



How to Better Prepare Your Community for a Chemical Emergency

A Guide for State, Tribal and Local Agencies

The Emergency Planning and Community Right-to-Know Act (EPCRA) was passed by Congress in 1986 in response to concerns raised by the major industrial accident that occurred in 1984 in Bhopal, India. In that accident, which killed and disabled hundreds of thousands, the public was unaware of the hazardous chemicals in use and stored at the facility and they lacked information on what to do when accidents occur. Soon after, a chemical accident at a facility in Institute, West Virginia in 1985 raised concerns in the U.S. about local preparedness for chemical emergencies and the availability of information on hazardous chemicals.

The need for EPCRA continues today. More recent incidents have occurred, such as the 2013 West, Texas fertilizer facility ammonium nitrate explosion that killed 15 people, the 2010 explosion and fire at Tesoro Refinery in Anacortes, Washington, that killed seven employees, and the 2012 Chevron Refinery hydrocarbon fire in Richmond, California, that affected 15,000 people in the surrounding area. These incidents highlight the need for continued improvement in a number of areas related to chemical facility safety including the need for greater awareness of chemical hazards present in communities, better planning, and appropriate response to chemical incidents.

On August 1, 2013, the White House issued Executive Order (EO) 13650 on *Improving Chemical Facility Safety and Security*. The Chemical Facility Safety and Security Working Group, established by Executive Order 13650, released the status report entitled *Actions to Improve Chemical Facility Safety and Security – A Shared Commitment* on June 6, 2014, which includes key considerations identified in the process of implementing the EO. Some of those considerations include:

- Strengthening the state and local infrastructure created by EPCRA for emergency planning and preparedness
 - This infrastructure includes State Emergency Response Commissions (SERCs), Tribal Emergency Response Commissions (TERCs), Local Emergency Planning Committees (LEPCs), and Tribal Emergency Planning Committees (TEPCs)
- Ensuring participation of key stakeholders (i.e., community members, emergency responders and industry) in the planning process
- Engaging chemical facilities in preventing, preparing for, and responding to chemical accidents, and
- Ensuring effective communication and notifications to the community members before, during, and following a chemical accident.

The purpose of EPCRA is to:

- Encourage and support emergency planning efforts at the state, tribal and local levels
- Provide local governments and first responders with information concerning potential chemical hazards present in their planning district
- Prevent, prepare for, and mitigate the effects of a chemical incident, and
- Provide the public with information on chemical risks in their community and information on what to do if a chemical accident occurs.

OVERVIEW OF EPCRA REQUIREMENTS

<u>Emergency Planning</u>	<u>Hazardous Chemical Inventory Reporting</u>	<u>Emergency Release Notification</u>
<p>Section 302, the emergency planning provisions of EPCRA, requires facilities to provide notification of the presence of extremely hazardous substances (EHSs) on their sites. Facilities must also provide a representative who will serve as the facility emergency coordinator to the LEPC or TEPC and participate in local emergency planning activities. The LEPCs and TEPCs use this information to develop or modify local emergency response plans as required under Section 303.</p> <p>Section 303 authorizes LEPCs and TEPCs to request any information that is needed to develop or update their emergency plans from facilities subject to Section 302 requirements.</p>	<p>Sections 311 and 312 of EPCRA contain provisions for hazardous chemical inventory reporting, also known as community right-to-know reporting. Facilities that handle hazardous chemicals, defined under the Occupational Safety and Health Act and its implementing regulations, above set threshold amounts are required to provide information on the chemicals, their quantities, locations, and potential hazards.</p> <p>Section 311 requires facilities to submit a Material Safety Data Sheet, MSDS (or Safety Data Sheet, SDS) for each hazardous chemical, or a list of hazardous chemicals, present at or above the reporting thresholds specified in the implementing regulations. Section 312 requires that facilities submit an inventory of these hazardous chemicals (Tier II form) annually by March 1st. The MSDSs or list of chemicals and Tier II form are submitted to the SERC (or TERC), LEPC (or TEPC), and the local fire department.</p> <p>Information submitted on the Tier II form may also be useful to LEPCs and TEPCs in their planning process since it provides information on other hazardous chemicals as well as EHSs present at the facilities in their community.</p>	<p>Facilities are required to provide immediate notification to the SERCs, TERCs, LEPCs and TEPCs of any releases of EHSs and hazardous substances listed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Soon after a release, facilities are required to provide a written follow-up with additional information regarding the release. The immediate notification and follow-up reports will include: the name and quantity of the chemical released; the media to which the chemical was released; known or anticipated acute or chronic health risks; proper precautions to take (e.g., evacuation or shelter-in-place); actions taken to respond to and contain the release; and advice regarding medical attention necessary for exposed individuals.</p> <p>LEPCs and TEPCs can use this information to improve their local emergency plan to better prepare for a chemical incident. An actual incident can be used to evaluate and measure the effectiveness of the emergency plan. Effectiveness may be determined by how well the response was undertaken and how the emergency situation was communicated to responders and the community.</p>

“What are the functions of the organizations created by EPCRA to protect the community from chemical risks?”

