# Process Safety Code Orientation/Starter Kit

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1. Introduction

The Responsible Care program is being modified by virtue of a two-year Strategic Review completed in 2012. One of the key modifications resulting from the review is the introduction of a stand-alone Process Safety Code. Process safety has always been a focus area for Responsible Care as evidenced by the original (legacy) Process Safety Code of Management Practices adopted in 1990. The new code sets forth our collective commitment to an enhanced culture of process safety throughout our chemical facility processing operations and those operations within your operations where chemicals are present, including the management systems and leadership organizations associated with those operations. The code is intended for implementation across all Responsible Care practitioner facilities, whether the current operations are OSHA PSM Regulated or not.

The informational items and guidance included in this document are designed to serve as an “orientation/starter kit”. While this information is geared towards those companies, both ACC members and Responsible Care Partners, who may not be as familiar with the evolving concepts of process safety management as others, it is by no means limited as to consideration by Responsible Care practitioners of all sizes.

This Code aims to supplement existing process safety requirements which are 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. Importantly, this is not a ‘start from zero’ effort since, as stated above, all Responsible Care member and Partner practitioners have historically had process safety considerations integrated into their management.

The new Process Safety Code focuses on activities and understanding-typically above the facility level, such as across a division or the 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.


Process Safety is the approach that is taken to ensure that the assets used in our chemical manufacturing, distribution and handling processes are managed and under control to minimize the likelihood of a loss of containment that could lead to a fire, explosion, exposure, or business interruption. Process safety management starts with a sound design, and requires good systems for operating, maintenance, and inspection procedures; training; hazard identification and mitigation; and emergency response.
NOTE: Consideration for a company that does not manufacture chemicals:
For a Responsible Care Supply Chain Partner who does not maintain a chemical facility processing operation, process safety concepts should be considered for those activities required to support their operations that may involve chemicals. For example: a motor carrier should consider tank wash, loading and unloading, disposal of residual heels.

3. Implementation Flow diagram – on following page.

This diagram is intended as a simplified pictorial representation of a Process Safety Code Gap analysis activity which may assist a company/facility (typically not currently PSM regulated) in beginning to understand the enhanced concepts of Process Safety as they apply in their company as a result of the new Process Safety Code.
PLAN


Does my organization understand the RC definition of Process Safety?

Yes

Have you defined your operational processes covered by the Process Safety Definition beyond OSHA and EPA requirements?

Yes

Review your processes vs your existing:
- Hazards and Risk Aspects
- Legal and other requirements
- Operational Controls
- And refine list

Review your systems and documentation to ensure all processes and elements have been included

Are there any gaps?

Yes

Revised/develop systems and documentation as necessary, communicate and train as required

Internally audit

Any corrective or preventive actions

No

Maintain & Monitor

No

Any corrective or preventive actions

Check

Act

DO

Review RC definition and concepts and brainstorm potential applicability

No
4. Gap Analysis explanation

New Process Safety Code
Gap Analysis Tool (Note: Gap Analysis tool is in the form of an excel spreadsheet and therefore is an attachment to this Orientation/Starter Kit document)

In an effort to facilitate an organization’s understanding of, and implementation planning process for, the Responsible Care Process Safety Code, the ACC has developed a Process Safety Code Gap Analysis tool. This tool is in the form of a spreadsheet, available in the MemberExchange website. If you cannot access it through this system, contact Dave Gleason of the ACC, 336-851-0657 / email dave_gleason@americanchemistry.com

The Gap Analysis tool is a spreadsheet organized by the seven elements of the Process Safety Code with the following columns:

**Question Numbering system:** The number of the gap analysis question, in the format of “A/B” where:
- Column A = the number of the Process Safety Code element; and
- Column B = the number of the question associated with that element
- For example, question # 2.1 refers to the 2nd Process Safety Code Element (Accountability) and the first question associated with that element (Definition of Individual process safety roles & responsibilities)

**Question (Column C)** – Suggested gap analysis questions to address each element of the process safety code.

**Yes/No (Column D)** - These questions are formed as “yes/no” questions to determine if there is a system in place/ if there is need for such a system. The person(s) responsible for the gap analysis would gather objective evidence to assess if there is a system in place for each element and if not, should there be one developed and implemented.

