Chapter 16. Effective Planning for Chemical Emergencies

This chapter provides some suggestions on how to have an effective plan for chemical emergencies. As mentioned in other parts of this document, your state (or tribe) may have specific requirements to develop a plan for other hazards. You may include your chemical emergency plan as part of your all-hazards plan or have a stand-alone plan for chemical emergencies.

For the LEPC and TEPC emergency plan to be effective, a two-phased approach to planning should be considered:

- The LEPC and TEPC should coordinate its planning with the existing county or area EOP or emergency action guideline (EOP/EAG), if one exists. Of the required elements, those common to all sites should be included in the EOP.
- The LEPC and TEPC should develop off-site procedures for each facility to address the required elements that are unique to each site and work with the local emergency management coordinator to make sure all the off-site community response plans developed by the LEPC and TEPC are incorporated into the local jurisdiction's EOP.
    - For example: A community has three RMP facilities. Each one of them has developed an emergency response plan and is required to coordinate with local officials, including the LEPC (or TEPC). RMP Facility # 1 has evacuation procedures for their own employees directing them to go to certain areas outside the facility to gather for personnel accounting purpose. RMP Facility # 2 has evacuation procedures for their own employees directing all employees to go home and call back into a central number for personnel accounting. RMP Facility # 3 has evacuation procedures for their own employees directing all employees to stay on site but to go to a safe area, such as a well-protected building.
    - The LEPC and TEPC—working with the local emergency management agency—and fire departments will probably need to address each of these facilities slightly differently during coordination in advance of a response.
    - Fire department personnel will also need to consider separate procedures for each facility for search and rescue activities, as well as other response activities based on the facilities each having different evacuation procedures.

16.1 LEPC and TEPC Tasks for Effective Planning

1. **Develop a good working relationship with the local fire departments.**

   The local fire departments, who are part of the LEPC and TEPC) organization, may have similar planning responsibilities under the state right-to-know programs or state HAZWOPER regulations. They may already have collected significant information about the hazards in the community. Also, fire departments are the first responders to arrive at a

hazardous chemical incident and therefore must be involved in emergency response planning.

2. **Develop a good working relationship with local emergency management coordinators.**

   Each county, and many larger cities and townships, have appointed local emergency coordinators. A list of these coordinators may be available through the state emergency management programs. The local coordinator is responsible for the development of the local EOP/EAG, the document the LEPC (or TEPC) needs to build on in accomplishing its planning responsibilities. As with the fire departments, the local coordinator has already compiled significant information about the hazards in the community and its response procedures.

   Tribes that do not have a TERC/TEPC established may join neighboring LEPCs to learn about their organization and maintain good relationships. Tribes may request assistance from neighboring LEPCs to develop emergency response plans or to respond to emergency situations. Tribes may also reach out to EPA Regional coordinators for assistance with developing an emergency response plan or to be connected with neighboring LEPCs.

3. **Develop a good working relationship with the facility coordinators.**

   Under EPCRA Section 302, each facility for which planning is necessary is required to name a facility coordinator and participate in the LEPC (or TEPC) planning process (*see Chapter 2*). They are also required to inform the LEPC (or TEPC) of any changes occurring at the facility and provide information in response to the LEPC (or TEPC) requests as necessary for developing and implementing the plan. As mentioned in Chapter 3, EPCRA Section 303 allows LEPCs and TEPCs to request any information to develop or modify the plan from facilities that are subject to emergency planning notification requirements as provided in EPCRA Section 302 (i.e. Facilities that have EHSs on-site at or above their TPQs).

4. **Research community response capabilities.**

   The LEPC and TEPC should become familiar with existing resources and expertise. This should entail gathering information from the emergency coordinator, health department, fire departments, industrial groups, hospitals, and EMS organizations and response teams. The LEPC and TEPC needs to have a good background on local hazardous chemical incident response capabilities before the development of procedures can take place. In addition, the LEPC and TEPC should be informed on the response procedures of state and federal agencies.

