Catskill Citizens stands by every statement in our brochure. Here is the evidence:

"Are you ready to be part of Governor Cuomo's industrial experiment? Your community has been targeted for fracking."

When he was running for office, candidate Andrew Cuomo told New Yorkers that their drinking water was "sacrosanct", and that he would not let it be endangered by fracking. When he was elected, his administration provided special protection for New York City's water supply. Other, less politically powerful regions of the state, were not so lucky. In the summer of 2012, the Cuomo administration leaked a story to the New York Times indicating that gas companies would be allowed to frack five Southern Tier counties on a trial basis while the rest of the state remained protected.

"High volume hydraulic fracturing has never been allowed in New York State... until now."

The kind of gas extraction proposed for New York State's Marcellus Shale is unlike anything that's ever been permitted in the state before. The last time the state created guidelines for gas extraction was in 1992. At that time, the standard fracking technologies were "foam frac" and "nitrified frac" operations that utilized between twenty to eighty thousand gallons of fluid, and only a handful of chemicals.

By the late 1990's drillers working in the Barnett Shale in Texas had begun to fracture horizontal wells with "slickwater" fluid. Horizontal wells are first drilled vertically down into the gas-bearing formation, then the drill bit is turned sideways and redirected horizontally. This horizontal well bore can be a mile or more in length and it accesses much more of the target formation than a vertical well. It also requires much more fracking fluid - almost one hundred times as much fluid as the old-fashion vertical wells. And the slickwater frack fluid used in high volume horizontal wells contains dozens of chemicals that are known to be harmful to humans, including carcinogens and neurotoxins, These fluids also contain many other chemicals that have never been analyzed from a human health perspective.

Around 2005, gas companies began leasing large tracts of land in Marcellus Shale region with the intent of bringing high volume hydraulic fracturing (HVHF) technology to the Northeast.
To set the stage for HVHF in New York, the gas industry set about rewriting state laws. In 2005 a "compulsory integration” bill, written by industry lobbyists, was signed into law. It gave unprecedented powers to gas corporations, enabling them to extract gas from a production unit even if the owners of up to 40% of the land in the unit do not want to lease their land, or have their gas extracted.

Then, in 2008, an industry-backed "well spacing” bill was rushed through the legislature, at night, on the last day of the session. This bill was also designed to make it easy for the gas companies to assemble large production units for horizontal wells.

Governor David Paterson signed the well spacing bill into law, but he also recognized that high volume fracking was different than anything that had ever been permitted in the state before, so he ordered the Department of Environmental Protection (DEC) to prepare a Supplemental Generic Environmental Impact Statement (SGEIS) before issuing permits for this new type of gas extraction. Upon taking office, Governor Cuomo reaffirmed Paterson’s de facto moratorium on horizontal (HVHF) pending the release of the SGEIS.

"Millions of gallons of fluid are pumped into the ground to develop each gas well."

“It is estimated that 2.4 million to 7.8 million gallons of water may be used for a multi-stage hydraulic fracturing procedure in a typical 4,000-foot lateral wellbore.”
Revised Draft SGEIS 2011, Executive Summary, Page 8

"Hundreds of different chemicals are used."

The Endocrine Disruption Exchange has compiled a list of hundreds of chemicals that are used in gas extraction operations and their known effects on human health.

In 2010, Catskill Citizens used the Freedom of Information Law (FOIL) to obtain information on chemical products used in thirty-six vertical Marcellus wells that were drilled in New York State prior to 2009. To comply with this request, the DEC released the Material Safety Data Sheets (MSDS's) for fifty-two products containing scores of different chemicals. These sheets identify the bewildering variety of symptoms that can result from exposure to these products. They range from skin rashes and blindness to nervous disorders and death.

Still, the information provided by the DEC was incomplete. The identities and concentrations of some of the most dangerous chemicals (such as benzene, toluene, and xylene) were not included in the response to our FOIL request, and have never been revealed to the public. The industry claims this information is a “trade secret”.

"Fracking chemicals have been found in drinking water supplies."

The first documented instance of drinking water contaminated by fracking was detailed in a 1987 report by the Environmental Protection Agency.

In 1997 Alabama residents went to federal court because they believed that fracking had contaminated their drinking water. The U.S. Court of Appeals concluded that fracking was a form of underground injection that should be regulated under the Safe Drinking Water Act (SWDA). This led the EPA to undertake a study of fracking and drinking water safety that was published in 2004.

This controversial EPA report found that fracking posed little or no risk to drinking water except when diesel fuel was used in the process. However the report itself was tainted by political interference. The office of Vice-president Dick Cheney was suspected of removing damaging information from the report and altering its conclusions. (Mr. Cheney was a former Chief Executive of Halliburton, the company that invented fracking. It still earns billions from the process.)

Here is how the Union of Concerned Scientists described what happened:

In 2004, the EPA’s study was released, concluding that hydraulic fracturing did not threaten water supplies and that no further study of the practice was needed. Soon afterwards, Weston Wilson, a scientist and 31-year veteran of the EPA, spoke out. In an 18-page letter to the EPA Inspector General and to congressional leaders, Wilson, who sought protection under the federal Whistleblower Protection Act wrote:

"EPA’s conclusions are unsupportable. EPA has conducted limited research reaching the unsupported conclusion that this industry practice needs no further study at this time. EPA decisions were supported by a Peer Review Panel; however five of the seven members of this panel appear to have conflicts-of-interest and may benefit from EPA’s decision not to conduct further investigation or impose regulatory conditions."

"I think the agency’s acted egregiously," said Wilson in an interview a few months after sending his letter to Congress. "It’s not fulfilling its responsibility to protect public health. Wilson's concern was supported by other scientists both inside and outside of EPA. Geoffrey D. Thyne, a professor at the Colorado School of Mines who is generally supportive of hydraulic fracturing, argued that exempting the practice from regulation "is premature, unwise and goes against the public interest." Wilson is correct when he says, "EPA should finish its study and obtain field information to see if this does represent a risk to ground water."

In 2009 Catskill Citizens reported on an incident where fracking operations contaminated drinking water supplies in McKean County, Pennsylvania. Although Seneca Resources, the company responsible for the contamination, was fined $15,000
by the Pennsylvania Department of Environmental Protection, representatives of the
gas industry later said this incident "didn't count" because the poisonous fluid was
dumped or spilled into the drinking water supply and didn't enter through a subterranean
passage.