SERCs		TERCs		LEPCs		TEPCs	
State Emergency Response Commissions		Tribal Emergency Response Commissions		Local Emergency Planning Committees		Tribal Emergency Planning Committees	
SERCs are appointed by the governor of each state to establish LEPCs.		TERCs are established by the Chief Executive Officer of the Tribe. TERCs have the same responsibilities as SERCs under EPCRA in the tribal region.		LEPCs are established by the SERC in each state.		TEPCs are established by the TERC in each tribal region. They have the same responsibilities as LEPCs in the tribal region.	
Responsibilities include establishing LEPCs (or) TEPCs; reviewing local emergency plan; supervising LEPC (or) TEPC activities; establishing mechanisms for collecting hazardous chemical inventories and information on releases of chemicals from facilities; and establishing procedures for processing public information requests.				Responsibilities include preparing chemical emergency response plan and reviewing the plan annually or more frequently as necessary; coordinating responses to emergency releases serving as a focal point in the community for providing information and holding discussions about chemical risks in the community; and establishing procedures for processing public information requests.			

Roles and Responsibilities under EPCRA

SERCs and TERCs

SERCs and TERCs are required to establish emergency planning districts, appoint LEPCs and TEPCs, and supervise and coordinate all activities of the LEPCs and TEPCs in their state or tribal region. SERCs and TERCs should ensure that each planning district has an emergency plan and that emergency exercises are conducted at least once a year. SERCs and TERCs must review the plan and make recommendations to improve the plan, as well as ensure that each LEPC or TEPC plan is coordinated with the plans of neighboring emergency planning districts. SERCs and TERCs should assist LEPCs and TEPCs with community meetings to discuss emergency plans and understand the chemical risks.

Designation of Additional Facilities Subject to Emergency Planning

While the emergency planning provisions in EPCRA are limited to EHSs and the facilities that handle them, other chemicals and facilities may also pose danger to the community in an emergency. Section 302 authorizes SERCs and TERCs to designate additional facilities subject to emergency planning notification. SERCs and TERCs could consider naming individual sites or companies, or designate certain classes of facilities as ways to expand the number of facilities included in the planning process after public notice and opportunity for comment. EPA encourages SERCs and TERCs to use this authority so these additional facilities and the chemicals they handle would also be subject to emergency planning. This would require these facilities to participate in the local emergency planning process and provide information on chemical risks at their facility. LEPCs and TEPCs would be able to include these facilities also in their emergency plan.

LEPCs and TEPCs

LEPCs and TEPCs play a key role in meeting the goals of EPCRA. They are required to develop and implement an emergency plan for their community, as well as to ensure that the people in the community are aware of the chemical risks and know what to do if a chemical accident occurs. It is important that the members of the LEPC or TEPC represent all stakeholders in their community. EPCRA states that LEPC or TEPC membership shall include, at a minimum, representatives from these entities:

- Elected state and local officials
- Law enforcement
- Civil defense
- Transportation
- Broadcast and print media
- Hospital
- Fire fighters
- First aid
- Local environmental
- Health
- Community groups
- Facility owners and/or operators

Representatives from each of these organizations play an important role in developing the local emergency plan and protecting the public during chemical emergencies.

For many communities, a successful LEPC or TEPC acts as a forum to support the overall emergency management program within the community. Stakeholders bring their specific expertise and talents into the planning process to ensure all elements of the plan are appropriately addressed. For example, facility owners and operators who know and understand the chemical risks at their facility can assist the LEPC or the TEPC in identifying actions to take in order to prepare for and respond to a chemical accident. Members of the public also have a role to play in assisting the LEPC or the TEPC in understanding the unique needs of the community regarding communication about the chemical risks and emergency response procedures. For example, individuals with special medical needs, such as the elderly, disabled/handicapped, children, and those with transportation challenges. Tailoring outreach to meet the specific considerations of the local community is key to enabling effective participation in the

planning process and an efficient response to ensure safety of the public. LEPCs and TEPCs must appoint a chairperson and establish rules by which the committee shall function. Rules shall include:

- Public notification of committee activities, and
- Public meetings to discuss the emergency plan, public comments, response to such comments by the committee, and distribution of the emergency plan.