5. **Review and update, if necessary, the community resource manual.**

   One of the elements listed in the law requires the LEPC and TEPC to identify resources that can be used during a hazardous chemical response. The local emergency coordinator is responsible for maintaining a comprehensive list of resources in the community. The LEPC and TEPC should review this list and make suggestions for revision, as necessary, based on the information it acquired in step 4 (above). EPCRA Section 303(b) requires the LEPC and TEPC to evaluate the need for additional resources. Certain grants are available from federal and state programs. The resource list should also contain resources

that are not necessarily available in the community but may be needed during a response. Once the LEPC and TEPC has reviewed the list, it must decide the best place to list resources. It can simply reference the list itself if it feels the list adequately meets the responders' needs. Alternatively, the LEPC and TEPC may choose to insert a specific list in each site-specific procedure it develops.

6. **Review and suggest revisions, if necessary, to the Emergency Operations Plan/Emergency Action Guideline (EOP/EAG).**

   The local emergency coordinator should have developed a hazardous incident response section within the community's EOP/EAG. The LEPC and TEPC should review and suggest revisions as necessary based on the information it has collected in step 4 (above) and develop the site-specific procedures based on the general policy found in the EOP/EAG. It is the local emergency management coordinator's responsibility to keep the EOP/EAG up to date.

7. **Obtain a copy of the Section 302 list.**

   Section 302 requires that facilities with any EHSs above a certain threshold amount make notification to the SERC or TERC and LEPC or TEPC within 60 days of acquiring the substance on-site. All facilities, farms, private industry, and sites owned by public agencies are subject to this requirement. It is these facilities for which the LEPC and TEPC must develop an emergency response plan applicable to its community as required under EPCRA Section 303. As discussed in Chapter 5 of this document, these facilities also report EHSs annually on their Tier II forms and indicate if the facility is subject to emergency planning.

8. **Compile existing information about facilities.**

   The first thing the LEPC and TEPC should do when beginning to plan is acquire information from fire departments. Each department may have already performed a survey of each site in the community where chemicals are located. The LEPC and TEPC should look at these surveys and sort out the Section 302 sites from them. They should use this information for preliminary planning. The LEPC and TEPC will need additional information, and it can develop its own survey form to send to facilities in the community, as described in step 9 (below). The Section 302 sites are priority planning sites for which LEPC and TEPC planning is required under the federal statute for chemical emergencies.

9. **Develop facility questionnaires.**

   Develop a form asking for the additional information needed. You may develop a form for each specific group of facilities. As mentioned above, the LEPC and TEPC has the authority under EPCRA Section 303 to request any information it feels it needs in accomplishing its duties. (*See Chapter 3*, EPCRA Section 303(d).) An example of a facility questionnaire is provided in Appendix H of this document.

   The list of facilities that have EHSs can also be identified from the Tier II forms. As discussed in Chapter 5 of this document, facilities are required to submit Tier II forms to their SERC or TERC, LEPC or TEPC and the local fire department.

10. **Conduct outreach with facilities in your community.**

Use the fire department surveys and other community information to identify other facilities that may be subject to the reporting requirements. The LEPC and TEPC can make direct contact with these facilities. A facility may be unaware of its reporting requirements under Section 302 or the Section 312 annual reporting requirement. EPCRA Section 312 provisions are discussed in Chapter 5.

11. Perform a vulnerability analysis for each facility.

Using the survey and other information, determine the worst-case incident scenario that could occur at each of these facilities. Alternatively, using a worst-case scenario, the LEPC and TEPC may want to modify its results based on the "most probable" incident. You may also review RMPs submitted by facilities in your planning district under Section 112(r) of the CAA, also known as the “Risk Management Program (RMP),” to identify worse-case scenarios. The reporting criteria for EPCRA Section 302 and RMP are slightly different; however, you may use the information from the RMP to identify facilities that may pose significant hazards to the community if a release occurs. A summary of the RMP regulations is provided in Chapter 11.

