PAGE



# **PESTICIDES AND COMMUNITY RIGHT-TO-KNOW**

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# **ACRONYMS USED IN THIS PUBLICATION**

CAS: Chemical Abstract Service CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act EHS: Extremely Hazardous Substances EPA: (United States) Environmental Protection Agency EPCRA: Emergency Planning and Community Right-to-Know Act LEPC: Local Emergency Planning Committee MSDS: Material Safety Data Sheet NRC: National Response Center OSHA: Occupational Safety and Health Administration RCRA: Resource Conservation and Recovery Act RQ: Reportable Quantity SERC: State Emergency Response Commission TPQ: Threshold Planning Quantity TRI: Toxic (Chemical) Release Inventory

# EFFECTIVE EMERGENCY RESPONSE REQUIRES PREPARATION

Imagine a fire in a pesticide warehouse. The first emergency units to arrive at the scene of a fire—police, medical professionals, and firefighters—need to react quickly. A portion of the structure is engulfed in flames. Billowing smoke drifts into surrounding neighborhoods. The fire chief anxiously contemplates whether to issue an evacuation order. Fortunately, because the firefighters are aware of the types, amounts, and exact locations of pesticides stored in the warehouse, they are able to quickly and safely extinguish the fire. Their rapid and effective response prevents evacuation from the surrounding area, limits damage, and reduces environmental pollution. This is obviously the desired result in emergency situations associated with fires, spills, or releases involving hazardous chemicals.

Unfortunately, emergency personnel are often expected to battle fires and react to spills and other chemical emergencies without knowledge of the substances involved, their quantities, their potential impact on health and the environment, or their exact locations. Responders may be forced to devote valuable time to asking questions, gathering facts, and making decisions on how to react to the emergency. Given limited time to determine the level of danger, often the course of action is to evacuate the area, ensure the safety of those responding to the emergency, and minimize adverse environmental effects by simply containing the fire and allowing it to burn itself out. Communities seldom expect individuals battling blazes, spills, or other accidents to perform heroic acts when the hazards and potential dangers are unknown. Not knowing what chemicals are involved in these situations can easily lead to loss of life, serious injury, damage to the environment, and the destruction of valuable records, equipment, vehicles, and structures.

# FEDERAL, STATE, AND LOCAL PARTNERSHIPS IN MANAGING HAZARDOUS CHEMICALS IN THE COMMUNITY

The federal Emergency Planning and Community Right-to-Know Act (EPCRA) enacted in 1986 requires businesses (including farms) that store certain quantities of hazardous substances to report to local and state agencies. In turn, these agencies coordinate emergency response plans for implementation in the event of fires, spills, accidents, and acts of vandalism. They also distribute information about stored hazardous substances, available upon request by individuals or public organizations.

# Linking Federal and State Right-to-Know Programs

The Environmental Protection Agency (EPA) is responsible for administering the Emergency Planning and Community Right-to-Know Act at the federal level through oversight of and coordination with state EPCRA programs. The federal oversight task has been assigned to the U.S. EPA Office of Chemical Emergency Preparedness and Prevention. The exchange of Community Right-to-Know information is enhanced greatly by the availability of EPA's 24-hour, toll-free hotline (800-535-0202) to answer technical and regulatory questions. EPA staff also provide technical assistance by offering training to states, local communities, and affected industries.

Planning for chemical emergencies is one of the central themes of EPCRA. The governor of each state is responsible for appointing a State Emergency Response Commission (SERC). Representatives serving on the state commission typically represent a diverse cross section of persons involved with issues such as environmental health, emergency response, health care, transportation, commerce, emergency training and planning, and education. SERC's primary functions are to assist local communities' development of emergency plans, to review those plans annually, and to coordinate Community Right-to-Know and data collection activities at the local level.

