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CHAPTER 11: COMMUNICATION WITH THE PUBLIC

Once you have prepared and submitted your RMP, EPA will make it available to the public. Public availability of the RMP is a requirement under section 114(c) of the Clean Air Act (the Act provides for protection of trade secrets, and EPA will accordingly protect any portion of the RMP that contains Confidential Business Information). Therefore, you can expect that your community will discuss the hazards and risks associated with your facility as indicated in your RMP. You will necessarily be part of such discussions. The public and the press are likely to ask you questions because only you can provide specific answers about your facility and your accident prevention program. This dialogue is a most important step in preventing chemical accidents and should be encouraged. You should respond to these questions honestly and candidly. Refusing to answer, reacting defensively, or attacking the regulation as unnecessary are likely to make people suspicious and willing to assume the worst. A basic fact of risk communication is that trust, once lost, is very hard to regain. As a result, you should prepare as early as possible to begin talking about these issues with the community, Local Emergency Planning Committees (LEPCs), State Emergency Response Commissions (SERCs), other local and state officials, and other interested parties.

Communication with the public can be an opportunity to develop your relationship with the community and build a level of trust among you, your neighbors, and the community at large. By complying with the RMP rule, you are taking a number of steps to prevent accidents and protect the community. These steps are the individual elements of your risk management program. A well-designed and properly implemented risk management program will set the stage for informative and productive dialogue between you and your community. The purpose of this chapter is to suggest how this dialogue may occur. In addition, note that some industries have developed guidance and other materials to assist in this process; contact your trade association for more information.

11.1 BASIC RULES OF RISK COMMUNICATION

Risk communication means establishing and maintaining a dialogue with the public about the hazards at your operation and discussing the steps that have been or can be taken to reduce the risk posed by these hazards. Of particular concern under this rule are the hazards related to the chemicals you use and what would happen if you had an accidental release.

Many companies, government agencies, and other entities have confronted the same issue you may face: how to discuss with the public the risks the community is subject to. Exhibit 11-1 outlines seven “rules” of risk communication that have been developed based on many experiences of dealing with the public about risks.

A key message of these "rules" is the importance and legitimacy of public concerns. People generally are less tolerant of risks they cannot control than those they can. For example, most people are willing to accept the risks of driving because they have some control over what happens to them. However, they are generally more

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uncomfortable accepting the risks of living near a facility that handles hazardous chemicals if they feel that they have no control over whether the facility has an accident. The Clean Air Act's provision for public availability of RMPs gives public an opportunity to take part in reducing the risk of chemical accidents that might occur in their community.

Exhibit 11-1: Seven Cardinal Rules of Risk Communication

1. Accept and involve the public as a legitimate partner
2. Plan carefully and evaluate your efforts
3. Listen to the public's specific concerns
4. Be honest, frank, and open
5. Coordinate and collaborate with other credible sources
6. Meet the needs of the media
7. Speak clearly and with compassion

HAZARDS VERSUS RISKS

Dialogue in the community will be concerned with both hazards and risks; it is useful to be clear about the difference between them.

Hazards are inherent properties that cannot be changed. Chlorine is toxic when inhaled or ingested; propane is flammable. There is little that you can do with these chemicals to change their toxicity or flammability. If you are in an earthquake zone or an area affected by hurricanes, earthquakes and hurricanes are hazards. When you conduct your hazard review or process hazards analysis, you will be identifying your hazards and determining whether the potential exposure to the hazard can be reduced in any way (e.g., by limiting the quantity of chlorine stored on-site).

Risk is usually evaluated based on several variables, including the likelihood of a release occurring, the inherent hazards of the chemicals combined with the quantity released, and the potential impact of the release on the public and the environment. For example, if a release during loading occurs frequently, but the quantity of chemical released is typically small and does not generally migrate off site, the overall risk to the public is low. If the likelihood of a catastrophic release occurring is extremely low, but the number of people who could be affected if it occurred is large, the overall risk may still be low because of the low probability that a release will occur. On the other hand, if a release occurs relatively frequently *and* a large number of people could be affected, the overall risk to the public is high.