Also in 2009, a report titled Documenting Contamination of Private Water Supplies
by Gas Well Drilling in New York State by Stephen Penningroth, Ph.D., Executive
Director, Community Science Institute in Ithaca, New York found

... solid evidence that gas wells have contaminated drinking water wells in the
past. However, very few systematic studies have been done, and exact numbers
are hard to come by. Based on a 2007 survey of 200 private water wells in an
area with extensive oil and gas well activity, Penn State Cooperative Extension
estimates that in the past, roughly 8% of private water wells have experienced
mild to severe impacts. Penn State points out that 8% could be an overestimate
or an underestimate. It could be an overestimate because prior to stricter
regulations that took effect in the 1980s, many abandoned wells were not
plugged properly, and these older wells were included in the survey. It could be
an underestimate because the current practice of hydraulically fracturing
horizontal gas wells generates approx. 100 times more waste fluid than older
vertical wells, and larger fluid volumes mean greater risk of contamination.

There are several ways in which drilling and fracking can contaminate drinking water
other than by polluting it with fracking fluid. Both methane and so-called "produced
water" can also contaminate water supplies. In fact, just drilling a gas well can cause
contamination. That's what happened in Dimock, Pennsylvania. Cabot Oil and Gas
polluted the water wells\(^2\) of more than a dozen homes before it even began fracking.

Methane contamination of drinking water accompanying gas-well drilling and
hydraulic fracturing\(^3\), a peer-reviewed scientific study published in 2012 found
"systematic evidence for methane contamination of drinking water associated with shale
gas extraction".

It should be noted that shallow formation methane can migrate into drinking water
supplies even if no drilling or fracking has occurred. There is no reason to doubt reports
of drinking water that could be set on fire in regions of the country that were never
subjected to gas extraction. But of course just because methane can naturally migrate
into drinking water, that doesn't mean gas extraction doesn't increase the likelihood of
methane contamination. Isotope analysis enables scientists to distinguish between
naturally occurring shallow formation methane in drinking water and deep formation
methane that has been released by drilling and fracking.

A low level of methane in drinking water is not necessarily a hazard, but drilling and
fracking can lead to a dangerous build up of methane in water wells - enough to blow
up a well\(^4\) (as happened in Dimock), or even enough to blow up a house\(^5\) (as
happened in Ohio).
But a greater danger is that fracking, which shatters the underground rock formations, will create pathways that allow produced water to enter drinking water supplies.

"Produced water" is a naturally occurring fluid that is trapped underground along with the gas. When the gas is brought to the surface, so is the produced water. In the Marcellus formation, the produced water is known to be rich in chlorides, bromides, metalloids (such as arsenic), toxic heavy metals, and radioactive substances.

A peer-reviewed study published in 2012 found that naturally occurring pathways could permit produced water to migrate from gas bearing formations into drinking water. And of course manmade pathways created by well bores and fracking are only likely to increase the risk of produced water contamination.

The many contamination risks posed by hydraulic fracturing are still poorly understood, but nevertheless it's clear that the gas industry claim that 'one million frack jobs have never caused a single instance of water contamination' is both false and misleading. It's false because there are known instances of contamination, and it's misleading because the vast majority of those 'one million frack jobs ' were conducted long before the advent of horizontal high volume slickwater fracking, which now poses an unprecedented risk to groundwater and aquifers.

Fracking has been linked to more than one thousand instances of water contamination. Natural Resources Defense Council Senior Attorney Amy Mall compiled the following (incomplete) list of incidents in 2011.

Arkansas: In 2008, Charlene Parish of Bee Branch reported contamination of drinking water during hydraulic fracturing of a nearby natural gas well owned by Southwestern Energy Company. Her water smelled bad, turned yellow, and filled with silt.

Arkansas: In 2007, the Graetz family in Pangburn reported contamination of drinking water during hydraulic fracturing of a nearby natural gas well owned by Southwestern Energy Company. The water turned muddy and contained particles that were “very light and kind of slick” and resembled pieces of leather.

Arkansas: In 2009, a family in Bee Branch, who wishes to remain anonymous, reported changes in water pressure and drinking water that turned gray and cloudy and had noxious odors after hydraulic fracturing of a nearby natural gas well owned by Southwestern Energy Company.

Arkansas: In 2007, a family in Center Ridge reported changes in water pressure and water that turned red or orange and looked like it had clay in it after hydraulic fracturing of nearby wells owned by Southwestern Energy Company. They told their story on YouTube.
Arkansas: In 2008, a homeowner in Center Ridge reported changes in water pressure and water that turned brown, smelled bad, and had sediment in it after hydraulic fracturing of a nearby well owned by Southwestern Energy Company. He also told his story on YouTube.

Colorado: In 2001, two families in Silt reported a water well blow-out and contamination of their drinking water during hydraulic fracturing of four nearby natural gas wells owned by Ballard Petroleum, now Encana Corporation. Their drinking water turned gray, had strong smells, bubbled, and lost pressure. One family reported health symptoms they believe are linked to the groundwater contamination.

Colorado: In 2007, the Bounds family in Huerfano County reported a pump house exploded and contamination of drinking water during hydraulic fracturing of nearby wells owned by Petroglyph Energy.

Colorado: In June, 2010, the day hydraulic fracturing began on a nearby gas well in Las Animas County, landowner Tracy Dahl checked his cistern and found approximately 500 gallons of grayish brown murky water where water had previously run clear for years. The Dahls have extensive water testing documentation going back many years, verifying that their water has always been clean and clear. They were told by Colorado Oil and Gas Conservation Commission (“COGCC”) staff that the water could not be tested for chemicals in the hydraulic fracturing fluid because there is insufficient information about the chemicals used. Three monitor wells on the ranch are now producing methane at an escalating rate.

New Mexico: A 2004 investigation by the U.S. Environmental Protection Agency found two residents who reported that the quality of their water was affected by hydraulic fracturing.

New York: In 2007, the Lytle family in Seneca County reported contamination of drinking water the morning after hydraulic fracturing of a nearby natural gas well owned by Chesapeake Energy Corporation. The water turned gray and was full of sediment.

New York: In 2009, the Eddy family in Allegany County reported contamination of drinking water during hydraulic fracturing of a nearby well owned by U.S. Energy Development Corporation. The water turned "foamy, chocolate-brown."

North Dakota: The North Dakota non-profit organization Bakken Watch reports very serious health symptoms in humans, livestock, and pets after nearby hydraulic fracturing. Their website has photos of sick animals, pit leaks, and corroded tanks. North Dakota state legislators admit they are "understaffed and overwhelmed" and "struggling to provide adequate oversight amid an explosion of activity in North Dakota's oil patch."
Ohio: In 2007, there was an explosion of a water well and contamination of at least 22 other drinking water wells in Bainbridge Township after hydraulic fracturing of a nearby natural gas well owned by Ohio Valley Energy Systems. According to the State investigation, one of the contributing factors to this incident is that: “the frac communicated directly with the well bore and was not confined within the “Clinton” reservoir.”