**Accountability (Columns E-K)** – Are provided to indicate who is accountable at each level in your organization: Strategic, Leadership or Operational; and to tabulate (Column K) what is in place – if applicable - in this area today.

For example: at a plant site Strategic may be Plant Manager; Leadership might be area line supervision; and Operational is hourly paid employee (e.g. mechanic, operator, driver).

**Evidence (Column M)** – A section to list evidence (documents, operating procedures, etc.) gathered to verify that the activity actually occurs. Essentially helping companies link an individual code element to what they may already have in place and avoid “starting from zero” if possible.

For example, Code element # 4 (to paraphrase) calls for understanding, evaluating and prioritization of process safety risks. A company may already have a process for assessing risk in areas
other than EHS&S to which they can add EHS&S/Responsible Care considerations for operating facilities—thus there would be a link to an existing practice.

In some cases, there are practices that address the element, but the system is not documented. In order to be thorough and auditable, there should be documented policies, programs and procedures where relevant and commensurate with risk. Thus, the company may be implementing the intent of the element, and simply need to document what it is already doing.

**Gap (Column O)** - A column used to document any gaps noted in the specific area in question. When a gap is identified—additional activity will need to be discussed, including priority of resolving the gap versus any others that may have been noted and primary responsibility for reconciliation of the gap.

**Reconciliation (Column Q)** - A column to list initial thoughts and suggestions as to actions and resources needed as well as projected time frame to correct.

**Gaps**

**A point of clarification:**

This Process Safety Code Gap Analysis Tool is not meant to be an auditable document. Moreover, the suggested questions and Strategic, Leadership & Operational accountability columns should be reviewed prior to performing the Gap Analysis. Companies should determine whether the questions are relevant to their operations, and if the functions identified properly fit their internal organization. For example, if there is not a specific process safety organization, the company should review those questions and determine who is best suited to answer them. In some cases, a company may wish to add questions to the gap analysis to allow for further probing of company practices.

### 5. Attributes for Audit

The new Process Safety Code is intended to be included in certification audits beginning with the 1/1/2014 – 12/31/2016 audit cycle. Since the new code is a supplement to the RCMS® and the RC14001® technical specifications, it should be considered as one of the “...Responsible Care related requirements...” as noted in the following two RCMS Technical Specification (Revised 2008) code elements:

**Element 1.4. The policy shall include a commitment to comply with legal and Responsible Care related requirements to which the organization is subject or subscribes.**

**Element 2.3 The organization shall have a system in place to review and determine the applicability of regulations, legislation and other Responsible Care related requirements to which the organization is subject or subscribes.**

To facilitate further integration of the Process Safety Code into the Management System audit/certification process, a list of several of “Attributes That an Auditor Might Review” or “What a Company Might be Expected to Do” are provided in the table below. While this is certainly not an exhaustive list, the intent is to help a Responsible Care practitioner better understand how the
integration might impact their certification audit preparations and actual 3rd party audits – regardless of whether the scope of their facilities includes assets formally OSHA PSM regulated or not. Please keep in mind that, as stated above, process safety has been an historical key part of the Responsible Care program since its inception in 1988; and an integral part of the RCMS® and RC14001® technical specifications since their inception in 2004. The new code is intended as further enhancement of these continuing efforts. Note: the information below should not be considered an audit checklist nor a required list of attributes.