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The rule does not require you to assess risk in a quantitative way because, in most cases, the data you would need to estimate risk levels (e.g., one in 100 years) are not available. Even in cases where data such as equipment failure rates are available, there are large uncertainties in using that data to determine a numerical risk level for your facility, because your facility is probably not the same as other facilities, and your situation may be dynamic. Therefore, you may want to assign qualitative values (high, medium, low) to the risks that you have identified at your facility, but you should be prepared to explain the terms if you do. For example, if you believe that the worst-case release is very unlikely to occur, you must give good reasons; you must be able to provide specific examples of measures that you have taken to prevent such a release, such as installation of new equipment, careful training of your workers, rigorous preventive maintenance, etc. You should also be able to show documentation to support your claim.

WHO WILL ASK QUESTIONS?

Your Local Emergency Planning Committee (LEPC) and other facilities can help you identify individuals in the following groups who may be reviewing RMP data and asking questions. Interested parties may include:

(1) Persons living near the facility and elsewhere in the community or working at a neighboring facility

(2) Local officials from zoning and planning boards, fire and police departments, health and building code officials, elected officials, and various county and state officials

(3) Your employees

(4) Special interest groups including environmental organizations, chambers of commerce, unions, and various civic organizations

(5) Journalists, reporters, and other media representatives

(6) Medical professionals, educators, consultants, neighboring companies and others with special expertise or interests

In general, people will be concerned about accident risks at your facility, how you manage the risks, and potential impacts of an accident on health, safety, property, natural resources, community infrastructure, community image, property values, and other matters. Those individuals in the public and private sector who are responsible for dealing with these impacts and the associated risks also will have an interest in working with you to address these risks.

WHAT INFORMATION ABOUT YOUR FACILITY IS AVAILABLE TO THE PUBLIC?

Even though the non-confidential information you provide in your RMP is available to the public, it is likely that people will want additional information. Interested

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parties will know that you retain additional information at your facility (e.g., documentation of the results of the offsite consequence analysis reported in your RMP) and are required to make it available to EPA or its implementing agency during inspections or compliance audits. Therefore, they may request such information. EPA encourages you to provide public access to this information. If EPA or its implementing agency were to request this information, it would be available to the public under section 114(c) of the CAA.

The public may also be interested in other information relevant to risk management at your facility, such as:

- Submissions under sections 302, 304, 311-312, and 313 of the Emergency Planning and Community Right to Know Act (EPCRA) reporting on chemical storage and releases, as well as the community emergency response plan prepared under EPCRA section 303.

- Other reports on hazardous materials made, used, generated, stored, spilled, released and transported, that you submitted to federal, state, and local agencies.

- Reports on workplace safety and accidents developed under the Occupational Safety and Health Act that you provide to employees, who may choose to make the information publicly available, such as medical and exposure records, chemical data sheets, and training materials.

- Any other information you have provided to public agencies that can be accessed by members of the public under the federal Freedom of Information Act and similar state laws (and that may have been made widely available over the Internet).

- Any published materials on facility safety (either industry- or site-specific), such as agency reports on facility accidents, safety engineering manuals and textbooks, and professional journal articles on facility risk management.

11.2 SAMPLE QUESTIONS FOR COMMUNICATING WITH THE PUBLIC

Smaller businesses may not have the resources or time to develop the types of outreach programs, described later in this chapter, that many larger chemical companies have used to handle public questions and community relations. For many small businesses, communication with the public will usually occur when you are asked questions about information in your RMP. It is important that you respond to these questions constructively. Go beyond just answering questions; discuss what you have done to prevent accidents and work with the community to reduce risks. The people in your community will be looking to you to provide answers.

To help you establish a productive dialogue with the community, the rest of this section presents questions you are likely to be asked and a framework for answering them. These are elements of the public dialogue that you may anticipate. The person

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from your facility designated as responsible for communicating with the public should review the following and talk to other community organizations to determine which questions are most likely to be raised and identify other foreseeable issues. Remember that others in the community, notably LEPCs and other emergency management organizations are also likely to be asked these and other similar questions. You should consider the unique features of your facility, your RMP, and your historical relationship with the community (e.g., prior accidents, breakdowns in the coordination of emergency response efforts, and management-labor disputes), and work together with these other organizations to answer these questions for your situation and to resolve the issues associated with them.

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What does your worst-case release distance mean?

The distance is intended to provide an estimate of the maximum possible area that might be affected under catastrophic conditions. It is intended to ensure that no potential risks to public health are overlooked, but the distance to an endpoint estimated under worst-case conditions should not be considered a "public danger zone."

