

Public Policy Issues in Air Pollution: The Public Interest Perspective

By Jim Blackburn

© February 2016

Thank you for having me here today to talk about public policy issues from the public interest perspective. I appreciate the chance to come and share some thoughts about some very important issues. Today I want to address three issues – climate change, the new ozone standard and environmental justice. But before we get to these, I want to reflect briefly about the public interest – what it is and what it means.

Public interest is generally defined to be “the welfare or well-being of the general public” as opposed to that of one individual or group. It is about the community collective rather than one interest group or another. To be asked to speak about the public interest is as far as I am concerned a very high honor. Somewhere in such an invitation is an assumption that I might be able to rise above my individual concerns and interests and speak more generally for the public. This is a challenge that I will try to live up to.

Let me start with a question. How many of you here today are lawyers? How many are engineers? How many scientists? Interestingly, there is a difference in the Code of Ethics of these groups relative to the public interest.

According to the Preamble to the Texas Disciplinary Rules of Professional Conduct, a lawyer is a representative of their clients, and the primary duty is to the client. Public interest representation is identified in the context of rendering public interest legal service, e.g., providing legal services to those unable to pay. At least from a lawyer’s ethical standpoint, public interest law is working for those who cannot

pay. We are all encouraged to do some of this free legal work, but there is no requirement. I, on the other hand, have been practicing public interest law for much of my career, and I am afraid my bank accounts reflect that to some extent.

By contrast, engineers have a very different duty. According to Section 137.55(a) of the Texas Engineering Practice Act, engineers shall be entrusted to protect the health, safety, property, and welfare of the public in the practice of their profession. Now, that charge is very different from that of the lawyer, which is clearly to the client. I suggest that this ethical obligation has not been discussed or enforced to any extent. If it were, the results could be quite interesting.

And what about scientists. Do scientists have any general ethical obligation to the general public? My limited research indicates that there is no legal obligation in Texas regarding scientists and their obligations to the public interest. Geoscientists have to be licensed, but there does not seem to be any statement about duty to the public other than not defrauding the public. According my friend Ron Sass, there was once an effort to license all scientists in Texas, but that failed many years ago.

As a general proposition, I think it is the role of scientists to seek understanding of the Earth and the universe – about the way the natural world functions, formation processes, insights as to fate and consequences. This search for understanding has never been easy or without serious consequences for some – witness Galileo being found guilty of heresy and placed under house arrest where he did some of his finest work. I don't know of anyone under house arrest for heresy today, but there is genuine fear of losing jobs for expressing honest

scientific or engineering opinions about climate change. And in many respects, that is a true loss of liberty.

Now let me turn to the three topics I want to discuss today – the new ozone standard, environmental justice and climate change.

Ozone

First, consider the new ozone 70 ppb 8-hour standard. Once again, I am hearing industry claim that it is impossible to reach this standard and that the Obama administration is once again coming after the oil and gas industry. The Texas Attorney General has once again sued EPA. Legal testosterone is abundant.

When I first heard industry's response to this new standard, my response was to dismiss it out of hand as, once again, industry protesting in spite of scientific evidence to the contrary. And then I consulted a colleague at Rice University who told me that there was indeed a real serious issue about whether or not this standard was in fact attainable.

If nothing else, I believe that the public interest requires that attainability be a consideration in any standard, and I stated such concerns in a recent speech to the Air Alliance luncheon here in Houston. And after that presentation, I was approached by another Houston-area scientist who said that the standard may, in fact, be attainable, that our VOC inventory likely was incorrect and that our methods for determining VOC emissions were obsolete.

In this town, industry has done little, in my opinion, to gain credibility about its science relative to ozone. I am old enough to remember HAOS, the Houston Area Oxidant Study, the attempt by the old Houston Chamber of Commerce and industry to show that there was no health basis for regulating ozone. And that turned out to be flat

wrong, although yet today the rhetoric lingers and many still believe the ozone health connection to be tenuous at best. Since then, the focus has been to push back attainment dates, always delaying expenditure and commitment, most recently when Governor Perry in 2007 requested that the compliance status of the Houston-Galveston area be elevated from moderate to severe under the then-new, 8-hour standard, ensuring several additional years to meet that standard, even though the monitoring data did not really support that designation.

On the other hand, I am willing to listen to industry concerns about attainability, and I am willing to counsel others concerned about the health effects of air pollution to listen, if we have a defensible plan for compiling and evaluating emissions. We have known for years that emission factors used by EPA, TCEQ and others were inaccurate. We have received evidence from aerial overflights as well as from Differential Absorption LIDAR (DIAL) and Solar Occultation Flux (SOF) analyses that our emissions inventories of VOCs are about 5 times lower than actual, particularly from storage tanks if not also from cokers and cooling towers.