The emergency plan should include:

- Facilities that handle EHSs and transportation routes of EHSs, as well as any facilities designated by the SERC or TERC
- Emergency response procedures for facility owners and operators, as well as for local emergency and medical personnel
- Designation of a community and a facility emergency coordinator to implement the plan
- Procedures for notifying the public and the local emergency response team that a release has occurred
- Methods for determining the occurrence of a chemical release
- Determination of the probable area and population affected by potential releases, including considerations of environmental justice, vulnerable residents, fence-line communities, etc.
- Identification of emergency response equipment in the community and at the facilities in the community, and the persons responsible for them (including identification of the response capabilities of regulated facilities)
- Evacuation plans (including evacuation routes and shelter-in-place procedures)
- Training program for emergency responders (including schedules)
- Methods and schedules for exercising emergency response plan.

An incident in one community may affect other communities. LEPCs and TEPCs should consult with other LEPCs and TEPCs near their emergency planning districts to coordinate planning efforts and potential mutual response support during an incident. Additionally, LEPCs and TEPCs should consider the unique challenges of industrial parks (i.e., clustering of facilities) and their potential for impacts to adjacent facilities and fence-line communities.

LEPCs and TEPCs are required to review the emergency plan at least once a year or more frequently when changes occur in the community. To accomplish this, LEPCs and TEPCs should meet regularly to review and exercise the plan and update it as necessary. Conducting emergency plan exercises are important to ensure that the plan includes all necessary elements and any gaps or areas that need improvement are identified. Emergency plan exercises would benefit emergency responders to be better prepared for an incident.

Developing an Emergency Response Plan

With the information obtained from facilities under Section 302, LEPCs and TEPCs are required to develop the local emergency response plan for their community. There are approximately 90,000 facilities covered by Section 302. EPCRA authorizes LEPCs and TEPCs to obtain any information from these facilities necessary to develop or update the emergency response plan. Necessary information includes identification of chemicals of concern, identification of serious events that can lead to releases, amounts of toxic material or energy that could be released, predicted consequences of the release and associated damages, and prevention measures in place at the facility.

Emergency Planning for Hazardous Chemicals reported under the Community Right-to-Know sections of EPCRA

With approximately 400,000 facilities reporting under Section 311 and 312, the chemical information provided by these facilities offers a wealth of additional information that can be useful to first responders, LEPCs, and TEPCs in the local planning process. LEPCs and TEPCs should use information received under Sections 311, 312, and 302 to develop, implement, and update the emergency response plan. It is critically important that first responder organizations make full use of the chemical hazard information for appropriate training and to minimize the risks to fire-fighters, medics and hazmat teams when responding to an emergency.

The Tier II form under Section 312 requires specific information on facilities that handle hazardous chemicals. Beyond the requirements for specific information about the facility (e.g., the address of the location where hazardous chemicals are stored, latitude and longitude, maximum number of occupants, and whether the facility is manned or unmanned), the form now requires facilities to provide contact information for the facility emergency coordinator. This one-time notification required under Section 302 was originally provided by the facilities that existed when the law was passed in 1986. Requirements to update this information may have been overlooked by some facilities; they are now required to report this information annually on the Tier II form. In addition to the emergency contact information, facilities are required to provide contact information for the person responsible for the content of the Tier II form. The additional requirements on the Tier II form were published in the Federal Register notice on July 12, 2012 ([77 FR 41314](#)), effective January 1, 2014.

Regarding chemical information, the Tier II form requires facilities to report specific information on hazardous chemicals, such as the amounts (in ranges), locations, and the potential hazards related to those chemicals. This information can supplement the information provided by facilities under Section 302 for local emergency planning. It can assist LEPCs and TEPCs in updating their emergency plan. Additionally, some facilities should have an emergency plan in place for potential chemical accidents at their facility. One important issue to address in the local emergency plan is to ensure that either the facility itself or the public emergency responders have the capabilities to respond to a chemical release at a facility.

LEPCs and TEPCs should use all information received under EPCRA and from chemical facilities to assist them in developing an emergency response plan that addresses chemical risks to the community.