Pennsylvania: A gas well near the home of the Simons family in Bradford County was drilled in 2009 and re-fracked in February, 2011. Shortly after the 2011 operation, the Simons family reports that their tap water turned gray and hazy. After the water changed, family members began getting severe rashes with oozing blisters, and one child had to be taken to the hospital for torrential nosebleeds that would not stop, nausea and severe headaches. The Pennsylvania Department of Environmental Protection (DEP) tested the water and found very high levels of methane and other contaminants in the water, but said it was safe to drink. Since the Simons family stopped using any of their water, these symptoms have gone away but the water still “stinks awfully; it is a scummy, rotten, nasty smell…”

Pennsylvania: In September, 2010, a lawsuit was filed by 13 families who say they have been and continue to be exposed to contaminated drinking water linked to hydraulic fracturing. Eight different properties in Susquehanna County are said to have contaminated drinking water. One child has neurological symptoms consistent with exposure to toxic substances. Southwestern Energy, the company operating the well near these families, responded that it promptly investigated all complaints and that both the company and the Pennsylvania Department of the Environment independently tested the water and found no link between gas operations and the water quality and no problems with the integrity of the gas well.

Pennsylvania: In 2009, families in Bradford Township reported contamination of drinking water after hydraulic fracturing of nearby natural gas wells owned by Schreiner Oil & Gas. The drinking water of at least seven families has been contaminated.

Pennsylvania: In 2009, the Smitsky family in Hickory reported contamination of their drinking water after hydraulic fracturing of nearby natural gas wells owned by Range Resources. Their water became cloudy and foul-smelling. Testing found acrylonitrile, a chemical that may be used in hydraulic fracturing.

Pennsylvania: A family in Bradford County reports that its water turned black and became flammable from methane contamination in 2009 after hydraulic fracturing of a nearby well operated by Chesapeake Energy. The water cleared for a while but turned black again in 2010. Relatives living down the road also report their water turning black in 2010.
Texas: Larry Bisidas is an expert in drilling wells and in groundwater. He is the owner of Bisidas Water Well Drilling in Wise County, and has been drilling water wells for 40 years. Two water wells on his property became contaminated in 2010. When his state regulator stated that there has been no groundwater contamination in Texas related to hydraulic fracturing, Mr. Bisidas replied: "All they've gotta do is come out to my place, and I'll prove it to them."

Texas: In Wise County, Catherine and Brett Bledsoe report that their drinking water became contaminated in 2010 soon after hydraulic fracturing began on two natural gas wells bordering their property. The water stung their eyes during showers, and their animals refused to drink the water. Without any assistance from regulators, the Bledsoes paid for their own water testing. The testing found benzene, a known carcinogen, at double the safe levels.

Texas: In 2007, three families who share an aquifer in Grandview reported contamination of drinking water after hydraulic fracturing of a nearby well owned by Williams. They experienced strong odors in their water, changes in water pressure, skin irritation, and dead livestock. Water testing found toluene and other contaminants.

Texas: The Scoma family in Johnson County is suing Chesapeake Energy, claiming the company contaminated their drinking water with benzene and petroleum by-products after hydraulic fracturing of natural gas wells near the Scoma home. The family reports that its drinking water sometimes runs an orange-yellow color, tastes bad and gives off a foul odor.

Texas: Tarrant County Commissioner J.D. Johnson, who lives in the Barnett shale area, reported groundwater contamination immediately after two gas wells on his property were hydraulically fractured. His water turned a dark gold color and had sand in it.

Texas: Carol Grosser, in south Texas, noticed changes in her water after a neighbor told her a nearby well was being hydraulically fractured. Carol noticed changes in her water pressure and rust-colored residue in her stock tanks. The fish in her tanks died, and some of her goats had abnormal milk production and produced kids with unusual birth defects.

Texas: Toby Frederick began noticing a foul odor and discoloration in his water after "an oil company blew out some casing during a hydraulic fracturing job northeast of his property." Mr. Frederick paid for his own water samples, which found traces of benzene, a known carcinogen, in his water. He sent samples to his local Ground Water Conservation District, but never received any results. The Texas Railroad Commission told him his water was drinkable, even though it is brown and smells like diesel fuel.
Texas: The Executive Director of the Upper Trinity River Groundwater Conservation District in north Texas stated that the District "gets 'regular reports' from property owners who said that 'since a particular [gas] well had been fracked, they've had problems' with their water wells, such as sand in them, saltier water or reduced water output...."

Texas: Susan Knoll in the Barnett shale reports that last year her drinking water became foamy right after hydraulic fracturing of a well adjacent to her property. Since that time, additional gas wells have been fractured near her home and her drinking water has continually gotten worse. It sometimes foams, becomes oily, and has strong odors that burn Susan’s nose when she smells her water. Susan has a lot of videos and more information on her blog.

Texas: Grace Mitchell, a resident of Johnson County, Texas, is suing Encana and Chesapeake. According to her lawsuit, soon after drilling and hydraulic fracturing took place near her home in 2010, her water became contaminated, feeling slick to the touch and giving off an oily, gasoline-like odor. Testing results performed on her well water confirmed it was contaminated with various chemicals, including C-12-C28 hydrocarbons, similar to diesel fuel.

Texas: The Harris family of Denton County, Texas, is suing Devon Energy. They say that their water became contaminated soon after Devon commenced drilling and hydraulic fracturing near their home in 2008, and that their water became polluted with a gray sediment. Testing results performed on the well water found contamination with high levels of metals: aluminum, arsenic, barium, beryllium, calcium, chromium, cobalt, copper, iron, lead, lithium, magnesium, manganese, nickel, potassium, sodium, strontium, titanium, vanadium, and zinc.

Virginia: Citizens reported drinking water contamination after hydraulic fracturing. Water was murky and had oily films, black sediments, methane, and diesel odors. Individuals experienced rashes from showering. The Buchanan Citizens Action Group reported over 100 documented complaints of adverse effects of hydraulic fracturing and the Dickenson County Citizens Committee reported ground water quality deteriorated throughout the county as a result of the large number of hydraulic fracturing events.

West Virginia: The Hagy family in Jackson County, West Virginia, is suing four oil and gas companies for contaminating their drinking water. They say their water had "a peculiar smell and taste" and the parents as well as their two children are suffering from neurological symptoms. A news article reports that the lawsuit makes the connection between the drinking water contamination and the hydraulic fracturing process.