### **Risk Management at the Local Level**

The success of the right-to-know program hinges on the effectiveness of the Local Emergency Planning Committee (LEPC). Each LEPC is assigned an emergency planning district by SERC. The local committee draws on the expertise and experience of individuals with diverse backgrounds: state and local elected officials: law enforcement, emergency management, and firefighting personnel; first aid, health, and hospital workers; transportation experts; journalists; community and environmental groups; and representatives of EPCRA-regulated facilities. Typically, each committee consists of 15-20 individuals appointed by the state commission. The work load for administering local programs generally is assigned to existing local units of government which, in turn, receive assistance from committee members who volunteer their time (EPCRA Section 301).

LEPC is assigned responsibility for understanding and managing potential risks posed by chemicals in the community. This responsibility includes the development of an emergency and chemical risk management plan (EPCRA Section 303). The local emergency response plan is prepared using the chemical information submitted to LEPC by local industries, businesses, and farms. Compilation of the submitted information enables the committee to conduct a community-wide analysis of the location and types of chemicals stored, as well as vulnerable areas and populations at risk. These analyses form the basis for short- and long-term emergency response plans. Successful management of hazardous chemicals is achieved by LEPCs working harmoniously with hazardous materials teams, local fire firefighters, emergency management personnel, medical professionals, and the regulated community in preparing for and responding to chemical emergencies.

#### Elements of a Local Emergency Plan

• Utilizes information provided by industry and farms to identify facilities where hazardous substances are present and to identify transportation routes leading to and from such sites.

• Establishes evacuation plans and alternative traffic routes.

• Establishes emergency response procedures, including evacuation plans, for dealing with accidental chemical releases.

• Designates a Community Emergency Coordinator and sets up notification procedures for those who will respond in an emergency.

• Establishes methods for determining the occurrence and severity of a chemical release and the areas with populations likely to be affected.

• Establishes ways to notify the public of a chemical release.

• Identifies emergency equipment available in the community.

• Establishes a program and schedule for training local emergency response and medical workers to respond to chemical emergencies.

• Establishes methods and schedules for conducting simulation exercises to test the emergency response plan.

LEPC also is responsible for disseminating information regarding the identity, quantity, location, and hazardous properties of chemicals stored in or transported through the community. Residents may request such information from their Local Emergency Planning Committee, exercising their right-to-know; thus, valuable information on the types of chemicals stored and used within their emergency planning district is readily available. This provides greater assurance that the community can be protected in the event of a chemical emergency.

# **REPORTING INCREASES AWARENESS WITHIN THE COMMUNITY**

Identifying and communicating the existence of hazardous substances within the community is vitally important and lays the groundwork for emergency planning and preparedness. Community planners who can anticipate and are prepared to respond to emergencies provide their citizenry maximum health and property protection.

# The List of Extremely Hazardous Substances

The potential hazards of chemicals—relative to toxicity, reactivity, volatility, combustibility, and flammability—have been evaluated by the EPA. Chemicals which potentially pose the most serious hazards during release are found on the list of Extremely Hazardous Substances (EPCRA, Section 302, 40 CFR, Part 355, appendices A and B). The Extremely Hazardous Substances (EHS) list consists of 360 substances, including pesticides. The current listing, *Title III List of Lists,* is available through your LEPC, SERC, or the EPA hotline in Washington, D.C. (800-535-0202).

# Threshold Planning Quantities Trigger Reporting

The EPCRA list of Extremely Hazardous Substances contains more than just the identity of specific hazardous chemicals; it includes information on the Threshold Planning Quantity (TPQ), which is a reportable storage quantity for each listed chemical.

The easiest method to determine the TPQ for a specific chemical is to locate the Chemical Abstract Service (CAS) number either on its Material Safety Data Sheet or under the alphabetical listing of the chemical name in the *Title III List of Lists*.

The TPQ for each EHS chemical is 500 pounds or the amount listed, whichever is lower. An EPA administrative ruling mandates that any TPQ above 500 is to be reduced to the 500-pound Threshold Planning Quantity. For example, the TPQ for ethoprophos is listed as 1000 (see Table 1), but due to the administrative ruling it would be changed to 500. If a threshold number is not assigned to a pesticide on the EHS list, a TPQ of 500 pounds may be assumed. For example, a TPQ is not listed for 2,4–D Acid; therefore, the reportable quantity is 500 pounds. In addition, all hazardous substances *not* on the EHS list, but for which Material Safety Data Sheets (MSDS's) are required under OSHA's Hazard Communication Standard, must be reported under EPCRA Sections 311 and 312 if present at the facility. All such hazardous substances have a TPQ of 10,000 pounds.

