



On Wastewater and The New York Times

Sunday front-piece story a “malicious attempt to mischaracterize how Pennsylvania regulates its industry,” says fmr. DEP secretary

Boil it down, break it apart, reduce it to its irreducible parts, and the basic thesis you’ll find at the center of *The New York Times*’ weekend disquisition on natural gas development goes something like this: Wastewater, collected at the wellhead after a fracturing operation is complete, tends not to meet the standard for safe drinking water. In fact, in some cases, across some categories, it may not even come close. It’s a revelation that’s dramatic, stunning, controversial and, for the most part, irrelevant – especially under scenarios that don’t involve people drinking this water straight from the wellbore.

To his credit, NYT reporter Ian Urbina concedes relatively early-on in [his 3,800-word piece](#) that “people clearly do not drink drilling wastewater,” which strikes us as good news. But if folks don’t consume the wastewater, why assess its relative risk value against a drinking water standard? According to the reporter, that’s the only one he could find: “[T]he reason to use the drinking-water standard for comparison is that there is no comprehensive federal standard for what constitutes safe levels of radioactivity in drilling wastewater.” Of course, the absence of one standard doesn’t constitute the appropriateness of use for another. The sentence is a non-sequitur. But the problems with the piece extend well beyond matters of syllogism.

Below we begin the process of addressing some of these issues, building on the work of [our colleagues](#) and [outside observers](#) who have already identified a number of errors in the piece, and obvious examples in which the reporter “writes-around” or otherwise minimizes things that, had they been represented genuinely, would have forced a diversion from what appears to have been a pre-established narrative. “The article excludes information completely or from the main story, used misleading words to conceal important points, and consistently shaped information to advance [a certain] narrative.” [That’s according to John Hanger](#), formerly Pennsylvania’s Department of Environmental Protection (DEP)

secretary and a man who, although quoted in the Urbina story, was never actually interviewed by the reporter for the piece. How's something like that happen? We'll get to that in a bit.

For now, let's take 'em as they come and see where we land at the end. Imagine we'll have plenty more to say on these fronts once additional facts come to the fore, and additional pieces – **like the one that [just hit the website](#) an hour ago** – are posted by this reporter.

NYT: “[T]he relatively new drilling method — known as high-volume horizontal hydraulic fracturing, or hydrofracking — carries significant environmental risks.”

- Hydraulic fracturing is not a drilling method. It's also not “relatively new.” From an E&E News piece that appeared on the NYT website last week: “The **method of drilling is not called 'hydraulic fracturing.'** Fracturing ... is a process that is one part of drilling a well and producing oil or gas. Fracturing has been used by drillers for around 60 years.” (NYT, [2/24/11](#))
- And what of fracturing's record of safety? Here, Urbina references “significant environmental risks” associated with hydraulic fracturing, but spends the rest of the piece focusing on wastewater – perhaps unaware that the generation of produced water is a phenomenon not unique to fracturing.
- Contrast Urbina's declaration with [statements](#) from regulators [across the country](#), whose jobs require them to be aware of how fracturing technology is being deployed in their state. As then-DEP secretary John Hanger [told Reuters](#) this past fall: “It's our experience in Pennsylvania that **we have not had one case** in which the fluids used to break off the gas from 5,000 to 8,000 feet underground have returned to contaminate ground water.” Of course, by choosing not to interview Hanger, the reporter was able to evade this reality entirely.
- What's in a name? In our experience, those who insist on assigning cartoonish nicknames to highly technical engineering processes also tend to be those who know the least about how the technology works. In this case, for this story, the technology is called [hydraulic fracturing](#). It's been called that now for 60 years. Just because you give it a new handle – even a percussive, scary-sounding “hydrofracking” one – doesn't make it a new process.

NYT: “In fact, federal and state regulators are allowing most sewage treatment plants that accept drilling waste not to test for radioactivity. And most drinking-water intake plants downstream from those sewage treatment plants in Pennsylvania, with the blessing of regulators, have not tested for radioactivity since before 2006, even though the drilling boom began in 2008.”