In most cases, the mathematical models used to analyze the worst-case release scenario as defined in the rule may overestimate the area that would be impacted by a release. In other cases, the models may underestimate the area. For distances greater than approximately six miles, the results of toxic gas dispersion models are especially uncertain, and you should be prepared to discuss such possibilities in an open, honest manner.

Reasons that modeling may underestimate the distance generally relate to the inability of some models to account for site-specific factors that might tend to increase the actual endpoint distance. For example, assume a facility is located in a river valley and handles dense toxic gases such as chlorine. If a release were to occur, the river valley could channel the toxic cloud much farther than it might travel if it were to disperse in a location with generally flat terrain. In such cases, the actual endpoint distance might be longer than that predicted using generic lookup tables.

Reasons that the area may be overestimated include:

- For toxics, the weather conditions (very low wind speed, calm conditions) assumed for a worst-case release scenario are uncommon and probably would not last as long as the time the release would take to travel the distance estimated. If weather conditions are different, the distance would be much shorter.

- For flammables, although explosions can occur, a release of a flammable is more likely to disperse harmlessly or burn. If an explosion does occur, however, this area could be affected by the blast; debris from the blast could affect an even broader area.

- In general, some models cannot take into account other site-specific factors that might tend to disperse the chemicals more quickly and limit the distance.

Note: When estimating worst case release distances, the rule does not allow facilities to take into account active mitigation systems and practices that could limit the scope of a release. Specific systems (e.g., monitoring, detection, control, pressure relief, alarms, mitigation) may limit a release or prevent the failure from occurring. Also, if you are required to analyze alternative release scenarios (i.e., if your facility is in Program 2 or Program 3), these scenarios are generally more realistic than the worst case, and you can offer to provide additional information on those scenarios.

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What does it mean that we could be exposed if we live/work/shop/go to school X miles away?

(For an accident involving a flammable substance):

The distance means that people who are in that area around the facility could be hurt if the contents of a tank or other vessel exploded. The blast of the explosion could shatter windows and damage buildings. Injuries would be the result of the force of the explosion and of flying glass or falling debris.

(For an accident involving a toxic substance):

The distance is based on a concentration of the chemical that you could be exposed to for an hour without suffering irreversible health effects or other symptoms that would make it difficult for you to escape. If you are within that distance, you could be exposed to a greater concentration of the chemical. If you were exposed to higher levels for an extended period of time (10 minutes, 30 minutes, or longer), you could be seriously hurt. However, that does not mean that you would be. Remember, for worst case scenarios, the rule requires you to make certain conservative assumptions with respect to, for example, wind speed and atmospheric stability. If the wind speed is higher than that used in the modeling, or if the atmosphere is more unstable, a chemical release would be dispersed more quickly, and the distances would be much smaller and the exposure times would be shorter. If the question pertains to an alternative release scenario, you probably assumed typical weather conditions in the modeling. Therefore, the actual impact distance could be shorter or longer, and you should be prepared to acknowledge this and clearly explain how you chose the conditions for your release scenario.

In general, the possibility of harm depends on the concentration of the chemical you are exposed to and the length of time you are exposed.

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IF THERE IS AN ACCIDENT, WILL EVERYONE WITHIN THAT DISTANCE BE HURT? WHAT ABOUT PROPERTY DAMAGE?

In general, no. For an explosion, everyone within the circle would certainly feel the blast wave since it would move in all directions at once. However, while some people within the circle could be hurt, it is unlikely that everyone would be since some people would probably be in less vulnerable locations. Most injuries would probably be due to the effects of flying glass, falling debris, or impact with nearby objects.

Two types of chemicals may be modeled - toxics and flammables. Releases of flammables do not usually lead to explosions; released flammables are more likely to disperse without igniting. If the released flammable does ignite, a fire is more likely than an explosion, and fires are usually concentrated at the facility.

For toxic chemicals, whether someone is hurt by a release depends on many factors. First, the released chemicals would usually move in the direction of the wind (except for some dense gases, which may be constrained by terrain features to flow in a different direction). Generally, only people downwind from the facility would be at risk of exposure if a release occurred, and this is normally only a part of the population inside the circle. If the wind speed is moderate, the chemicals would disperse quickly, and people would be exposed to lower levels of the chemical. If the release is stopped quickly, they might be exposed for a very short period time, which is less likely to cause injury. However, if the wind speed is low or the release continues for a long time, exposure levels will be higher and more dangerous. The population at risk would be a larger proportion of the total population inside the circle. You should be prepared to discuss both possibilities.