West Virginia: In Marshall County, Jeremiah Magers reported in October 2010, that "As soon as they 'fracked' those gas wells, that's when my water well started getting gas in it." He also lost all the water in his well.
West Virginia: In Wetzel County, Marilyn Hunt reported to the EPA in 2010 that: "frac drilling is contaminating the drinking water here." Residents report health symptoms, such as rashes and mouth sores, as well as illness in their lambs and goats, which they suspect is linked to drinking water contamination.

Wyoming: Families in the small town of Pavillion have been reporting contamination of their drinking water for at least ten years. Hydraulic fracturing has been used in the many wells in the area owned by Encana Corporation. Drinking water has turned black, smelled bad, and tasted bad. Individuals report medical symptoms they believe are related to water contamination. The U.S. Environmental Protection Agency found contamination in 11 water wells, and concluded in the draft report on its investigation that: "the data indicates likely impact to ground water that can be explained by hydraulic fracturing."

One obstacle to gaining a clear understanding of contamination risks is the industry practice of buying the silence of its victims. Gas corporations will typically pay off individuals who can prove they have been harmed by drilling and fracking operations only if they sign non-disclosure agreements that prevent them from talking about their experiences. These NDA's make it difficult to assess the true safety record of fracking. They also deprive scientists and health care professionals of important information that could be used to protect public health and make fracking safer.

In 2010 the EPA launched a new study of fracking and drinking water safety to supersede the discredited 2004 study. The agency issued a progress report in late 2012, and the final report is scheduled to be released in 2014. Once again, tremendous political pressure is being brought to bear on the agency. Both the findings of the study, and its integrity, are up in the air.

"Fracking is exempt from the Safe Drinking Water Act."

The Safe Drinking Water Act specifically “excludes” “the underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations related to oil, gas, or geothermal production.” According to a Congressional Research Service report Hydraulic Fracturing and Safe Drinking Water Act Regulatory Issues:

...the Energy Policy Act of 2005 (EPAct 2005) revised the SDWA term "underground injection" to explicitly exclude the injection of fluids and propping agents (except diesel fuel) used for hydraulic fracturing purposes. Thus, EPA lacks authority under the SDWA to regulate hydraulic fracturing, except where diesel fuel is used.
"If fracking is so safe, why has the industry fought so hard to get around the law?"

The Natural Resources Defense Council compiled a spreadsheet that lists fifty-five exemptions from federal environmental laws and regulations. It includes exemptions from such bedrock laws as the Clean Air Act, the Clean Water Act and the Superfund law. These exemptions didn't just happen. They are the result of a concerted effort by the oil and gas industry to avoid having to abide by the same laws that govern other industries.

The public recently had an opportunity to see just how hard the industry will fight to preserve its special exemptions. In 2009 a bill known as the FRAC Act was introduced in Congress. It would close the so-called "Halliburton loophole" by permitting the federal government to regulate fracking under the SDWA. It would also require the oil and gas companies to identify the chemicals that they inject underground.

Since the industry claims that fracking is perfectly safe, one would think that it would be willing to accept these modest regulations. In fact, the gas companies fought tooth and nail to block the FRAC Act. The industry-funded Energy in Depth made the astounding claim that the FRAC Act would somehow "cripple the U.S. economy."

"Big gas corporations have the best legal loopholes money can buy."

Exemptions from the law of the land don't come cheap. The oil and gas industry takes billions of dollars of taxpayer subsidies each year, then turns around and uses a small fraction of that money to buy influence with our lawmakers. In 2011 Common Cause reported:

- A faction of the natural gas industry has invested more than $747 million as part of a 10-year lobbying and political spending campaign to persuade federal authorities to ignore the dangers of hydraulic fracturing, or “fracking,” a rapidly expanding but poorly regulated method of tapping gas reserves ... Despite the pollution risks, the industry has argued that regulatory exemptions for fracking are needed to give America the opportunity to tap vast reserves of natural gas...

- From 2001 through June 2011, companies now engaged in fracking contributed $20.5 million to current members of Congress. Industry giving more than tripled from the 2001-02 election cycle, when $2 million was contributed, to the 2009-10 election cycle, when $6.8 million was contributed.

- Contributions heavily favored current members of Congress who voted for the 2005 Energy Policy Act, which exempted fracking from regulation under the Safe
Drinking Water Act. Current members who voted for the bill received an average of $73,433, while those who voted against the bill received an average of $10,894.

- Current members of the Senate Committee on the Environment and Public Works have received a total of $1.4 million from the industry.

- Current members of the House Energy and Commerce Committee have received a total of $3.7 million from the industry. Chair Rep. Fred Upton (R-MI) has received $153,917 from the industry and Committee member Rep. Joe Barton (R-TX) is the single-biggest recipient of fracking money in Congress with $514,945.

- The natural gas industry’s fight against regulation has gotten important help at the state level from the American Legislative Exchange Council (ALEC). As documented in an August 2011 Common Cause report, ALEC generates and lobbies for hundreds of model bills every year despite its status as a tax-exempt 501 (c)(3) organization. Prominent financial backers of ALEC’s activities include the American Petroleum Institute, ExxonMobil, and Koch Industries, owner of the largest network of natural gas-transmitting pipelines in the country.

And industry money is not only used to reward compliant members of Congress; it's also used to punish elected representatives who favor regulation. Again, from Common Cause:

The natural gas industry’s political expenditures have been used to target supporters of the FRAC Act, which would regulate fracking under the Safe Drinking Water Act and require disclosure of chemicals used in the fracking process. For example, in 2010, the industry gave $3 million to American Crossroads which in turn spent $533,000 in an attempt to defeat FRAC Act sponsor U.S. Rep. Maurice Hinchey (D-NY).

The gas industry also buys influence at the state level. Common Cause/New York looked at lobbying expenditures in New York State and found:

- ... lobbying totals for 2010 reached historic highs for the natural gas industry. Because of the substantial amounts it spent for advertising, Chesapeake Appalachia, the nation’s second largest producer of natural gas, was the biggest spender among industry advocates of hydro-fracturing, disclosing a total of $1,090,051 spent lobbying in 2010.

- In contrast, the biggest spender among the groups that supported the moratorium, Citizens Campaign for the Environment, an entity which lobbies on numerous environmental issues, not only natural gas exploitation, spent $159,232 lobbying in 2010.
• ... the companies and entities which opposed a moratorium on natural gas drilling outspent those entities which supported the moratorium by a margin of 4 to 1.

• Common Cause/NY also wants to emphasize that while natural gas industry groups such as Fortuna, IOGA and Chesapeake Appalachia have focused their lobbying efforts specifically at issues pertaining to natural gas extraction, environmental groups have been involved in lobbying on a plurality of issues. The significantly larger amount the organizations associated with natural gas interests spent lobbying reflects the great imbalance in resources at the disposal of the natural gas industry as compared to multi issue environmental lobby groups.