- With so many weasel-words in one sentence, it’s difficult to determine exactly what the reporter is trying to say. Regulators are allowing “most” sewage treatment plants to accept wastewater from the Marcellus, even though “most” water plants don’t test for radioactivity. Unfortunately for NYT, the folks who actually run these wastewater treatment facilities in Pennsylvania are starting to speak up – and what they’re saying doesn’t align with the thesis put forth by the reporter.
- From this morning’s [Sunbury \(Pa.\) Daily Item](#): “Norm Zellers, operations support manager at Sunbury Generation LP in Shamokin Dam, said the Snyder County plant does have testing done for radioactive material at a certified laboratory in western Pennsylvania. **‘We’ve been analyzing from very beginning,’** Zellers said, noting that state Department of Environmental Protection officials and other groups have been to the plant many times to check on the plant’s output.”
- From yesterday’s [KDKA newscast in Pittsburgh](#): “The Mon [River] is the primary water source for Pennsylvania American Water and their spokesperson told KDKA Investigator Andy Sheehan they **last checked their finished tap water for radioactivity in 2008 and it was ‘well within’ federal and state standards.** ‘We will continue to follow the US EPA and PA DEP monitoring and sampling guidelines for radium at this time. Pennsylvania American Water’s plants on the Mon River continue to surpass all federal and state drinking water standards.”

NYT: “[Pennsylvania] is the only state that has allowed drillers to discharge much of their waste through sewage treatment plants into rivers.”

- Here, the reporter attempts to minimize both the importance and frequency of wastewater recycling and reuse programs in Pennsylvania. Later in the piece, he actually writes that “most” of the wastewater generated by the state’s Marcellus producers is sent to treatment plants, which presumably means greater than 50 percent.

- In the second installment of the anti-Marcellus series posted on the Times' website [today](#), Urbina doubles-down on this assertion, writing: "In Pennsylvania, for example, natural-gas companies recycled less than half of the wastewater they produced during the 18 months that ended in December, according to state records.
- But later in *that* piece, the reporter admits "the amount reported recycled in the past six months is **roughly 65 percent of the total produced**, up from roughly 20 percent during the 12 months before that." Most major Marcellus didn't begin their recycling programs in earnest until late 2009 or early 2010 – **so why would Urbina focus on recycling data going back 18 months?**
- Data confirm clear trend toward greater water recycling in PA: "According to production reports due Feb. 15 and posted last week ... Marcellus Shale operators directly reused 6 million barrels of the 10.6 million barrels of waste fluids produced from about 1,500 different wells between July and December. **At least an additional 978,000 barrels were taken to facilities that treat the water and return it to operators for reuse.**" (Scranton Times-Tribune, [2/27/11](#))
- [More](#) lessons from the data sheets: "The amount reused or recycled is about **seven times larger** than the 1 million barrels of wastewater Marcellus Shale drillers said they directly reused during the 12 months between July 2009 and June, the first time the drillers' waste reports were made publicly available on the website." (Scranton Times-Tribune, [2/27/11](#))
- Seven times the water being recycled today compared to 18 months ago, and several steps closer to the goal of 100 percent: "The majority of companies are working toward reusing 100 percent of their flowback water for several reasons. Environmentally it makes sense, and economically it makes more sense..." [Penn State hydrologist Dan] Yoxtheimer said." (Pittsburgh Post-Gazette, [3/1/11](#))

NYT: "‘We’re burning the furniture to heat the house,’ said John H. Quigley, who left last month as secretary of Pennsylvania’s Department of Conservation and Natural Resources. ‘In shifting away from coal and toward natural gas, we’re trying for cleaner air, but we’re producing massive amounts of toxic wastewater with salts and naturally occurring radioactive materials, and it’s not clear we have a plan for properly handling this waste.’"