12. Rank the facilities.

Once a vulnerability analysis has been completed for each facility, the LEPC and TEPC should study the results and rank the facilities, starting with the one that poses the greatest risk to public health and safety. One facility should be identified as the first facility for which an off-site site-specific procedure will be developed. Ideally, this should be the facility that poses the greatest threat.

13. Collaborate with the relevant parties.

At a minimum, the fire chief of the jurisdiction in which the site is located, the facility emergency coordinator, and the local emergency management coordinator should be involved with the LEPC or TEPC in developing the site-specific procedure. These are the primary response entities. They must have input into developing the plan since they will be the ones who must use it. It is also recommended to hold a briefing with elected local government officials (or the chief executive officer of the tribe) on the importance of planning for chemical emergencies and to gain their support.

14. Divide up the work.

The LEPC and TEPC can write the emergency plan, appendices, and standard operating procedures (SOPs) in a number of ways. It can divide into subcommittees and assign a portion of the project to each subcommittee, or it can assign one person to write it with review and revision privileges retained by the LEPC or TEPC. In any case, the intent of the law is to have all parties who may be involved in the response participate in the writing of the plan.

15. Coordinate with other jurisdictions.

The law requires procedures for coordinating with other jurisdictions when the vulnerability zone overlaps jurisdictional boundaries. The LEPC (or TEPC) may need to hold a joint meeting with neighboring LEPCs (or TEPCs) to work out issues of direction and control, protective action orders, etc.

16. **Exercise the plan.**

    It is recommended that the LEPC and TEPC) hold an exercise after it has developed a draft of the procedures or plan. Often problems with a plan do not become apparent until its use is attempted. An exercise tests the plan and should be coordinated with the local emergency manager. The plan should be part of an annual review and exercise. Every citizen in the community, including low-income residents and/or people of color should be invited to observe or participate in the local emergency response plan exercises. You may need to explain the emergency action plan and how the community will be notified of emergencies in multiple languages.

17. **Get the plan signed.**

    Follow your state (or tribal) procedures on having the plan reviewed and approved. Normally, the highest official of the county/parish or municipality will be the signatory to the plan. However, several other persons also need to sign off on the plan (e.g., fire chief, local fire department representative, other emergency responders such as police or hospital staff). This signifies these persons have participated in the plan's development and, more importantly, they agree with the procedures contained within it.

18. **Incorporate comments.**

    The LEPC and TEPC should consider the comments as helpful tools for improving its plan. It can incorporate changes to the plan. As provided in EPCRA Section 303(e) (*see legislative text provided in Chapter 3*), the SERC or TERC is required to review the plan and make recommendations to improve the plan and coordinate with neighboring LEPC's or TEPC's plans.

19. **Annually review and update the plan.**

    Section 303(a) of EPCRA requires the LEPC and TEPC to review its plans annually, or more frequently if changes occur. It is recommended, at a minimum, the LEPC and TEPC annually review the emergency plan. This should be done with the emergency management coordinator, fire chief, and facility emergency coordinator. Suggested changes can then be included in the EOP/EAG and/or the site-specific procedures.

20. **Give public notice and hold a meeting.**

    The LEPC and TEPC must publish a notice stating the plan is available for review. It must also hold a meeting to discuss the emergency plan with the community. You should request assistance from facilities to explain the risks to the community. The LEPC and TEPC should incorporate comments, if any, from these meetings into the plan.

16.2 Required Elements of a Chemical Emergency Plan Provided in EPCRA Section 303

The following is a list of nine elements required under EPCRA Section 303(c) for chemical emergencies. Contact your state (or tribe) for additional requirements. EPCRA also requires LEPCs and TEPCs to submit the plan to your SERC or TERC to review the plan and coordinate the plan with neighboring LEPCs or TEPCs. If any LEPC or TEPC has limited resources or technical expertise, they may request to join the neighboring LEPC or TEPC.