Generally, it is the people who are closest to the facility — within a half mile or less — who would face the greatest danger if an accident occurred.

Damage to property and the environment will depend on the type of chemical released. In an explosion, environmental impacts and property damage may extend beyond the distance at which injuries could occur. For a vapor release, environmental effects and property damage may occur as a result of the reactivity or corrosivity of the chemical or toxic contamination.

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HOW SURE ARE YOU OF YOUR DISTANCES?

Perhaps the largest single difficulty associated with hazard assessment is that different models and modeling assumptions will yield somewhat different results. There is no one model or set of assumptions that will yield "certain" results. Models represent scientists' best efforts to account for all the variables involved in an accidental release. While all models are generally based on the same physical principles, dispersion modeling is not an exact science due to the limited opportunity for real-world validation of results. No model is perfect, and every model represents a somewhat different analytical approach. As a result, for a given scenario, people can use different consequence models and obtain predictions of the distance to the toxic endpoint that in some situations might vary by a factor of ten. Even using the same model, different input assumptions can cause wide variations in the predictions. It follows that, when you present a single predicted value as your best estimate of the predicted distance, others will be able to claim that the answer ought to be different, perhaps greater, perhaps smaller, depending on the assumptions used in modeling and the choice of model itself.

You therefore need to recognize that your predicted distance lies within a considerable band of uncertainty, and to communicate this fact to those who have an interest in your results. A neighboring facility handling the same covered substances as you do may have come up with a different result for the same scenario for these reasons.

If you use EPA's *RMP Offsite Consequence Analysis Guidance* or one of the industry-specific guidance documents that EPA has developed, you will be able to address the issue of uncertainty by stating that the results you have generated are conservative (that is they are likely to overestimate distances). However, if you use other models, you will have to provide your own assessment of where your specific prediction lies within the plausible range of uncertainties.

WHY DO YOU NEED TO STORE SO MUCH ON-SITE?

If you have not previously considered the feasibility of reducing the quantity, you should do so when you develop your risk management program. Many companies have cited public safety concerns as a reason for reducing the quantities of hazardous chemicals stored on-site or for switching to non-hazardous substitutes. If you have evaluated your process and determined that you need a certain volume to maintain your operations, you should explain this fact to the public in a forthright manner. As appropriate, you should also discuss any alternatives, such as reducing storage quantities and scheduling more frequent deliveries. Perhaps these options are feasible - if so, you should consider implementing them; if not, explain why you consider these alternatives to be unacceptable. For example, in some situations, more frequent deliveries would mean more trucks carrying the substance through the community on a regular basis and a greater opportunity for smaller-scale releases because of more frequent loading and unloading.

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WHAT ARE YOU DOING TO PREVENT RELEASES?

If you have rigorously implemented your risk management program, this question will be your chance, if you have not already done so, to tell the community about your prevention activities, the safe design features of your operations, the specific activities that you are performing such as training, operating procedures, maintenance, etc., and any industry codes or standards you use to operate safely. If you have installed new equipment or safety systems, upgraded training, or had outside experts review your site for safety (e.g., insurance inspectors), you could offer to share the results. You may also want to mention state or federal rules you comply with.

WHAT ARE YOU DOING TO PREPARE FOR RELEASES?

For such questions, you will need to talk about any coordination that you have done with the local fire department, LEPC, or mutual aid groups. Such coordination may include activities such as defining an incident command structure, developing notification protocols, conducting response training and exercises, developing mutual aid agreements, and evaluating public alert systems. This description is particularly important if your employees are not designated or trained to respond to releases of regulated substances.

If your employees will be involved in a response, you should describe your emergency response plan and the emergency response resources available at the facility (e.g., equipment, personnel), as well as through response contractors, if appropriate. You also may want to indicate the types of events for which such resources are applicable. Finally, indicate your schedule for internal emergency response training and drills and exercises and discuss the results of the latest relevant drill or exercise, including problems found and actions taken to address them.

DO YOU NEED TO USE THIS CHEMICAL?