<table>
<thead>
<tr>
<th>Process Safety Code Element</th>
<th>Some Examples: Attribute(s) an ASP Might Review – or What A Company Might be Expected to do</th>
</tr>
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<tbody>
<tr>
<td>#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.</td>
<td>• Evidence that senior executives have been briefed about process safety and possible consequences of process safety “deviations.” • Evidence of communications to the organization such as policy statements, directives and/or procedures. Evidence that senior executives participate in these communications. • Evidence of resource allocation – personnel, programs, funding, etc. (Possibly tied to goals). • Management Review activities to ensure that process safety topics are on the agendas, referenced in minutes, and considered in action items. • Evidence that deadlines are being set, ownership for action items has been established and evidence of closure.</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>#2. Accountability. Establishment of process safety accountability within the company. Process safety is integral to business processes and stakeholder expectations.</td>
<td>• Evidence of company policy which is tested and verified through surveys or interviews of personnel at all levels to confirm process safety understanding and commitment. • Process safety “owners” identified at various levels of the organization. Evidence that these owners have authority relevant to their position in the organization (e.g. stated in job descriptions, delegation of authority protocol, etc. • Evidence that a process for reporting concerns (i.e., unsafe conditions and/or unsafe behaviors) exists such as procedures, reports on file, follow-through action reports, etc. Confirm reporting process is “real” through interviews with employees. • Definition/description of how contractors and others might fit into the reporting process.</td>
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</table>
to their jobs and are responsible for following and contributing to the work processes to achieve improvement in company process safety performance.

<table>
<thead>
<tr>
<th><strong>#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.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
<tr>
<td>• Training programs in place to ensure that those individuals responsible for operating and maintaining hazardous processes and equipment understand associated hazards and the requirements for safe operation.</td>
</tr>
<tr>
<td>• Evidence that training programs cover situations such as new employees and employees who change jobs within facility.</td>
</tr>
<tr>
<td>• Employee training records that can be confirmed through records review and interviews of selected employees.</td>
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<tr>
<td>• Formalized program to ensure that individuals complete process safety-related tasks consistently, in accordance with company procedures and practices.</td>
</tr>
<tr>
<td>• Evidence that individuals recognize all of the safety equipment available to them, understand how the equipment functions, and what is required to ensure that it is working properly.</td>
</tr>
<tr>
<td>• Confirm that contractor and others receive relevant orientation and training.</td>
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<tr>
<td>• Systems to assure training effectiveness in which employees can demonstrate understanding and practical application.</td>
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<tr>
<td>• Defined set of job performance standards and a listing of initial and ongoing training needs for each job position.</td>
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<thead>
<tr>
<th><strong>4. Understanding and prioritization of process safety risks. Processes to systematically understand process safety risks throughout the organization, prioritize actions and allocate resources.</strong></th>
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<tr>
<td>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.</td>
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<tr>
<td>• Program in place to identify and understand hazards and risks, and to ensure inclusion of process safety considerations in hazards and risks analyses.</td>
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<tr>
<td>• Defined activity in place to determine whether the risks are adequately controlled by management systems and/or engineering controls.</td>
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<tr>
<td>• A structured hazard identification approach to pinpoint hazards and any weaknesses in the design and operation of facilities that could lead to major incidents.</td>
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<tr>
<td>• Management of Change (MOC):</td>
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<tr>
<td>o Evidence that, when a change is made, how the change is reviewed and evaluated prior to implementation to determine whether the change inadvertently introduces unforeseen hazards, unknowingly increases the risk associated with a known hazard, or weakens or eliminates an existing management system or engineered control. (Example could include pre-startup safety inspection)</td>
</tr>
<tr>
<td>o Formalized procedure defining review and approval process, types of changes requiring review and approval, individual roles and responsibilities, and methods for communicating changes to affected individuals.</td>
</tr>
<tr>
<td>o A formalized mechanism for documenting changes and tracking all follow-up activities resulting from changes</td>
</tr>
<tr>
<td>o Formalized mechanism to ensure that the level or review and the composition of the review team is commensurate with the level of proposed change.</td>
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</table>
| #5. Comprehensive process safety management system. Development and implementation of a comprehensive process safety management system to manage process risk and drive continuous improvement. | • Procedures which enable the employee to respond appropriately to unusual conditions or circumstances that are not addressed by the plant’s standard practices or procedures.  
• Effective incident investigation and trending systems to communicate and ensure learning from internal and external incidents.  
• Provision for control of processes and equipment during emergencies resulting from natural events, utility disruptions and other external conditions.  

