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Chemicals in Your Community









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Part 1

Preface

Chemicals are an important part of the modern world. They make our water safe to drink, provide fuel for our cars, increase the production from our farms, and are often key parts of products we use every day. Many of the properties of chemicals that make them valuable to us, however, such as their ability to kill dangerous organisms in water and pests on crops, pose a hazard to us and the environment if the chemicals are used or disposed of improperly.

EPA is committed to providing you with as much information as possible about chemicals at your local businesses, and other facilities, so that you can work with local government agencies, citizen groups, and business to ensure that the chemicals in your community are used safely. You can also ensure that facilities and emergency responders are prepared to respond appropriately to accidents.

You and your family and neighbors are the people most at risk if chemicals in your community are being used unsafely or released into the environment. You are in the best position to work with local agencies to ensure that you, your neighbors, local agencies, and responders are prepared to handle any accidents that do happen.

Two laws, the Emergency Planning and Community Right-to-Know Act (EPCRA) and the Clean Air Act's (CAA) chemical accident prevention provisions (also called the risk management program), were specifically designed to provide you with information on chemicals at individual facilities, their uses, and releases. Many other EPA programs also have data available, as do States, local governments, trade associations, public interest groups, and individual facilities. Much of this information is easily available on the Internet; other information is available from State and local agencies who receive annual reports from facilities.

This pamphlet:

- Summarizes the information you can obtain under EPCRA and CAA;
- Tells you where to find it;
- Tells you about other information you may also find helpful; and
- Indicates how you can use these various sources of information to build a snapshot of chemicals stored and released in your community.

It also discusses how specific groups, such as fire departments, health care professionals, State and local agencies, citizens, and industry can use the information to improve the safety of our communities.

Dealing with Chemicals: It's Everybody's Job

The Emergency Planning and Community Right-to-Know Act (EPCRA) and the Clean Air Act (CAA) both require facilities to report on hazardous chemicals they store or handle, and both provide for public access to these reports. These laws help build better relationships among government at all levels, business and community leaders, environmental and other public-interest organizations, and individual citizens.

The laws recognize that citizens are full partners in preparing for emergencies and managing chemical risks. Each of these groups and individuals has an important role in making the program work:

- **Local communities and State governments** are responsible for understanding risks posed by chemicals at the local level, managing those risks, reducing those risks, and dealing with

emergencies. Developing emergency planning and chemical risk management at the levels of government closest to the community helps to ensure the broadest possible public representation in the decision-making process.

The *Local Emergency Planning Committee* (LEPC) develops and reviews the community chemical emergency response plan and receives annual inventory reports. The State Emergency Response Commission (SERC) reviews local emergency response plans and receives annual inventory reports. LEPC and SERC contact names and phone numbers are available at www.rtk.net/lepc.

- **Citizens, health professionals, public-interest and labor organizations, the media,** and others work with government and industry to use the information for planning and responding to emergencies in the community.
- **Facilities that use hazardous chemicals** are responsible for operating safely, using the most appropriate techniques and technologies; gathering information on the chemicals they use, store, and release into the environment and providing it to government agencies and local communities; and helping set up procedures to handle chemical emergencies. Some industry groups and individual companies have gone beyond the letter of the law and have reached out to their communities by explaining the hazards involved in using chemicals, by opening communication channels with community groups, and by considering changes in their practices to reduce any potential risks to human health or the environment.
- **The Federal government** provides national leadership and assistance to States and communities to ensure they have the tools and expertise necessary to receive, assimilate, and analyze all data, and to take appropriate measures to reduce the risk of accidents and chemical emissions. EPA helps facilities comply with the laws' requirements; it ensures the public has access to information on chemical storage and releases as well as other information to protect the nation's air, water, and soil from pollution. EPA works with industry to encourage voluntary reductions in the use and release of hazardous chemicals wherever possible.

What Information is Available?

EPCRA and the Clean Air Act's Risk Management Program provide an array of complementary information:

Emergency Release Notification. Companies must immediately report accidental releases of certain chemicals to the SERC and LEPC and file follow-up reports. Minimum reportable quantities vary from one pound to 10,000 pounds. More than 1,000 chemicals are covered by this requirement. You can find out the name and quantity of the chemical; the duration of the release; whether the release was to air, water, or land; the potential health impacts; and who to contact for more information.