Again, if you have not yet considered the feasibility of switching to a non-hazardous substitute, you should do so when you develop your risk management program. Assuming that there is no substitute, you should describe why the chemical is critical to what you produce and explain what you do to handle it safely. If there are substitutes available, you should describe how you have evaluated such options.

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WHY ARE YOUR DISTANCES DIFFERENT FROM THE DISTANCES IN THE EPA LOOKUP TABLES?

If you did your own modeling, this question may come up. You should be ready to explain in a general way how your model works and why it produces different results. EPA allows using other models (as long as certain parameters and conditions specified by the rule are met) because it realizes that EPA lookup table results will not necessarily reflect all site-specific conditions.

In addition, although all models are generally based on the same physical principles, dispersion modeling is not an exact science due to the limited opportunity for real-world validation of the results. Thus, the method by which different models combine the basic factors such as wind speed and atmospheric stability can result in distances that readily vary by a factor of two (e.g., five miles versus ten miles). The introduction of site-specific factors can produce additional differences.

EPA recognizes that different models will produce differing predictions of the distance to an endpoint, especially for releases of toxic substances. The Agency has provided a discussion of the uncertainties associated with the model it has adopted for the OCA Guidance. You need to understand that the distances produced by another model lie within a band of uncertainty and be able to demonstrate and communicate this fact to those who are reviewing your results.

HOW LIKELY ARE THE WORST-CASE AND ALTERNATIVE RELEASE SCENARIOS?

It is generally not possible to provide accurate numerical estimates of how likely these scenarios are. EPA has stated that providing such numbers for accident scenarios rarely is feasible because the data needed (e.g., on rates for equipment failure and human error) are not usually available. Even when data are available, there are large uncertainties in applying the data because each facility's situation is unique.

In general, the risk of the worst-case scenario is low. Although catastrophic vessel failures have occurred, they are rare events. Combining them with worst-case weather conditions makes the overall scenario even less likely. This does not mean that such events cannot or will not happen, however.

For the alternative scenario, the likelihood of the release is greater and will depend, in part, on the scenario you chose. If you selected a scenario based on your accident history or industry accident history, you should explain this to the public. You should also discuss any steps you are taking to prevent such an accident from recurring.

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IS THE WORST-CASE RELEASE YOU REPORTED REALLY THE WORST ACCIDENT YOU CAN HAVE?

The answer to this question will depend on the type of facility you have and how you handle chemicals. EPA defined a specific scenario (failure of the single largest vessel) to provide a common basis of comparison among facilities nationwide. So, if you have only one vessel, EPA's worst case is likely to be the worst event you could have.

On the other hand, if you have a process which involves multiple co-located or interconnected vessels, it is possible that you could have an accident more severe than EPA's worst case scenario. If credible scenarios exist that could be more serious (in terms of quantities released or consequences) than the EPA worst case scenario, you should be ready to discuss them. For example, if you store chemicals in small containers such as 55-gallon drums, the EPA-defined worst-case release scenario may involve a limited quantity, but a fire or explosion at the facility could release larger quantities if multiple containers are involved. In this case, you should be ready to frankly discuss such a scenario with the public. If you take precautions to prevent such scenarios from occurring, you should explain these precautions also. If an accidental release is more likely to involve multiple drums than a single drum as a result, for example, of the drums being stored closely together, then you must select such a scenario as your alternative release scenario so that information on this scenario is available in your RMP.

Chemical manufacturers may want to talk about releases that could result from runaway reactions that could continue for several hours. This type of event could result in longer exposure times.

WHAT ABOUT THE ACCIDENT AT THE [NAME OF SIMILAR FACILITY] THAT HAPPENED LAST MONTH?

This question highlights an important point: you need to be aware of events in your industry (e.g., accidents, new safety measures) for two reasons. First, your performance likely will be compared to that of your competitors. Second, learning about the circumstances and causes of accidents at other facilities like yours can help you prevent such accidents from occurring at your facility.

You should be familiar with accidents that happen at facilities similar to yours, and you should have evaluated whether your facility is at risk for similar accidents. You should take the appropriate measures to prevent the accident from occurring and be prepared to describe these actions. If your facility has experienced a similar release in the past, this information may be documented in your accident history or other publicly available records, depending on the date and nature of the incident, the quantity released, and other factors. If you have already taken steps specifically designed to address this type of accident, whether as a result of this accident, a prior accident at your facility, or other internal decision-making, you should describe these efforts. If, based on your evaluation, you determine that the accident could not occur at your facility, you should discuss the pertinent differences between the two facilities and explain why you believe those differences should prevent the accident from occurring at your facility.

