AIChE's 2008 Annual Meeting taking place November 16-21, 2008 in Philadelphia, PA

Extended Abstract

DuPont has a long history of aggressively reducing our air emissions beyond compliance, whether it is greenhouse gases, which we reduced globally by 72% between 1990 and 2004 and continue to reduce, or air toxics which we reduced by 80%.

The Clean Air Act (CAA) has made significant contributions to improving America's environmental quality. Ambient air has improved continuously for the last 25 years and continues to improve. Major improvements have been made in mobile sources and more reductions are coming as the fleet turns over. Electric utilities have made major reductions form the acid rain requirements and NOx SIP call. We are a manufacturing entity that operates small power facilities that are a much different scale than utilities, and our perspectives relate to those operations, not bulk power generation.

DuPont supported the Clean Air Act as approved by the 1990 amendments, we now have the opportunity to build on the experience since then to move toward improvement to eliminate barriers to improvement, streamline governmental processes and reduce the unnecessary ongoing costs to society while ensuring the high level of air quality the Act has helped to provide.

1. The National Ambient Standards (NAAQS) have generally been increased in stringency since 1990 and have made important contributions to air quality. Now though, we have reached a point where there is disagreement about the basic interpretation and methods of data and science evaluations being conducted and on their significance levels. Some levels now approach natural background levels. The 5 year renewal time is much too short to allow the EPA and other researchers to adequately do sound scientific reviews with input from all stakeholders. A 10 year NAAQS review period would be more reasonable at this point in time.

CAIR/CAM: The vacature of CAIR and CAMR creates a pretty big gap relative to NAAQS compliance and regional haze. There needs to be some way to address further utility unit emissions reductions in an economically practical manner.

2. The Operating permit program in Title V has been much more expensive than anticipated and fees continue to escalate. We are concerned that the fees are now out of proportion and result in a significant cost burden on entities at a time when high energy and health care costs challenge the global competitiveness of US manufacturers. For example, at DuPont we have sites where Title V fees exceed $500 thousand per year. A reduction is possible if the renewal period was modifies from the current 5 year period to a longer period or if permit modifications were triggered only by substantive and significant changes too an operation.

The current system should also be streamlined by having only one permit modification procedure, public hearings etc for NSR/PSD vs. the current duplicative system.

3. The current NSR/PSD program can represent significant time delay and expensive procedure for sources to obtain permits, including for projects that improve energy efficiency and reduce greenhouse gas emissions and these extended timeframes can further inhibit competitiveness in a world where businesses have to be nimble.

The program could be improved through implementation for existing sources of programs like acid rain and the Air toxics residual risk programs where need is determined by local/regional conditions and air quality evaluation. The modification rules as implemented by EPA in the past have become a constant litigation and interpretative nightmare. The 2002 rulemakings for the arithmetic test for determining emission increases from modifications are a significant improvement over the emission increase methods previously used by EPA enforcement.
4. The trend toward expensive hardware to continuously monitor emissions with all the continuous evaluations required for small sources such as typical in the manufacturing world (i.e. less than electric utility size) to allow a variety of different techniques to be used for determining emissions. Sources typically spend over $100,000 annually per regulated monitor for NOx or SOx continuous monitors for large size industrial boilers. The cost is the same regardless of the size of the emissions. The cost per ton of emissions skyrockets as each emission point becomes smaller. Industrial cost of monitoring can easily exceed electric utility cost of control including continuous monitoring.

These smaller sources need to be able to use available information in most cases, with invoices as backup support for fuel purchases. Fuel metering as for natural gas is usually pretty good. Fuel monitoring for coal is not possible unless you have gravimetric feeders (none of our units have them), so we use calculated fuel use, coal purchases invoices, inventory corrections, etc. combined with fuel analysis and emission factors.

5. DuPont has long been reducing our own greenhouse gas emissions, and we are actively advocating for comprehensive, mandatory US legislation to reduce greenhouse gas emissions. We think that to deliver the needed reductions in an economically sustainable manner that greenhouse gas reduction program needs to be intentionally developed, and that simply adapting the elements of the current Clean Air Act to greenhouse gas controls without Congress adapting them would be ineffective and costly.

SUMMARY:
DuPont supports a robust Clean Air Act as well as reductions in greenhouse gas emissions. We believe that greenhouse gases should be addressed through a new construct developed by the US Congress for that purpose. We also believe we should look for opportunities to increase the efficiency of the existing CAA while ensuring its ongoing effectiveness.
E. I. duPont de Nemours and Company