Annual Chemical Inventories. Companies must file annual chemical inventory reports on hazardous chemicals they store on site above certain quantities, usually 10,000 pounds; chemicals may be reported by hazard type or by name. The reports tell where the chemical is located in the facility, how much is stored, and who to contact in an emergency. This information will allow you to map these facilities and see where heavy concentrations of chemicals are located. You can get copies of these reports from your LEPC or SERC.

Material Safety Data Sheets (MSDSs). Companies must submit copies of the MSDSs or list of chemicals to the SERC, LEPC, and local fire department. MSDSs are available for more than 500,000 products that could create physical hazards or adverse health effects and include the chemical identity, components of chemical mixtures, the physical properties (e.g., boiling point), hazards (e.g., flammability, corrosivity, toxicity), and health hazards. The SERC or LEPC can tell you which MSDSs facilities have; and, they or the facility can provide you with a copy of the MSDS. MSDSs do not have a standard format and can sometimes be confusing. On-line databases, which often have multiple versions of MSDSs for individual chemicals, can help you find an MSDS that is well organized and easy to read.

Toxics Release Inventory (TRI). Certain facilities file annual reports on all releases of about 650 chemicals. The data include estimates of the quantities of chemicals released to air, water, and land and otherwise managed as waste. TRI data are available on-line. You can search for specific facilities or search for all facilities in a town, county, or State.

Risk Management Plans (RMPs). Certain companies file chemical accident prevention plans that include a summary describing the facility and its processes; the worst-case and other more likely accident scenarios; the facility's accident prevention practices; its emergency response program; a recent history of serious chemical accidents (if any); and planned improvements to safety design or operations. You also will learn why accidents have happened and find out what companies have done to prevent recurrences.You can get RMPs from EPA's Envirofacts database in a system called **RMP*Info**.

Community Emergency Response Plan. The LEPC has developed a community emergency response plan for chemical accidents. You can review the plan, which addresses facilities with certain quantities of 356 extremely hazardous substances (acutely toxic chemicals). Your LEPC can provide information on which local facilities have been involved in the planning process.

What's Available on the Internet?

Profiles of the extremely hazardous substances:
www.epa.gov/ceppo/ep_chda.htm#ehs

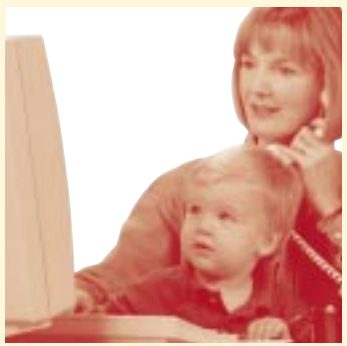
ERNS online (release reports by State by year):
www.epa.gov/ernsacct/pdf/index.html

Access to the on-line copies of MSDSs maintained by a number of universities:
www.hazard.com

TRI and RMP data through Envirofacts:
www.epa.gov/enviro. (Also available in Envirofacts, data on facilities that have:

- Permits to release substances to water, in the Permit Compliance System database.
- Permits to release hazardous pollutants to air, in the air release database.
- Permits to store and treat hazardous wastes, in the RCRA database.)

TRI data also are available at www.epa.gov/tri, www.rtk.net, and at www.scorecard.org, which maps the location of facilities in a county or city.



How Do I Build a Picture of Chemical Use in My Community?

If you have Internet access, the easiest way to begin is to search RMP*Info and the TRI database for your city and county. Use these to develop a list of facilities and chemicals in your area. Ask your SERC or LEPC to provide information from their records on other facilities in the community that have filed reports.

Annual chemical inventories (available from the SERC and LEPC) are likely to be the most comprehensive source because they cover the largest number of chemicals. But remember that some facilities covered by other environmental regulations may not be required to file these inventories. The threshold for reporting chemicals also varies among the regulations and not all companies are required to report information under every environmental regulation. Some facilities may report acutely toxic chemicals to help LEPCs prepare local emergency response plans, but are not required to file Risk Management Plans. In some cases, chemicals will be reported under TRI, but not under any of the other rules because TRI is based on the total quantity used during the year, not the quantity on site at any one time.