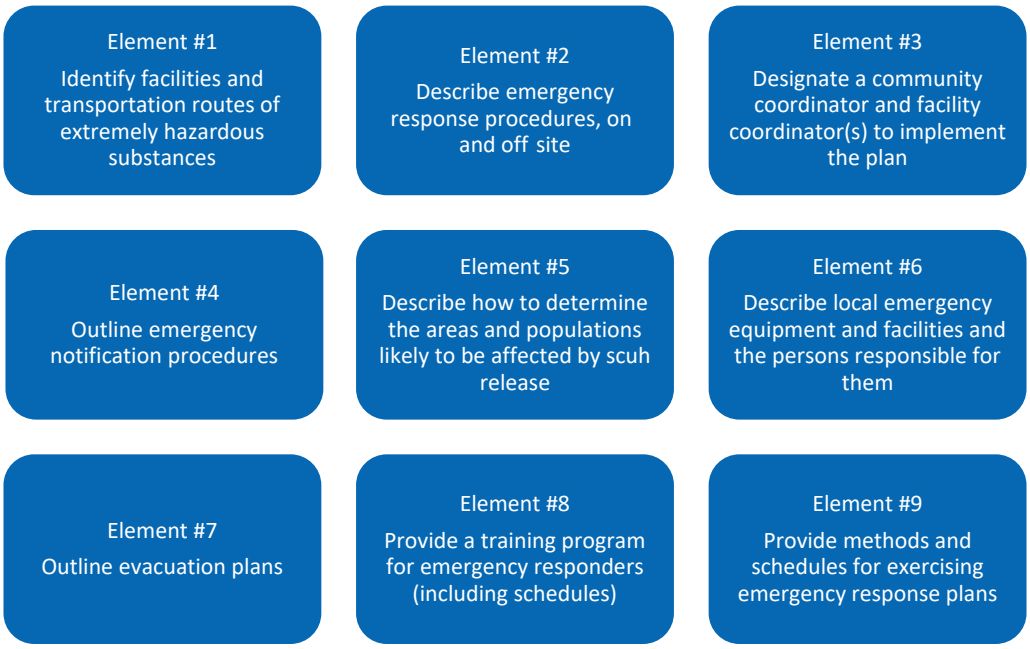

Figure 35. Elements of an emergency response plan (Section 303).

16.2.1 Section 303(c)(1)

(1) Identification of facilities subject to the requirements of this subchapter that are within the emergency planning district, identification of routes likely to be used for the transportation of substances on the list of extremely hazardous substances referred to in section 302(a) of this title, and identification of additional facilities contributing or subjected to additional risk due to their proximity to facilities subject to the requirements of this subchapter, such as hospitals or natural gas facilities.

This requirement is described below in greater detail.

Identification of Facilities That Have EHSs Within the Emergency Planning District

LEPCs and TEPCs should identify facilities that have EHSs from the notification received under EPCRA Sections 302(c) and 312. These facilities should also include those that conduct subsurface operations (mining), farms, federal facilities and any other facilities that may handle EHSs above their TPQs. See Chapter 5 for details on information reported under EPCRA Section 312.

Using the authority provided in EPCRA Section 303(d)(3), LEPCs and TEPCs may request any information from facilities subject to EPCRA Section 302, such as amounts and locations of all EHSs and other hazardous chemicals present on site, and potential hazards. Some facilities may have an emergency response plan prepared under other federal or state environmental

regulations. LEPCs and TEPCs may request these facilities share their plan or help coordinate the plan with the community emergency response plan.

The plan should also include vulnerable institutions or organizations (e.g., schools, daycare centers, churches, hospitals and nursing homes) and sensitive natural resources that may be affected by accidental chemical releases from facilities that handle EHSs or other hazardous chemicals. LEPCs and TEPCs may use Computer-Aided Management of Emergency Operations (CAMEO) and other tools discussed in Chapter 177 to assist in identifying affected populations in the community.