- But DCNR **doesn't even regulate** oil and natural gas development in Pennsylvania. "Some confusion exists about the jurisdictions and roles of DCNR and DEP," former DEP secretary Hanger [wrote on his personal blog](#) this weekend. "The DCNR does not regulate the oil and gas industry in Pennsylvania. DEP does."
- Why would Urbina interview the former head of an agency with no jurisdiction over oil and gas instead of the former head of the regulatory agency that did have it? "**I find it amazing** when this reporter is writing a narrative of lax regulation in Pennsylvania for essentially the period that I served as Secretary of the Department charged with regulating the industry that my perspective is not relevant." (John Hanger's personal blog, [2/28/11](#))
- Quigley now says Urbina represents his view in "misleading" way: "Secretary Quigley informs me that the representation by this reporter of that interview and his views as expressed to the reporter in this article is **highly selective and misleading.**" (Hanger blog, [2/27/11](#))

NYT: "There are business pressures' on companies to 'cut corners,' John Hanger, who stepped down as secretary of the Pennsylvania Department of Environmental Protection in January, has said. 'It's cheaper to dump wastewater than to treat it.'"

- NYT quotes John Hanger without ever actually talking to John Hanger: "[T]hough I am quoted in the piece, this reporter never interviewed me prior to the publication of the Sunday [sic.] article. ... The reporter did not ask the new administration for my contact information after I left office. **He made no attempt to reach me** from January 18th until the piece was published, including again to confirm the quotation he uses." (Hanger blog, [2/27/11](#))
- Hanger calls Urbina's assurances that he tried to get hold of Hanger "**slimy**": "I know of no other reporter in the 30 plus months that I served as Secretary who did not get an interview with me after supposedly requesting it. This reporter stands alone to my knowledge. ... And it turns out that the emails show the Reporter does not believe his own **slimy** verbally stated reason for not interviewing me." (Hanger blog, [2/28/11](#))
- Hanger calls Urbina story "malicious" in its design: "This was a **malicious attempt to mischaracterize** how Pennsylvania regulates its industry." (KDKA-TV, [2/28/11](#))

NYT: “The risks are particularly severe in Pennsylvania, which has seen a sharp increase in drilling, with roughly 71,000 active gas wells, up from about 36,000 in 2000.”

- Imagine the disappointment the reporter must have felt upon finding out that only 2,498 Marcellus wells have actually been drilled in Pennsylvania. (DEP year-end workload report, accessed [2/28/11](#))
- Disappointed, but not deterred: He decided to simply conflate the number of conventional, shallow wells in state with the number of Marcellus wells to arrive at his final number – even if it’s true that 96.5 percent of those 71,000 wells produce less than 50,000 gallons of wastewater in total, and most now produce none at all (this is called “context” in the news business).
- Believe it or not, even as Pennsylvania today continues to produce more than 2.4 billion cubic feet of natural gas per day, those resources are only flowing from a total of [just over 1,100 Marcellus wells](#) – representing less than two percent of all those “active gas wells” over which the reporter laments in the piece.

NYT: “Hydrofracking impacts associated with health problems as well as widespread air and water contamination have been reported in at least a dozen states,’ said Walter Hang, president of Toxics Targeting, a business in Ithaca, N.Y., that compiles data on gas drilling.”

- There’s that term “hydrofracking” again, this time uttered by Walter Hang. In the piece, Urbina identifies Hang only as the president of a business “that compiles data on gas drilling.” In reality, Mr. Hang is among the most aggressive anti-shale activists in the entire mid-Atlantic region – a fact of which the reporter would have been aware, and should have made clear to his readers. [Take a look](#) for yourself.
- EID has grappled with Mr. Hang on occasion over the years, most notably in late-2009 when EID released a [devastating fact-check](#) showing quite clearly how Hang manipulated data to construct a misleading talking point on “spills” in New York State. Less than a month after our rebuttal was sent, Pete Grannis, then commissioner of New York’s Department of Environmental Conservation (DEC), [sent a follow-up letter](#) to a member of the New York State Assembly corroborating what EID had found, and debunking Hang in clear and categorical terms.

NYT: “In late 2008, drilling and coal-mine waste released during a drought so overwhelmed the Monongahela that local officials advised people in the Pittsburgh area to drink bottled water.”