Table	1
Invit	-

CAS Number	Chemical Name	Threshold Planning Quantity (TPQ) Listed in Title III List of Lists
116-06-3	Aldicarb	100
94-75-7	2,4-D Acid	
13194-48-4	Ethoprophos	1000
1910-42-5	Paraquat	10
7664-41-7	Ammonia (anhydrous)	500
71-43-2	Benzene	

Facilities that manufacture, store, or use extremely hazardous substances must be aware of the assigned TPQ (EPCRA, Section 302). If the threshold planning quantity of a listed substance is *present at a facility at any time*, it must be reported to the State Emergency Response Commission, the Local Emergency Planning Committee, and the fire department. The report is due within 60 days of the first day of storage of the TPQ at the site.

# Determining the Amounts of Extremely Hazardous Substances On-Site

It is important to maintain accurate records of all pesticides, fertilizers, and other chemicals brought onsite. The resulting list of products can be checked against the Extremely Hazardous Substances list to identify those present at any time in quantities which must be reported. Chemicals present in quantities *less than* the corresponding TPQs need *not* be reported. To make this determination, review your records or your current chemical and fertilizer inventory and develop a list of all of the materials you have had in stock at any time during the previous calendar year. Compare what has been stored or used on your property with those chemicals listed on the Extremely Hazardous Substances list.

Even though reporting may not be required under EPCRA, local emergency units such as fire departments should be informed of chemical inventories and storage locations. It is advisable to include a map or diagram showing where chemicals are stored. A reporting form and a descriptive list of the chemicalsand information as to when they are on-site-also are advised. Good communication and advance planning are the best defense against emergencies involving hazardous chemicals.

## **Pesticides Containing EHS's**

If a pesticide used or stored at any time appears on the EHS list, it must be determined if the amount (by weight) stored at any time meets or exceeds the TPQ assigned to that product. If the pesticide product is on the EHS list, the entire product is reportable. If only an ingredient of the pesticide product is listed, only the quantity of that specific EHS ingredient is reportable. Remember that reporting requirements are based on the total amount (above the TPQ) of a given chemical that is stored at the facility regardless of location, number of containers, method of storage, or how it is packaged-including differences in formulation.

The following worksheet can be used to calculate the total amount of active ingredient in EHS products at a given facility.

#### Step 1.

#### Amount of the ingredient in formulation

• total dry weight of product \_\_\_\_\_ x the percent of the ingredient \_

~ or ~

Amount of total formulation

• total gallons of product \_\_\_\_\_ x the total lbs. of the ingredient per gal.\_

#### Step 2.

Multiply figures in Step 1 to establish the amount of Extremely Hazardous Substance: \_ (pounds).

#### Step 3.

Repeat Steps 1 & 2 for other formulations with the same active ingredient.

#### Step 4.

Add the weight of the ingredient in each formulation.

\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_ (pounds)

#### Step 5.

For each active ingredient calculated in Steps 1-4, fill in the Threshold Planning Quantity

(Table 1) \_\_\_\_\_ (Threshold Planning Quantity)

#### Step 6.

If line 4 is equal to or greater than line 5, you must report that you have an Extremely Hazardous Substance on your premises. If not, you are not obligated to report.

#### **Example:** Solid Formulation

The active ingredient in Counter 15G insecticide is terbufos. Terbufos makes up 15 percent (by weight) of the product and is found on the EPA list of Extremely Hazardous Substances. If a storage facility contains thirty, 50-pound bags of this insecticide, the total weight of the stored Counter 15G is 30 x 50 pounds, or 1500 pounds. Fifteen percent of the 1500 pounds equals 225 pounds of terbufos. The 225 pounds of terbufos is above the 100-pound Threshold Planning Quantity and therefore must be reported.