LandView

Another way to build your comprehensive list of all the facilities that use or store hazardous chemicals in your community is to download your county information from the LandView web site: www.census.gov/geo/www/tiger/landview.html. LandView is a geographic reference, like an atlas. It displays:

- A detailed network of roads, rivers, and railroads based on Census files.
- Jurisdictional and statistical boundaries — a set of generalized boundary files for States, congressional districts, metropolitan areas, Native American Indian Areas, Alaska Native lands, counties.
- EPA-regulated sites, a subset of the facilities, sites, and monitoring stations represented in five EPA databases including sites with air and water permits, sites handling hazardous wastes, Superfund sites, and TRI facilities.
- Selected demographic and economic information from the 1990 Census, and
- Key geographic features of the United States provided by the United States Geological Survey and other Federal agencies.

LandView will give you a map which you can then fill in with data from other sources.

You may be surprised at the variety of businesses that use and store hazardous chemicals. While everyone generally knows that chemical manufacturers and refineries have chemicals on site, many people don't realize that food processors and food distribution centers may have large quantities of ammonia in their refrigeration systems. Your local drinking water system and sewage treatment plant also store toxic chemicals that are used to kill dangerous bacteria in the water. Many industrial and commercial sites also use and sell chemicals.

What's Missing?

1. Trade Secrets and Confidential Business Information. Under the community right-to-know law, facilities are not required to disclose the identity of a chemical on a Toxic Release Inventory or an annual inventory report if it is a trade secret, but they must indicate what type of chemical it is. The risk management program allows facilities to withhold from their Risk Management Plans any information that would reveal confidential business information. In practice, less than one percent of the facilities that have filed any of these reports have claimed information as confidential or trade secret. If a facility in your community has made such a claim, you may ask EPA to determine whether the claim is legitimate.

2. Facilities Not Required to Report. Some facilities that handle hazardous chemicals are not required to report information under community right-to-know laws. EPA recently exempted virtually all gas stations

Data Limitations

You should know that:

The *TRI annual release reports* are based on estimates, not actual measurements. They also represent annual emissions; you cannot tell from the data whether the chemicals were released in large amounts over a short period of time or in small amounts every day. Information on the rate of release is needed to determine effects on human health and the environment.

The *release estimates* do not show the extent of human exposure. Many things can happen to a chemical when it is released; these natural processes (e.g., wind) make it difficult to determine the extent of actual exposure.

The *initial reports on releases* to LEPCs, SERCs, and EPA are often made while the release is occurring. The data from those reports, such as in EPA's Emergency Release Notification System (ERNS), may not accurately reflect the quantity released, the chemicals released, or the impacts.

The *quantities on site* reported under EPCRA 312 and TRI are given in broad ranges; it is not possible to tell the actual quantity.

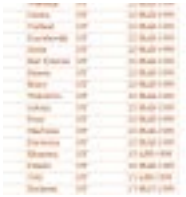
All the *requirements limit the number of facilities covered,* usually by including only certain chemicals and setting thresholds below which reporting is not required. TRI also covers facilities in only certain industrial sectors with more than nine employees. Other facilities may handle the same chemicals or may handle other chemicals that could pose hazards.

The *offsite consequence analysis data* in the RMP are usually based on conservative assumptions about the accident scenario and weather conditions and on conservative modeling; the distances reported are likely to overestimate the area potentially affected.

from EPCRA reporting because the public and emergency responders are aware of the location of these facilities and of the hazards of gasoline. Likewise, facilities that handle relatively small quantities of acutely toxic chemicals and up to 10,000 pounds of other hazardous chemicals are not required to report. Many agricultural chemicals are not subject to reporting under these rules, as well.

3. Transportation. Chemicals transported through your community by rail, barge, or truck are not reported to EPA. You may assume that any of the chemicals you find at facilities in your locality are moving through your community via railroad lines or major highways. But, chemicals also may be transported through your community on the way to some other location. Some LEPCs have surveyed traffic on major roads and rail lines to determine which chemicals are being transported and who is transporting them. Most vehicles that carry hazardous materials must be marked with placards that identify the hazard class and give a number that identifies the specific chemical.

4. Non-Filers. Although environmental laws impose substantial penalties for facilities that fail to report, some companies may be unaware of their reporting obligations. When you develop a list of facilities in your community that have reported under these rules, you should check whether other, similar facilities exist in your community. Work with those facilities and your LEPC to determine whether they should also be reporting.



