OREGON LOCAL EMERGENCY PLANNING COMMITTEE MEMBER MANUAL

A Guide to Understanding LEPC Responsibilities

An LEPC has many duties, challenges and responsibilities and as a member, the more you understand what an LEPC is and what it is supposed to do, the better for you, your LEPC and the public it serves.

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INTRODUCTION

HISTORY

The Emergency Planning and Community Right to Know Act (EPCRA) was passed in 1986 by the United States Congress after a series of incidents in the United States and abroad raised concerns about a lack of planning and preparation for accidental releases of hazardous materials.

There were two incidents in particular that heightened public awareness of chemical accidents and precipitated a new phase in chemical emergency preparedness, prevention and response planning. In 1984, a release of methyl isocyanate from a Union Carbide plant in Bhopal, India killed over 2,500 people. Some estimates are as high as 10,000. Then in 1985, there was a release of aldicarb oxime from another Union Carbide facility in Institute West Virginia, while not having the same devastating life loss, closely mirrored the Bhopal incident.

Because of these and other incidents, the Environmental Protection Agency (EPA) established the Chemical Emergency Preparedness Program (CEPP). This program was a voluntary effort to improve planning and response capabilities at the state and local levels. EPA initiated CEPP to determine and develop appropriate prevention initiatives to aid communities trying to implement chemical awareness programs. CEPP did not rely on any specific statutory authority, but on EPA's general mandate to protect human health and the environment.

Then, another large-scale incident in the US occurred in Roseville, Minnesota. There was a petroleum tank farm fed by a pipeline in a residential area of Roseville. In the middle of the night, a leak spilled a large amount of petroleum, which eventually ignited, burning some homes and killing citizens.

The Roseville Fire Department was not aware of the location and route of the pipeline. Nor were the firefighters trained in handling this type of large-scale incident involving chemicals. The Roseville Fire Department did not have enough equipment and manpower to handle the blaze, so other fire departments and police were called to assist.

There were problems with coordination of response efforts, as no one had planned or prepared for such a scenario, or practiced for such an incident. The fire burned for days before being extinguished. There were also casualties among the police who participated in the evacuation of citizens and performing other duties during the incident. There was uncertainty about the effects of exposure to the smoke and chemicals from this incident even among medical professionals.

There was still no law that required facilities to report their chemical inventories to fire departments, police and other government agencies that may be required to respond to an incident. Nor did anyone have the responsibility to inform the public or medical professionals

about what the effects of exposure to the chemicals might be. With these incidents on the minds of citizens, the path was set and EPCRA was born.

WHAT EPCRA IS AND WHAT IT DOES

As recently as the 1980's there was no law that said firefighters and other responders had the "right to know" what chemicals were stored, or otherwise present at facilities, even when they were expected to save the facility and/or its personnel and contents. Congress enacted EPCRA regulations to address this issue.

EPCRA, also known as SARA Title III, established a program with two goals:

- ✓ Provide a structure for each community to develop and tailor a chemical emergency planning and response program to suit the community's unique needs; and
- ✓ Provide the public, emergency planners and responders with ability to identify, quantify, locate and determine the physical and chemical properties of the hazardous substances and their associated risks to the community.

EPCRA has four major provisions:

- ✓ Emergency Planning (Sections 301-303)
- ✓ Emergency Release Notification (Section 304)
- ✓ Hazardous Chemical Storage Reporting Requirements (Sections 311-312)
- ✓ Toxic Chemical Release Inventory (Section 313)

The provisions of EPCRA are found at http://www.law.cornell.edu/uscode/text/42/chapter-116 .

These provisions should be studied in their entirety to gain a full understanding of the requirements. When reading EPA documents, Federal Registers and your training materials, remember that SARA Title III and EPCRA are synonymous and may be used interchangeably.

Besides establishing requirements for Federal, State and local governments, Indian Tribes and industry, regarding emergency planning for hazardous chemicals reported through the "Community Right to Know" provision, which will be discussed in a later section, EPCRA also created a provision for states to establish State Emergency Response Commissions (SERC) and Local Emergency Planning Committees (LEPCs).

These provisions, that help increase the public's knowledge and access to information on chemicals at facilities, also provide an organizational structure through SERCs and LEPCs so that government and communities can work with facilities to improve chemical release preparedness to help protect the public, environment and emergency responders.

Under EPCRA, a facility is any of the following: buildings, structures, equipment and other stationary items located at the same single place and controlled or operated by the same entity.

As stated earlier, EPCRA and SARA Title III are synonymous terms. EPCRA is Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, which makes it part of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) laws.

CERCLA was the first federal law designed to handle response to releases of hazardous chemicals into the environment, but there were many aspects of emergencies involving hazardous chemicals that CERCLA did not address, which is what caused the EPCRA law to be enacted. More information about CELCLA can be found at http://www.epa.gov/superfund/policy/cercla.htm .

WHAT CERCLA DID NOT DO

- ✓ It did not identify what chemicals facilities had, or what the quantities were.
- ✓ It did not indicate what a facility would do to respond to an incident involving a spill or release of these chemicals, or what the role of the responder would be.
- ✓ It did not accommodate for any planning involving a release of chemicals, at the facility level or at the level of local or state government.
- ✓ It did not identify what chemicals were stored or used in large quantities in a community.
- ✓ It did not identify or mandate training for responders and medical personnel for a response to an incident involving exposure to the chemicals.

What CERCLA does, is requires facilities that accidentally spill or release certain dangerous chemicals into the environment, to report immediately to the federal government. It also requires a cleanup of chemical spills and sets forth who will pay for the cleanup. It also touches on public health issues and determining what effects such spills of chemicals into the environment may have on citizens.

With the components of EPCRA in place, responders, emergency planners and the public could now take a proactive role in planning, preparing and responding to hazardous material releases within their communities.

OREGON'S SERC & LEPC STRUCTURE

The first requirement of the EPCRA statutes is establishment of the State Emergency Response Commission (SERC). The Governor of each state was required to appoint a SERC by 1987. The governors were given an option to make one or more existing emergency response organizations that were state-sponsored or state-appointed, the SERC. The Governors were required to appoint persons to the SERC who would have technical expertise in the field of emergency response.

The SERC's responsibility was to establish local emergency planning districts within the state and then to appoint LEPC's within those planning districts. The SERC's were to provide administrative oversight and assistance to the LEPC's in accomplishing their requirements.

In Oregon, the "State Fire Marshal" is the SERC. The SERC maintains its responsibility to include persons who have technical expertise in the field of emergency response through an advisory committee that includes the required disciplines. The SERC and related administrative functions are currently located at The Office of State Fire Marshal, 4760 Portland Rd NE, Salem Or 97305-1760. This is also the location for Oregon's Community Right to Know Section, which collects the required EPCRA information from regulated facilities.

INTRODUCTION TO LEPC MEMBERSHIP

WHAT IT MEANS TO BE AN LEPC MEMBER

As an LEPC member, you are part of a broad-based collaborative effort to prepare your planning district for response to emergencies involving releases of hazardous materials as well as any other hazard, or emergency to which your LEPC has a priority to address and to which your area may be prone.

Although LEPCs were originally established to deal strictly with chemical hazards, since catastrophic events such as 9/11 and Katrina, there has been a steady transition from the federal level down to the local level, for LEPCs to become involved in "all-hazard" issues.

An LEPC has many duties, challenges and responsibilities and as a member, the more you understand what an LEPC is and what it is supposed to do, the better for you, your LEPC and the public it serves.

Typically, LEPCs do not directly respond to emergencies. Rather, LEPCs are tasked with ensuring the broad issues of planning for response to a chemical incident or other disaster has occurred. LEPCs deal with topics such as, identifying in advance, what the different response entities will do during a response, assisting with arranging the appropriate training, equipment and drills, educating the public, coordinating with facilities possessing hazardous substances and many other pieces of the emergency planning puzzle.

EPCRA AND THE ROLE OF LEPCS

LEPCs consist of stakeholders working in a collaborative way to process and utilize the data that is provided under EPCRA to create, or validate regional emergency response plans. The EPCRA law encourages state and local governments to expand emergency planning requirements by creating laws tailored to their own states and localities that complement the federal requirements. EPCRA allows for great flexibility in how it is implemented on the local level, as emergency planning scenarios are different and typically unique to each community.

Part of the role of an LEPC is to form partnerships with local governments, communities, academia and industry as a resource for enhancing hazardous materials preparedness and with these partnerships in place are ready to help address "all-hazards" issues as well.