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WHAT ACTIONS HAVE YOU TAKEN TO INVOLVE THE COMMUNITY IN YOUR ACCIDENT PREVENTION AND EMERGENCY PLANNING EFFORTS?

If you have not actively involved the community in accident prevention and emergency planning in the past, you should acknowledge this as an area where you could improve and start doing so as you develop your risk management program. First, you may want to begin participating in the LEPC and regional mutual aid organizations if you aren't doing so already. Other opportunities for community involvement are fire safety coordination activities with the local fire department, joint training and exercises with local public and private sector response personnel, the establishment of green fields between the facility and the community, and similar efforts.

When discussing accident prevention and emergency planning with the community, you should indicate any national programs in which you participate, such as the Chemical Manufacturers Association's Responsible Care program or Community Awareness and Emergency Response program or OSHA's Voluntary Protection Program. If fully implemented, these programs can help improve the safety of the facility and the community. You may have future plans to participate in areas described previously or have new initiatives associated with the risk management program. Be sure you ask what else the community would like you to do and explain how you will do it.

CAN WE SEE THE DOCUMENTATION YOU KEEP ON SITE?

If the requested information is not confidential business information, EPA encourages you to make it available to the public. Although you are not required to provide this information to the public, refusing to provide it simply because you are not compelled to is not the best approach. If you decide not to provide any or most of this material, you should have good reasons for not doing so and be prepared to explain these reasons to the public. Simply taking a defensive position or referring to the extent of your legal obligations is likely to threaten the effectiveness of your interaction with the community. Offer as much information as possible to the public; if particular documents would reveal proprietary information, try to provide a redacted copy, summary, or some other form that answers the community's concerns. You may want to work with your LEPC on this issue. You should also be aware that information that EPA or the implementing agency obtains as part of an inspection or investigation conducted under section 114 of the Clean Air Act would be available to the public under section 114(c) of the Act to the extent it does not reveal confidential business information.

11.3 COMMUNICATION ACTIVITIES AND TECHNIQUES

Although this section is most applicable to larger companies, small businesses may want to review it and use some of the ideas to expand their communications with the public. To prepare for effective communication with the community, you should:

(1) Adopt an organizational policy that includes basic risk communication principles (see exhibit 11-1).

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(2) Assign responsibilities and resources to implement the policy.

(3) Plan to use "best communication practices".

ADOPT AN ORGANIZATIONAL COMMUNICATIONS POLICY

An organizational policy will support communication with the public on your RMP and make it an integral part of management practices. Otherwise, breakdowns are likely to occur, which could cause mistrust, hostility and conflicts.

A policy helps to establish communication as a normal organizational function and to present it as an opportunity rather than a burden or threat. The policy can be incorporated in an organization's policies, an approach taken by many companies who belong to the Responsible Care program of the Chemical Manufacturers Association (CMA). These companies have adopted CMA's Codes of Management Practices, which contain risk communication principles and practices.

Remember that what you communicate is more important than the type of communication policy or program you use, and what you actually *do* to maintain a safe facility is more important than anything you say. Your company's safety and prevention steps in your risk management program should serve as the core elements of any risk communication program.

ASSIGN RESPONSIBILITIES AND RESOURCES

A policy is only a paper promise until it is regularly and effectively implemented. Thus, you should follow up your communication policy by (1) having top management participate at the outset and at key points throughout the communication process, and (2) assigning communication responsibilities within your organization and providing the necessary resources.

Experience has demonstrated that assigning responsibility to knowledgeable managers, plant engineers, and staff and encouraging participation by employees, (most of whom are likely to be community residents) is a good communications practice. Delegating communication functions to outside technical consultants, attorneys, and public relations specialists has repeatedly failed to impress the community and even tends to incur mistrust. (However, if you hired a firm with acknowledged expertise in dispersion modeling, you may want them on hand to help respond to technical questions.)

Communications staff will need work time and resources to prepare presentation materials, hold meetings with interested persons in the community, and do other work necessary to respond to questions and concerns and maintain ongoing dialogue. A training program in communication skills and incentives for good performance also may be advisable.