So, here's a thought. If we conduct these sophisticated tests and determine that the inventories are correct, then all of us should come together and work to find an agreeable path forward based on concerns about attainability. On the other hand, if industry is unwilling to support DIAL and/or SOF studies and ensure that the best science is being brought forward, don't ask for my help in arguing against the standard and don't tell me that you are acting in the public interest. Public interest requires sound science. If you are unwilling to develop it, don't ask for help.

Environmental Justice

Yet another continuing dispute exists in many locations between industry and their neighbors. Fence line communities often suffer the highest levels of certain pollutants, including air toxics and metals. They are particularly vulnerable to upset emissions and flaring not to mention benzene emissions from storage tanks. These fence-line community issues have come to be addressed under the heading of environmental justice because many of these neighbors are either minority or very low income areas. I have worked in many of these areas, including Port Arthur, Freeport and Corpus Christi, as well as certain Ship Channel areas, and I find a certain similarity of both the issues and the failures. And I think I have an idea or two that might work in many of these areas.

Let me start by talking about a success. In Port Arthur, Hilton Kelly and his group, CIDA, have been able to work some very interesting solutions in association with Motiva, Valero and Total. This situation started as adversarial. I represented Hilton and CIDA, and we were able to negotiate settlements of various types with these three refineries. These settlements were not tort litigation settlements but were rather settlements in permit disputes. If I had not been willing to represent Hilton pro bono, he certainly could not have afforded legal representation, and these settlements likely would not have occurred. However, in my opinion, they have been excellent for the community and I believe, for the plants as well, and they offer an interesting way forward in these community interactions.

The biggest problem that I see with regard to fence line communities is the absence of parity – the absence of equality - between the plant and the community. As a general proposition, the plant is in the position of power and the community is at their mercy in

more ways than one. The thing that litigation brings is equity, at least to some extent. Whether it is in federal court or in a state administrative hearing, legal representation brings the plant and the community to eye level with each other, something quite different from the CAP process which, while certainly positive, lacks the ability to address key problems as it is currently constituted, which has been the same for over two decades.

In my opinion, what is needed is a form of dispute resolution between the plants and the adjacent neighborhoods, one that sets up a way to hear grievances and concerns and one that is structured to address these problems. I have had experience with this type of structure at Formosa Plastics where I think it worked superbly. But it requires the company to want to create a process to solve problems and a willingness to address these problems. Without such an interest and/or commitment, success will prove elusive.

So what would such a process involve? What issues might be addressed? And how would it work?

To start with, the process should provide a forum for hearing issues and concerns. No issue should be off the table. An independent team of experts should be available to undertake research into issues raised by the neighbors. There will be doubt about studies and science controlled by the plants; let the citizens participate in consultant selection and scope of work. Allow the citizens to bring in counsel to assist them. And have one or more persons set up to hear and report on these grievances. In short, I am asking you to consider giving up some autonomy in order to create a different working relationship with the community.

Along these lines, how about setting up a LEED-like process for chemical plants and refineries, one that awards certification based upon the use of best management practices within the plant. These best management practices could represent operational aspects such as air and water pollution control performance and systems, various aspects of community relationships, including the establishment of effective resolution mechanisms and interactions with the natural environmental system.

Here, I would also consider creating a different working relationship with the community. If shelter in place is part of the protocol, a determination should be made of the ability of the homes of these fence-line residents to provide adequate protection from releases. And to the extent that the houses are structurally unable to protect these residents, help them do something about this. If shelter in place is part of the response, it has to work.

Climate Change

It is hard to imagine a topic with a greater impact on the general public than climate change. The 5th report from the Intergovernmental Panel on Climate Change and other reputable sources are full of horrifying implications arising from our continued use of fossil fuels as we are now (the so-called business as usual scenario). Under this scenario, we will be looking at over 100 days a year in Texas where the temperature exceeds 100 degrees Fahrenheit. We are looking at worse drought and worse severe storms. Our traditional bell curve upon which we use in so many engineering calculations is changing, pushing out the edges where the severe events reside.

And that is only the beginning. Sea level rise will affect hundreds of millions of people around the world. Here on the Texas coast, hurricanes are projected to become more severe, fueled by the heating of the oceans which is increasing every year. How many of you watched as Hurricane Patricia formed virtually overnight as a major hurricane off of the coast of Mexico in October of 2015 and later that same year, Yemen, a country that had never been impacted by a Tropical Cyclone, was hit by not one but two major cyclonic storms. We all are familiar with the “weird weather” that is becoming the norm. In fact, “weird weather” is code for climate change as used by many state agency employees who are afraid that they will be fired for mentioning climate change. What type of state do we live in where our official state water availability models refuse to acknowledge a future that will see much more severe droughts more often.