Local governments, emergency planners, and responders are responsible for the coordination of emergency planning and response within their jurisdiction. This includes ensuring the local hazard analysis adequately addresses chemical incidents; incorporating planning for chemical incidents into the local emergency management plan and annexes; assessing capabilities and developing chemical incident response capability using local resources, mutual aid and contractors; training responders and exercising the plan.

EPCRA's emergency planning provisions are designed to promote the discovery and mitigation of risks associated with chemical use. To reduce risks, prevention, preparedness and quick response to chemical emergencies are best. If properly executed, these three measures can make the difference between disaster and inconvenience.

Prevention involves identifying the causes of and reducing the potential for chemical accidents to occur. Proper safety measures, sound management practices, and preventive maintenance all reduce the potential for chemical accidents. However, it should be noted, no chemical safety management program could be guaranteed 100 percent effective.

Preparedness involves anticipating accidents that may occur despite prevention measures and developing contingency or emergency response plans. Emergency response plans help facilities and local and state governments respond to accidents quickly and efficiently. These plans outline the procedures a facility and the community should follow in responding to a release. When accidents occur, it is imperative that the various players in the response process know their roles, as well as the roles of other responders and use their resources wisely.

The **Emergency Planning Process** has a greater impact than the plan itself, encouraging awareness, communication, and coordination of efforts. Theodore Roosevelt once said, "planning is more important than the plan".

LEPC MEMBERSHIP AND COMPOSITION

By federal statute, each LEPC is to include, at a minimum, representatives from each of the following groups or organizations.

1) Elected officials

2) Law enforcement, civil defense, firefighting, first aid, health, local environmental, hospital and transportation.

3) Broadcast and print media. (These entities are needed to get the word out about a release or for providing a channel for public education about LEPCs and their projects and goals.)

4) Community groups. Community groups, especially environmental activists and advocates can raise issues and be very effective in representing public concerns about chemical risks and hazards. It is a good idea to look for participation from community groups that are active in EPCRA issues. The LEPC can help channel their energy and concerns into useful suggestions and work. By inviting these groups to the table, LEPCs will find it far easier to achieve the intent of EPCRA.

5) Owners and operators of facilities subject to the requirements of EPCRA.

Oftentimes it is difficult to attract LEPC members from each of these areas. The purpose of the diversity of stakeholders is to get a globally encompassing grasp on the complexities of the job assigned to an LEPC and to ensure each point of view and expertise lends more substance to the planning effort. Each area of interest and expertise represented on the LEPC membership adds to the depth of the LEPC effort.

Each LEPC appoints a chairperson and adopts procedural rules by which the LEPC will function, with focus on the required tasks and duties of an LEPC. These rules must include provisions for public notification of committee activities, public meetings to discuss the emergency plan, public comments, response to such comments by the committee and distribution of the emergency plan.

Each LEPC must establish procedures for receiving and processing requests from the public for EPCRA information, including Hazardous Substance Information available through the Office of State Fire Marshal, Community Right-to-Know Unit. Such procedures shall include the designation of an official to serve as the coordinator for information.

Federal law requires each LEPC to review its emergency plan at least annually in a public meeting, or more frequently as changed circumstances in the community or at any facility may require.

YOUR ROLE AS AN LEPC MEMBER

Your active role as an LEPC member can make a difference in the successful functioning of an LEPC. As an LEPC member, you may be asked to serve on a subcommittee to help coordinate emergency planning activities that are consistent with your particular area of expertise or interest. For example, a hospital official who is an LEPC member may serve on a subcommittee with fire department and county officials that review notification procedures for emergency rooms impacted by hazardous materials incidents.

LEPCs are expected to help coordinate various entities in both pre-incident planning and post incident recovery, to review the effectiveness of emergency procedures and to make recommendations to improve the emergency response system when necessary. The LEPC is also the designated entity that the public turns to in the case of a significant chemical release, to answer any questions concerning the response and address any problems associated with the response.

The effectiveness and success of the LEPC is entirely dependent on its members and the commitment they bring to the LEPC to provide the best planning and response possible. Having moved from the age of "accidental release" to the age of "terrorist act," it is more important than ever to take response efforts to a new level with each LEPC member a key component to the overall success or failure of the LEPC.

LEPC members should try to answer the following questions:

- ✓ What are the goals of the LEPC this year?
- ✓ Do certain topics require much discussion / research?
- ✓ Is it necessary to establish subcommittees – Are there enough people, expertise, and leadership among LEPC members to maintain subcommittees?

SUBCOMMITTEES

Dividing the work among subcommittees can facilitate planning and data management. Subcommittees allow members to specialize and help the process move forward more quickly, because the LEPC can work on several projects at one time. The appointment of a subcommittee chairperson may ensure that work progresses efficiently. The number and type of subcommittees that an LEPC creates depends solely on the needs of the LEPC and its members. Subcommittees may be formed and disbanded as occasions arise, to accomplish initial and on-going tasks.

Subcommittee membership need not be limited to LEPC members. The LEPC is encouraged to invite persons from various sectors of the jurisdiction for additional input and enhanced expertise. In determining the type and number of subcommittees to establish, the LEPC should examine a number of factors regarding current LEPC status and future expectations and goals.

The LEPC might appoint subcommittees for the following:

- ✓ Gathering and reviewing existing community and facility emergency plans annually;
- ✓ Coordinating emergency response capabilities of LEPC member organizations;

- ✓ Checking existing response equipment in the community;
- ✓ Identifying financial resources;
- ✓ Coordinating with other LEPCs and the SERC;
- ✓ Conducting a hazard analysis;
- ✓ Managing and providing information for citizens;
- ✓ Providing information to facilities;
- ✓ Promoting public awareness of EPCRA, community chemical hazards, and emergency response expected from the public.

SUGGESTED SUBCOMMITTEES FOR THE LEPC

1) A Planning Subcommittee whose responsibilities may include:

- ✓ Developing and assisting in the revision of the hazardous material response portion of the emergency operations plan;
- ✓ Establishing a vulnerability zone determination methodology;
- ✓ Reviewing the site-specific Hazardous Materials Response Plans submitted for each facility with EHS; and
- ✓ Reviewing the LEPC plan annually.

2) A Public Information Subcommittee, whose responsibilities may include:

- ✓ Writing and publishing public notices;
- ✓ Establishing an information retrieval system; and
- ✓ Performing citizen / neighborhood outreach to inform them of plans and other information that is available.

3) A Training and Exercising Subcommittee, whose responsibilities may include:

- ✓ Conducting a training needs assessment;
- ✓ Requesting training grants to provide needed training;
- ✓ Coordinating training programs; and
- ✓ Establishing an exercise schedule.

Once an assessment has been done by the LEPC and basic subcommittees have been formed, the LEPC may desire to create additional subcommittees to respond to expanded needs / ideas generated from the current LEPC membership. Some examples are included on the following page.

1) An Executive Subcommittee, whose responsibilities may include:

- ✓ Developing LEPC long-term goals;
- ✓ Tending to LEPC member needs;
- ✓ Reviewing LEPC membership terms and soliciting volunteers to fill vacancies;

- ✓ Being familiar with state, local, and federal laws which impact the hazardous material planning process; and
- ✓ Developing a work plan with timetables for the other subcommittees.

2) A Resource Development Subcommittee, whose responsibilities may include:

- ✓ Researching the community's resources for emergency response (e.g., various types of equipment, facilities, and expertise available);
- ✓ Identifying alternative resources upon which the community may draw in time of emergency or disaster;
- ✓ Updating the local Resource inventory;
- ✓ Identifying other volunteer or in-kind assistance contributions (e.g., private sources such as local business / industry, non-profit agencies, etc.), which may be used for various types of response.

3) An Emergency Response Subcommittee, whose responsibilities may include:

- ✓ Developing emergency response procedures for local government personnel that may be utilized in hazardous materials responses; and
- ✓ Establishing local Incident Command System (ICS) procedures to review, strengthen, and coordinate local government emergency response.

4) A Finance Subcommittee, whose responsibilities may include:

- ✓ Management of the LEPC budget and
- ✓ Examining and recommending the use of these funds.
- ✓ Developing the annual business plan

5) A Business / Industry Outreach Subcommittee, whose responsibilities may include:

- ✓ Developing initiatives that will encourage active participation by the community's commercial businesses and industrial facilities.
- ✓ Updating reports on Sub-Committee meetings can be made at the regularly scheduled LEPC meetings.

BY-LAWS

Rules or by-laws for the LEPC should be established as set forth in EPCRA Section 301. The by-laws should include the following minimum provisions:

- ✓ Public notification of committee activities;
- ✓ Public meetings to discuss the emergency plan;
- ✓ Public comment and response to these comments;
- ✓ Distribution of the emergency plan;
- ✓ Election of officers.