Organizations have a legitimate interest in preventing disclosure of confidential business information or statements that inadvertently and unfairly harm the

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organization or its employees. Thus, you should assure that your risk communication staff is instructed on how to deal with situations that pose these problems. This may mean that you have an internal procedure enabling your staff to bring such situations to top management and legal counsel for quick resolution, keeping in mind that unduly defensive or legalistic responses that result in restricting the amount of information that is provided can damage or destroy the risk communication process.

Your communication staff may find the following steps helpful in addressing the priority issues in the communication process:

Prior to RMP Submittal

- Enlist employee support for, and involvement in, the communication process.
- Build on work you have done with your LEPC, fire department, and local officials, and gain their insights.
- Incorporate technical expertise, management commitment, and employee involvement in the risk communication process.
- Use your RMP's executive summary to begin the dialogue with the community; be sure you have taken all of the steps you present.
- Taking a community perspective, identify which data elements need to be clarified, interpreted, or amplified, and which are most likely to raise community concerns; then compile the information needed to respond and determine the most understandable methods (e.g., use of graphics) for presenting the information.

At Submittal

- Review the RMP to assure that you are familiar with its data elements and how they were developed. In particular, review the hazard assessment, prevention, and response program features, as well as documentation of the methods, data, and assumptions used, especially if an outside consultant performed the analyses and developed these materials. You have certified their accuracy and your spokesperson should know them intimately, as they reflect your plan.
- Review your performance in implementing the prevention and response programs and prepare to discuss problems identified and actions taken.
- Review your performance in investigating accidents and prepare to discuss any corrective actions that followed.

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Other Steps

- Identify the most likely concerns about risks identified in the RMP but not fully addressed, consult with management and safety engineering, and determine additional measures the organization will take to resolve these concerns.

- Avoid misrepresentations and minimize the roles of public relations specialists.

- Identify "best communication practices" (as described in the next section) and plan how to use them.

USE "BEST COMMUNICATION PRACTICES"

Many facilities already have gained considerable experience in communicating with the public. Lessons from their experiences are described below. However, the value of these best practices and your credibility will depend on your facility's possession and ongoing demonstration of certain essential qualities:

- Top management commitment (e.g., owner and facility manager) to improving safety

- Honesty, openness, and concern for the community

- Respect for public concerns and perceptions

- Commitment to maintaining a dialogue with all sectors of the community, to learning from this dialogue, and to being prepared to change your practices to make your facility more safe

- Commitment to continuous improvement through internal procedures for evaluating incidents and promoting organizational learning

- Knowledge of safety issues and safety management methods

- Good working relationships with the LEPC, fire department, and other local officials

- Active support for the LEPC and related activities

- Employee support and commitment

- Continuation of commitment despite potential public hostility or mistrust

Another note: Because each facility and community involves a unique combination of factors, the practices used to achieve good risk communication in one case do not necessarily ensure the same quality result when used in another case. Therefore,

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while it is advisable for you to review such experience to identify "best communication practices," you should carefully evaluate such practices to determine if they can be adapted to fit your unique circumstances. For example, if your facility is in the middle of an urban area, you probably will use different approaches than you would use if it were located in an industrial area far from any residential populations. These practices are complementary approaches to delivering your risk management message and responding to the concerns of the community.

With these cautions in mind, a number of "best" practices are outlined below for consideration. First, you will want to establish formal channels for information-sharing and communication with stakeholders. The most basic approaches include the following:

- Convene public meetings for discussion and dialogue regarding your risk management program and RMP and take steps to have the facility owner or manager and all sectors of the community participate, including minorities and low-income residents.

- Arrange meetings with local media representatives to facilitate their understanding of your risk management program and the program summary presented in your RMP.

- Establish a repository of information on safety matters for the LEPC and the public and, if electronic, provide software for public use. Some organizations also have provided computer terminals for public use in the community library or fire department.

Other, more resource-intensive activities of this type to consider include the following:

- Create and convene focus groups (small working groups) to facilitate dialogue and action on specific concerns, including technical matters, and take steps to assure that membership in each group reflects a cross section of the community and includes technically trained persons (e.g., engineers, medical professionals).

- Hold seminars on hypothetical release scenarios, prevention and response programs, applicable standards and industry practices, analytic methods and models (e.g., on dispersion of airborne releases, health effects of airborne concentrations), and other matters of special concern or complexity.