A subsequent report from Common Cause/New York found:

From January 2007 to October 2011, the Natural Gas industry made 2,349 campaign contributions to state and local level New York politicians and parties. These contributions represent over $1.34 million in industry spending - $1,340,246.58.

"They [big gas corporations] don't have to obey hazardous waste laws."

The gas industry enjoys numerous exemptions from federal hazardous waste disposal laws and regulations. The aforementioned NRDC spreadsheet of industry exemptions references the following waste law exemptions:

Fracking fluid and produced water from natural gas wells are not considered pollutants subject to the National Pollutant Discharge Elimination System permitting under the Clean Water Act.

A hazardous waste exemption to the Resource Conservation and Recovery Act encompasses "...drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas..." 42 U.S.C. § 6921(b)(2)(a)

The Comprehensive Environmental Responsibility, Compensation and Liability Act (CERCLA), commonly known as the Superfund Act, is meant to ensure that polluters pay to clean up the contamination that they create, but oil and natural gas pollution does not trigger liability under CERCLA. There is a specific exemption for "natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel...." 42 U.S.C. § 9601(14).

The federal program that governs the underground disposal of waste imposes stricter standards on wells that dispose of hazardous waste, but because toxic waste from oil and gas operations is exempt from the "hazardous" classification, it can be disposed of and gas in wells with fewer regulatory controls. 40 CFR § 146.5
Wastes from oil and gas drilling and exploration are exempt from regulations known as Subtitle C. The exemption includes "gas and oil drilling muds, oil production brines, drilling fluids, and produced water. Natural gas plants that process NG to remove water and other impurities prior to entering the sales line are considered to be part of the exempt production operations regardless of their location with respect to the wellhead". 53 Fed. Reg. 25,445 (1988)

According to 58 Fed. Reg. 15,284 (1993) "A simple rule of thumb for determining the scope of the exemption is whether the waste in question has come from down-hole (i.e. brought to the surface during oil and gas E&P operations) or has otherwise been generated by contact with the oil and gas production stream during the removal of produced water or other contaminants from the product.... If the answer to either question is yes, the waste is most likely considered exempt."

Oil and gas companies also enjoy hazardous waste exemptions at the state level. In New York, drilling waste is automatically classified as "industrial", not "hazardous", no matter how dangerous it actually may be. Hazardous waste is regulated by metering, both at the point of origin and again at the point of disposal. This is meant to ensure that harmful materials are delivered to appropriate disposal facilities. Because drilling waste is automatically classified as "industrial", it isn't metered and there is no easy way to tell if it's being disposed of lawfully, or if it's being illegally dumped.

A bill that would close the gas industry's "hazardous waste loophole" has been voted out of the NYS Assembly twice in the last two years. Each time it died in the Senate.

"Each Marcellus gas well can produce millions of gallons of toxic, radioactive waste."

As noted earlier, the NYS DEC estimates that each horizontal Marcellus well will be fracked with between 2.4 and 7.8 million gallons of toxic fracking fluid. Roughly 80% of that fluid will remain underground, the other 20% will return to the surface. That means a horizontal Marcellus well might produce anywhere from 600,000 to 1,600,000 gallons of used fracking fluid. The industry claims it is now doing has a better job recycling this used fluid, but there is no law or regulation that requires recycling. Nor is there any way to verify this assertion.

The toxic, radioactive produced water that comes to the surface along with the gas is not readily recycled. The quantity of produced water can vary greatly from well to well, but an examination of documents from New York's vertical Marcellus wells indicates that the amount of produced water can, in some instances, even exceed the total amount of fluid used to frack a well. (See reports on the Calabro and WG11 wells.)

“There’s not a single treatment plant in the state that can clean it up.”
Normally the industry cheaply disposes of produced water by spreading it on roads. In the winter it's called "brine" and used as a deicer. In the summer, this salty, poisonous liquid is routinely spread on dirt roads to "keep down the dust".

Because produced water from the Marcellus is highly radioactive, the DEC has determined that it cannot be legally disposed of on roads.

The NYS DEC has been unable to identify a single treatment plant in the state that is equipped handle Marcellus waste fluids. To be disposed of legally, these fluids have to be trucked out of state to treatment plants in Pennsylvania or to injection wells in Ohio.¹

"How much fracking wastewater will be dumped on our back roads when no one is looking?"

Because drilling waste is not metered, there is no way to know how much of it is hauled long distance to legal disposal sites, and how much is dumped illegally on roadsides and in rivers and streams. We do know that illegal disposal is common enough to have earned a nickname. It's called "midnight dumping".

You can find numerous instances of illegal drilling waste disposal if you search catskillcitizens.org Newsroom using the key word "dump".

"Fracking has nothing to do with energy independence."

The gas industry claims that fracking will reduce our dependence on foreign oil. The industry propaganda has been so intense, that some Americans have been led to believe that there's something almost patriotic about fracking. Perhaps you've seen their slogan "Drill a well, bring a soldier home."

But the gas companies aren't telling you about their plans¹ to build giant liquefied natural gas export terminals that will have the capacity to ship more than 40% of America's natural gas to foreign countries.

France, Britain, Norway, Japan, India and China all own American gas leases & gas reserves."

An article called Marcellus shale gas may head overseas by Lou Kilzer and Andrew Conte posted on Triblive.com on April 10, 2011 reported the story:

Drilling companies rapidly expanding their U.S. operations in places such as Pennsylvania's vast Marcellus shale formation repeatedly tout they are providing American jobs and securing the nation's energy future.

Yet, a Tribune-Review examination found foreign companies are buying significant shares of these drilling projects and making plans for facilities to liquify and ship more of that natural gas overseas.
A leading player in the natural gas grab is China, whose thirst for energy to fuel its industrial explosion is growing rapidly. Others include the governments of South Korea and India, and companies in Great Britain, the Netherlands, Norway, Japan and Australia.”

This is from an article in *Upstream: The International Oil and Gas News Source*, dated January 26, 2010.

French giant Total has become the latest big-name player to enter the US’ unconventional onshore play, shelling out $2.25 billion for a 25% slice of gas player Chesapeake Energy’s Barnett Shale assets.”

If the gas industry gets its way, countries like China and Japan will get cheap energy, gas companies will make a big profit, and ordinary Americans will be left to deal with polluted air, contaminated water and local economies that have been disrupted by gas extraction.