Information Sources

Type of Information	Where Can I Get It?
Facilities in city, county, State	LEPC, SERC, Toxic Release Inventory (TRI) and RMP*Info (located in EPA Envirofacts at www.epa.gov/enviro)
Name and address of facility Contact names	LEPC, SERC, EPA TRI and RMP*Info
Parent Company	TRI and RMP*Info
Quantities of chemicals on site	LEPC, SERC, TRI database
Chemicals and quantities in processes	RMP*Info
Annual releases to the environment	TRI
Accidental or significant releases	ERNS and RMP*Info
Physical properties of chemicals Health and safety hazards Exposure limits	LEPC, SERC, on-line MSDS databases
Offsite consequence analysis	RMPs
Prevention practices Hazard controls	RMP*Info
Wastes generated/recycled	TRI

What Do These Data Mean?

The presence of hazardous chemicals does not necessarily mean that the community is at risk. These chemicals can be, and usually are, handled safely. Many of the substances covered by EPCRA pose little risk to the community because, even if spilled, they will not migrate beyond the facility; they may, however, pose risks to workers at the facility. (Other right-to-know regulations provide information to workers on workplace hazards.) Some chemicals are hazardous only if you are exposed to them over a long period of time. Most of the chemicals are dangerous only if people are exposed to them above certain concentrations. For some of the chemicals EPA has set standards detailing how much of the chemical can be released safely to the air or water per hour or day. The Occupational Safety and Health Administration (OSHA) has set permissible exposure levels for workers for many chemicals that are generally included on MSDSs.







Hazard vs. Risk

To evaluate the dangers these chemicals may create for your community it is useful to understand the difference between hazard and risk.

Hazards in chemical properties generally 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. Similarly, if you live in an earthquake zone or an area affected by hurricanes, earthquakes and hurricanes are hazards. When a facility conducts a hazard review or process hazards analysis, it will identify hazards and determine 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 usually is 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.

Can We Really Assess Risk?

EPA, under the right-to-know and accident prevention regulations, does not require facilities to assess risk. In most cases, the data that are needed to estimate risk levels quantitatively do not exist. Even when such data are available, it is difficult to assign a numerical value to risk. Generally, facilities and emergency planners estimate risk - in qualitative terms - as high, medium, and low. Most potential worst-case releases are considered to be low risk, but that does not mean they could not happen; it simply means that they are unlikely to occur. Smaller releases may be more likely, but may have little effect on the surrounding community and, therefore, still would be considered low risk.

The challenge for the community and for facilities is to decide which risks need to be reduced and where time and resources can best be spent. For example, a serious release may be very unlikely, but if it could affect schools or hospitals if it happened, a community might decide to work with the facility to reduce the risk. If the same release occurred at a facility that is a considerable distance from anyone else, it might not merit any steps to reduce the likelihood.

How Can Risk Be Reduced?

Communities and facilities can work together to reduce risk. Many companies have already cut back on routine emissions, reduced the quantities of chemicals stored, or switched to less hazardous chemicals. In all cases, improved operations, such as better employee training, operating procedures, and preventive equipment maintenance, can reduce risks and improve the efficiency of the business. EPA and OSHA have imposed such safe practices requirements on facilities that handle the most hazardous chemicals. Through RMP*Info, companies and communities can compare the quantities stored, hazard controls, detection systems, and mitigation systems used for one facility with those reported by similar facilities elsewhere. These data may provide ideas on how to improve safety.

Facilities handling chemicals that could pose risks to the public have a general duty to identify the hazards of their operations, design and operate safe plants, and be prepared to mitigate any releases that occur. The community can use the data available under the right-to-know laws as a way to spark dialogue with facilities to find out which risks need to be reduced and how to do it.

What's in RMP*Info

Besides basic facility information (name, location, contacts), RMP*Info provides information on chemicals, processes, prevention practices, and accidents. You can review the following information in RMP*Info when you call up a facility's RMP.

Facility Information

Executive summary

Read a description of the facility—what it does and the chemicals it uses. The summary describes the worst-case and alternative release scenarios, the general approach to preventing accidents, the five-year accident history, and steps being taken to reduce risks.

Parent company name.

Find out if a facility is owned by a larger corporation. You can search RMP*Info by the parent company name to look at RMPs from other facilities owned by the same company.

Chemical Information

Process chemicals

Find out which chemicals the facility has, the quantity of each chemical, the general hazard of the chemical (flammable or toxic), and number of covered processes. One chemical may appear in more than one process. If you want to review RMPs for similar facilities with the same chemical, search RMP*Info by chemical and NAICS code (which identifies the industrial sector).