Emergency Planning for Substances in Transportation

Although EPCRA provides an exemption for facilities from reporting substances in transportation for emergency planning purposes, chemicals in transportation or facilities that are involved in chemical transportation operations should also be included in the local emergency plan. Section 303 requires LEPCs and TEPCs to identify transportation routes of EHSs as part of the planning process. LEPCs and TEPCs should consider including substances other than EHSs in transportation. Many transportation-related incidents involved other substances which have adversely affected the community and require response actions to be taken by local responders.

Some recent incidents involving crude oil transported by rail have significantly impacted communities. These incidents compelled the federal government to implement more protective regulations. The US Department of Transportation issued an Emergency Order ([USDOT Emergency Order on Transport of Bakken Crude Oil](#)) requiring railroads that operate trains moving large quantities to notify the SERCs and TERCs about the operation of these trains through their states or tribes. As of June 2014, SERCs began to receive such notifications under this EO. TERCS may reach out to SERCs to obtain information on trains operating through the tribal lands. SERCs and TERCs should be sharing the information with local emergency planners and responders so that LEPCs and TEPCs can include these operations in the local emergency plan. On May 28, 2015 the DOT announced that the Emergency Order will remain in full force and effect until further notice while the DOT considers options for codifying the Order disclosure requirement. The DOT notice is available: <http://www.phmsa.dot.gov/hazmat/phmsa-notice-regarding-emergency-response-notifications-for-shipments-of-petroleum-crude-oil-by-rail>.

LEPCs and TEPCs should use their authority provided in Section 303 to request information from facilities for substances that may be in transportation through their community. This will allow emergency responders to be prepared for any chemical-related transportation incident.

Tools for Planning and Response

Facilities subject to EPCRA requirements submit their reports to the SERCs, TERCs, LEPCs, TEPCs and their local fire department. Reports include the amount (in ranges), locations and potential hazards of chemicals present on site. To assist state, tribal, and local agencies in collecting, managing, and using this information, EPA and the National Oceanic and Atmospheric Administration (NOAA) created the [Computer-Aided Management of Emergency Operations \(CAMEO\)](#). CAMEO is a system of software applications used to plan for and respond to chemical emergencies. CAMEO assists chemical emergency planners and responders to access, store, and evaluate information critical for developing emergency plans.

There are four integrated programs within CAMEO:

- Facility and chemical data management
- Chemical properties and hazards
- Air dispersion modeling
- Mapping application

Fire Departments Role in Emergency Planning

Representatives of the fire service play a key role in implementing EPCRA. Since fire departments are often the first to respond to an emergency, they should be active in the emergency planning process for their community. EPCRA Sections 311 and 312 require facilities to submit MSDSs (or SDSs) or a list of hazardous chemicals along with the Tier II form to their local fire department and to the SERC (or TERC) and LEPC (or TEPC). Having access to this information enables fire departments that respond to chemical emergencies to know which chemicals, as well as their quantities and locations they can expect to find at the scene. Fire departments should inspect facilities that handle hazardous chemicals using the authority provided under Section 312. As part of an on-site inspection, facilities are required to provide location information of all hazardous chemicals present at the facility. Fire departments are encouraged to use this authority to understand the chemical risks at each facility in order to appropriately respond to those risks. As noted above, it is critically important that first responder organizations make full use of the chemical hazard information for appropriate training and to minimize the risks to fire-fighters, medics and hazmat teams when responding to an emergency.

It is also important to keep an open dialogue with facility personnel to ensure facility participation in the development and implementation of the local emergency plan. Facilities subject to emergency planning under Section 302 are required to provide the name of a facility representative to participate in the planning process. Facilities subject to Section 312 Tier II reporting are required to appoint an emergency contact who can be reached in the event of an incident to assist the fire fighters. These facility representatives can help the fire department in planning and fostering communication before and during response to an incident. Facilities in your community may offer training, technical assistance and resources for responding to chemical emergencies.

Collaboration and Outreach with Stakeholders

Working with Chemical Facilities on planning and prevention

There may be facilities in the community that are not aware of EPCRA and its reporting requirements. SERCs, TERCs, LEPCs and TEPCs should reach out to facilities in their community. Outreach could include compliance workshops and electronic media. Many SERCs and LEPCs have published EPCRA outreach materials to educate facilities and the public. EPA encourages collaboration through outreach to facilities to illustrate the importance of public safety and the need to comply with EPCRA, as well as steps that can be taken to prevent chemical accidents. These steps could include reducing inventories of chemicals, reducing shipments or adjusting transportation routes away

from vulnerable populations, and working with adjacent chemical facilities to reduce the potential for “domino” effects from a chemical accident.