MAINTAINING A HEALTHY LEPC

Research shows that the most successful LEPCs have the following attributes:

- ✓ They have clearly defined goals;
- ✓ Members are trained in the law and know what is expected of them;
- ✓ The right people with responsibilities and interests from broad-based community representation (not dominated by one segment) are appointed;
- ✓ Members are committed and interested because they:
    - * Feel useful and believe they are helping the community;
    - * Have been given tasks according to their interests and expertise;
    - * Have been given challenging tasks;
    - * Are recognized for their contributions; and
    - * Have a chance to develop or enhance their skills.

EPCRA: SECTIONS 302, 311, 312

The reports and facility emergency plans required by EPCRA are the cornerstones for much of the planning and work LEPCs undertake. The EPCRA reporting requirements for facility's chemical inventories are generally in Sections 302, 311, and 312 of the statute. R*eporting requirements for accidental releases of chemicals are in Section 304.*

The SARA Title III List of Lists, which is available at the EPA web page at http://www.epa.gov/osweroe1/docs/chem/list_of_lists_revised_7_26_2011.pdf is the most important reference material for EPCRA. It provides what weights of Extremely Hazardous Substance (EHS) require the different reporting and/or planning activities, notifications to occur, and what amounts trigger the requirements of EPCRA Sections 302, 311, and 312.

EPCRA SECTION 302

Section 302 deals with which chemicals are deemed an Extremely Hazardous Substance (EHS) and not just a hazardous substance. A sufficient weight of an EHS on-site at any one time triggers a requirement for the facility to report the presence of the EHS to the state, the LEPC, and the fire department of jurisdiction.

In Oregon, this information is reported to the Office of State Fire Marshal, Community Right to Know Unit, and can be obtained by contacting our office. If enough of an EHS is present, it will also trigger a requirement to develop and update a facility emergency plan in accordance with EPCRA requirements. Sometimes the same amount of an EHS triggers both the reporting and planning, but not always.

The accidental release of a Reportable Quantity (RQ) of an EHS or CERCLA hazardous substance, during a 24-hour period, triggers emergency notification requirements. The release of a sufficient quantity of an EHS or Hazardous Substance also requires an immediate notification to the National Response Center at 1-800-424-8802.

Detailed notification requirements are found under Section 304 of EPCRA, and explained in more detail in another module. Facility emergency plans promulgated under Section 302 requirements are the raw material for the LEPC's own regional emergency response plan required by EPCRA Section 303.

A facility has enough of an EHS on-site to trigger planning requirements, if the amount of the EHS on-site reaches the Threshold Planning Quantity (TPQ) and must report this to the LEPC, SERC, and their local fire department.

In Oregon, notification requirements are satisfied when the facility fills out the Hazardous Substance Information Survey (HSIS) and identifies themselves as subject to EPCRA requirements. This information is made available to LEPCs and fire departments through annual distribution of HSIS information to these entities.

At that point, the facility must also promulgate and update a facility emergency plan. This facility emergency plan, under EPCRA, must be prepared whenever the facility has an EHS at, or above the TPQ. (*This would include a hazardous waste with a sufficient weight of an EHS in the waste to trigger planning requirements).*

It is important to note that for reporting and planning requirements, chemicals on-site are examined in terms of weight and not quantity. So it is not how many gallons of a chemical are on-site, it is how much does the amount on-site weigh in totality.

A review of the SARA Title III List of Lists is necessary to determine if a facility needs to report their substance, and whether the facility has enough of the EHS to trigger the emergency planning requirements.

For example, a facility with 500 pounds of ammonia on-site must identify themselves as subject to the EHS requirements, as ammonia has a 500-pound reportable minimum reporting threshold. Additionally, if the facility "releases" 100 pounds of ammonia, it must make appropriate notifications regarding that Reportable Quantity (RQ) release.

Because 500 pounds is the Threshold Planning Quantity (TPQ) for ammonia, the facility must also prepare an emergency plan in accordance with EPCRA.

NOTE: In Oregon, facilities meeting the reporting requirements for EHS are required to notify the Office of State Fire Marshal, (OSFM) through the Hazardous Substance Information System (HSIS) Survey. LEPCs should utilize information and assistance from the Office of State Fire Marshal, Community Right to Know Unit, as well as their own local resources when identifying EHS facilities within their planning district.

If a facility has sufficient quantities of an EHS to require reporting as an EHS facility, to the OSFM, it must do so within thirty days. A new facility owner/operator may discover that the previous owner/operator was remiss in these duties, and should immediately report to the OSFM. There are also provisions within EPA for self-audits.

The history of this self-audit program is that a facility that identifies its own discrepancies will not be subject to fines. If the facility owner/operator waits for EPA or the OSFM to discover the oversight, the facility is quite vulnerable to significant fines and penalties.

The OSFM, Community Right to Know Unit, provides a list of EHS facilities in Oregon, to the EPA. Facilities may also have other inventories of hazardous materials that are not EHS, and for these, they must review the reporting requirements exclusively for Oregon, to identify if they have a reportable quantity of these substances that should be included on their annual Hazardous Substance Information Survey.
These non-EHS chemicals are called OSHA chemicals. The presence of reportable quantities of these non-EHS chemicals do not trigger mandatory facility emergency planning requirements; however, they may require planning and/or reporting under Oregon Law, other environmental laws and/or local fire codes.

UNDERSTANDING OSHA CHEMICALS IN RELATIONSHIP TO EPCRA

The requirements of EPCRA Section 311 and 312, Safety Data Sheets (SDS) as required by OSHA, must be understood, as well as the role they play in EPCRA.

Understanding EPCRA requires understanding the relationship between EPCRA and the Occupational Safety and Health Administration (OSHA) because OSHA created the Safety Data Sheet, known as the SDS. EPCRA is an unusual approach to law in that it "weds" an environmental law to the Occupational Safety and Health Act, which created the Occupational Safety and Health Administration (OSHA).

These OSHA worker protection laws require employers to train and inform workers about chemical hazards present at the work site. The principle is that, through proper training about chemical hazards at the work site, employers can protect workers.

Rather than "reinvent the wheel," EPCRA uses the information in the SDS to inform responders and planners that there are hazardous chemicals at a facility.

EPCRA also "weds" worker health and safety to concerns about community safety. If a chemical present at the work site can potentially harm workers, then it makes sense that if large enough quantities of these chemicals or mixtures are somehow released into the environment, there could be harm to those responding, and those nearby, including businesses, communities, and the public.

EPCRA takes the SDS data presented to workers about chemical hazards at the worksite and uses it as a foundation for the information that will be provided to the public and communities about chemicals present in or adjacent to their neighborhoods. EPCRA also uses the SDS data for the foundation of a report that must be prepared and provided in the event of a release of these chemicals.

The data about a chemical or mixture of chemicals used at a facility is presented on an SDS. With recent changes the SDS now follow a common format. OSHA provides guidance for the subjects that must be covered. Specific information about EPCRA (SARA Title III) requirements is not covered by OSHA. Now, with the mandatory form for the SDS, workers and the public will see consistent format. What is also consistent about an SDS is the type of information included on the form.

OSHA developed the MSDS form as part of the Hazard Communication Standard (HCS), or Worker Right-To-Know regulation. OSHA wanted to make sure workers had one basic reference for most of the information on a hazardous substance.

An SDS contains:

- ✓ What it is.
- ✓ The identity of the chemical--what is it called on its label.
- ✓ Who makes or sells it.

- ✓ Name and address of the company that made the chemical, plus the telephone numbers to call for information, or in an emergency.
- ✓ Why it is hazardous.
- ✓ Substance's hazardous components, chemical identification number (CAS#), worker exposure limits.
- ✓ Physical properties: boiling point, melting point, vapor pressure, vapor density, evaporation rate, solubility in water, specific gravity, normal appearance, odor
- ✓ How workers can be exposed to the hazard.
- ✓ Can it be absorbed through the skin, is it inhaled, does it have to be ingested (drinking, eating)?
- ✓ What are the health hazards?
- ✓ Some effects can show up right away, like skin burns. These are acute effects. Other effects may show up hours after exposure. Chronic exposure can cause other effects, like lung cancer. The MSDS will indicate some of the early warning signs of exposure, symptoms like headache, nausea, dizziness, rashes, and/or dermatitis.
- ✓ What conditions would increase the hazard.
- ✓ Keeping incompatible chemicals apart. If they are accidentally combined, they could ignite or explode. Temperature, flammability limit at some concentrations, vapors will ignite. At lower or higher concentrations, they won't.
- ✓ How to handle the substance safely.
- ✓ Special safety and handling precautions
- ✓ What protection to use while working with the substance.
- ✓ Need to wear protective gear? Gloves, eye protection, type of respirator.
- ✓ Need to wear a mask? What level of protective gear is needed?
- ✓ What to do if a worker is exposed.
- ✓ First aid, medical procedures.
- ✓ What to do if there is a spill or an emergency.
- ✓ Special cleanup procedures, special instructions, special precautions.