#### **Example: Liquid Formulation**

The active ingredient in Dyfonate 4-EC is fonofos, which is on the EPA list of Extremely Hazardous Substances. There are 25, five-gallon containers at the storage site, for a total volume of 125 gallons. There are 4 pounds of fonofos per gallon of Dyfonate 4-EC, so the total weight of fonofos contained in the stored product is 4 pounds x 125 gallons, or 500 pounds. The TPQ for fonofos is 500 pounds, so the on-site quantity must be reported.

#### Example: Fertilizer

Anhydrous ammonia is listed as an Extremely Hazardous Substance, with a TPQ of 500 pounds. Therefore, even a single, 850-gallon nurse tank must be reported. At 60°F, anhydrous ammonia weights 5.2 pounds per gallon. So the calculation is 850 gallons (total stored) times 5.2 pounds of product, for 4420 pounds of anhydrous. The TPQ is exceeded; therefore reporting is required.

### Notification Allows for Emergency Planning by the Community

An initial one-time letter of notification is required of all facilities (e.g., commercial dealer, golf course, pest control, lawn care, greenhouse, farm) whose storage or possession of an EHS meets or exceeds its Threshold Planning Quantity. Although it is only a one-time requirement, a facility's EHS inventories should be reviewed frequently to account for product changes and fluctuations in quantities stored. Owners and operators are required to report that their facilities are subject to the emergency planning requirements of EPCRA Section 302; they must notify the State Emergency Response Commission and the Local Emergency Planning Committee within 60 days of first meeting the TPQ for an EHS. The notification requirement does not require that the actual names and amounts of pesticides be reported, but the Local Emergency Planning Committee can legally request this information to develop or implement the local

A fill-in-the-blank sample letter is provided on page 11 and may be photocopied as needed. Certified mail is optional, but encouraged.

A sample form is provided on page 13 and may be photocopied as needed. emergency plan. Someone at the facility will need to be assigned the responsibility of serving as Facility Emergency Coordinator to work with the LEPC. When a new entry is added to EPA's list of Extremely Hazardous Substances, facilities which store the new EHS at or above its TPQ are required to provide the State Emergency Response Commission and the Local Emergency Planning Committee with a follow-up notification letter.

# PROVIDING DETAILS COMPLETES THE CIRCLE OF AWARENESS

# Material Safety Data Sheets Assist Communities in Evaluating Hazards (EPCRA Section 311)

Any facility that manufactures chemicals and prepares Material Safety Data Sheets or is required to maintain files of Material Safety Data Sheets under OSHA's Hazard Communication Standard may have to comply with the additional requirements of Section 311 of EPCRA.

Reports are necessary if a pesticide or other chemical listed as an Extremely Hazardous Substance is present in inventory at the Threshold Planning Quantity. The TPQ for an EHS is 1, 10, 100, or 500 pounds, depending on the substance. Any substance requiring an MSDS on file under OSHA's Hazard Communication Standard and stored in excess of its respective threshold quantity (or 10,000 pounds if no threshold is listed) also will have to satisfy requirements under Section 311. Any facility whose individual chemicals exceed Threshold Planning Quantities for EHS's or threshold quantities for non-EHS's must provide to its LEPC, SERC, and local fire department copies of each chemical's Material Safety Data Sheet or a list of those chemicals and their specific hazards: flammability; reactivity; sudden release of pressure; immediate health hazards; delayed health hazards. Information on the hazards can be obtained from the MSDS or directly from the chemical manufacturer.

### Five Exemptions Apply to Section 311

The following are exemptions from the MSDS reporting requirements under EPCRA Section 311.

1. Any substance used in routine agricultural operations at the point where it is being used or stored by the end user; any fertilizer stored for sale to the end user. (While farms generally are not covered, one possible exception is that a farm which is part of a larger business operation may be required to comply with Section 311.)

Date \_\_\_\_\_

Address of State Emergency Response Commission: Address of Local Emergency Response Committee:

This letter is to notify the State Emergency Response Commission and the Local Emergency Planning Committee that I have a facility that falls under the requirements of the Emergency Planning and Community Right-to-Know Act, SARA Title III, Subtitle A, Section 302.