Identification of Additional Facilities Contributing or Subjected to Additional Risk Due to Their Proximity to Facilities Subject to the Requirements of Emergency Planning (e.g., Hospitals or Natural Gas Facilities)

Under the authority provided in EPCRA Section 302(b)(2), the governor of a state, SERC, or TERC may designate additional facilities that should be included in the local emergency plan due to the chemicals that are handled at these facilities or their proximity to vulnerable institutions (schools, assisted living, etc.).

In addition to the facilities with EHSs, LEPCs and TEPCs should also consider facilities that have other hazardous chemicals that may pose risks to the public. For instance, facilities subject to the Risk Management Program under CAA Section 112(r) are required to submit an RMP to EPA.

Facilities that are subject to EPCRA Section 302, Emergency Planning Notification, may also be subject to CAA Section 112(r). The RMP filed by these facilities may have information useful to LEPCs and TEPCs. LEPCs and TEPCs may request RMPs from EPA for facilities in their emergency planning district. Facilities that must submit under CAA Section 112(r) are required to coordinate their emergency response plan with the local response organization.

Under the Chemical Facility Anti-Terrorism Standards (CFATS), covered facilities are encouraged or required to coordinate with local responders. (*See Chapter 255 for information on CFATS and Emergency Planning for LEPCs and TEPCs.*)

Facilities that are subject to EPCRA Section 302 may also be subject to Section 313 of EPCRA or the TRI. A brief overview of the TRI program is provided in Chapter 2511. Facilities that submit reports under Section 313 identify the toxic chemical released, the amount released, the amount of the chemical on site, and where the release occurred. These reports are submitted to the state and EPA. LEPCs and TEPCs may request TRI reports from your state (or tribe) or EPA.

Although Section 303 focuses mainly on planning for EHSs, these are not the only chemicals that may pose serious risks to the community. Hazardous chemical information provided on Tier II forms, discussed in Chapter 5, is useful in identifying these other chemicals and facilities that may need to be included in the local emergency plan.

Identification of Potential Routes of Transportation of Extremely Hazardous Substances

EPCRA Section 304, discussed in Chapter 4, requires facilities to provide notification of releases that occur during transportation, as well as at fixed facilities. Therefore, it is important to include transportation routes for EHSs in the local emergency plan. Other hazardous chemicals may also be transported through the community via highways, local roads, pipelines, or railroads. LEPCs and TEPCs may also want to consider these chemicals and routes in their plan and then assess the potential impacts. Some states now collect the routes and transporter information on the hazardous chemical inventory report ("Tier II"). (*See Chapter 5 for discussion on Tier II reporting requirements.*). In addition, see discussion below on Information Sharing on High Hazard Flammable Trains to SERCs and TERCs required under DOT regulations.

Identification of Potential Routes of Transportation of Other Hazardous Chemicals

In addition to EHSs, there may be other hazardous chemicals that pass through each planning district via railroads or highways. LEPCs and TEPCs should also consider these chemicals and their transportation routes in the emergency response plan. Information regarding hazardous chemicals transported via railroads can be obtained from your SERC or TERC as required by Department of Transportation (DOT) regulations, which are discussed below. An LEPC/TEPC can assess the transportation routes and railroads. The LEPC/TEPC can also work with its state truck inspection service's agency to get information. DOT's Federal Railroad Administration (FRA) has information about hazardous materials on the rail lines (see below).

DOT Regulations (49 CFR 174.312): Information Sharing on High Hazard Flammable Trains (HHFTs) to SERCs and TERCs

The Pipeline and Hazardous Materials Safety Administration (PHMSA) of the DOT issued a final rule on February 28, 2019 (84 FR 6910) https://www.govinfo.gov/content/pkg/FR-2019-02-28/html/2019-02491.htm, requiring railroads to provide the SERC and the TERC or other state-delegated agency with certain information regarding HHFTs passing through the state or tribal region. The information must include the following:

- A reasonable estimate of the number of HHFTs that the railroad expects to operate each week through each county or tribal jurisdiction.
- The routes over which the HHFTs will operate.
- A description of the hazardous materials being transported, and all applicable emergency response information identified in the DOT regulations.
- An HHFT point of contact at the railroad (including name or email address, title, phone number and address) who has knowledge of the railroad's transportation of affected trains and who is responsible for serving as the point of contact for the SERC, TERC, or other state or tribal agency responsible for receiving the information.
- If a route is identified for the HHFTs and if they are subject to the comprehensive spill plan requirements (49 CFR Part 130, Subpart C), then certain information such as a description of the response zones (including counties and states) is required.