EPCRA SECTION 311

In most states, EPCRA Section 311 requires a facility to provide the MSDS, or a list of chemicals to the LEPC, local fire department, and SERC when sufficient quantities of an EHS (500 pounds or the Threshold Planning Quantity) or other OSHA hazardous substance (10,000 pounds) are onsite at any one time to trigger reporting requirements. More information on this requirement can be found in 29 CFR Section 1910.120.

Under Oregon law, facilities are required to submit information on hazardous substances, annually, including those substances to be reported under Section 311. Additionally, there are requirements for Oregon facilities to submit to the OSFM "Substantive Changes" within 30 days.

A Substantive Change is defined as any of the following:

- ✓ Introduction of a new substance in reportable quantities, which were not previously reported
- ✓ Increase in the maximum amount of a reported substance to a higher quantity range than previously reported
- ✓ A change in site or mailing address
- ✓ Designation of a different emergency contact person
- ✓ A change to any of the listed phone numbers
- ✓ A change of ownership or business name
- ✓ Movement of a reported substance to another building, floor level or 300 feet or more from its reported location
- ✓ Facility ceases operation for any reason

Because Oregon businesses submit this information to the OSFM and keep it current under the Substantive Change requirement, any LEPC requesting Section 311 information should contact the Office of State Fire Marshal, Emergency Planning & Response Section for that information and not the facility.

EPCRA SECTION 312

In most other states, this section would include information on how to fill out the Tier Two (*federal*) report for possession of hazardous substances. Because Oregon's reporting requirements are stricter and the survey requires facilities to answer questions pertaining to Tier II reporting, Oregon facilities can fulfill all the following requirements.

- ✓ EPCRA Sections 311 and 312 notification and reporting requirements
- ✓ Identify themselves as subject to the Clean Air Act (CCA) 112(r) as regulated by EPA
- ✓ Identify themselves as subject to the Process Safety Management (PSM) requirements as regulated by the Oregon Department of Consumer and Business Services, Occupational Safety and Health Division.

THE OREGON HAZARDOUS SUBSTANCE INFORMATION SYSTEM (HSIS) SURVEY

The following section provides an overview of Oregon's HSIS Survey system.

The Oregon Community Right to Know and Protection Act of 1985 (ORS 453.307 through 453.414) requires the Office of State Fire Marshal (OSFM) to conduct an annual Hazardous Substance Information Survey (HSIS) of Oregon facilities. This survey is conducted through the Community Right to Know Unit.

WHAT A HAZARDOUS SUBSTANCE IS UNDER OREGON LAW

Any substance for which OR-OSHA requires the manufacturer to produce a Safety Data Sheet (SDS) must be considered for reporting. If the maximum amount on site at any time during the survey period meets or exceeds the listed quantities below, the substance must be reported. This includes substances produced at the site, waste substances, solutions and refrigeration system gases.

- ✓ LIQUIDS: 500 gallons or more (E.g. gasoline, diesel, oils, acetone, paint, cleaners, solutions, etc.)
- ✓ SOLIDS: 500 pounds or more (E.g. lime, metal ingots, fertilizer, caustic soda, concrete mix, wastes, etc.)
- ✓ GASES: 500 cubic feet or more at atmospheric pressure and temperature (E.g. acetylene, oxygen, propane, liquid oxygen, sulfur dioxide, Freon, etc.)

Reporting exception for gases: Gases intended for human/animal ingestion and/or inhalation directly, or added to a product, are exempt from reporting, if **ALL** of the following apply:

1. The gas is used for human/animal ingestion and/or inhalation.
2. The gas is not used in a manufacturing process.
3. The gas is not a cryogenic.
4. The gas is not being stored at the site in excess of 1,000 cubic feet.

HIGHLY TOXIC MATERIALS AND EXPLOSIVES REPORTABLE QUANTITIES

Highly toxic materials (i.e. poisons) and explosives currently have the following reportable quantities;

- ✓ LIQUIDS: 5 gallons or more
- ✓ SOLIDS: 10 pounds or more
- ✓ GASES: 20 cubic feet or more

RADIOACTIVE SUBSTANCES

Any quantity of radioactive substance including radioactive wastes. **EXCEPTION:** Sealed source radioactive materials, as defined by OAR 333-100-0005(118).

EXTREMELY HAZARDOUS SUBSTANCES (EHS)

Extremely Hazardous Substances (EHS) that meet or exceed their Threshold Planning Quantity (TPQ) are required to be reported at the TPQ or the amounts required through Oregon reporting requirements, whichever is lower.

HOW LEPCS CAN OBTAIN THIS INFORMATION

The OSFM has created a database containing information received from the HSIS. Once the information is data entered and validated, groups and individuals are able to access the information to help target their hazardous substance activities. Data collected from the HSIS is provided annually to each local fire department, county emergency manager and county health administrator. This information enables them to effectively plan for and respond to incidents involving hazardous materials and other emergencies. The HSIS non-confidential information can be accessed via the web at http://www.sfm.state.or.us/CR2K_SubDB/SubstanceSearch.htm .

This database has many preset queries allowing the user to interact with the data in a variety of ways. The database is also available on CD and can be obtained by calling the Hazardous Substance Information Hotline at (503) 378-6835, or 1-800-454-6125. In addition, staff are available to help individuals with requests that are more detailed. This information is available in a variety of formats, from electronic transfers to hard copy.

WHAT IS INCLUDED IN AN LEPC EMERGENCY PLAN

EPCRA SECTION 303 – LEPC REGIONAL PLAN

LEPCs were required to create a regional emergency plan by 1988, two years after the U.S. Congress adopted EPCRA. Thereafter, the LEPC is required to review this regional emergency plan in a public meeting once a year, or more frequently as changed circumstances in the community or at any facility may require. There are many required aspects of this emergency plan, and they are all interconnected and interdependent.

LEPCs use the facility emergency plans and HSIS Survey information from facilities with sufficient quantities of EHS on-site in promulgating and updating the LEPC regional emergency plan.

An example of changed circumstances in the community that could trigger this regional emergency plan review would be a new hospital or elder care facility opening near a facility with a large inventory of EHS.

An example of changed circumstances at any facility that could trigger this could be the addition of a new process or chemical at a facility that requires special planning for a large-scale disaster. A wastewater treatment facility, for example, could decide to start bringing in its chlorine in railcars rather than in one-ton cylinders. The off-site consequence for a release of a one-ton cylinder of chlorine is about 1.3 miles. The off-site consequence for a large railcar of chlorine could be as much as 14 miles.

Even though the word release is commonly used in everyday language, a release is a specific legal term in emergency planning and response. There is also the "reportable quantity release" of a chemical, which varies for each of the chemicals. The SARA Title III List of Lists must be referred to when making these reportable quantity release determinations.

EHS FACILITIES - PLANS AND INVENTORIES

The LEPC plan will be largely based upon the EHS facilities within its jurisdiction, with attention to the types and quantities of EHS chemicals reported. As noted in the previous module, facilities with enough EHS, (chlorine, ammonia, sulfuric acid, etc.) on-site to trigger facility emergency plan requirements must provide their facility emergency plan to the LEPC as well as the OSAB and Fire Department/District with jurisdiction.

The LEPC compiles this data from all EHS facilities and makes updates to its regional emergency plan. The LEPC depends on facility plan updates to keep abreast of the changes in its jurisdiction.

TRANSPORTATION ROUTES OF EHS

Besides planning for incidents at stationary facilities, the LEPC plan must also take into account where EHS's are being transported. Going back to the chlorine railcar example, there would be a potential consequence 14 miles on either side of the route by rail of the railcar. It makes sense that these EHS have to arrive at the stationary facilities, and that an incident during transportation is possible.

PROXIMITY OF LAND USES MAY BRING ADDITIONAL RISKS

The LEPC must also identify facilities that are contributing to, or subjected to an additional risk due to their proximity to EHS facilities. A hospital wants to locate near a wastewater facility with large inventories of chlorine. A wastewater facility decides to start using railcars of chlorine instead of one-ton cylinders.