Selling American gas overseas will also raise prices for American consumers and make our products less competitive in world markets. If American manufacturers lose the advantage of relatively low energy costs, they could end up shipping American jobs overseas.

"Some gas will go to countries where fracking is banned because it’s too dangerous."

France (which owns shale gas assets in the U.S.) and Bulgaria have both banned fracking citing safety concerns.

Today there are robust anti-fracking movements in many other countries including Canada, the United Kingdom, Ireland, Australia and South Africa.

"Fracking threatens your property rights."

HVHF is a dirty, destructive process that is known to cause noise pollution, light pollution, air pollution and water pollution. The right to the “quiet enjoyment” of one's home seems to fly out the window when it comes to fracking. Homeowners cannot expect to be compensated if their lives are disrupted, or their home loses value because of nearby extraction activities.

New York State does not have a clear “strict liability” law to protect property owners if their property and/or water is contaminated by drilling or fracking. Even if it's obvious that nearby fracking contaminated a water well that never had a problem in past, or that a swath of dead trees or dying livestock was caused by a chemical spill on a wellpad, the gas company is not assumed to be liable. In every case, no matter how damning the evidence, the landowner must prove his or her claim in court and at the landowner’s expense. That can take years, and cost tens, or even hundreds of thousands of dollars.
Because most gas companies are incorporated in other states, they can seek to move a lawsuit from state court into federal court. Not many people can afford to pursue a lawsuit, no matter how strong their claim, if they have to repeatedly appear in court in Oklahoma City or some other distant city to prove their claim.

If a landowner eventually wins a lawsuit, gas companies have ways to limit their exposure that make it difficult for victims to obtain just compensation. They can incorporate each gas well as a separate legal entity thereby putting most of their assets out of reach.

A bill in the New York State legislature would subject gas companies to strict liability and relieve property owners of the burden of having to sue gas corporations if they are harmed by drilling operations.

Finally, if gas is extracted, then pipelines and compressor stations have to be built to bring the gas to market. Interstate pipeline companies can seize private property by eminent domain. The remaining pieces of land left in the possession of the owner may be worth less if they are bisected by a pipeline, because the land may no longer be unsuitable for high value future uses such as building houses.

"A law written by industry lobbyists lets gas companies drill under your land even if you say "no" to leasing."

As noted earlier, New York’s 2005 Compulsory Integration law allows gas companies to extract gas against the will of the landowners. The gas companies have to pay for the gas they take, but forcibly integrated landowners are compensated at the lowest rate allowed by law, even when landowners in the same production unit are paid at a much higher rate. And of course gas companies don’t pay signing bonuses to landowners who are fracked against their will.

"Gas leases can make it impossible to insure or sell a home."

Many homeowners have been shocked to discover that signing a gas lease, or even owning a home in the vicinity of leased land, can expose them to uninsured risks, or violate the terms of their mortgage.

In the fall of 2012 attorney Elisabeth N. Radow published Homeowners and Gas Drilling Leases: Boom or Bust? In the journal of the New York State Bar Association. She found:

- Homeowners can be confronted with uninsurable property damage for activities that they cannot control. And now a growing number of banks won’t give new
mortgage loans on homes with gas leases because they don’t meet secondary mortgage market guidelines.

- Even the most comprehensive homeowner’s coverage, known as “broad risk form” or “special form” insurance excludes the types of property damage associated with the drilling lifecycle, such as air pollution, well-water contamination, earth movement and other risky commercial activity performed on residential property.

- Signing a gas lease without lender consent is likely to constitute a mortgage default. At any time before or after the drilling begins, a lender can demand the borrower to either terminate the lease or pay off the loan. Since the gas companies have pledged the gas leases as collateral for loans or brought in investors based upon the potential income the gas lease can produce, facilitating a lease termination may require protracted litigation. Further, it is not likely that most homeowner-borrowers will have the ready cash to repay the loan. This places the lender in an untenable position.

- If homeowners with gas leases can’t mortgage their property, they probably can’t sell their property either…

Radow also found that

New York’s compulsory integration law can force neighbors who do not want to lease their land into a drilling pool, which can affect their liability and mortgages as well.

"Towns have the right to prohibit fracking. Dozens of towns in New York State have already enacted bans that’ve have been upheld in court."

Once gas extraction gets underway, towns are powerless to control it because only the state and the federal government are allowed to regulate the industry. But municipalities are not powerless, the New York State Constitution gives them the right to restrict where fracking can place, or to prohibit fracking altogether. As of February 12, 2013, forty-eight New York towns\(^1\) have exercised their right to prohibit fracking. More than a hundred others have instituted temporary moratoriums on gas drilling and fracking. These community-based actions now protect hundreds of thousands of New Yorkers, including more than a third of those who live atop the Marcellus Shale.

Two of these municipal fracking bans were challenged in court; but in each case the court upheld the town’s lawful probation.
FOOTNOTES:

"Are you ready to be part of Governor Cuomo's industrial experiment? Your community has been targeted for fracking."

1. "Therefore, any drilling in the Marcellus Shale must be environmentally sensitive and safe. These reviews must demonstrate that health and environmental risks are adequately addressed and protected. However, existing watersheds are sacrosanct... "

2. “The revised analysis of high-volume hydraulic fracturing operations in the revised dSGEIS concludes that the proposed high-volume hydraulic fracturing activity is not consistent with the preservation of these watersheds as an unfiltered drinking water supply. Even with all of the criteria and conditions identified in this dSGEIS, a risk remains that significant high-volume hydraulic fracturing activities in these areas could result in a degradation of drinking water supplies from accidents, surface spills, etc. Moreover, such large scale industrial activity in these areas, even without spills, could imperil EPA’s Filtration Avoidance Determinations and result in the affected municipalities incurring substantial costs to filter their drinking water supply. Accordingly, this dSGEIS supports a finding that site disturbance relating to high-volume hydraulic fracturing operations not be permitted in the Syracuse and New York City watersheds or in a protective 4,000 foot buffer area around those watersheds”
Revised Draft SGEIS 2011, Executive Summary, Page 19

3. “Gov. Andrew M. Cuomo’s administration is pursuing a plan to limit the controversial drilling method known as hydraulic fracturing to portions of several struggling New York counties along the border with Pennsylvania...”

"High volume hydraulic fracturing has never been allowed in New York State... until now."

1. The 1992 Final Generic Environmental Impact Statement (GEIS) on the Oil, Gas and Solution Mining Regulatory Program doesn’t have a lot to say about hydraulic fracturing which it calls “stimulation”. (See pages 9-25 through 9-28.) “Water-gel fracs”, which were the most common fracking technique at that time. According to the GEIS “Twenty to eighty thousand gallons of fluid are injected into the producing formation.”