With regard to enforcement efforts, if facilities fail to comply, then SERCs, TERCs, LEPCs and TEPCs may use the authority provided in EPCRA Section 326 to file civil enforcement action against facilities. SERCs, TERCs, LEPCs and TEPCs may also refer facilities to EPA to take enforcement action, if necessary.

Engaging the Community

LEPCs and TEPCs serve as a community focal point for information and discussion about hazardous substances, emergency planning, and health and environmental risks. Engaging and educating the community is an important part of meeting the goals of EPCRA, especially for those members of the community identified in the local response plan that could be directly affected by the impacts of a chemical accident. Section 301 contains provisions for LEPCs and TEPCs to notify the public of its activities and hold public meetings to discuss the emergency plan with the community, educate the public about chemical risks, and share information on what is to be done during an emergency (i.e., evacuation or shelter-in-place). LEPCs and TEPCs are responsible for ensuring that procedures are in place for notifying the public when a chemical accident occurs (via reverse 911 or other system) and ensuring that the public understands what to do when they receive that information. To facilitate this, LEPCs and TEPCs should encourage the public and community groups to become LEPC or TEPC members, participate in the planning process, and promote participation in emergency exercises. Additionally, LEPCs and TEPCs should consider focused outreach (i.e., addressing language and cultural issues) to vulnerable, sensitive, and low income members of the community to assist them in effectively participating in the local planning meetings, understanding risk issues, and what to do when an accident occurs.

ENGAGING FACILITIES

LEPCs / TEPCs should educate facilities that are unaware of EPCRA reporting requirements and provide assistance to facilities to comply with EPCRA reporting requirements. In addition, LEPCs/TEPCs should work with facilities to identify actions which could be taken to reduce chemical risks to the community.

Ways in which LEPCs / TEPCs can reach out to facilities is by sending letters, as well as brochures and outreach materials to facilities in your community that cover the requirements of EPCRA - including penalties for non-compliance. Outreach may also include holding public meetings or workshops for local facilities to explain the reporting process and the information which is needed for reporting, as well as participating in the development of the local emergency plan.

In addition, LEPCs / TEPCs should encourage facility owners and operators to become members of the LEPC / TEPC and be a part of the planning process. Facilities are prime resources to assist LEPCs / TEPCs in explaining potential chemical risks to the community.

Another approach to gather needed facility and chemical information is for LEPCs / TEPCs to use questionnaires requesting facilities to provide information on available resources, emergency response training held at the facilities, emergency response equipment, and so forth. This information is invaluable during the LEPC / TEPC emergency planning process.

Public Access to Information under EPCRA

SERCs, TERCs, LEPCs and TEPCs receive reports and notifications under EPCRA from facilities covered under the requirements. EPCRA requires that this information be made available to the public. Fence-line Communities located close to chemical facilities will find this information useful to help them understand chemical risks and prepare for chemical accidents. Information that would be most helpful includes:

- The local response plan that identifies the potential chemical risks to their community and response actions to be taken;
- How the public will receive information on these risks, as well as how they will receive notification when a chemical accident occurs; and
- What they need to do to prepare for a chemical accident and how to protect themselves once they receive the notification that a chemical accident has occurred.

SERCs, TERCs, LEPCs and TEPCs are required to establish procedures for processing and receiving requests from the public as well as providing that information to community members. Procedures may include setting-up a reading room, establishing hours of operation, determining if copies of the reports can be made, and determining if service fees will be charged.

For More Information

EPCRA: <http://www2.epa.gov/epcra>

NRT Hazardous Materials Emergency Planning Guidance:
[http://www.nrt.org/production/nrt/nrtweb.nsf/AllAttachmentsByTitle/SA-27NRT1Update/\\$File/NRT-1%20update.pdf?OpenElement](http://www.nrt.org/production/nrt/nrtweb.nsf/AllAttachmentsByTitle/SA-27NRT1Update/$File/NRT-1%20update.pdf?OpenElement)

Actions to Improve Chemical Facility Safety and Security – A Shared Commitment:
<https://www.osha.gov/chemicalexecutiveorder/index.html>

EPCRA Requirements:
http://www2.epa.gov/sites/production/files/2013-08/documents/epcra_fact_sheet.pdf

CAMEO: <http://www2.epa.gov/cameo>

EPA EPCRA Regional Contacts: <http://www2.epa.gov/epcra/epa-regional-epcramp-contacts>

EPA Superfund, TRI, EPCRA, RMP & Oil Information Center:
<http://www2.epa.gov/epcra/superfund-tri-epcra-rmp-oil-information-center>
800-424-9346 or 703-412-9810