Responsible Care

Industry reaffirms committment to continuous improvement

American Chemistry Council (ACC) member companies continue to embrace Responsible Care as a cornerstone of their environmental, health, and safety (EHS) initiatives and have approached new product and process safety components as a welcome challenge to elevate their own safety and stewardship efforts. In the spirit of continuous improvement, ACC is looking to expand the scope of Responsible Care to include sustainability, both within and beyond fence lines. Meanwhile, the rollout of the new federal chemicals management regime looks promising, with EPA meeting deadlines and demonstrating a commitment to honoring Congressional intent (*p. 27*).

Rebecca Coons

Responsible Care, industry's signature environmental, health, safety, and security initiative, continues to underscore industry's commitment to responsible operation of facilities and business integrity. The recent addition of product safety codes augments product stewardship programs already in place by many manufacturers, while plans to add sustainability metrics will ensure that performance never plateaus.

"By adhering to the Responsible Care Management System process, we drive continuous improvement in performance and increase the efficiency and effectiveness of EHS-related activities," says Derek Fairclough, BASF senior vice president, environment, health and safety (EH&S) services, North America. "We regularly conduct audits to monitor our performance and progress, and update our guidelines and requirements if necessary."

Keith Silverman, vice president, global operations, quality, and EH&S at Ashland, says the company's approach to Responsible Care is built on "safe, compliant, and responsible" operations. Ashland targets continual improvement through its Zero Incident Culture. The program doesn't only consider safety; it also considers environmental, spills, and releases," Silverman says. "It considers product safety and encompasses quality standards. So by having a really broad definition, we can include a large population of the employee base in this."

Stronger systems

Recent updates to Responsible Care's process safety codes strengthen leadership, accountability, and culture standards. Early results for 2016 show process safety incidents at their

NEVER SETTLE: Process safety code updates strengthen leadership, accountability.

lowest level in 10 years. The update is also intended to complement existing regulatory requirements, such as OSHA's Process Safety Management standard and EPA's Risk Management Plan standard.

"We've strengthened our management system and the way we operate to reflect those updates," Silverman says. "The process safety program is a challenging one, particularly to implement globally with so many regulations and different approaches from governments. So we use Responsible Care as a foundation, and the updated process safety code is a tool that gave us an opportunity to look at our process safety program globally and harmonize these processes. We [took] a lot of the good or the best practices from the different regulations globally and created a management system that reflects that globally."

Barry Crawford, FMC's vice president of operations, says FMC used the new process safety codes as an opportunity to revamp the company's approach. "We developed a whole new way to prioritize and assess our process safety hazards, and essentially moved forward with a totally new program," he says. FMC shifted to a prioritized approach based on the hazards associated with a process rather than stay with a "one-size-fits-all" approach. "We developed a matrix to tell us what approach we should have based upon the relative risk and hazards of the individual process itself. One of the big challenges at FMC when we started this was that we had a very wide range of different processes within the corporation. When we started this, we still owned our alkaline division, which was based upon hard rock mining. And then we also owned a peroxygen division where we made hydrogen peroxide, combined with lithium, health and nutrition, and ag. You cannot keep a one-size-fits-all approach to those wildly different processes." Last year was FMC's lowest recordable injury rate, he adds.

FMC's portfolio is poised to undergo another significant revamp should the proposed asset swap with DuPont proceed. The deal would propel FMC to a position as a tier-1 supplier of agricultural chemicals. "During the due diligence associated with the asset swap, we did do some initial investigation and feel comfortable. DuPont is renowned for their approach to process safety," Crawford adds.

> **"Using Responsible Care as a foundation to harmonize process safety globally."**
>
> **Keith Silverman**
> **Ashland**

Responsible Care works best when it engages employees at every level, from operations to the executive suite, executives say.

Ashland has a program manager specifically dedicated to Responsible Care, as well as an internal auditor, Silverman says. "Execution, however, lies with the EHS folks at all of the company's operations, but we've also really driven it down so that all employees are part of our Responsible Care program. It's less about one person being responsible for it." Responsible Care requirements are easier to implement from a manpower perspective if "you build it into how you operate," he adds.

Frequent, in-depth review is also vital to a successful Responsible Care program. FMC holds a Responsible Care management review at the end of every year. The meeting looks at both EHS and product stewardship. "We review what the goals were for the prior year and performance versus those goals." Crawford says EHS is not a "separate process" but rather a core value to the corporation. "We always talk about core value. Many companies call EHS a priority, but the problem with that is that priorities can change. If you have safety as a core value, it will never change."