The hospital five miles from the wastewater facility will now be at risk from a catastrophic release of chlorine. Hospitals, elder care facilities and health care facilities in general pose a challenge in the event an evacuation is required.

HOW TO KNOW HOW FAR THE SPILL WILL GO

CAMEO

The EPA has created a suite of software programs designed to assist LEPCs in making determinations about the distance a chemical spill can harm the public. **Computer-Aided Management of Emergency Operations (CAMEO)** includes a program named **Arial Locations of Hazardous Atmospheres (ALOHA)**, developed by the Environmental Protection Agency and the National Oceanic and Atmospheric Administration (NOAA).

ALOHA is an air-dispersion model used to evaluate hazardous chemical scenarios and determine the likely "footprint" of such spills. ALOHA, helps planners make comparisons, develop optional spill scenarios, and help them visualize what might happen. Many clouds of chemical vapor are colorless. ALOHA is especially helpful in scenarios involving these chemicals.

ALOHA can also model how quickly chemical vapors would likely infiltrate buildings at different distances from the release as well as how quickly the chemical vapors would likely arrive. CAMEO also includes a mapping program (MARPLOT) that allows the user to plot a release on a map.

There are other similar modeling programs available, privately and publicly. LandView has become an essential part of the planning toolkit, which includes MARPLOT as part of its software package.

In Oregon, the CAMEO suite of software has been populated with the information contained in the HSIS. To obtain a copy of the CAMEO software with Oregon specific information, contact the OSFM, Community Right to Know Unit, or visit the OSFM website at http://www.oregon.gov/osp/SFM/pages/cr2k_infoavailable.aspx#HSIS_CAMEO_Ready_Data_Files to fill out a request for the files you need.

ALOHA is not used with spills that will cause a cloud or plume that will be longer than six miles or ten kilometers, so the chlorine railcar scenario would be modeled with other software. This software for these larger scenarios was developed by the Environmental Protection Agency for its Clean Air Act 112r Program, commonly called the Risk Management Program. More is provided on this in a later module. It is critical to note the limitations on ALOHA regarding wind speeds, fires, liquids, etc.

RMP*Comp is a free program that was developed by EPA to be used to complete the offsite consequence analyses for RMP facilities. It can be useful to model off-site consequences greater than six miles. To download the program and obtain further information, go to http://www.epa.gov/osweroe1/content/rmp/rmp_comp.htm

ARCHIE

The acronym stands for **Automated Resource for Chemical Hazard Incident Evaluation**. This program is available from FEMA through the State Emergency Management Offices at no cost to LEPCs. The program does not have a chemical database, so a large amount of informational input is required. Data output is NOT set up for mapping. The printout of tables containing distances of chemical concentrations is very helpful in determining vulnerability zones, which can later be transposed onto maps.

ARCHIE has the capability to determine blast effects for flammable and explosive substances. A more detailed discussion of ARCHIE is found in chapter 12 of the Handbook of Chemical Hazards Analysis Procedures, which is also available from FEMA. It should be noted that this is a DOS program and has NOT YET been upgraded for use In WINDOWS.

LandView

LandView is a Community Right-To-Know software tool in the format of an electronic atlas, with both geographic and tabular information from selected EPA databases and the U.S. Census Bureau. Because LandView 5 contains 10.4 gigabytes of data, it requires two DVDs (East/West). Individual states (or state groupings) may be ordered. To access LandView ordering information, go to http://www.census.gov/geo/landview/lv5/lv5.html

RESPONSE METHODS AND PROCEDURES

LEPC emergency plans must also include the methods and procedures to be followed by facility owners and operators and local emergency and medical personnel to respond to any release of

such substances.

[NOTE: The term emergency response personnel include the police, and any others who may be asked to assist with an evacuation, shelter-in-place strategy, or notification of the public, including facility personnel.]

LEPCs often provide questionnaires to facilities with EHS planning requirements that ask the facility owner/operator to detail the methods, equipment, and procedures that will be used to respond to an incident. The questionnaire will also ask about the appropriate training for facility staff.

Local emergency and medical personnel have to make many of their own decisions regarding the response to a specific incident. This must be done with a case-by-case evaluation. An evacuation may be in order, a shelter-in-place strategy, or neither. The release may be confined, or in an area, that has no humans at risk. Medical personnel on-scene may conduct a triage and send the injured to a hospital for further treatment, or they may release the injured after treatment at the scene.

Each chemical may have different or delayed effects. An exposure to nitric acid can cause a reaction 24-48 hours later, for example. There may be more than one chemical exposure involved in an incident, and medical personnel may have to seek additional expertise from the Oregon Poison Control Center, or other professional advice.

The LEPC plan for local emergency and medical personnel to respond to any release of hazardous substances has to cover a very broad range of topics and situations and must include considerations for law enforcement personnel and others involved with the incident.

If there will be any specificity in a regional emergency plan, it should focus on the chemicals stored in the community as reported on HSIS and facility emergency plans. It should include consideration for the chemicals shipped or transported through the jurisdiction.

EMERGENCY COORDINATORS

The LEPC plan must designate a community emergency coordinator as well as facility emergency coordinators, who shall make determinations necessary to implement the plan.

The emergency plan, which includes provisions for opening the Emergency Operations Center, is only implemented for a large-scale incident. Incidents involving the spill or release of chemicals occur often and the potential for harm in most of these incidents is minimal. Someone has to be able to make the decision as to whether there is sufficient threat to implement the LEPC emergency plan.

Usually, implementation of the plan is done through the On-scene Incident Commander who, through the Incident Management System, will determine needs for additional resources that

may be required to effectively respond to the incident.

RELEASE NOTIFICATION

The LEPC emergency plan must include procedures providing reliable, effective and timely notification by the facility emergency coordinator and the community emergency coordinator to persons designated in the emergency plan, and to the public, that a release has occurred.

The ***immediate*** and ***follow-up notifications*** required under EPCRA Section 304 are also a consideration. CERCLA Section 103, which deals with un-permitted releases to the environment of hazardous substances, is a consideration here because CERCLA Section 103 is closely linked to EPCRA.

The SARA Title III List of Lists is the reference document for CERCLA 103 and EPCRA 304 notification thresholds (see columns on Reportable Quantities-RQ). There is some overlap, but many of the chemicals listed under CERCLA 103 are not on the EPCRA 304 list. This can cause confusion and noncompliance with the notification requirements. But in essence, if a facility has a reportable quantity release (RQ) of a CERCLA 103 hazardous substance or EPCRA 302 EHS, the notification requirements are the same.

Immediate Notification

If there is a release at a facility, the facility owner/operator is required to notify immediately, (by such means as telephone, radio, or in person) the community emergency coordinator for the LEPC for any area likely to be affected by the release and to the OSAB. The responsible party is responsible for notifying ALL LEPCs that could be impacted by the release. This includes Tribal jurisdictions as well.

For all releases to the environment that are at/above the reportable quantity, the National Response Center (NRC) MUST be immediately notified. IMMEDIATE is defined as being within 15 minutes. The NRC number is 1-800-424-8802.

The immediate notification must include each of the following (to the extent known at the time of the notice and so long as no delay in responding to the emergency results ;)

1. The chemical name or identity of any substance involved in the release;
2. An indication of whether the substance is on the EHS list;
3. An estimate of the quantity of any such substance that was released into the environment;
4. The time and duration of the release
5. The medium or media into which the release occurred;
6. Any known or anticipated acute or chronic health risks associated with the emergency and where appropriate, advice regarding medical attention for exposed individuals.
7. Proper precautions to take as a result of the release, including evacuation (unless such information is readily available to the community emergency coordinator pursuant to the emergency plan); and

8. The name and telephone number of the persons to be contacted for further information

Follow-up Notification

As soon as practicable (30 days, or less) after a release that required the immediate notification, the facility owner or operator must provide a written follow-up emergency notice (or notices, as more information becomes available) setting forth and updating the information required under the immediate notification, and must also include the following additional information;

1. Actions taken to respond to and contain the release;
2. Any known or anticipated acute or chronic health risks associated with the release; and
3. Where appropriate, advice regarding medical attention necessary for exposed individuals

These notification and reporting requirements are not just for fixed or stationary facilities. There is no transportation exemption in this section of law, so a tanker truck of chemicals that leaks or releases to the environment must make these notifications. The difference is that the transportation report can be made through any means available, e.g. local telephone operator.