1. Name of the facility or farm	
2. Address of the facility or farm	
3. County of location	
4. Name of emergency contact person	
5. Phone number of facility representation	ve
6. List and quantities of EHS chemicals	(optional)
Chemical(s)	Quantity(ies)
Signature _	
Printed Name Mailing Address	
-	

Copy to company or farm file (attach returned certified mail card to letter).

2. Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration.

3. Any chemical present as a solid in any manufactured item where exposure to the substance does not occur under normal use conditions.

4. Any substance to the extent it is used for personal, family, or household purposes, or is present in the same form or concentration as a product packaged for distribution to and used by the general public.

5. Any substance to the extent it is used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual.

A list of substances identifies hazards generally, but does not provide information on the amounts in inventory or their seasonal occurrence at the facility. If the list is chosen as the method of reporting, be aware that the Local Emergency Planning Committee may request that the owner make available all or specific Material Safety Data Sheets. Either the MSDS's or the list is a one-time submission requirement of the State Emergency Response Commission, Local Emergency Planning Committee, and the local fire department. Facilities have 90 days to update the original list or provide new MSDS's to the three agencies when new chemicals falling under the MSDS provisions are added to the inventory, or when stock is increased above a threshold limit.

# Inventory Information Provides Valuable Clues to Protecting Communities (EPCRA Section 312)

If a facility is required to comply with EPCRA Section 311, compliance with Section 312 also is required. Section 312 of the Emergency Planning and Community Right-to-Know Act requires that either a Tier One or Tier Two inventory form be completed on or before March 1 of each year. In Indiana, the Tier Two inventory form is required. Check with your own state authorities regarding which form is required. The inventory forms present the maximum amounts of pesticides and other substances stored on-site at any one time with respect to the preceding calendar year. The inventory forms are submitted to the State Emergency Response Commission, the Local Emergency Planning Committee, and the fire department that has jurisdiction over the facility. Always keep a copy of the completed forms and the certified mail receipt in your files for future reference and review. The cost for reporting varies depending on the state. Not all states have filing fees.

# **EPCRA Section 311 Report Form\***

Name of Facility						
<b>Physical Address</b> (Street or P.C. City, State, Zip, Code	J. Box)					
City, State, Zip Code	. 4					
County where Facility is Locate						
Mailing Address (Street or P.O	. Box)					
City, State, Zip Code						
Printed Name of Facility Contac	ct Person					
Facility Phone Number						
Phone Number of Contact Perso	on (if different from Facility Phone Num	ber)				
Printed Name of Person Submit	ting Information					
Signature of Person Submitting	Information					
Material Safety Data Sheets End If yes, is this an initial submit If no, will the submittal of the Has either the list of chemicals of State Emergency Response C Local Emergency Planning C Fire Department? Yes	closed? Yes No ttal or an update? Initial Upda e list comply with Section 311 of EPCR for the MSDS's been submitted to commission? Yes No committee? Yes No	nte A?	Yes	i		No
Common Name	Chemical Name	Acute Health	Chronic Health	Fire	Sudden Release	Reactivity

Copy to facility file (attach returned certified mail notice to form).

\*Use of this particular form is optional; alternative formatting of required information is acceptable.

#### Tier One Inventory Forms

This reporting form assigns to the reportable chemicals specific "qualitative hazards." The basic feature of the Tier One inventory form is not to identify specific pesticides, fertilizers, or other chemicals but, rather, to categorize all of the chemicals according to physical hazards (fire, sudden release of pressure, reactivity) and health hazards (acute or chronic toxicity). The inclusion of information regarding the maximum amounts stored, average daily amount, number of days on-site, and the storage location for each of the hazard categories makes the Tier One inventory form different than the reporting required by EPCRA Section 311. Tier One inventory forms can be obtained by contacting your LEPC, SERC, or the EPA hotline in Washington, DC (800-535-0202).