Accident history

Find details of serious accidental releases in the past five years. You can learn when the accident occurred, what type of release it was (gas, liquid, fire), what impacts it had (deaths, injuries, property damage), what caused the accident, and what the facility has done to prevent a recurrence.

Prevention Program

Provides a list of covered processes, the NAICS code (which identifies the type of activity, such as petrochemical manufacturing), and the program level. If you want to review RMPs for similar facilities in your state or nationwide, search RMP*Info by the NAICS code.

Major hazards identified

Find out which major hazards are associated with a process. You can compare the list to the hazards identified by other facilities in the same NAICS code using the same chemical (search RMP*Info by NAICS code and chemical).

Process controls in use

Find out what kinds of process controls (safety measures) the facility uses to reduce the risk of an accident. You can compare the controls to those identified by other facilities in the same NAICS code using the same chemical (search RMP*Info by NAICS code and chemical).

Mitigation systems in use

Find out what kinds of mitigation systems (e.g., dikes, scrubbers) the facility uses to limit the quantity of the chemical accidentally released that reaches the community. You can compare the systems to those identified by other facilities in the same NAICS code using the same chemical (search RMP*Info by NAICS code and chemical).

Detection systems

Find out what kinds of systems the facility uses to detect releases early so they can respond quickly and limit the risk to you and your community. You can compare the systems to those identified by other facilities in the same NAICS code using the same chemical (search RMP*Info by NAICS code and chemical).

Emergency Response Program

Find out whether the facility has an emergency response plan and which local response agency the facility coordinates with to ensure a rapid and safe response if an accident occurs.

Part 2

Part 2: Stakeholders

Right-to-know laws have forged a closer relationship among citizens, health professionals, industry, public-interest organizations, and the local, State, and Federal government agencies responsible for emergency planning and response, public health, and environmental protection.

Under the provisions of EPCRA and the CAA, all of these groups, organizations, and individuals have vital roles to play in making the laws work for the benefit of everyone. The laws require facilities to provide information on the presence of hazardous chemicals in communities directly to the people who are most affected, both in terms of exposure to potential risks and the effects of those risks on public health and safety, the environment, jobs, the local economy, property values, and other factors.

These "stakeholders" include people who are best able to do something about assessing and managing risks through inspections, enforcement of local codes, reviews of facility performance and, when appropriate, political and economic pressures.

This relationship between the data and community action can best occur at the local level, through the work of the LEPC and other local groups. For example, if a local firm has reported the presence of extremely hazardous substances at its facility, several accidents, substantial quantities of chemicals, and continuing releases of toxic chemicals, a community has the data it needs to seek appropriate corrective action. In short, the laws open the door to community-based decision-making on chemical hazards for citizens and communities throughout the nation.

EPA and States implement and enforce a number of environmental laws to protect you and the environment, but these laws set minimum standards. Many industries, stimulated by right-to-know laws and public pressure, have gone beyond these standards to create a higher level of safety and performance. You can work with your local facilities to ensure that not only are they complying with State and Federal laws, but that they are also moving beyond them to protect your community.

This section describes how each of the key groups and organizations—as well as individual citizens can use the information available under these laws to fulfill the promise of community right-to-know laws: a safer, healthier environment for you and your family.

Local Emergency Planning Committees (LEPCs)

LEPCs are crucial to the success of community right to know and can play a vital role in helping you understand chemical information and other environmental data.

LEPCs include local elected officials; law enforcement, civil defense, firefighting, first aid, health, and local environmental and transportation agency employees; hospital staff; broadcast and print media journalists; community activists; and industry representatives.

The LEPCs developed a community response plan to prepare for and respond to chemical emergencies, focusing on 356 extremely hazardous substances. The plans are reviewed annually, exercised, and updated. Because LEPC members represent the community, they are familiar with factors that affect public safety, the environment, and the local economy and can help you understand the chemical hazards and risks present in your community.

The LEPC also receives emergency release notifications and the annual hazardous chemical inventory information submitted by local facilities. They will make this information available to you

What's In An Emergency Plan?

An emergency plan includes:

- Identity and location of hazardous materials;
- Procedures for immediate response to a chemical accident;
- Public notification and evacuation or shelter-in-place procedures;
- Industry contact names; and
- Timetables for testing and updating the plan.

upon written request. Facilities covered by the CAA risk management program also coordinate their on-site emergency response plans with the LEPCs. If there is more information that you want on particular chemicals or facilities, the LEPC can request it on your behalf and can serve as a forum for discussions with community groups, the public, and facilities.