The railroads must also provide free emergency response training to the SERC, TERC, LEPC, TEPC, and other local response organizations. https://www.transportation.gov/briefing-room/emergency-order.

See 49 CFR Parts 130[12] and 174[13] for details on requirements for railroads carrying HHFTs.

(2) 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.

The MSDS/SDS of a chemical would include response actions in case of an emergency. The LEPCs, TEPCs and facilities need to review Sections 4, 5, and 6 of the MSDS (or SDS). *See below for a description of each of these sections.*

- **Section 4: First-Aid Measures.** This section describes the initial care that should be given by untrained responders to an individual who has been exposed to the chemical. The required information consists of:
  - Necessary first-aid instructions by relevant routes of exposure (inhalation, skin and eye contact, and ingestion).
  - Description of the most important symptoms or effects and any symptoms that are acute or delayed.
  - Recommendations for immediate medical care and special treatment needed, when necessary.
- **Section 5: Firefighting Measures.** This section provides recommendations for fighting a fire caused by the chemical. The required information consists of:
  - Recommendations of suitable extinguishing equipment, and information about extinguishing equipment that is not appropriate for a particular situation.
  - Advice on specific hazards that develop from the chemical during the fire, such as any hazardous combustion products created when the chemical burns.
  - Recommendations on special protective equipment or precautions for firefighters.
- **Section 6: Accidental Release Measures.** This section provides recommendations on the appropriate response to spills, leaks, or releases, including containment and cleanup practices to prevent or minimize exposure to people, properties, or the environment. It may also include recommendations distinguishing between responses for large and small spills where the spill volume has a significant impact on the hazard. The required information may consist of recommendations for:

[12] Title 49 Subtitle B Chapter 1 Subchapter B Part 130: Oil spill Prevention and Response Plans https://www.ecfr.gov/cgi-bin/text-idx?SID=b9dcaf30ea5babe54205aaa16baaeb76&mc=true&node=pt49.2.130&rgn=div5.

[13] Title 49 Subtitle B Chapter I Subchapter C Part 174: Carriage by Rail. https://www.ecfr.gov/cgi-bin/text-idx?SID=b9dcaf30ea5babe54205aaa16baaeb76&mc=true&node=pt49.2.174&rgn=div5.

- Use of personal precautions (such as removal of ignition sources or providing sufficient ventilation) and protective equipment to prevent the contamination of skin, eyes and clothing.
- Emergency procedures, including instructions for evacuations, consulting experts when needed and appropriate protective clothing.
- Methods and materials used for containment (e.g., covering the drains and capping procedures).
- Cleanup procedures (e.g., appropriate techniques for neutralization, decontamination, cleaning or vacuuming; adsorbent materials; and/or equipment required for containment/clean up).

The emergency plan should include the name and contact information of the LEPC or TEPC community emergency coordinator for the facility's emergency coordinator to notify in the event of an emergency. This individual must then notify local emergency responders and inform local hospitals to prepare the staff, if necessary. The plan should also include procedures for the community emergency coordinator to notify the public to take proper precautions.

Most LEPCs/TEPCs have designated the 9-1-1 system to take the emergency call and pass the information to the emergency response community, as needed, based on the information received.

Procedures for Emergency Response, On Site and Off Site

Some large facilities may be able to respond to their own chemical emergencies, assist local emergency responders or provide emergency response equipment. The emergency plan should include this information.