- According to [Tetra Tech, Inc.](#), a major environmental analysis and consulting firm with offices and experts around the world, the elevated levels of total dissolved solids (TDS) found in the Monongahela River during the period in question were at best “only minimally” related to natural gas development.
- [From the study:](#) “[T]he results of this study clearly indicate that discharges from natural gas exploration and production operations contributed only minimally to the total TDS concentrations and mass loadings in the Monongahela River during the time period the study was conducted.”
- [More:](#) “The main chemical component detected in the TDS concentrations and mass loadings was sulfate, **which mostly likely is the result of mine drainage**. The significant increase in the river’s assimilative capacity in December indicates that controlled flow back and produced water discharges to the river could occur **without exceeding water quality limits** during most of the year when low-flow conditions do not occur.”
- Jazz Shaw over on the [Hot Air blog](#) provides perspective Urbina didn’t: “It’s true that a 2008 recommendation was made favoring the use of bottled water in the Pittsburgh area. But one look at [their water safety report](#) for that year shows that the concerns over water quality cover a wide range of problems, including agricultural run-off and unrelated industrial activity, **with drilling of any sort falling far down the list**.”

NYT: “A confidential industry study from 1990, conducted for the American Petroleum Institute, concluded that ‘using conservative assumptions,’ radium in drilling wastewater dumped off the Louisiana coast posed ‘potentially significant risks’ of cancer for people who eat fish from those waters regularly.”

- Interestingly, the “confidential industry study” prepared 21 years ago and cited extensively by the reporter this weekend wasn’t actually confidential at all. “The API study mentioned in the NYT article **was not confidential**,” API told Hot Air in an email. “In fact, it was turned into API Publication 4532 and published in 1991.” (Hot Air blog, [2/28/11](#))

- Its non-confidential status aside, the 1990 study analyzed the “over-board” discharge of wastes from offshore platforms – discharges that included not only dissolved solids, but actual suspended ones as well. In Pennsylvania, however, wastewater treatment facilities remove suspended solids from the mix – reducing the amount, volume and concentration of potential contaminants discharged.

NYT: “Gas producers are generally left to police themselves when it comes to spills. In Pennsylvania, regulators do not perform unannounced inspections to check for signs of spills.”

- **Flashback: DEP Inspector visits drilling site unannounced:** “A DEP inspector discovered the spill while inspecting the well pad. The inspector found that the bottom valve on a 21,000-gallon fracking fluid tank was open and discharging fluid off the well pad. No one else was present at the pad, which has one producing Marcellus well.” (DEP press release, [11/22/10](#))
- **In 2010 alone, DEP oversight staff performed nearly 5,000 inspections at Marcellus Shale wellsites, a more than 100 percent increase over the previous year.** (DEP Year End Workload Report, accessed [2/27/11](#))
- **Pennsylvania has been recognized for having “well managed” hydraulic fracturing regulatory program by national group of experts:** “A targeted review of the Pennsylvania program regulating the hydraulic fracturing of oil and gas wells has been completed by a multi-stakeholder group, which has concluded that the program is, over all, well-managed, professional and meeting its program objectives.” (STRONGER press release, [9/24/10](#))
- **Fmr. DEP secretary details strong regulatory oversight and enforcement on personal blog:** “We hired in 2009 and twice in 2010. We opened a new drilling staff office in Williamsport in 2009 and another in Scranton during 2010. Pennsylvania is the only state that has hired substantial or any staff for its drilling operation. The NYT does not say that, because it does not fit its narrative of lax Pennsylvania regulation. Indeed, the reporter deliberately did not include a long list of actions by DEP that represented strong enforcement.” (John Hanger blog, [2/27/11](#))

(h/t: [Marcellus Shale Coalition](#))

Round two to come – this one focused on wastewater recycling.

READ MORE

- **Marcellus Shale Coalition:** [Drilling Down on NYT Wastewater Story](#)
- **New York Times/E&E:** [Groundtruthing Gasland](#)
- **Pittsburgh Post-Gazette:** [Gas Drillers Recycling More Water, Using Fewer Chemicals](#)
- **Fact-Check:** [Debunking GasLand](#) ([Fact Sheet](#))