#### **Tier Two Inventory Forms**

Specific chemical and location information is provided by the Tier Two inventory form. In general, most State Emergency Response Commissions require that the Tier Two inventory form be completed because it is more useful for emergency planning purposes than the Tier One form. In the event of a fire or explosion, a Tier Two inventory form provides a good indication of the chemicals' identities, locations, physical characteristics, health hazards, inventory quantities, and conditions of storage. EPCRA Section 312 also allows an LEPC and/or a SERC to request information from a facility even no threshold planning quantities are onsite. These details provide emergency responders with necessary information for planning and responding to an emergency. The forms and accompanying information can be obtained by contacting your LEPC, SERC, or the EPA hotline in Washington, DC (800-535-0202).

## ACCIDENTAL RELEASES AND THE REPORTING OF EMERGENCIES

In dealing with the accidental release of pesticides and other substances which threaten people and the environment, it is very important that those providing information fully understand the spill reporting provisions. The spill reporting requirements are based on the Reportable Quantity (RQ) found alongside the Threshold Planning Quantities. The RQ sets the amount of an active ingredient which is reportable in the event of release.

The chemicals that need to be reported and their RQ values are provided in the EPA publication, *Title III List of Lists*. Be aware that RQ numbers are listed under the Section 304 EHS and CERCLA columns. For example, 2,4–D acid has a CERCLA Reportable

Quantity of 100 pounds (see Table 2). If an EHS has no listed RQ, the CERCLA Reportable Quantity is to be used. For example, the EHS Reportable Quantity for anhydrous ammonia is 100 pounds because that is the CERCLA Reportable Quantity for anhydrous ammonia. If no RQ is listed for a CERCLA chemical, one pound is to be used as the RQ. For example, ethoprophos would have a CERCLA Reportable Quantity of one pound.

### Table 2.

		Reportable Quantity (RQ) Listed in Title III List of Lists Section 304			
CAS Number	Chemical Name	EHS	CERCLA		
116-06-3	Aldicarb		1		
94-75-7	2,4–D Acid		100		
13194-48-4	Ethoprophos	1			
1910-42-5	Paraquat	1			
7664-41-7	Ammonia (anhydrous)		100		
71-43-2	Benzene		10		

Section 304 of EPCRA classifies a reportable release as one which meets the following criteria:

- Listed as either an EHS or a CERCLA chemical
- Meets or exceeds the RQ of such substance

• Escapes the facility into the environment to potentially impact persons off-site

If a facility has a release of a CERCLA hazardous substance at or above the RQ, the facility must provide immediate notification to the National Response Center (800-424-8802), LEPC, and SERC. In the case of EHS Reportable Releases which escape the facility, only LEPC and SERC need to be notified; however, contacting the National Response Center is advisable. Each LEPC must designate a Community Emergency Coordinator to receive notification in the event of a release of Section 304 designated substances. If a release occurs from a facility where the chemical is produced, used, or stored, the Community Emergency Coordinator for the Local Emergency Planning Committee must be notified immediately by telephone or radio, or in person. It was the intent of Congress that reporting would take place within 15 minutes of the release (see legislative history of Superfund, Volume 2, page 600). Section 304 releases in Indiana also must be

reported to the State Emergency Response Commission (317-233-7745). The following information should be reported:

• Chemical name or identity of any substance involved in the release

Location of the release

• An indication of whether the substance is on the list of Extremely Hazardous Substances

• An estimate of the quantity of the substance released into the environment

• The time and duration of the release

• Medium (i.e., soil, water, and/or air) to which the release occurred

• Any known or anticipated acute or chronic health effects posed by the emergency and, where appropriate, advice regarding medical attention necessary for exposed individuals

• Proper precautions to be taken as a result of the release, including evacuation (unless such information is readily available to the Community Emergency Coordinator pursuant to the emergency plan)

• Name and telephone number of the person(s) to be contacted for further information

As soon as practical after a release which requires notice, the owner or operator of the facility must provide a written, follow-up emergency notice detailing and updating the initial information. The report should indicate actions taken to respond to and contain the release; any known or anticipated acute or chronic health effects associated with the release; and, where necessary, advice regarding medical attention for exposed individuals. The written follow-up report must be submitted to the LEPC and SERC. Depending on the nature of the release, the facility may be obligated under other laws, such as Indiana spill reporting rules, to provide additional notification. An attorney should be consulted and a copy of pertinent information filed for further reference. Sending the report via certified mail is recommended.