NOTIFICATION TO THE PUBLIC ABOUT THE AVAILABILITY OF EMERGENCY INFORMATION

Each LEPC must publish annually a notice in local newspapers that the emergency response plan, material safety data sheets, and inventory forms have been submitted under the requirements of EPCRA. The notice must also state that follow-up emergency notices may subsequently be issued.

This published notice shall announce that members of the public who wish to review any such emergency response plan, material safety data sheet, toxic release inventory form, or follow-up notice may do so at the designated location.

METHODS FOR DETERMINING THE OCCURRENCE OF A RELEASE

As noted before, "release" is a specific legal term. As noted in the discussion of EPCRA Section 302, a facility owner/operator with enough of an EHS on-site to trigger planning requirements must develop a method of determining that a release has occurred.

Facility owners and operators are not always aware of this, may not comply with notification requirements even when aware that a release has occurred, or an incident involving a release may occur when facility staff are not present. The facility may not be aware that enough of an EHS or CERCLA 103 chemical has been released to warrant the proper notifications.

So there must be alternate methods of determining the occurrence of a release. Sometimes, the local fire department will learn of a release when a phone call from a facility's neighbors is received. This could start as a tip regarding strong or strange chemical odors. Or there might be a cloud that hugs the ground, or a colorful plume emanating from a facility that tips the fire department or the police.

LEPCs must think through the responsibility to promulgate an emergency plan and the different ways to determine that a release has occurred. In our changed world since September 11, 2001, we cannot over-emphasize the words "SITUATIONAL AWARENESS." It's truly up to each of us to be aware of what is around us and just how important vigilance is in our everyday lives.

AREA OR POPULATION LIKELY TO BE AFFECTED BY A RELEASE

Each stationary facility requiring an emergency plan due to its quantities of Section 302 EHS chemicals, should include an analysis of the area or population likely to be affected by such a release. This data can be requested by the LEPC. But the data from the EHS facility should be reviewed to make certain that the facility is correct in its calculations. CAMEO and ALOHA software are available to the LEPC as well as any interested party and may be used to assist in planning tasks.

To create, maintain, and update its regional emergency plan, the LEPC must have a good idea of the population potentially at risk from the accidental release of EHS chemicals within their jurisdiction. Planning for the evacuation or sheltering of 1,000 people is far different from tens, or hundreds of thousands of people.

There is also a group of facilities that must report and plan under EPCRA 302, but also have such large quantities of chemicals that they fall into the Risk Management Program as dictated and regulated by Clean Air Act Section 112r. This will be discussed in more detail in a later section, but should be an important consideration for LEPCs as the off-site consequence of a release may be miles away from the facility.

The EPA model of the off-site consequence of a catastrophic release of chlorine from a railcar can be 14 miles. This also is a consideration for the LEPC as it examines the transportation routes for extremely hazardous substances. It won't be enough to plan for an incident from the stationary facility that would receive the rail car shipment of chlorine. The planning for a disaster must also be for the entire transportation route. In the example of the railcar of chlorine, an LEPC must plan for a 14-mile length on either side of the chlorine railcar route.

LEPCs can use MARPLOT, another component of the CAMEO suite of software, to determine the area of off-site consequence. Additionally, LandView is another software tool to assist in local planning.

The RMP facility owner/operator is required to coordinate with the LEPC and to ensure that the LEPC has sufficient information for its planning district plan. EPA remains the authority for the RMP program and there are significant cautions in handling RMP information at the local level. LEPCs are cautioned to be sure that they determine liability for the mishandling of RMP information.

The EPA created special software for the Clean Air Act 112r program to assist facilities in the Risk Management Program with making these same determinations, and these software programs are available to LEPCs. Refer to the following link: http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/ds-epds.htm

EVACUATION

The LEPC regional emergency plan must include evacuation plans, including provisions for a precautionary evacuation and alternative traffic routes. Evacuation planning must include facilities subject to EPCRA requirements. These facilities if compliant with the requirements have already in place, worst-case scenarios for releases of subject substances from their facility and the area around the facility likely to be impacted by such a release. Utilizing, this information and existing evacuation information from first responders, evacuation routes can be developed specific to each incident and/or facility.

DETERMINING IF EMERGENCY RESPONDERS HAVE THE PROPER RESOURCES

LEPCs are also tasked with evaluating the need for resources necessary to develop, implement, and exercise the regional emergency plan, and must make recommendations with respect to additional resources that may be required and the means for providing such additional resources.

It isn't enough to develop an emergency plan, the LEPC must evaluate whether the resources are available locally to actually respond to a chemical emergency.

In the example of the wastewater treatment facility, it wouldn't be sufficient to change the emergency plan to language that has an evacuation and shelter-in-place notification for the 14-mile area of off-site consequence. The LEPC would have to make a determination that responders had the manpower and equipment, as well as training, to handle such an incident.

Responding to an incident from a catastrophic release from a one-ton cylinder of chlorine, with an impact 1.3 miles downwind is very different from responding to an incident from a catastrophic release from a railcar of chlorine, with an impact 14 miles downwind.
In this example, once the LEPC determines that the resources are available for such a response, then it would exercise the emergency plan.

Of course, staging a full-scale drill would be very expensive and resource intensive. The tabletop drills are a far less costly alternative and can help in thinking out the specifics and particulars of responding to such an incident.

Again, using this example, if the LEPC determines that there are not sufficient resources to prepare and respond to an incident involving the railcar of chlorine, the LEPC must make recommendations with respect to additional resources that may be required and the means for providing such additional resources. In other words, shortfalls in equipment, staffing, training, notification systems, and many more resource questions may surface.

Finding the additional resources may involve acquiring more equipment from facilities with large amounts of EHS chemicals that must develop facility emergency plans under EPCRA Section 302.

Finding the additional resources might involve a political decision, such as having the wastewater facility purchase the additional equipment needed. Use of Department of Homeland Security Grants to meet local/regional needs based on LEPC hazards analysis and risk analysis is certainly within the purview of the Right to Know Planning mandates.

EMERGENCY EQUIPMENT AND FACILITIES

The LEPC regional emergency plan must include an updated description of emergency equipment and facilities in the community and at each facility in the community subject to the requirements of this subchapter, and an identification of the persons responsible for such equipment and facilities. This includes emergency equipment and government operated facilities as well as the emergency equipment at facilities with EHS chemicals.

In the event of a large-scale incident, for example, Self-Contained Breathing Apparatus (SCBA) at both government-operated facilities and at private facilities might be needed for an evacuation and response. Responders must know at the time of the incident how to obtain these resources and who they must contact to get them.

TRAINING PROGRAMS FOR RESPONDERS AND MEDICAL PERSONNEL

The LEPC regional emergency plan must include training programs, including schedules for training of local emergency response and medical personnel. This should also include responders from law enforcement, public works, public health and anyone that could be "first-on-scene" at a chemical incident.

METHODS AND SCHEDULES FOR EXERCISING THE EMERGENCY PLAN

The LEPC regional emergency plan must include methods and schedules for exercising the emergency plan. Realistic scenarios should be practiced, expecting to identify problems or areas of improvement. Identifying such areas documents the need for additional planning and training and will often assist in justifying and obtaining needed resources.

REVIEWING AND TESTING THE LEPC REGIONAL PLAN

The LEPC Plan must be reviewed at least once a year. Most planners agree that the best way to review a plan is to test, or exercise, it. There is no requirement that the plan must be tested each year however, the LEPC is required to establish a schedule for testing the plan. Obviously, the

level of review and testing is dependent on many factors, including cost, personnel required, and other reasons.

Each LEPC should determine the level of review and exercise to be conducted each year. In testing the Plan, the following areas should be evaluated to represent the minimum requirements for qualification such as an exercise.

In addition, jurisdictions are encouraged to test areas particular to their part of the plan. An exercise of the plan is required no less than once every two years.

Examine the Plan for the Following Items

1. Does the Plan attempt to reduce the unknowns in a situation?
2. Are the aims of the Plan to evoke appropriate actions?
3. Is the Plan based on what is likely to happen?
4. Are the basic tenets of the Plan based on knowledge of actual problems and solutions or upon myths and misconceptions?
5. Does the Plan operate as a continuous process?
6. Does the Plan focus on principles rather than concrete details?
7. Does the Plan overcome resistance in thinking and established methods of response because of limitations of money, time and effort?
8. What parts of the Plan are educational activities?

How LEPCs Gather the Needed Information

LEPCs rely on reporting facilities for the information needed for the Section 303 plan. EPCRA gives LEPCs the power to request reporting facilities to provide relevant information. There is strong language in EPCRA protecting industry trade secrets, as well as language to prevent a facility from trying to avoid its EPCRA reporting obligations with baseless claims of trade secrecy.

