

RESPONSIBLE CARE[®]

PROCESS SAFETY CODE OF MANAGEMENT PRACTICES

Purpose and Scope

The American Chemistry Council's (ACC) Responsible Care companies are committed to the safe operation of their chemical processes. The Process Safety Code sets forth our collective commitment to a culture of process safety throughout our chemical processing operations, management systems and leadership organizations.

This Code aims to supplement existing process safety requirements contained within the Responsible Care Management System[®] (RCMS[®]) and RC14001[®] technical specifications, by specifically addressing process safety concepts such as leadership, accountability and culture in order to drive overall process safety performance improvement. It is also intended to complement regulatory requirements (e.g., OSHA's process safety management (PSM) standard and EPA's Risk Management Program (RMP) standard). Regulatory standards, by necessity, focus on process safety at an individual facility. In contrast, the Process Safety Code addresses issues at a more universal level, such as across a division or corporation, and includes a company commitment to set expectations regarding process safety, define accountability for process safety performance and allocate adequate resources to achieve performance expectations. These higher level considerations, contained within this Code, are critical elements of effective management of process safety.

This Code is a manifestation of the leadership that Responsible Care companies will undertake to seek systematic continuous improvement in process safety, drawing from the most current learning and advances. When implemented alongside the integrated Responsible Care management systems, this Code will help advance the chemical industry's commitment to process safety by embedding state-of-the-art concepts within Responsible Care, strengthening process safety leadership, culture, management and ultimately, performance. Implementation of the Process Safety Code is mandatory for all ACC Responsible Care companies. The Code will be applied to chemical operations over which the ACC Responsible Care company has control, commensurate with risk.

Management Practices

Taken together with the RCMS[®] or RC14001[®], implementation of the following management practices enables chemical manufacturers to systematically evaluate, demonstrate, and continuously improve their process safety performance. Each Responsible Care company's management system must include the following process safety management practices:

1. **Leadership and culture.** Senior leadership commitment to creating and valuing a process safety culture. Each company's leadership will demonstrate a visible and ongoing commitment to overseeing and improving process safety performance.

Senior leaders demonstrate an understanding of the importance of process safety. Senior leaders establish and communicate process safety performance expectations, including measurable goals, objectives and targets; allocate sufficient resources to meet performance

expectations; and promote an observable culture of process safety across the organization. Senior leaders will promote and develop a process safety culture within their organizations, encouraging openness in raising concerns and identifying opportunities for improvement.

2. **Accountability.** Establishment of process safety accountability within the company. Process safety is integral to business processes and stakeholder expectations.

Process safety roles and responsibilities across the organization are clearly-defined and include an expectation to raise, and authority to respond to process safety concerns. Senior leaders are held accountable for process safety performance. Employees understand the importance of process safety as it applies to their jobs and are responsible for following and contributing to the work processes to achieve improvement in company process safety performance.

3. **Knowledge, expertise and training.** Processes to provide that companies and their employees have the required knowledge, expertise, tools and training to manage process risks of their operations.

Process safety competency requirements are established and executed for management, engineering and operational personnel, as well as contractors and third-party service providers, commensurate with the activities performed. Employees and contractors are trained on process safety, commensurate with their process safety responsibilities. Company process safety experts are provided continuing education related to emerging process safety tools and techniques.

4. **Understanding and prioritization of process safety risks.** Processes to systematically understand process safety risks throughout the organization, prioritize actions and allocate resources.

Companies will identify and understand the hazards and risks of their processes. Companies will implement systems for documenting and accessing comprehensive and current information on process-related hazards and risks to enable informed decision making.

5. **Comprehensive process safety management system.** Development and implementation of a comprehensive process safety management system to manage process risk and drive continuous improvement.

Companies will design systems to manage and mitigate identified risks with adequate safeguards. Management of process safety will take into account passive controls; engineering controls; operational controls; inherently safer approaches; inspection, maintenance and mechanical integrity programs; management of change procedures; and scenario planning.

6. **Information sharing.** Systems to actively share relevant process safety knowledge and lessons learned across the organization, including methods for making information available to relevant stakeholders.

Companies establish processes fostering two-way flow of information between management, employees, contractors and other stakeholders to share process safety information. These processes will provide that experiences from process safety reviews, inspections, audits, and incident and near-miss investigations are shared, as relevant, across the company in a timely manner. The processes should also promote sharing of process safety concerns.

- 7. Monitoring and improving performance.** A system to monitor, report, review and improve process safety performance.

Senior leaders, including the company's senior operating committee, where applicable, monitor process safety performance. Routine evaluation of process safety management systems, independent of regulatory audits, is performed to confirm that desired results are achieved, using appropriate leading and lagging indicators. Results are reviewed at planned intervals to determine progress against process safety performance expectations and to take action to improve performance when needed.