- Convene special meetings to foster dialogue and collaborations with the LEPC and the fire department and to establish a mutual assistance network with other facility managers in the community or region.

- Establish hot lines for telephone and e-mail communications between interested parties and your designated risk communication staff and, if feasible, a web site for posting useful information.

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In all of these efforts, remember to use plain language and commonly understood terms; avoid the use of acronyms and technical and legal jargon. In addition, depending on your audience, keep in mind that the preparation of multilingual materials may be useful or even necessary.

Secondly, you may want to initiate or expand programs that more directly involve the community in your operations and safety programs. Traditional approaches include the following:

- Arrange facility tours so that members of the public can view operations and discuss safety procedures with supervisors and employees.
- Schedule drills and simulations of incidents to demonstrate how prevention and response programs work, with participation by community responders and other organizations (e.g., neighboring companies).
- Conduct a “Safety Street” - a community forum generally sponsored by several industries in a locality, where your representatives present facility safety information, explain risks, and respond to public questions (see Section 11.4 for a reference to more information on this program).
- Periodically reaffirm and demonstrate your commitment to safety in accordance with and beyond regulatory requirements and present data on your safety performance, using appropriate benchmarks or measures, in newsletters and by posting the information at your web site.
- Publicly honor and reward managers and employees who have performed safety responsibilities in superior fashion and citizens who have made important contributions to the dialogue on safety.

If community interest is significant, you may also want to consider the following activities:

- Invite public participation in monitoring implementation of your risk management program elements.
- Invite public participation in auditing your performance in safety responsibilities, such as chemical handling and tracking procedures and analysis and follow-up on accidents and near misses.
- Organize a committee comprised of representatives from the facility, other industry, emergency planning and response organizations, and community groups and chaired by a community leader to independently evaluate your safety and communication efforts (e.g., a Community Advisory Panel). You may also want to finance the committee to pay for an independent engineering consultant to assist with technical issues and learn what can be done to improve safety, and thereby share control with the community.

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Your communication staff should review these examples, consider designing their own activities as well as joint efforts with other local organizations, and ultimately decide with the community on which set of practices are feasible and can best create a healthy risk communication process in your community. Once these decisions are made, you may want to integrate the chosen set of practices in an overall communication program for your facility, transform some into standard procedures, and monitor and evaluate them for continuous improvement.

OTHER COMMUNICATION OPPORTUNITIES

By complying with the RMP rule and participating in the communications process with the community, you should have developed a comprehensive system for preventing, mitigating, and responding to chemical accidents at your facility. Why not share this knowledge with your staff, others you do business with (e.g., customers, distributors, contractors), and, perhaps through industry groups, others in your industry? If you transfer this knowledge to others, you can help improve their chemical safety management capabilities, enhance public safety beyond your community, and possibly gain economic benefits for your organization.

11.4 FOR MORE INFORMATION

Among the numerous publications on risk communication, the following may be particularly helpful:

- *Improving Risk Communication*, National Academy Press, Washington, D.C., 1989
- "Safety Street" and other materials on the Kanawha Valley Demonstration Program, Chemical Manufacturers Association, Arlington, VA
- Community Awareness and Emergency Response Code of Management Practices and various Guidance, Chemical Manufacturers Association, Arlington, VA
- *Communicating Risks to the Public*, R. Kasperson and P. Stallen, eds., Kluwer Publishing Co., 1991
- "Challenges in Risk and Safety Communication with the Public," S. Maher, Risk Management Professionals, Mission Viejo, CA, April 1996
- Primer on Health Risk Communication Principles and Practices, Agency for Toxic Substances and Disease Registry, on the World Wide Web at atsdr1.atsdr.cdc.gov:8080
- *Risk Communication about Chemicals in Your Community: A Manual for Local Officials*, US Environmental Protection Agency, EPA EPCRA/Superfund/RCRA/CAA Hotline

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- *Risk Communication about Chemicals in Your Community: Facilitator's Manual and Guide*, US Environmental Protection Agency, EPA EPCRA/Superfund/RCRA/CAA Hotline

- *Chemicals, the Press, and the Public: A Journalist's Guide to Reporting on Chemicals in the Community*, US Environmental Protection Agency, EPA EPCRA/Superfund/RCRA/CAA Hotline

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