Neighboring emergency planning districts may also be able to assist in emergency response. EPA encourages LEPCs and TEPCs to meet with other emergency planning districts and attend meetings to discuss coordination across jurisdictions.

(3) Designation of a community emergency coordinator and facility emergency coordinators, who shall make determinations necessary to implement the plan.

The emergency plan should include the contact information for each person in the planning district who would be the facility point of contact for emergency responders and the public during an emergency. The contact list should be updated periodically. This information should be provided annually in the Hazardous Chemical Inventory Form, also known as "Tier II." Details on the Tier II reporting requirements are covered in Chapter 5.

Under EPCRA Section 303(d)(1), facilities in your planning district that are subject to emergency planning notification in EPCRA Section 302 are required to provide the name of the facility emergency coordinator who should participate in the emergency planning process. LEPCs and TEPCs are encouraged to reach out to these individuals, as they have the expertise on

potential hazards of the chemicals stored at their facilities. These individuals may also assist in conducting exercises and explaining potential risks to the community.

An LEPC or TEPC should designate a community emergency coordinator. The facility owners and operators are required to notify this contact when there is a release of EHSs or CERCLA hazardous substances at the facility, as required by EPCRA Section 304, Emergency Release Notification (Section 304 requirements are explained in detail in Chapter 4). The community emergency coordinator should be trained to acquire as much information as possible from the person reporting the release to facilitate decisions on public notification and evacuation.

More than one individual should be named to ensure proper notification. It may be helpful to provide these individuals' contact information to each facility in the emergency planning district, whether or not the facilities have EHSs on site.

Most LEPCs have designated "9-1-1" to receive the initial emergency notification of a release.

Note: Under EPCRA Section 304, facilities are required to provide release notification of CERCLA HSs and EPCRA EHSs if certain criteria are met for release reporting. Therefore, LEPCs and TEPCs are encouraged to provide proper contact information of the community emergency coordinator or other established system (e.g., 9-1-1 or dispatch/call center) to the facilities in their planning district.

(4) Procedures providing reliable, effective, and timely notification by the facility emergency coordinators and the community emergency coordinator to persons designated in the emergency plan, and to the public, that a release has occurred (consistent with the emergency notification requirements of section 11004 of this title).

LEPCs and TEPCs should develop procedures so that facilities know to whom to report a chemical emergency (e.g., community emergency coordinator, local operator/9-1-1, or fire department personnel). These people should be trained to take accurate information from the caller (name of the substance released, date and time of release, quantity of the chemical, location(s) of the facility or transportation route(s), any injuries or evacuations, etc.).

The emergency plan should describe procedures for how the community emergency coordinator will oversee public notification that a release has occurred and methods of providing instructions to shelter in place or evacuate (e.g., broadcasting on radio or TV, use of reverse 9-1-1, and/or other mechanisms appropriate and most useful for the community). The plan should also include alerting the local fire department, traffic police for evacuation procedures, and local hospitals to prepare for treating any exposed individuals.

LEPCs and TEPCs should ensure that whatever system is used for notifying the public, it will reach all geographical areas of the community, including individuals with special medical needs (such as the elderly, disabled/handicapped individuals, children, and those with transportation challenges), and that the notification is timely enough to ensure protection of the public. Depending on the composition of the community, the notification to the public may have to be provided in multiple languages.

LEPCs and TEPCs may also request that facility owners and operators have a facility representative available when an incident occurs to provide first responders with the most up-to-date information about the chemicals at the facility. This individual would be the facility emergency coordinator discussed earlier in this section. This individual is also reported on the hazardous chemical inventory form (Tier II form) annually.

(5) Methods for determining the occurrence of a release, and the area or population likely to be affected by such release.

Hazards analysis for fixed facilities and transportation routes can be done by using CAMEO Data Manager and Areal Locations of Hazardous Atmospheres (ALOHA). (*See Chapter 177*.)