# PUBLIC ACCESS TO RIGHT-TO-KNOW INFORMATION

The Local Emergency Planning Committee is required by EPCRA to publish an annual notice in newspapers, stating where submitted emergency response plans, Material Safety Data Sheets, and inventory forms are available for public review. This provides the public an opportunity to become better aware of chemicals stored and used in their community. Section 313 of EPCRA requires manufacturers (defined as having Standard Industrial Classification Codes of 2000-3999) who have the equivalent of ten or more full-time employees and annually manufacture or process 25,000 pounds, or otherwise use 10,000 pounds, of a listed toxic chemical to report releases of any chemical listed on the Toxic Chemical Release Inventory (TRI). The need to report is not based on the size of releases but on the amount of chemical used at the facility.

Both routine and accidental releases must be reported. Reporting is done on Form R, which is filed with EPA in Washington, D.C., and with the SERC of the state in which the facility is located. Reports are due by July 1 for the preceding calendar year. EPA assembles all information from Form R submissions into a single database which is accessible to the public.

TRI data provide communities with specific information regarding the kinds and quantities of toxic chemicals being released in their area. Although EPCRA does not require LEPCs to receive and make available these data, it does require each SERC and the EPA to do so.

### POINTS TO REMEMBER

The federal Emergency Planning and Community Right-to-Know Act of 1986 requires the development of community management plans for emergencies involving hazardous substances, and it serves as a source of information on routine toxic emissions. The law is flexible, allowing state and local governments to devise plans specific to the needs of individual locales.

Who benefits from hazardous materials planning and reporting? The benefits of compliance with EPCRA extend from regulated businesses to the surrounding community. EPCRA planning and the reporting on which it is based reflect good business sense while protecting public welfare. Accurate reporting of hazardous substances used, produced, or stored facilitates the protection of employees, property, and chemical investment. Emergency personnel who lack information on the presence of hazardous substances during a fire may elect to simply let the fire burn, perhaps resulting in unnecessary damage to inventory and property. Compliance serves to improve business relations within the community, whereas evasiveness serves only to accentuate people's fears concerning potential impact on human health.

EPCRA benefits emergency personnel in a chemical spill or fire situation. Prior knowledge of chemical types and storage locations equips emergency responders to reduce their own—and others'— exposure. Concern for the welfare of neighboring hazardous materials storage areas also is demonstrated by compliance with EPCRA. Adjacent property owners have a large stake in hazardous materials reporting, and owners of facilities storing hazardous materials need to respect that interest.

### **Community Right-to-Know**

• The Emergency Planning and Community Rightto-Know Act provides local governments and communities at large with information on hazardous chemicals used, stored, or released in their area.

• The responsibility for EPCRA compliance is a joint endeavor among federal, state, and local governmental agencies and those businesses, facilities, and farms producing, storing, and using hazardous and extremely hazardous substances.

• The Emergency Planning and Community Rightto-Know Act contains numerous requirements for emergency planning and dissemination of information.

• The objective of EPCRA is to improve local chemical emergency response capabilities, primarily through improved emergency planning and notification, and to provide citizens and local governments access to information about EHS chemicals.

### **Emergency Personnel's Right-to-Know**

• The Emergency Planning and Community Rightto-Know Act specifies procedures within local communities for the development and implementation of emergency response plans, calling for anticipation of emergency situations and establishment of a plan of operation for those assigned the responsibility of handling emergencies involving EHS and CERCLA chemicals.

• The sharing of information among the Local Emergency Planning Committee members and those who respond to local emergencies leads to a better coordinated team effort to reduce risk to the community while simultaneously protecting the health and wellbeing of those whose purpose it is to provide assistance during emergency situations.

### Suggestions for Facilities with Hazardous Substances

• Businesses and farms should invite local response organizations—emergency management agencies, fire departments, emergency medical services, and local planning committees— to tour their facilities to become better acquainted with the layout. Valves, power switches, storage areas, steps, and stairways should be clearly marked and signs posted to accentuate their specific locations. • In all emergency situations, communication and advance planning are the best defense.

