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Introduction

Local Emergency Planning Committees as Risk Management Program Stakeholders

As day-to-day reliance upon benefits from advanced technology has increased, some hazards due to our increased capabilities have presented themselves. Technology has proven that it can bite back in various ways. In the computer software and hardware industry, viruses can destroy our ability to use some of our most powerful modern tools. In the telecommunications industry, equipment malfunctions can interfere with our increasingly complex communications systems. However, in the chemical processing industry sometimes the hazards have been realized with catastrophic results. Some historic toxic and flammable releases that illustrate this are listed below:

Year	Location	Material
1974	Flixborough, UK	Cyclohexane
1976	Seveso, Italy	Dioxin
1984	Mexico City, Mexico	Liquefied Petroleum Gas
1984	Bhopal, India	Methyl isocyanate
1988	Norco, LA	Propane
1989	Pasadena, TX	Ethylene and Isobutane

Each of the above releases caused great losses. When something goes wrong with our technology during the processing of hazardous chemicals, either in design, construction, or operation, dramatic effects can result in multiple fatalities or injuries.

These types of releases stirred the government to respond with regulatory prevention measures. Since 1985 some

important regulations have been established in the United States to protect citizens from the effects of toxic, flammable, and explosive substances. Government recognized that there are many types of stakeholders involved in this effort:

- regulators,
- state and local government,
- industry,
- environmental groups,
- response organizations, and
- the public.

The likelihood that we will end our addiction to the benefits of technology any time soon is slim. However, more intelligent use of our technological resources and our ability to organize and control them can reduce the risks we face.

The following list of regulations and official programs shows governments' recent trend toward enforcing intelligent use and control of our capabilities to prevent and respond to chemical risks:

Year	Regulation
1985	Chemical Emergency Preparedness Program (CEPP)
1986	Emergency Planning and Community Right-to-Know Act (EPCRA) * [also known as Superfund Amendment and Reauthorization Act Title III (SARA)] *Established LEPCs nationwide
1986	Chemical Accident Prevention Program
1986	Chemical Safety Audit Program
1987	Accidental Release Information Program (ARIP)
1990	Clean Air Act Amendments (CAA) section 112(r)
1992	**OSHA Process Safety Management (PSM) Regulation**
1996	**EPA Risk Management Program Rule (RMP)**

Pay special attention to the last two regulations in the list, OSHA PSM and EPA RMP. They represent a unique turn for regulatory agencies. Both were mandated to be developed under the Clean Air Act and can be considered unique due to the fact that they essentially require affected sites to establish a proactive business philosophy toward preventing and responding to

chemical releases. They do this by requiring management systems to be developed. These management systems are typically written administrative procedures or policies describing how a site will comply with a key element of PSM and RMP. Neither regulation has many hard and fast detailed requirements. They primarily allow the affected site to develop its own unique methods for compliance with major elements and each requires the affected site to self-audit its performance on a regular basis.

For years OSHA and EPA regulations tended to be prescriptive, that is, they tended to be detailed and inflexible. They were written to solve one problem or set of problems often without leeway for individual situations or special considerations. The Process Safety Management standard and the Risk Management Program rule are examples of a new trend toward performance based regulation.

One other unique advantage these two regulations have is that they are based upon best practices that some companies and industry groups already recognized and had been developing and practicing on their own. The American Institute of Chemical Engineers (AIChE) established the Center for Chemical Process Safety (CCPS) in 1985. CCPS published a comprehensive process safety management tool in 1989 entitled *Guidelines for the Technical Management of Chemical Process Safety*. The Chemical Manufacturers Association (CMA) produced the *Responsible Care® Process Safety Code* in 1988 and by 1990 the American Petroleum Institute (API) had developed Recommended Practice 750, *Management of Process Hazards*, describing a process safety management system for its members.

Many companies had been using accepted hazard assessment techniques, risk modeling, and process safety management systems of their own accord for years prior to the passing of these regulations. Some of the more progressive companies recognized that these techniques not only enhanced safety and environmental responsibility but also allowed them to operate more efficiently and make high quality product. However, many other facilities could only see the costs involved with these practices and chose not to implement them, thus the regulations were born.

Although this book is focused on helping local emergency planning committees understand EPA's RMP rule, we reference

OSHA's Process Safety Management regulation in this book as it has essentially been adopted as a key part of the RMP rule termed "Prevention Program." OSHA PSM has been in force since 1992 and is generally well understood by facilities covered under it. We will compare the two regulations in more detail in Chapter 4 but let us look briefly at the purpose of each regulation to see how these two regulations combine:

Protecting the Public
Purpose of EPA's Risk Management Program
rule 40 CFR part 68

". . .to prevent accidental releases to the air and mitigate the consequences of such releases by focusing preventive measures on chemicals that pose the greatest risk to the public"

Protecting Employees in the Workplace
Purpose of OSHA's Process Safety Management Regulation
29 CFR 1910.119

". . .to prevent or minimize the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals"

Imagine that the EPA is like a sentinel standing with its back to the perimeter fence of a facility looking outward, guarding the public from accidental releases. OSHA is like a sentinel with its back to the inside of the perimeter fence looking inward, guard ing the employees from catastrophic releases. In the case of these two regulations, RMP and PSM, both are intended to prevent chemical incidents. However, both regulations contain elements that show an understanding that even with a good prevention program, incidents may still occur and we must have a plan to address the immediate consequences and a system to prevent that particular failure (and ones like it) in the future. Our overall goal is to protect everyone and continuously improve our ability to do so.

Local emergency planning committees are key stakeholders in community risk management. They will be a primary end user of some of the data the EPA RMP rule requires facilities to prepare and submit. Each individual LEPC can choose to become more proactive in some areas as discussed in the next section.

What Can LEPCs Do to Enhance Public Safety Using the RMP Rule?

There are several activities that local emergency planning committees can undertake to assist in ensuring that the EPA RMP fulfills its purpose of protecting the public. These are

- Develop an understanding within the LEPC membership of the purpose and basic elements of the Risk Management Program rule.
- Work with facilities to help ensure their emergency response plans reflect and mesh seamlessly with the community emergency response plan.
- Actively evaluate additional information needs from the risk management plans and emergency response plans in your area and systematically seek out information from the stationary sources that will help your LEPC members respond effectively to the specific types of emergencies you may face.
- Act as a networking tool for the various stationary sources in your response area to assist in the transfer of information and compliance techniques between affected sites.
- Consider taking an active role in helping affected sites communicate their risk management plans to the public and in responding to requests from the public.
- Access and review the risk management plans for the facilities in your local community.
- Attend seminars provided for state emergency response committees (SERCs) and LEPCs on the implications of the EPA RMP rule. (CCPS offers public seminars for just this purpose.)

Each of these items is addressed in detail in the appropriate section of this book. The book as a whole is intended to help directly with the first item, developing an understanding of the rule and its elements. Many other resources are available to assist with overall knowledge of the RMP rule and its issues. A list of other references you can use is provided.

The next two items in the above list relating to the Emergency response plan are stated in the regulation itself and

discussed in Chapter 3, the section entitled "Emergency Response Plan." EPA is explicit in stating that affected sites must ensure their emergency response plans complement your overall community plan and that affected sites must respond to LEPC questions concerning their plans.

The last two items in the list are not required by law but can be key to success for RMP implementation in your area. They are discussed in Chapter 5.