Citizens

Community right-to-know laws and regulations were written specifically with you, the citizen, in mind. They are based on the principle that the more you and your neighbors know about hazardous chemicals in your community, the better prepared your community will be to manage these potential hazards and to improve public safety and health as well as environmental quality. By volunteering to work with your LEPC and engaging in a dialogue with local industry, you can play a major role in making the laws work.

The laws require industry and others to give you information on potential chemical hazards and inventories, on releases of toxic chemicals into the environment, on accident scenarios, and on prevention practices. There are several ways you can become involved in obtaining and using this information to enhance the quality of life in your community:

- **Attend LEPC meetings** and make sure all appropriate groups are members. Volunteer to serve on the LEPC as a citizen representative.
- Make sure that the LEPC has obtained **all the information** it needs from local

facilities to prepare a comprehensive emergency response plan.

- **Review and comment on the emergency response plan,** and ask questions about how procedures set out in the plan affect you, your family, or your place of business.
- **Ask for information** from your LEPC or SERC about chemical hazards, inventories, and releases in your community. Make sure both the SERC and LEPC have established procedures to make the information reported under EPCRA readily available to the public. Ask your LEPC what facilities are doing to reduce chemical hazards.
- **Use the national databases** available from EPA at www.epa.gov/enviro to obtain information on chemicals in your community. This web site contains links to other government and non-government web sites that may be of interest. Many facilities may also have web sites that provide information on safety policies and practices.
- **Call or visit facilities** in your community and ask if they have complied with the reporting, emissions, and prevention requirements of State and Federal environmental laws.

These laws give you the opportunity to become directly involved in the decisions that affect your safety and health. Your knowledge of and participation in these programs can help ensure that they accomplish their goals in your community.

Fire Departments

Fire departments are essential members of their LEPCs not only because they are often the first to respond, but also because fire departments have important expertise regarding chemical hazards and emergency planning. Any responders who will be involved in hazardous materials response will have specific training to handle such emergencies.

Fire departments receive the same information about annual hazardous chemical inventories and MSDSs as LEPCs do. Having access to this information helps a fire department responding to a chemical emergency know which chemicals, as well as their quantities and locations, to expect at the scene. A fire department can request additional, more specific information about chemical inventories at a plant, and it can also request an on-site inspection.

Fire departments may find the emergency release notifications filed with the LEPC and the five-year accident histories reported in the RMP useful in identifying facilities in the area that are having accidents even if those accidents have not yet required a response from fire fighters. Talking to the facilities about these smaller accidents may help identify steps that can

CAMEO™

The National Oceanic and Atmospheric Administration (NOAA) and EPA developed a computer software program called CAMEO™ to help firefighters meet their information management needs. CAMEO contains information about commonly transported chemicals; an air dispersion model to evaluate accident release scenarios and evacuation options; and several easily adaptable databases and computer mapping programs. Information on CAMEO can be obtained from www.epa.gov/ceppo/.

be taken to prevent more serious accidents later.

Facilities subject to the RMP rule must coordinate their emergency response plans and activities with the local fire department or LEPCs. Fire departments may want to use the opportunity to review facility plans and equipment, discuss joint exercises, and consider whether the facility can provide additional training or support equipment when needed. Fire departments may also want to review RMP information on detection and mitigation systems at local facilities to determine how these may facilitate a response.

Public Institutions

Hospitals, schools, and State and local governments can be vital to the success of any emergency response action. Ambulance crews and emergency room personnel must know how to transport and treat victims of exposure to hazardous chemicals. Schools and public buildings should plan for emergencies. The information available under EPCRA and the CAA can help these institutions prepare for emergencies and identify opportunities for risk reduction. Here are some ways public institutions can participate in emergency planning and hazardous chemical risk reduction:

- **Join the LEPC,** or at least learn who represents public institutions on the committee and stay in contact with that person.
- **Inform the LEPC of sensitive facilities** within the community (hospitals, schools, and nursing homes) that should be included in the emergency response plan. Know how they will be notified in the event of an accident and be prepared to respond. Become familiar with plans for responding to fires and other emergencies involving hazardous chemicals.