Unfortunately, the carbon emission future will likely get worse than better in the short term. Every nation in the world was asked to make commitments for carbon reductions prior to the Paris COP 21 conference in December of last year. These submissions, called Intended Nationally Determined Concentrations (INDCs), are the official representations of emission futures on a country-by-country basis. If these submissions are to be believed, on the one hand, these contributions will reduce emissions from the worst case business-as-usual scenario. However, these reductions will not be enough. Global mean temperature would most likely still increase in the range of 2.7°C to 3.5°C. This shortfall was explicitly highlighted in the decision adopting the agreement, which “notes with concern” that the contributions “do not fall within least-cost 2°C scenarios but rather lead to a projected level of 55 gigatons of CO₂ in 2030”, while also noting

that for a 2°C pathway 2030 emissions would need to be reduced to 40 gigatons.

The time has come for those who have any regard for the so-called public interest to rise up and demand that we address climate change much more aggressively. There are approaches to abating and sequestering carbon that can be achieved and still maintain a robust oil and gas industry. These two actions – carbon neutrality and hydrocarbon usage – are not exclusive. They can co-exist. But we must admit that a problem exists and that controlling, abating and sequestering carbon emissions must occur if our children and their children are to have a livable planet. Period.

The time for arguing this issue is long past. It is time to roll up our sleeves and find mutually suitable answers. Here, I argue that the public interest does not demand the elimination of hydrocarbon consumption. That will not and should not happen. However, we should change the manner in which we use hydrocarbons. I, as a consumer, should be offered options such as carbon neutral gasoline. Consumers can use their money to change product mixes. And government should encourage product arrays that further climate neutrality.

Our economy should bend the straight line carbon emission projections by becoming circular, following literature that identifies a path to 28 billion tons of emissions from a projected 56 billion over the next twenty or so years. We should not be fighting over doing something but instead we should be developing the vision for the future.

In this regard, I fault environmentalists for failing to depict an alternative future that pursues carbon neutrality with significantly

reduced carbon emissions. The image that is often perceived is one of doing without, rather than a future that might be better, where quality of life is emphasized rather than quantity. We have failed to paint this image, at least in part due to the persistent nay-saying of industry. If we work together we can achieve great things. But we have to stop fighting.

And along this line, we have to be realistic about the fact that the climate is changing and that we have to adapt to it. Hurricanes on the Texas coast will become worse. At SSPEED Center at Rice, we are looking at a worst case hurricane surge of the future on the Houston Ship Channel that might exceed 30 feet with climate effects taken into account. Currently we believe that 20+ feet of surge up the channel is a very realistic storm projection. If we don't understand these changes and plan for them, the core of the petrochemical business in Houston and on the Texas coast could be seriously damaged along with our environment.

Conclusion

In conclusion, I want to offer what is perhaps a very strange twist to this presentation. Frankly, I am concerned for the future of the hydrocarbon industry and I think that from the public interest standpoint we need to retread the dialogue. It seems that – much like our political system – the dialogue has fallen into two camps – the far right and the far left. The far left seems to want to eliminate hydrocarbons. The far right wants to keep business as usual. Neither of these positions is viable in my opinion. Perhaps they are both necessary for various reasons, but not viable.

What is viable is an oil and gas industry that is progressive and pro-active about carbon. I honestly believe it is in the public interest to

help the oil companies find their way – to offer a helping hand. This is an industry in search of leadership and frankly, it seems more likely to come from the outside than from within. Within is worried about risk minimization when what is needed is risk-taking. This is the time to be bold, not shy. We need the wildcatter mindsight brought to this issue.

So in closing, let me leave you with the thought that I – an environmentalist, a so-called public interest advocate – find myself wanting to assist the oil and gas industry find a way to move to a responsible, and viable, carbon future. Through our work at SSPEED Center at Rice, we are trying to find a way to protect the coast, restore native marshes, prairies and bottomlands and also help the oil and gas industry find pathways to sequester carbon.

And to that end, I would like to see the oil and gas community present here on the Texas coast to make a commitment to sequester one billion tons of carbon dioxide by restoring native prairies and grasslands. That is essentially an area twice the size of Texas, assuming about 3 tons of carbon dioxide stored per acre restored which may be low. Here on the upper Texas coast, we could probably sequester in excess of 12 million tons in four adjacent coastal counties. And there would be any number of private landowners and non-governmental organizations ready and willing to stand with the oil and gas industry to make this important start. It would not be the end but the beginning of defining the 21st century oil and gas company, a company that promises to be quite different from the current model.

Finding this path to a different carbon future is – in my opinion – what is required for the public interest. It's not easy. It's not without controversy from either side. But is it the right thing for this time and for this overwhelming challenge. Thank you.