Ashland has an EHS and quality committee on its board. "They meet regularly to look at our programs and how Responsible Care is being carried out in our company," Silverman says. "So when the product safety codes came out, it was a great discussion around how we can integrate what we're already doing, but also get better. In the beginning it looked to be a challenge, but in the end it was really an opportunity to strengthen those ties between our existing product stewardship program and our own product safety and quality programs."

Product safety

Industry is optimistic that Responsible Care and product safety codes, supported by a strong and respected federal chemical management policy (sidebar, p. 27) could be well-positioned to address one of industry's most pressing advocacy challenges—increasing public trust in the safety of chemicals in commerce and reducing state- and retail-level actions.

"People want to know that our industry is fully committed to doing the appropriate assessments of chemicals in commerce and that [it], in a transparent way, is engaging our partners downstream to share the appropriate information on the uses of these chemicals," Cal Dooley, ACC president, said at the recent Responsible Care meeting held in Miami.

Independent audits of member companies' progress in implementing the product safety codes began this year. The codes require member companies to manage the safety of their products across the product life cycle from inception to use, reuse, recycling, and disposal. The final phase of the three-year implementation window had to be completed by the end of 2016, and centered on product design, performance, measurement, and communication practices.

"BASF ensures uniformly high standards for product stewardship worldwide; our voluntary

initiatives go beyond legal requirements, and we monitor the compliance of our guidelines with regular audits," says Fairclough." For example, by 2020, BASF will conduct risk assessments for all substances and mixtures it sells worldwide in quantities of more than one metric ton per year. "We have already reached 75.4% of this goal as of 2016. We offer our customers training in the safe use of our products and keep them informed early on of any changes in regulations."

The product safety codes gave Ashland an opportunity to "really strengthen the ties between our existing product stewardship programs, which we have had for a while, and our product safety and quality programs," Silverman says. "In the beginning there was concern about how much it entailed and whether we would be able to meet the obligations. [A]s we really began to get into them, we realized that we already had much of it in our existing programs, but we needed to tie our efforts in closer with the supply chain. So we've take the product safety code rollout as an opportunity to bring product safety and quality into our Responsible Care program."

> **"Our voluntary [product stewardship] initiatives go beyond legal requirements."**
>
> **Derek Fairclough**
> **BASF**

Linda Bowman, sustainability director at FMC, says the company implemented all 11 management practices of the codes and submitted its attestations to ACC. "One of the things we do to make sure that we are always in compliance with the codes is to have an annual product stewardship dialogue will the executives of each of our businesses. If there are gaps, we identify those and create action plans to address them in the coming year."

Debra Phillips, ACC's managing director/ Responsible Care and value chain outreach, says the external communications piece of the product safety codes has been challenging for member companies. "There's a public conversation now about the safety of chemicals in consumer products, and how companies—especially those far upstream that aren't consumer facing—tell their story," Phillips says. ACC launched a website, chemicalsafetyfacts.org, to help provide top-line, consumer-level information about chemicals that are in the public discourse, but communicating the safety

Grading EPA as Lautenberg bill enters year two

Rebecca Coons

EPA's implementation of the Frank R. Lautenberg Chemical Safety Act (LCSA), passed 22 June 2016, has met deadlines and is largely in line with Congressional intent, although significant work and some concerns remain, according to ACC.

"EPA has made a considerable effort to meet the statutory deadlines under the Lautenberg Chemical Safety Act," says Mike Walls, vice president/regulatory and technical affairs at ACC. "We know that the staff there is committed to also meeting congressional intent in the implementation. And, in general, the rules that were made final [in June] represent a significant effort to fully implement the law." EPA also announced in June that it had halved the backlog of new chemicals being reviewed from about 300 to 150, and that it intended to complete the remaining review by the end of June.

ACC had long advocated reforming the outdated Toxic Substances Control Act (TSCA) because of waning public confidence in EPA's ability to regulate chemical safety. LCSA gives EPA authority to evaluate existing chemicals with clear and enforceable deadlines, sets a risk-based safety standard, increases public transparency for chemical information, and establishes a consistent source of funding for EPA to carry out its responsibilities.