Health Professionals

Doctors, nurses, and other trained medical professionals who serve in government health departments, hospitals, and private practice should have a particular interest in the information available under EPCRA and the CAA. Combining their medical knowledge with the specific information about chemicals obtained from the reports can make them an important source of information about risks to the public health in their communities. Here are some of the ways these professionals can participate:

- Volunteer to be a health professional representative on the LEPC.
- Participate in programs to train medical personnel to deal with emergencies involving chemical hazards (health professionals should contact their State training officer through their LEPC or SERC for more information on training programs).
- Screen information submitted to LEPCs to determine if any acute or chronic health effects may be associated with hazardous substances in their communities. Health professionals may want to use this information to develop a list of hazardous substances in the community and ensure that they or the hospitals and medical centers have copies of MSDSs for every chemical or have the web addresses to locate information on these chemicals quickly in case of an emergency. MSDSs and other data available from EPA and other agencies provide emergency treatment data.
- Talk with representatives of local facilities to determine whether other chemical hazards are created by the chemicals that are present. For example, chemicals could react during a release to form other dangerous substances.
- Work with the LEPC to **build an information base about hazardous chemicals** in the community. Be sure that hospitals and other medical personnel are familiar with chemical hazards that exist in the community, with the steps to take to treat people exposed, and with the actions needed to avoid contamination.
- Use the information base to identify "hot spots," or potential problem areas that warrant further investigation to determine if they represent unacceptable risks to the public health or the environment. Use this information to work with industry on voluntary programs to **reduce the amounts and risks of hazardous chemicals** used or released in the community.

Public institutions may also be subject to the reporting requirements under EPCRA and the CAA if they have the covered substances above the thresholds for each requirement. Water treatment and wastewater treatment plants are particularly likely to be subject to the rules.

Anticipated Chemical Use

The community and planners should question any new business seeking to locate in the community about their anticipated chemical use. Many types of facilities use hazardous chemicals: food distributors and cold storage facilities may have ammonia refrigeration systems; some retailers store flammable gases. All of these can be handled safely, but placing them close to homes, schools, or hospitals may increase the risk unnecessarily. In some cases, risks are increased by locating facilities with hazardous chemicals close to each other; for example, allowing storage of explosive flammable gases next to a facility that stores chlorine for water treatment could increase the risk of a chlorine release. Planners can work with facilities to ensure that storage at a site is not dangerously close to chemicals at adjacent sites.

Land Use Planners

One of the best ways to reduce risk to the public from hazardous chemicals is to locate the chemicals at a considerable distance from areas where the public lives, shops, and plays. The information collected under community right-to-know laws provides land use planners, school boards, property developers, and businesses with data they can use to make informed decisions about where to locate new industrial facilities and where to allow development close to existing facilities that handle hazardous chemicals.

Land use planning agencies and others involved in planning decisions should work with the LEPC to develop maps that locate facilities with chemical inventories. The more likely scenarios (alternative scenarios) reported in the RMPs may be useful to planners. If facilities have reported that these releases could travel a half mile from the site before dispersing, planners may want to refrain from allowing new residential development, nursing homes, day care centers, or hospitals within that area; school boards may want to ensure that new schools are not located in areas within the zones of alternative release scenarios.

New industrial facilities will not have filed information under these laws, but the data from similar facilities can be used to develop estimates of how large a buffer zone is needed to protect the public. Planners should ask the new facility about the chemicals and quantities it expects to have on site. They and the facility owner can work with the LEPC to develop estimates of what a reasonable buffer would be. They can also look at RMPs submitted by facilities using similar types and quantities of these chemicals to determine what distances the chemicals may travel. RMP data can also help both the community and the facility determine what types of safety measures should be installed to help reduce the risk.

Industry and Small Businesses

Hazardous substances are not found only at large chemical plants and refineries. They are also used routinely by other manufacturers, by food processors and distributors, most of whom have refrigeration systems, by water treatment and sewage treatment plants, and by many small operations such as garages and dry cleaners. Even if these chemicals are handled and used safely, they may be of concern if stored or used improperly, or during an emergency such as a fire.

Facilities and the public should review environmental data to determine which chemicals are being used in the immediate area. Even if a business does not handle any chemicals, it should be aware of any nearby facilities that are handling hazardous chemicals. A release of these chemicals could affect the business's workers, customers, and property. Talking with the facility and with the LEPC can ensure that should an emergency occur, the business will know what to do to protect workers and customers.