2. The website of the West Firm described the activities of attorney and lobbyist and attorney Tom West as follows:

“Tom represents clients in the oil and gas sector on a broad variety of issues involving legislation, compulsory integration, administrative adjudication, civil litigation, investigations by the New York Attorney General's office, and criminal defense. In 2010, he and his firm launched a title practice in New York and Pennsylvania and they are actively writing title opinions in both states for the oil and gas industry.”

And:

“In his more than 30 years of practice, Tom has represented the oil and gas industry on many issues. He was one of the principal authors of the spacing and compulsory integration legislation that overhauled New York's oil and gas program in 2005. He was also at the forefront of the 2008 amendments to New York law to accommodate the development of the shale resources in New York State. That law
authorized spacing units up to 640 acres in size and multiple wells on a common well pad. Since the
passage of that law, he has been actively involved with the environmental review process being
conducted by the New York State Department of Environmental Conservation ("DEC") to prepare a
Supplemental Generic Environmental Impact Statement ("SCEIS") relative to high-volume hydraulic
fracturing. He has been working closely with industry on their comments to the DEC relative to the SGEIS
and recently represented an industry working group in responding to technical comments from the DEC.
He is also currently counseling several clients concerning the steps that must be taken to defend against
the highly anticipated litigation that will be brought challenging the SGEIS…"

"Hundreds of different chemicals are used."


2. Go to http://www.catskillcitizens.org/index.cfm and enter “trade secret” in our Search feature and you’ll
find numerous articles about the gas industry refusing to disclose the chemicals used in fracking.

"Fracking chemicals have been found in drinking water supplies."

1. A September 27 2008 News Update from Catskill Citizens included this report:

**GAS DRILLING LEAVES FAMILIES WITH CONTAMINATED WATER**

You don’t have to go out West to find evidence of drilling disasters. Just across the state line, in McKean
County, Pennsylvania, Stephen and Beth Hilyer were among the Gibbs Hill residents left with
contaminated drinking water after Seneca Resources drilled a vertical well within 800 feet of the spring
that supplied their homes.

Stephen Hilyer says that early one morning last July he got a call from an alarmed neighbor who told him
“You’d better taste the water.” Stephen took a drink, his mouth puckered up, and before long he had a
pounding headache.

The Pennsylvania Department of Environmental Protection was alerted and dispatched a representative
to investigate. Although there were seven workers at the well site and the production noises had been
going on since 4 AM, the Seneca crew denied that they had been working on the well that morning.

Tests of the Hilyers drinking water showed dangerous spikes in contaminants far above the baseline (pre-
drilling) levels:

<table>
<thead>
<tr>
<th>Figures are milligrams per liter, (mg/L) or micrograms/liter (ug/L) as indicated.</th>
<th>Baseline</th>
<th>Post-drilling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloride (mg/L)</td>
<td>0.6</td>
<td>1279.9</td>
</tr>
<tr>
<td>Magnesium (mg/L)</td>
<td>1.2</td>
<td>60.1</td>
</tr>
<tr>
<td>Calcium (mg/L)</td>
<td>3.3</td>
<td>203.0</td>
</tr>
<tr>
<td>Potassium (mg/L)</td>
<td>0.6</td>
<td>7.8</td>
</tr>
<tr>
<td>Sodium (mg/L)</td>
<td>1.6</td>
<td>92.2</td>
</tr>
<tr>
<td>Strontium (ug/L)</td>
<td>-</td>
<td>1120.0</td>
</tr>
</tbody>
</table>

While, the United States Environmental Protection Agency has not established safety standards for the
chemicals listed above, it has set maximum contaminant standards for barium, a heavy metal that can
cause gastrointestinal disturbances, muscle weakness and high blood pressure. After the incident,
barium in the Hilyers’ drinking water was well above the EPA standard.

<table>
<thead>
<tr>
<th>Baseline</th>
<th>EPA Max. Contaminant Level</th>
<th>Post-drilling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium (mg/L)</td>
<td>0.026</td>
<td>2.00</td>
</tr>
</tbody>
</table>
The EPA has found that another heavy metal, manganese, may cause neurological and muscular problems but it has yet to establish maximum contaminant levels. The manganese in the Hilyers’ drinking water was 200% higher after the incident.

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Post-drilling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manganese (ug/L)</td>
<td>20</td>
</tr>
</tbody>
</table>

Prior to the incident the Hilyers never had to filter their drinking water, but now there was a hundredfold increase in dissolved solids:

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Post-drilling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissolved solids</td>
<td>25</td>
</tr>
</tbody>
</table>

The Pennsylvania Department of Environmental Protection determined that the contamination was due to the surface discharge of frack water - that’s the chemical laced fluid that drillers pump into the ground to release gas and oil. The Department has not determined whether the discharge was deliberate or accidental.

**OTHER INCIDENTS**

This is not the first time Seneca Resources has been blamed for ruining the water sources of McKean County residents. Just about a mile up the road from the Hilyers another drilling mishap dried up Jim Hughes’ water well. Six weeks after his well went dry, Seneca Resources finally drilled him a new one; but when it was completed it burst into flames and had to be capped. Seneca then drilled a second well that also flamed for several months before it could be used.

PA DEP spokesperson Freda Tarbell says complaints of contaminated water have increased along with the drilling. In 2007 her Regional Office received between 25 and 30 reports of “gas migration” - instances of “gas bubbling and roiling in wells, and sometimes seeping into basements.” Ms. Tarbell said many of these incidents could be attributed to over-pressuring gas wells, but sometimes “just happen” due to fractured geology.

**SENeca FAILS TO PROVIDE COMPENSATION**

Almost two months after the spring was contaminated, the DEP says that the spring has “nearly” returned to normal and is now safe to drink. But the Hilyers aren’t so sure. They still drink bottled water and worry about what will happen the next time Seneca fracks the well.

Despite the DEP’s finding that the contamination was caused by the illegal discharge of frack water, the Hilyers say Seneca Resources has failed to offer them any compensation. They claim that the pristine spring that they relied on for years no longer provides enough water to meet their needs, and the contamination has decreased the value of their property. They are trying to find a lawyer to represent in a civil action. The three local attorneys they approached turned them down because they had business ties to Seneca.

