

Houston's post-Harvey toxic mess

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City Hall in Houston, Texas. Credit: Flickr user Jerald Jackson

With overflowing sewage, under-regulated exploding chemical plants, and leaking household cleaning and gardening chemicals, some of the air and water in Texas was a toxic mess in the wake of Hurricane Harvey.

The explosions of chemical tanks at the Arkema chemical plant in Crosby, Texas were no surprise. It was the predictable impact of a complex industry that EPA has been too weak to effectively regulate for years. In January 2017, when the Obama Administration was practically out the door, EPA finally published the Chemical Disaster Rule. This regulation was designed to toughen up the relatively weak, 1996 requirement that chemical plants and other high-risk facilities issue risk management plans to reduce the probability of industrial accidents. One might wonder why it took Obama eight years to revise this weak requirement. A 2013 fertilizer plant explosion in West Texas killed 15 people and that seemed to stimulate action. A bit late, but at least Obama's EPA did something. That was too much for Scott Pruitt, the anti-regulatory zealot commanding the Trump EPA. This past June, he decided to delay implementation of the rule for 20 months.

Industry pressure to resist regulation is nothing new, and certainly not limited to America. The nuclear industry in Japan weakened plant protection, resulting in the disaster at Fukushima. The auto industry's opposition to regulation goes back to opposing seat belts over a half century ago. For years, the chemical industry has been effective in its efforts to block rules designed to protect the environment. In Texas, plants that violate rules are subject to relatively small fines. In the long-run, industries that are under-regulated make mistakes that cost more to fix than compliance with reasonable regulations would have cost. But that is of little relevance in a world of frequent financial reporting and low cost, endless information. Long run sustainability is driven out by the need for short-term financial results.

Some businesses look to locate in places where government will leave them alone and they won't be troubled by rules and regulations that cost money to comply with. The problem with this logic is that it assumes that regulations are both unreasonable, which is usually not the case, and unnecessary, which is rarely the case. I view the anti-regulatory impulse

the same way I look at deferred maintenance or disinvestment in infrastructure. It is a short term, myopic perspective that is a prime indicator of poor management. Effective regulation, like the rule of law itself, provides a civilized base from which competition can take place. It facilitates rather than impedes commerce.

In the small, visible, networked world we live in, bad management can come back to cost the company more than money saved by cutting corners. Think BP and the Deepwater Horizon explosion in the Gulf of Mexico, or Volkswagen and the fraud in its emissions monitoring process. In the case of Arkema Inc., this French owned company is already being sued by first responders who were patrolling near the plant and not told about the toxicity of the explosion. According to the Wall Street Journal's Quint Forgey:

The first responders were manning the perimeter of a 1.5-mile evacuation zone imposed two days before the explosions, but after the blasts occurred, the lawsuit alleges no one from Arkema alerted the first responders. "One by one, the [police officers](#) and first responders began to fall ill in the middle of the road," according to the lawsuit. "The scene was nothing less than chaos. Police officers were doubled over vomiting, unable to breathe. Medical personnel, in their attempts to provide assistance to the officers, became overwhelmed and they too began to vomit and gasp for air."

The company responded by saying they did everything they could to protect the public in a dangerous, unpredictable situation. Releasing toxic emissions into the air in Houston seems to be a way of life, as companies often vent chemicals when storms are approaching and plants are shut down, or when plants reopen after a storm. On September 8, Michelle Minkoff of the Associated Press reported that:

Petrochemical corridor residents say air that is bad enough on normal

days got worse as Harvey crashed into the nation's fourth-largest city and then yielded the highest ozone pollution so far this year anywhere in Texas...Of the dozen plants in Harris County reporting storm-related emissions, Exxon Mobil, Chevron Phillips and Shell Oil have been fined or ordered to pay settlements totaling \$27.8 million since 2010 for violating federal environmental laws after suits by The Sierra Club and Environment Texas.

But it is not only industry that can be careless with toxics; our modern way of life is infused with toxic materials that can find their way into the environment due to disasters, careless management, or simple ignorance. Sometimes we truly do not understand the toxicity of household items. Printer toner, cleaning fluids, and the electronic gizmos we rely on all contain [toxic chemicals](#). When they stay where they belong and aren't subject to flood or fire they present little danger. But when disaster strikes, they can compound the damage. We learned painful lessons about toxicity after 9/11 at the "pile" that remained where the Twin Towers used to be. Decades later first responders are still experiencing the health impacts of that toxic site.

It is important to acknowledge that the danger and complexity of the modern economy is not limited to Texas, but is a global phenomenon. And on this anniversary of the horror visited on New York City in 2001, we need to understand that our vulnerability is not only to natural disaster, but to deliberate acts of terror by humans. When we built the original World Trade Center we still used asbestos as a flame retardant. Eventually scientists learned about the unanticipated impacts of that chemical and we developed regulations that prevent its use. The rule came too late to help those that worked the pile, but was a reasonable action taken in the public interest.

Regulations are needed because the world can be a dangerous place, and we need to take reasonable steps to ensure safety. All human and

economic activities involve risk, but some risks should be avoided. Rules should always be subject to an assessment of costs and benefits, and an organization's good faith compliance with rules should always be considered when enforcing rules. But the effort to delegitimize environmental rules has gone on for far too long. Unfortunately, it often takes a disaster to convince people that protection is inadequate.

The late Tip O'Neil famously maintained that all politics is local, and the reaction to Harvey by Ted Cruz and most of the Texas congressional delegation is further proof of Speaker O'Neil's wisdom. Suddenly these conservative ideologues favor an activist federal government. Their ideology of smaller government has been overwhelmed by the immense, immediate and desperate need of people all over Texas. We may see a similar development in Florida once the cost of Irma's destructive force is totaled.

Will the impact of these hurricanes convince people in Florida and Texas of the need to rethink regulation, climate change, and the need to better manage toxic substances? Many people in these places reflexively accept the idea that federal regulations over-reach, kill jobs, and are not needed. Perhaps a small dent has been made in the anti-regulatory armor. Toxic chemicals can be well managed and carefully handled. The risk of their use can be contained. But it takes political will from elected officials, management competence from unelected administrators and a willingness to cooperate from chemical companies to improve performance.

Disasters can change the way people look at the world and their role in it. But people also want to return to normalcy, and resume their old way of doing business. We won't know how these hurricanes will change Texas and Florida, but we know that some change is inevitable. If we are to maintain the way of life we enjoy while maintaining a safe and healthy environment, we need to require more careful management of

toxic substances.

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