**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. | • Identification and implementation of management systems and/or engineering controls commensurate with the level of identified risk.  
• Sufficient layers of protection through technology, facilities and employees to prevent escalation from a single failure to a catastrophic event.  
• Formalized system to establish and maintain testing, inspection, and/or replacement frequencies based on service conditions, criticality, prior history, or any manufacturer’s recommendations.  
• Change management program using documented structural programs to identify and address hazards associated with new processes and modifications to existing processes.  
• Preparation and planning for the response and management of incidents that could occur.  

**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. | • Evidence of evaluation processes supplementing audits: How they are conducted; on what frequency; and how documented.  
• Existence of a system for documenting and communicating information on hazards relating to chemicals, equipment, and technology is complete and accurate allowing for informed decisions and responsible actions.  

**Indicators used to measure performance (leading and lagging):**  
- How these indicators are determined and how often they are re-evaluated for suitability and effectiveness.  
• Evidence that the company has a process to acquire/obtain process safety knowledge for use in the company (what kind of**
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.

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6. Appendix

6.1 Gap analysis spreadsheet – separate excel document

6.2 The new Process Safety Code

6.3 Glossary of Terms and Acronyms

6.4 FAQ’s
6.2 New Process Safety Code

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._

### 6.3 Glossary of Terms and Acronyms

**Responsible Care® Process Safety Code Glossary**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Accident</td>
<td>An unplanned, specific combination of events or circumstances that leads to an undesirable consequence.</td>
</tr>
<tr>
<td>Accidental Chemical Release</td>
<td>An unplanned, sudden release of chemical(s) from manufacturing, processing, handling and on-site storage facilities to the air, water or land. It does not include permitted or other releases.</td>
</tr>
<tr>
<td>Acute hazard</td>
<td>The potential for injury or damage to occur as a result of an instantaneous or short duration exposure to the effects of an accident.</td>
</tr>
<tr>
<td>Chronic Hazard</td>
<td>The potential for injury or damage to occur as a result of prolonged exposure to an undesirable condition.</td>
</tr>
<tr>
<td>Commensurate with Risk</td>
<td>Activity prioritized based on relative risk versus other activities. The higher</td>
</tr>
</tbody>
</table>
the risk is deemed to be, the higher the priority of the activity

**Hazard**

The inherent chemical or physical potential of a material or activity to harm people, property or the environment.

**Hazard and Operability Analysis (HAZOP)**

A systematic, qualitative brainstorming approach for hazard evaluation that studies deviations from normal process conditions.

**Human Factors**

A discipline concerned with designing machines, operations and work environments so they match human capabilities, limitations and needs. Includes any technical work (engineering, procedure writing, worker training, worker selection, etc.) related to the human factor in operator-machine systems.

**Incident**

An unplanned event or series of events and circumstances usually involving equipment failures and human errors resulting in an undesired consequence. If the outcome is severe, it is usually called an accident.

**Likelihood**

An estimate of the expected frequency or probability or occurrence of an event.

**Management Practice**

The basic component of a Responsible Care Code. It represents goals and objectives rather than prescriptive absolute or quantitative standards.

**Process Safety**


Process Safety is the approach that is taken to ensure that the assets used in our chemical manufacturing, distribution and handling processes are managed and under control to minimize the likelihood of a loss of containment that could lead to a fire, explosion, exposure, or business interruption. Process safety management starts with a sound design, and requires good systems for operating, maintenance, and inspection procedures; training; hazard identification and mitigation; and emergency response.

NOTE: Consideration for a company that does not manufacture chemicals:

For a Responsible Care Supply Chain Partner who does not maintain a chemical facility processing operation, process safety concepts should be considered for those activities required to support their operations that may involve chemicals. For example: a motor carrier should consider tank wash, loading and unloading, disposal of residual heels.
Risk 
An estimate of human injury or economic loss in terms of both the accident likelihood and the magnitude of the loss or injury. The combination of the expected frequency (events/year) and consequence (effect/event) of a single accident or a group of accidents.

Risk Assessment 
The systematic evaluation of the risk associated with potential accidents at complex facilities or operations.