2. The Consent Order and Agreement between the Commonwealth of Pennsylvania and Cabot Oil and Gas dated November 9, 2009 reads in part: “Pollution of Private Water Supplies…The Department collected samples from 13 homes near the Cabot wells (Affected Water Supplies”) and these wells contained elevated levels of methane. In addition, the Department identified combustible levels of methane in seven of the Affected Water Supplies…”

3. Methane contamination of drinking water accompanying gas-well drilling and hydraulic fracturing

4. The Consent Order and Agreement between the Commonwealth of Pennsylvania and Cabot Oil and Gas dated November 9, 2009 reads in part: “On January 1, 2009, an explosion was reported in an outside, below ground water well pit at a home located in the Affected Area…”

See http://catskillcitizens.org/learnmore/CABCON.PDF

5. "On Saturday, December 15, 2007, at 7:30 AM, the Geauga County Emergency Management Agency notified an Ohio Department of Natural Resources, Division of Mineral Resources Management (DMRM) Inspector that there was an explosion at a house on 17975 English Drive in Bainbridge Township of Geauga County. Two residents in the house at the time of the explosion were not injured, but the house was significantly damaged." Page 3, Report on the Investigation of the Natural Gas Invasion of Aquifers in Bainbridge Township of Geauga County, Ohio, September 1, 2008 Ohio Department of Natural Resources Division of Mineral Resources Management.

See http://www.dnr.state.oh.us/Portals/11/bainbridge/report.pdf

6. There is a great deal of information available on the radioactivity of the Marcellus Shale and the dangers it poses for human health. Find scientific articles and news reports using the keyword “radioactivity” at catskillcitizens.org.


For more information, go to http://www.catskillcitizens.org/index.cfm and enter the key word “radioactivity” in the Search feature on our home page. You can also access a number of reports on our Learn More page under “Environmental and Health Risks”/ “Radioactivity”.


8. A February 23, 2013 article the observer-reporter.com described a non-disclosure agreement that was being challenged in court. “The Hallowiches had claimed that nearby drilling operations, a compressor station and a gas processing plant made their property worthless and posed health risks to their family. Their lawsuit was settled Aug. 23, 2011, following a closed-door meeting in Pozonsky’s chambers. The case file was immediately sealed, and all parties were forbidden to discuss any portion of the agreement.”

See http://www.observer-reporter.com/article/20121219/NEWS01/1212192090/0/#.UShzeaVZ--J


Silent Drilling, How the fracking industry keeps its secrets by Michael Ludwig in Metroland, May 17, 2012 describes how one Pennsylvania family was tricked into signing a non-disclosure agreement. http://metroland.net/2012/05/17/silent-drilling/
A boilerplate non-disclosure agreement can be seen at http://catskillcitizens.org/learnmore/NDA.PDF

"Fracking is exempt from the Safe Drinking Water Act."

1. The relevant portion of the 2005 Energy Act:

Paragraph (1) of section 1421(d) of the Safe Drinking Water Act (42 U.S.C. 300h(d)) is amended to read as follows:
```
(1) Underground injection.--The term `underground injection'
(A) means the subsurface emplacement of fluids by well injection; and
(B) excludes--
(i) the underground injection of natural gas for purposes of storage; and
(ii) the underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations related to oil, gas, or geothermal production activities.
```

"Big gas corporations have the best legal loopholes money can buy."

1. NRDC - Oil and Gas Exemptions from Federal Environmental Laws: Exemptions
https://spreadsheets.google.com/spreadsheet/ccc?key=0AgeW9Alo7tb5dDFwajBQWf8zdUxYbE14X01TsdUI1VE&hl=en

2. The FRAC Act http://thomas.loc.gov/cgi-bin/bdquery/z?d112:h.r.1084:

"If fracking is so safe, why has the industry fought so hard to get around the law?"


“There’s not a single treatment plant in the state that can clean it up.”

1. “In NYS the disposal of processed and concentrated NORM in the form of pipe scale or water treatment waste is subject to regulation under Part 380. Because disposal of Part 380 regulated waste is prohibited in Part 360 regulated solid waste landfills, this waste would require disposal in out-of-state facilities approved to accept NORM wastes.” Revised Draft SGEIS 2011, Page 6-207

5.13.3.3 Out-of-State Treatment Plants

“The only regulatory role the Department has over disposal of flowback water (or production brine) at out-of-state municipal or industrial treatment plants is that transport of these fluids, which is considered
Industrial waste, must be by a licensed Part 364 Transporter.

For informational purposes, Table 5.28 lists out-of-state plants that were proposed in actual well permit applications for disposition of flowback water recovered in New York. The regulatory regimes in other states for treatment of this waste stream are evolving, and it is unknown whether disposal at the listed plants remains feasible.

Table 5.28 - Out-of-state treatment plants proposed for disposition of NY flowback water

<table>
<thead>
<tr>
<th>Treatment Facility</th>
<th>Location</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Waste Services</td>
<td>New Castle, PA</td>
<td>Lawrence</td>
</tr>
<tr>
<td>Eureka Resources</td>
<td>Williamsport, PA</td>
<td>Lycoming</td>
</tr>
<tr>
<td>Lehigh County Authority Pretreatment Plant</td>
<td>Fogelsville, PA</td>
<td>Lehigh</td>
</tr>
<tr>
<td>Liquid Assets Disposal</td>
<td>Wheeling, WV</td>
<td>Ohio</td>
</tr>
<tr>
<td>Municipal Authority of the City of McKeese</td>
<td>McKeesport, PA</td>
<td>Allegheny</td>
</tr>
<tr>
<td>PA Brine Treatment, Inc.</td>
<td>Franklin, PA</td>
<td>Venango</td>
</tr>
<tr>
<td>Sunbury Generation</td>
<td>Shamokin Dam, PA</td>
<td>Snyder</td>
</tr>
<tr>
<td>Tri-County Waste Water Management</td>
<td>Waynesburg, PA</td>
<td>Greene</td>
</tr>
<tr>
<td>Tunnelton Liquids Co.</td>
<td>Saltsburg, PA</td>
<td>Indiana</td>
</tr>
<tr>
<td>Valley Joint Sewer Authority</td>
<td>Athens, PA</td>
<td>Bradford</td>
</tr>
<tr>
<td>Waste Treatment Corporation</td>
<td>Washington, PA</td>
<td>Washington</td>
</tr>
</tbody>
</table>

"Fracking has nothing to do with energy independence."

1. Applications Received by DOE/FE to Export Domestically Produced LNG from the Lower-48 States_ [http://catskillcitizens.org/learnmore/LNGEXPORTTERMINALS.PDF]

"Fracking threatens your property rights."

1. The “Strict Liability” Bill [http://assembly.state.ny.us/leg/?bn=A00846&term=2013]

"Towns have the right to prohibit fracking. Dozens of towns in New York State have already enacted bans that have have been upheld in court."

1. You can follow the spread of anti-fracking bans and moratoria at [http://www.fractracker.org/maps/ny-moratoria/]