The RMP data can help both the public and industry assess its practices. You can look at RMPs from other facilities in the same sector with similar numbers of

Responsible Care®

Besides complying with the law, some chemical manufacturers, distributors, and other industries have developed codes of practice that address accident prevention and community involvement. The Chemical Manufacturers Association has adopted Responsible Care®, a set of management codes that address safety practices, product stewardship, and community involvement. The National Association of Chemical Distributors has adopted the Responsible Distribution Process℠, which covers the same issues for the shipping and handling of chemicals. These programs require trade association members to reach out to the public and involve the community as a partner in managing chemical risks and planning for chemical emergencies. You should talk with your local facilities to see if they have adopted these codes or have similar programs. More information on these codes is available online at www.cmahq.com and www.nacd.com.

employees and determine the typical quantity of chemicals used and common process controls, detection and mitigation systems used, and training approaches. Reviewing the prevention program data may provide ideas for additional steps that could be implemented. Reviewing accident histories may indicate potential problem areas that should be considered.

Safer operations are not only good for the public, they are also more cost-effective and efficient for businesses. Preventing accidents eliminates worker injuries, as well as costly down-time and clean-ups. Reducing routine emissions cuts hazardous wastes that require treatment and special care.

Indian Tribes

Because of the sovereignty of many Indian tribes, Federally recognized tribes may act as States, with the same responsibilities as States.

Tribes may negotiate agreements with States in which they are located so that the State assumes some or all of the responsibilities imposed by law.

Tribes that function as Tribal Emergency Response Commissions (TERCs) receive all reports on hazardous or toxic chemicals, and citizens should go to the TERC for information. If, however, the tribe has entered into an agreement with a State, the agreement will designate who will receive reports and answer questions.

States

State agencies serve a number of roles in collecting chemical information and implementing environmental rules. In some States, all information will be collected by the same State agency; in other States, different agencies may have the lead for chemical inventories, TRI, and RMP data. All of the agencies should, however, be members of the State Emergency Response Commission, or SERC, and, therefore, if you are seeking information across all of the right-to-know rules, your SERC is a good starting point. It will either provide the information to you directly or tell which other State agency has the data and how to contact the right person. Besides providing you with information submitted to it, the SERC can:

- Ask for further information from facilities about a particular chemical or facility.
- Help you identify other sources of environmental data.
- Help you interpret the data or identify experts who can assist you in understanding chemical risks and risk reduction methods.

Data available under the right-to-know laws can also be useful to State agencies, such as the State and regional water authorities and air permitting authorities. The RMP data can help water agencies identify patterns of chemical use and practices among water treatment and waste water treatment plants nationally; with that information, they can help local water authorities improve their knowledge of chemical storage and handling.

The Federal Role

States and local communities have the primary governmental responsibility to make community right-to-know programs work. The Federal government, however, also has important contributions to make. The Federal government's major responsibilities include:

- Providing guidance, technical assistance, and training to States, communities, and industry;
- Enforcing the laws to ensure compliance;
- Maintaining a national databases for TRI reports and making the data accessible to citizens;
- Ensuring that LEPCs have the information they need to take appropriate steps to reduce the risks in their communities; and
- Collecting and distributing RMP data to States, LEPCs, and the public.

The Federal government also has a variety of responsibilities to regulate certain toxic and hazardous substances under other Federal environmental and occupational health and safety laws.

For More Information

For a list of names, addresses, and telephone numbers for **SERCs and LEPCs,** check the Right-to-Know Net web site at

http://www.rtk.net/lepc/

For EPA regional **EPCRA contacts,** check

http://www.epa.gov/ceppo/sta-loc.htm

For **RMP regional and State contacts,** check

http://www.epa.gov/ceppo/

For access to EPA's **on-line databases,** check

http://www.epa.gov/enviro

State **TRI program officials and EPA Regional TRI contacts** can be found at

http://www.epa.gov/tri/statecon.htm.

TRI data releases can be ordered from the National Service Center for Environmental Publications (NSCEP) at:

Box 42419
Cincinnati, OH 45242-2419
(800) 490-9198
Fax: (513) 489-8695 or 8692

Online orders: http://www.epa.gov/ncepihom/.

For **general information** about EPCRA and CAA RMP, call the EPCRA Hotline at (800) 424-9346.