LEPCs should gather the information needed from the HSIS where information is gathered in one database and where customized reports can be developed, to fit the specific needs of the LEPC. LEPCs can also utilize questionnaires for EHS facility planning purposes.

[**42 USCA 11003(d)(3)** Upon request from the emergency planning committee, the owner or operator of the facility shall promptly provide information to such committee necessary for developing and implementing the emergency plan.]

Hazard Analysis

As you will notice while reading the criteria for developing a hazardous materials response annex, some of your key tasks will be to identify facilities containing extremely hazardous substances, or to identify transportation routes likely to be used for the transportation of these

substances. A hazard analysis will help you identify these and other hazards in your community. The hazard analysis process can assist local planners in answering these and other important planning questions:

- ✓ What are the major chemical hazards in the community?
- ✓ What kind of training do local responders need?
- ✓ How can we pre-determine the area or population likely to be affected by a release?
- ✓ What emergency response resources (personnel and equipment) does the community need?
- ✓ How can we help prevent chemical accidents?

REVIEW AND ASSISTANCE IN LEPC EMERGENCY PLANNING

After the LEPC completes or updates its emergency plan, the LEPC submits a copy of the plan to the Oregon SERC Advisory Board (OSAB). The OSAB reviews the LEPC emergency plan and may make recommendations on revisions of the plan that may be necessary to ensure coordination of such plans with emergency response plans of other LEPCs bordering and/or near their planning district.

REGIONAL RESPONSE TEAM GUIDANCE DOCUMENTS, REVIEW AND COMMENT

The National Response Team publishes guidance documents for preparation and implementation of emergency plans. The Region X, Regional Response Team (RRT) may review and comment upon an LEPC emergency plan, or other issues related to preparation, implementation, or exercise of such a plan if assistance is requested by the LEPC. The OSAB will normally coordinate such a request with the RRT after discussions with LEPCs interested in having their plans reviewed by the RRT.

Funds to support LEPC and OSAB activities

HMEP GRANTS

The Hazardous Materials Emergency Preparedness (HMEP) grant program is intended to provide financial and technical assistance as well as national direction and guidance to enhance State, Territorial, Tribal, and local hazardous materials emergency planning and training.

The HMEP Grant Program distributes fees collected from shippers and carriers of hazardous materials to emergency responders for HAZMAT training and to Local Emergency Planning Committees (LEPCs) for HAZMAT planning. HMEP funds may be used for training and planning, as it relates to hazardous materials, but not for purchasing equipment.

BACKGROUND

The HMEP grant program evolved from a proposal developed by DOT, FEMA, EPA, DOL / OSHA, and DOE. It was presented to Congress during the legislative process to reauthorize the HMTA of 1974. Federal Hazardous Material Transportation Law (FHMTL) creates an appropriate role for the Federal government to provide financial, technical assistance, national direction, and guidance to enhance State and local hazardous materials emergency planning and training.

The HMEP grant program is carefully crafted to build upon existing programs and relationships. It increases the emphasis on transportation in ongoing efforts. The HMEP grant program was designed to support the framework and working relationships established within the National Response System and the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986.

PLANNING GRANT

FHMTL authorizes annual planning grants to States, Territories and Native American tribes -- with a required 75% pass-through of funds to LEPCs.

These planning grants are to be used for: 1) developing, improving, and implementing emergency plans under Title III including plan reviews and exercises/drills; 2) conducting commodity flow studies; 3) determining the need for regional hazardous material response.

TRAINING GRANT

FHMTL authorizes training grants to States, Territories and Native American Tribes -- with 75% of the funding used to provide training to local responders, including volunteers.

Training grants are to be used for training public sector employees to respond safely and efficiently to accidents and incidents involving the transportation of hazardous materials. A broad spectrum of planning and training projects qualify under the HMEP grants.

For more information, contact the HMEP Grants Manager in the Office of State Fire Marshal, Emergency Planning and Response Section.

OTHER FEDERAL FUNDING

There is currently a multitude of federal grant opportunities available from the Office of Homeland Security, FEMA and EPA, that LEPCs can apply for. These grants can be a resource when an LEPC project is "all-hazards" related.

FOUNDATION GRANTS

There are approximately 16,000 + private foundations in the US today. When choosing a foundation to submit a proposal for support, research must be done to ensure the need matches with the foundations funding interests and area of support. Once the foundation has been identified, additional research must be done in order to meet the specific submission requirements of the foundation.

BUSINESS GIVING PROGRAMS

Business giving programs are different from corporate foundations. Corporate foundations are legally a separate entity from the business. Business giving programs are part of the business and are therefore administered by the business itself. Business giving programs provide all types of assistance to worthy causes. Assistance may include funds; use of equipment, facilities and vehicles; donation of products; donation of surplus or new equipment; free technical assistance, etc. Generally, 80% of the support provided by business giving programs is "in-kind" support.

SUPPLEMENTAL ENVIRONMENTAL PROJECTS (SEPS)

Once EPA has commenced an action against a facility for non-compliance with Section 312, or emergency release notification (CERCLA Section 103/EPCRA Section 312), there is an alternative to simply imposing fines on the non-complying facility. Current federal enforcement policy authorizes consideration for mitigating the fines imposed if the offending facility agrees to perform a supplemental environmental project (SEP).

Enforcement actions provide an opportunity for the facility to become actively involved in the local planning and response process and to assist the LEPCs in their activities. These agreements are an appropriate way to enforce EPCRA, since the SEPs can be arranged to aid in its implementation. Through SEPs, facilities have provided emergency or computer equipment to the LEPC and fire departments, and provided training to local emergency or planning personnel.

PUBLIC ACCESS TO EPCRA INFORMATION

This law is often referred to as **the Community Right-to-Know law,** because it was the first to require by federal law that certain information about chemical inventories at facilities would be available, **as a right**, to the public. The law does allow the facility to request that the locations of chemicals at the facility be kept confidential from the public (but not the fire department, the LEPC, or the OSAB), but the presence and amount of the chemical on-site must be disclosed and publicly available.

Part of the purpose for providing the information to the public is to garner the public's assistance in determining which facilities need to report. Also, the public is considered an important stakeholder in the planning process. Generally, the public will ask about a facility if there is a problem or a concern. Sometimes this is triggered when the facility or a neighboring facility has an incident or problem.

In general, the public in Oregon has not been too interested in EPCRA information. EPCRA is quite explicit in making it a requirement that the public has easy access to the EPCRA information. Recognizing this, the OSAB and OSFM supports each LEPC in meeting whatever public demands are placed on them.

EPCRA PUBLIC AVAILABILITY REQUIREMENTS

Each emergency response plan, material safety data sheet, list of chemicals provided pursuant to the requirements of EPCRA Section 311, HSIS Survey information and follow-up emergency notice, legally must be made available to the public during normal working hours at the location designated by the LEPC and OSAB. There are procedures set forth by EPCRA that the public must follow in making these requests.

Under EPCRA and Oregon Statute, there is a provision to make HSIS information available to the public. (Note: There is a provision for specific location information of chemicals within a facility to be withheld from the pubic).

EPCRA ENFORCEMENT REGARDING PUBLIC RECORDS

EPCRA allows citizens to sue the OSAB and/or the Governor in federal district court if there is not access to EPCRA information.

TRI & RMP

There is one part of EPCRA that has little to do with the emergency-planning theme of the sections already discussed. This is the **Toxics Release Inventory (TRI)**, which is part of EPCRA, found under Section 313. The Form R is the report that a facility files for the TRI. This Form R report is due the first of July of the following calendar year. [Download a blank Form R at http://www.epa.gov/tri/report/form_r.pdf]

The Toxics Release Inventory tracks the release of certain toxic chemicals and chemical categories (copper compounds, zinc compounds, certain glycol ethers), about 600 or so. This is certainly a smaller universe than the rest of EPCRA and its emergency planning focus. Many of the chemicals regulated by the Form R are in the EPCRA Section 302 EHS category. Not all types of industry and facilities must report using a Form R, even if these industries and/or facilities use the chemicals covered by the TRI. EPCRA reporting has no such restriction—if there are sufficient inventories of the chemicals at the facility, the facility must report.

Unlike the other EPCRA reporting requirements, the EPCRA statute requires that EPA make the TRI information available electronically, which has prompted EPA to post it on the Internet.

FORM R/313 REPORTING REQUIREMENTS

Reporting "trigger" is based on annual chemical consumption, not releases or on-site inventories. (The Form R Report is due July 1st of the following calendar year.) See www.epa.gov/tri for requirements.