The Inventory Reset Rule, the Prioritization Process Rule, and the Risk Evaluation Process Rule have all been finalized. The Risk Assessment Guidance is evergreen, and EPA will accept comments as they come in, Walls adds.

"The most significant takeaway from the risk-assessment guidance is that EPA says that its intention is to have third parties developing risk assessments that meet the same high quality standards that the agency itself will conduct," Walls says. "So I think by implication, at least, the risk assessment guidance is also a roadmap to how the agency is going to be doing those risk assessments. So again, we'll see how that is applied in the process."

EPA late last month released scope documents for the first 10 chemicals for which risk evaluation has been initiated. The release had been highly anticipated by industry as an indicator of EPA's interpretation of risk assessment under LCSA.

Walls says the scoping process is the first step to getting to "problem formulation, a specific process step in risk evaluations." The new dockets are an opportunity for all stakeholders to submit what they consider to be any new or important information—including information that might represent the best available science out there, he adds. EPA is under a statutory deadline to complete those first 10 risk evaluations by December 2019. "So this isn't a delaying step by EPA," he says. "It should be understood to be an effort to gather all relevant information and then apply the risk evaluation process in getting to a decision."

Meanwhile, the question of EPA resources from both a financial and personnel perspective, is a critical issue in effective implementation of the act, Walls says. "We know that the agency has transferred people from other programs into [the Office of Chemical Safety and Pollution Prevention] for the new chemicals program, for example. That's good, but those people have a learning curve, of course."

Congress also gave EPA an additional $8 million in the 2017 budget for LCSA implementation, and the president's budget proposal for 2018 keeps the agency's funding at $65 million. "I think this administration is sending a strong signal that based on appropriations and the fee rule, it expects sufficient sources to be available to meet the statutory responsibilities that it has," Walls says.

The fee rule is still to be proposed for public comment, but President Trump's 2018 budget proposal assumes it will be finalized by the start of the year. "So at some point in the next few months, we would assume that the fee rule would be proposed, to allow sufficient time to comment, and we'll have an indication there of what the schedule will be. In our industry's view, the fee provisions of TSCA were an important mechanism to ensure that the agency has the resources necessary to fully implement the law."

Walls says that both the agency and industry have "a long way to go" in implementing the overhaul of federal chemicals management, but EPA has "made a great start in getting these rules out and on time." ACC will continue to work closely with EPA to make sure Congressional intent is fulling reflected in LCSA implementation, he adds.

ENGAGEMENT: Responsible Care works best when it involves employees at every level.

of chemicals will remain a challenge that industry has to "grapple with going forward."

Sustaining care

Mike Graff, Air Liquide's executive vice president and chair of ACC's board committee on Responsible Care, called on industry to continue to innovate to solve the many sustainable development challenges facing the environment and the global population. The chemical industry is in a "unique and privileged" position to enable innovations that solve major global sustainable development challenges, he adds. Industry must also communicate the positive impacts its products have on the world. By telling "our story," industry can change the narrative that surrounds chemistry, he adds.

ACC's executive committee last year established a task force to develop a chemical industry strategy on sustainability. The committee has begun to focus on two major principles, Graff says. "First, we have a series of commitments that we as an industry will undertake to promote consistent, complete, conclusive, science-based approaches to understanding and evaluating chemical impacts, both positive and negative, on sustainability. Second, will be in pursuit of progress on key areas where chemistry can make a significant impact on sustainability beyond our fence lines."

Responsible Care already includes important operational metrics related to efficiency, safety, and environmental performance. "Further metrics to consider can include working with suppliers and customers to drive the use of more sustainable practices and solutions," BASF's Fairclough says. BASF is also working to increase the proportion of sales from products that make a particular contribution to sustainable development.

Ashland's Silverman says it is important to look across your company and decide where you can best make an impact. "A company might want to cut water usage, but if you don't use a lot, it isn't too helpful," he says. "You need to look at your operations, and understand their impact. It could be energy, emissions, or water usage. The easiest place to start is to set goals around energy usage , greenhouse gas emissions, and hazardous waste. These are low-hanging fruit. Get those in place, and then you can go after some more creative ideas."

Karen Totland, FMC's vice president/global procurement, global facilities, and corporate sustainability, says reducing targets reported under Global Reporting Initiative (GRI) standards to zero would be a key environmental metric, as well as reducing greenhouse gas emissions and energy usage at manufacturing sites. "Also, around innovation, we make sure new products are better than their benchmarks and very advantaged."