• Implement seminars or safety training programs and invite local community leaders so they can gain an understanding of and commit to the proper handling, storage, and disposal of EHS's.

• Employees working or coming into contact with chemicals used or stored at a given facility must be trained to recognize potential hazards and avert exposure. Employee awareness instills confidence among community members that the EHS's are being handled safely.

• Facility employees should be trained in the proper response to and reporting of accidental releases of hazardous substances.

• Exchange of information with local emergency responders can reinforce planning processes.

• Material Safety Data Sheets and product labels must be maintained in an organized and accessible manner to assist employees and others who request such information.

• The National Fire Protection Association placarding system (below) is an effective approach to posting uniform information on health and fire.



### REFERENCES

• Chemicals In Your Community—A Guide to the Emergency Planning and Community Right-to-Know Act. September 1988. United States Environmental Protection Agency.

• Code Of Federal Regulations. Environmental Protection Agency Emergency Planning and Notification Rules. Section 40, Part 355.

• Consolidated List of Chemicals Subject to Reporting under the Emergency Planning and Community Right-to-Know Act. 1992. EPA 560/4-92-011.

• Emergency Planning and Community Right-to-Know Act of 1986. Public Law 99-499. Bureau Of National Affairs. Washington, D.C.

• Emergency Response Guidebook. 1994. U.S. Department of Transportation.

• Guide to Environmental Laws: From Premanufacture To Disposal. 1993. Bureau Of National Affairs. Washington, D.C.

• Hazardous Waste Liability. 1992. Bureau of National Affairs. Washington, D.C.

• Pesticides: Emergency Planning and Community Right-to-Know. University of Missouri-Columbia Cooperative Extension Service. 1993. G 7512.

• Pesticide Regulation Handbook. 1993. McGraw-Hill, Inc.

• Pesticides and the Label (PPP-24). 1993. Purdue Pesticide Programs. Purdue University Cooperative Extension Service. West Lafayette, Indiana.

• Pesticides and Their Proper Storage (PPP-26). 1993. Purdue Pesticide Programs. Purdue University Cooperative Extension Service. West Lafayette, Indiana.

• Pesticides and Commercial Vehicle Maintenance (PPP-27). Purdue Pesticide Programs. Purdue University Cooperative Extension Service. West Lafayette, Indiana.

• Pesticides and Spill Management (PPP-29). 1993. Purdue Pesticide Programs. Purdue University Cooperative Extension Service. West Lafayette, Indiana.

• SARA Title III Agricultural Businesses' Responsibilities under the Emergency Planning and Community Right-to-Know Law. 1991. Michigan State University Cooperative Extension Service Extension Bulletin E-2174. East Lansing, Michigan.

• SARA Title III: Hazardous Chemicals and the Right-to-Know. 1993. Executive Enterprises, Inc.

• Technical Guidance for Hazards Analysis: Emergency Planning for Extremely Hazardous Substances. 1987. United States Environmental Protection Agency.

### RESOURCES

### **State of Indiana**

• Indiana State Emergency Response Commission, for regulations, forms and guidance; publishes a guarterly newsletter, the *SERCULAR*. (317) 233-6388.

• Purdue Pesticide Programs, Purdue University Cooperative Extension Service, publishes *the LABEL*, a quarterly pesticide newsletter, and numerous publications on a variety of pesticide issues. **(765) 494-4566.** 

• Indiana Department of Environmental Management (for spill reporting only). (317) 233-7745.

• Indiana Department of Labor (IOSHA), 402 West Washington Street, Indianapolis, Indiana 46204-2742. (317) 282-2693.

### **Federal Government**

• EPA Hotline. Information on the Emergency Planning and Community Right-to-Know Act, available Monday-Friday. (800) 535-0202.

• Office of Information and Consumer Affairs, Department of Labor. U.S. Occupational Safety and Health Administration. **(202) 523-3151.** 

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### **SPECIAL NOTE**

The National Fire Protection Association placarding system presented on page 19 is based on information obtained from a *Lab Safety Supply* catalog.

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