Note: For more information, call the EPA Hotline at 1-800-424-9346. For facilities on Tribal lands, contact the Commission for guidance.

RISK MANAGEMENT FACILITIES (RMP)

Under the Clean Air Act Amendments of 1990, there is another emergency planning law that picks up where EPCRA left off. It is Section 112r of the Clean Air Act, known commonly as the **Risk Management Plan (RMP)** Program. Starting June 21, 1999, facilities with sufficient amounts of certain hazardous chemicals had special emergency planning requirements.

The Clean Air Act requires facilities nationwide to assess their own potential for serious chemical spills, fires, and explosions, and based on these assessments to prepare Risk Management Plans (RMPs). These RMPs include vital information for workers, local jurisdictions and communities. These facilities must identify the hazards that may result from catastrophic releases of the chemicals stored on-site, using appropriate hazard assessment techniques. They must also design and maintain a safe facility, taking such steps as are necessary to prevent releases, and to minimize the consequences of accidental releases that do

occur. The latter includes notifying those within the range of a large-scale release, often called a worst-case scenario, about the potential risks from such a chemical release. These RMPs are public information and are available to the public.

The EPA was required to promulgate an initial list of at least 100 substances (chemicals) which, in the case of an accidental release, are known to cause or may reasonably be anticipated to cause death, injury, or serious adverse effects to human health or the environment. The EPA began with the EPCRA EHS list in promulgating this list. The list will be revised from time to time, and EPA may add or delete substances from this list by its own action or by being petitioned to do so.

The RMP Program requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n):

- ✓ Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases;

- ✓ Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and

- ✓ Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g. the fire department) should an accident occur.

The plans must be revised and resubmitted every five years. The Risk Management Program is about reducing chemical risk at the local level. This information helps local fire, police, and emergency response personnel (who must prepare for and respond to chemical accidents) and is useful to citizens in understanding the chemical hazards in communities.

EPA anticipated that making the RMPs available to the public would stimulate communication between industry and the public to improve accident prevention and emergency response practices at the local level. Later, the laws were adjusted, however. **LEPC members are cautioned to understand the restrictions placed upon them about releasing certain RMP facility information.** [See http://www.access.gpo.gov/nara/cfr/waisidx_02/40cfr1400_02.html]

These RMP facilities were allowed to use a special software for conducting off-site consequence analysis since the ALOHA plume modeling tool is limited to six miles from the point of release. Some RMP facilities have potential off-site consequences of many more miles than just six. To download the RMP Comp software, go to:
http://www.epa.gov/osweroe1/content/rmp/rmp_comp.htm

This RMP data will provide new information to an LEPC:

- ✓ Facility hazard assessments, including worst-case release and alternative release scenarios;

- ✓ Facility accident prevention activities, such as the use of special safety equipment, employee safety training programs, and process hazards analyses conducted by the facility;

- ✓ Past facility chemical accident history;

- ✓ Facility emergency response programs and plans.

Information about hazards and risks in a community will allow LEPCs to better work with industry to prevent accidents. The LEPC should make a point of reviewing at least the executive summary of all the risk management plans submitted by facilities within its LEPC planning area. Not only will the LEPC find a short summary of the entire facility plan, but will read about future changes planned to improve safety. The LEPC should review hazard assessments provided by facilities. The vulnerable zones may add significantly to the planning efforts of the LEPC. The LEPC should discuss these directly with the facility.

Community Awareness Projects

EPCRA does not require LEPCs to conduct public awareness programs, but it is desirable that LEPCs carry out such programs. The public needs to be aware of the dangers of hazardous substances and the procedures they need to follow in the event of orders for in-place sheltering or evacuation. Special facilities, such as nursing homes, schools, hospitals, public buildings, senior citizen housing, and others should also be included in emergency planning and awareness programs.

If not already in place, the LEPC needs to develop a program to provide for public education regarding hazardous materials. An important part of this program is the identification and education of administrators of special facilities. Additionally, education of special populations living independently, such as the hearing impaired, the blind, and the homebound is critical. This program could include presentations, audio-visual programs, written notices, pamphlets, and other materials to insure that community residents are aware of actions that may be required in the event of a hazardous materials incident.

The LEPC is encouraged to sponsor speakers for schools, clubs, and other groups, provide written or audio-visual programs, assist local response organizations with their public information programs, and coordinate other activities to take advantage of ongoing special events in the area. Close coordination with Community Emergency Response Teams and with local emergency managers is strongly recommended.

Trade Secrets

When crafting the EPCRA statutes, a balance was struck between the interests of the business community to keep confidential certain chemical processes and special chemical mixtures and the need for responders and emergency planners to have the necessary information to do their jobs. Also, there was the potential need for the public and/or the medical professionals who might need information to effectively diagnose and treat affected members of the public to have access to certain information. It was quite a balancing act. Ironically, claims by facilities using the trade secret exemption are very rare. Most chemical processes at most facilities are quite standardized and widespread around the country.

EPCRA Sections 321-330 set out discrete but important components of the EPCRA program that address policy or program implementation issues.

To protect business interests, EPCRA Section 322 provides a trade secrecy mechanism to allow compliance without divulging business-sensitive information. This mechanism has some limits. EPCRA also gives authority to the community to access information concerning the use and release of hazardous chemicals in their areas (EPCRA Section 324; 40 CFR Section 370.30).

Trade Secret issues are closely coordinated through the Office of State Fire Marshal, Emergency Planning and Response Section, Community Right to Know Unit. Any questions regarding Trade Secrets must be directed to the OSFM Community Right to Know Unit.

CIVIL SUITS / ACTIONS AND OTHER LIABILITY ISSUES

CIVIL ACTIONS

In addition to enforcement actions taken by EPA, the statute also provides for parties to seek relief through the courts. Under Section 326, citizens, states, and local groups have the authority to file civil actions against EPCRA violators.

The actions can take the form of citizen suits, which may be filed by any person on his or her own behalf, or state or local suits filed by any state or local government or by any SERC or LEPC. Civil actions can be filed against individual owners or operators of facilities, the EPA Administrator, a state governor, or a SERC.

The procedures for filing a civil action depend on the violation, the violator, and the party originating the action. Not all persons can file civil actions for all violations. Section 326 lists the proper filing authorities for each type of violation.

CIVIL SUITS

Any person may pursue a civil action against an owner or operator of a facility, the EPA Administrator, a governor, or the SERC. There are specific violations for which each party can be held liable.

A citizen may bring action against an owner or operator of a facility for failure to:

- ✓ Submit a follow-up emergency notice under Section 304(c)
- ✓ Submit an MSDS under Section 311(a)
- ✓ Complete and submit an inventory form under Section 312(a)

A citizen may commence a civil suit against the EPA Administrator for failure to:

- ✓ Publish inventory forms under Section 312(g)
- ✓ Respond to a petition to add or delete a chemical under Section 313(e)(1) within 180 days after receipt of the petition
- ✓ Promulgate trade secret regulations in accordance with Section 322(c)
- ✓ Render a decision in response to a petition under Section 322(d) within nine months after receipt of the petition.

A citizen may also file a civil suit against the EPA Administrator, a governor, or the SERC for failure to make information publicly available in accordance with Section 324(a). Failure to respond to a request for HSIS Survey information under Section 312(e)(3) may also trigger a civil suit against a state governor or the SERC if the information is not provided within 120 days of the receipt of the request.

STATE AND LOCAL GOVERNMENT SUITS

State and local governments have the authority to file suit against owners or operators of facilities for failure to comply with the following sections:

- ✓ Section 302(c) - SERC notification
- ✓ Section 311(a) - Submission of an MSDS or chemical list
- ✓ Section 311(c) - Public availability of inventory reporting information
- ✓ Section 312(a) - Preparation and submission of inventory forms.

A state government may also bring a civil action against the EPA Administrator for failure to provide trade secret information to the state under Section 322(g).

For all violations, no civil action may commence prior to 60 days after the plaintiff has given notice of the alleged violation to the EPA Administrator, the state in which the alleged violation occurred, and the alleged violator [EPCRA Section 326(d)].

OTHER LIABILITY ISSUES

The procedures and penalties associated with violations of reporting requirements and notification failures are specifically outlined in Section 326. The statute does not, however, address possible liability for individual SERC and LEPC members. In general, individual members of the SERC or a LEPC cannot be sued or held liable for a poorly handled emergency situation. Persons who serve on government committees generally have no liability for their actions except for instances of gross negligence. This issue varies from state to state. The best source for more information on specific state liability policies is the Attorney General's office in each respective state.