Risk Management 
The systematic application of management policies, procedures and practices to the tasks of analyzing, assessing and controlling risk in order to protect employees, the general public and the environment as well as company assets, while avoiding business interruptions. Includes decisions to use appropriate engineering and administrative controls for reducing risk.

Examples of acronyms which may be encountered in Process Safety discussions and within related Process Safety Resources

- CAA: Clean Air Act
- CCPS: Center for Chemical Process Safety
- CO: Compliance Officer (OSHA NEP inspection)
- CSB: Chemical Safety Board
- CWS: Coalition for Workplace Safety (OSHA)
- DG: Dangerous Goods (term used in Canada which includes Hazardous Materials)
- GDC: General Duty Clause (Clean Air Act)
- HAZMAT: Hazardous Materials
- ISA: Inherently Safer Approaches
- IST: Inherently Safer Technology
- LOPA: Layers of Protection Analysis
- MOC: Management of Change
- NEP: National Emphasis Program (OSHA-PSM)
- OCA: Off-site Consequence Analysis (security and EPA)
- OIIR: Occupational Injury and Illness Rate
- OSHA: Occupational Safety and Health Administration
- PSM: Process Safety Management
- RAGAGEP: Recognized and Generally Accepted Good Engineering Practices (OSHA/PSM)
- RMP: Risk Management Program (OSHA)
- SBREFA: Small Business Regulatory Enforcement Fairness Act (OSHA)
- SHARP: Safety and Health Achievement Recognition Program (Small business OSHA/analog of VPP)
- SVA: Site Vulnerability Assessment
- TRI: Total Recordable Injury Frequency
- VPP: Voluntary Protection Program (OSHA)
- WCS: Worst Case Scenario (EPA/RMP)
6.4 FAQ’s

Q. 1 What is different?

A. 1. The new Process Safety Code is intended to further enhance existing process safety considerations and process safety related efforts by all Responsible Care practitioners. All practitioners, whether they be formally “OSHA PSM Regulated” or not – are required to consider the new code and its 7 elements in their execution of Responsible Care within their respective companies and facilities. The Process Safety Code is to be considered as an additional Responsible Care requirement for all certification audits beginning with the 1/1/2014 – 12/31/2016 certification cycle.

Q 2 What do I need to do to ensure inclusion of the new code elements in my company’s / facility’s Responsible Care program?

A. 2. A first step for all practitioners is to confirm that you and your organization have a common understanding of the definition of process safety. Subsequently, process safety related issues should be fully integrated in the RCMS hazards and risks analysis or the RC14001 Aspects and Impacts analysis which form the basis for your overall management system. As the process safety considerations are integrated into the implementation of your management system, you should consider the ‘attributes for audit’ in section 5 above to assure you have evidence of having done the integration to the extent possible within your management system.

Q.3 How can I decide what is in and what is out regarding Process Safety Code?

A.3. Use the definition of a Process Safety Incident below as a guide- e.g.

If there is a chemical or process involving a chemical(s) with potential for an incident (personal injury, release, exposure, fire, etc.) directly involving chemicals to occur, then that chemical/process should be considered in assessing process safety hazard and risk.

Definition of a Process Safety Incident: (from RC metrics guidance) – underlines added for help in defining boundary conditions for process safety consideration

A chemical or chemical process must have been directly involved in the damage caused. For this purpose, the term "process" is used broadly to include the equipment and technology needed for petrochemical production, including reactors, tanks, piping, boilers, cooling towers, refrigeration systems, etc. An incident with no direct chemical or process involvement, e.g., an office building fire, even if the office building is on a plant site, is not reportable. An employee injury that occurs at a process location, but in which the process plays no direct part, is not reportable as a PSI (though it could be an OSHA or other agency reportable injury). The intent of this criterion is to identify those incidents that are related to process safety, as distinguished from personnel safety incidents that are not process-related. For example, a fall
from a ladder resulting in a lost workday injury is not reportable simply because it occurred at a
process unit. However, if the fall resulted from a chemical release, then the incident is
reportable.