

Providing Industry Room to Breathe While Protecting Our Air Quality: Some Current Thoughts

09/14/2020

As a former state air regulator, I understand the complexities of air quality issues. Air permitting and state planning exercises are often times some of the most difficult and time intensive areas of environmental protection. And for good reason. The air we breathe is a precious resource and its health directly impacts ours. State air regulators are keenly aware of the importance of their actions and rely heavily on their engineers, modelers, epidemiologists, scientists, and other professionals to analyze and interpret data in order to render sound and protective decisions.

In Arkansas, we are fortunate to be in attainment for all national ambient air quality standards, which means we're meeting or beating federally-set standards at all air monitoring stations around the state. As the former Arkansas Division of Environmental Quality's Air Chief, I was proud to commission the first State of the Air report. At the time I presented the first report to the public, I expressed that the purpose of the release of the data was not to tout the successes of our air quality programs; rather, it was to provide to the public an accounting of the data. The data speaks for itself, and I committed on behalf of the Division to continue to share that data year-to-year, good or bad.

In addition to the successes Arkansas has realized in improvements to its ambient air quality over the course of the last several years, the United States as a whole has tended to realize reductions in harmful air emissions as well. As a former President of the Association of Air Pollution Control Agencies, I was privy to air quality statistics provided by the member states. The data bore out success stories again and again. This is due in large part to the federal Clean Air Act, which is one of the most ambitious and impactful environmental programs administered by the United States Environmental Protection Agency.

The implementation of the programs of the Clean Air Act have resulted in improvements in air quality throughout the course of its fifty-plus year history while the nation's economy has continued to grow. The purpose of the Clean Air Act was not to stifle our country's growth and prosperity. Rather, it was meant to use science and technology to push industry towards operating in a more protective way. Innovation and market forces have often resulted in industry outpacing environmental goals. Our factories and plants largely aspire to meet their own resiliency objectives, and therefore frequently realize air quality improvements on their own volition.

Industry is usually targeted for clean air compliance in order to drive positive air quality trends, but the reality is that the onus of attaining and maintaining healthy air is sometimes out of the control of the regulated community. Interestingly enough, naturally occurring events can impact the environment. For example, both wildfires and controlled burns contribute significantly to particulate matter (PM) emissions. Desert sandstorms contribute to PM levels as well. Even if facilities are fully complying with all federal and

state air quality requirements, a raging wildfire or large haboob can have consequential negative impacts on air quality.

Perhaps most surprisingly, coniferous trees produce large amounts of volatile organic compounds (VOCs). In some rural states, like Arkansas, these trees are the largest contributor to VOCs. Ozone is formed by a photochemical reaction where precursors, including VOCs, are cooked by the sun to form the ozone compound. Because of this phenomenon, an air quality monitor in one of the most pristine and natural areas of Arkansas was approaching the lower value of the proposed federal standard for ozone roughly four years ago.

I provide these examples to demonstrate that even in the most rigorous regulatory schemes, naturally occurring events can impact air quality in surprisingly negative ways. It is tempting to attribute trends with a specific event or cause. However, successful air quality programs evaluate all the data, and create plans and programs responsive to that data. Sometimes this means that there is an accounting for events outside the control of the regulated industry. In all instances, states should strive to implement the Clean Air Act and their approved or delegated programs in ways that allow for businesses to responsibly flourish while adhering to deliberate and meaningful standards of air quality protection.