The Screening & Scenarios module in the CAMEO Data Managers is a planning tool to assess the hazards from accidental releases of hazardous chemicals for fixed facilities and transportation routes. Such an assessment is called a hazards analysis, and you can use the results of the analysis to prepare emergency response plans for your community.

In ALOHA, a facility's threat zone will appear as a shaded circle around the facility, with a radius equal to the threat zone radius shown on the Screenings & Scenarios record. A threat zone for a scenario also includes a small oval area representing the area that could potentially be affected if the wind blows from the direction you indicated on the scenario record. Threat zones for screenings do not include an oval area because wind direction is not specified in screenings.

In the case of a route, the threat zone will appear as a shaded corridor along the full length of the route, twice as wide at every point along the route as the calculated threat zone radius.

ALOHA can also be used for fixed facilities and transportation routes as a planning tool to assess the hazards from accidental releases of hazardous chemicals.

Each facility in the community has the responsibility to determine whether a release has occurred within their facility that triggers notifications to the federal government, SERC or TERC, and LEPC or TEPC. LEPCs and TEPCs should coordinate with each facility to determine what procedures and equipment (e.g., air monitors) the facility may have for determining the release magnitude and duration.

The LEPC and TEPC should also work to train 9-1-1 dispatchers and other responders to be mindful of calls that may come in from the public complaining of odors, burning eyes, or other indications of a release.

(6) A 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.

The emergency plan should include which facilities in your community have emergency response equipment or are able to respond to emergency situations. These facilities may donate emergency response equipment to local fire departments and offer training.

(7) Evacuation plans, including provisions for a precautionary evacuation and alternative traffic routes.

The plan should describe the places or buildings (e.g., schools, churches, municipal buildings, etc.) where the public should gather in the event of an emergency. This should also include traffic routes the public should avoid.

Coordinate with state, county and local police departments, as well as the Department of Public Works or DOT in the planning district, to develop evacuation procedures and identify traffic routes. The plan should include:

- Procedures to notify the public of the emergency.
- Shelter locations.
- Procedures to move persons that need special services.
- Evacuation routes.

(8) Training programs, including schedules for training of local emergency response and medical personnel.

Ensure that emergency response personnel, as well as medical personnel, are trained to deal with chemical emergencies. Your plan should include a training schedule.

There are training programs and tools developed by the Agency for Toxic Substances and Disease Registry (ATSDR) available to help communities develop sound, evidence-based assumptions in preparing for hazardous materials (HazMat) emergencies and disasters for Emergency Medical Services and Emergency Hospital Services (https://www.atsdr.cdc.gov/hazmat-emergency-preparedness.html).

Other areas that the LEPC and their emergency medical services, emergency hospital services and public health departments should review are sections 4 and 11 of the MSDS (or SDS). *See below for a description of these sections.*

- **SDS Section 4: First-Aid Measures.** This section describes the initial care that should be given to an individual who has been exposed to the chemical. The required information consists of:
    - Necessary first-aid instructions by relevant routes of exposure (inhalation, skin and eye contact and ingestion).
    - Description of the most important symptoms or effects and any symptoms that are acute or delayed.
    - Recommendations for immediate medical care and special treatment needed, when necessary.

- **SDS Section 11: Toxicological Information.** This section identifies toxicological and health effects information or indicates that such data are not available. The required information consists of:
    - Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact). The SDS should indicate if the information is unknown.
    - Description of the delayed, immediate, or chronic effects from short- and long-term exposure.
    - The numerical measures of toxicity (e.g., acute toxicity estimates such as the LD50 (median lethal dose))—the estimated amount (of a substance) expected to kill 50 percent of test animals in a single dose.
    - Description of the symptoms. This description includes the symptoms associated with exposure to the chemical, including symptoms from the lowest to the most severe exposure.
    - Indication of whether the chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions) or found to be a potential carcinogen by OSHA.

Your SERC or TERC is the primary contact to help you get the appropriate training for local emergency responders and medical personnel. In addition, chemical facilities in your community may be able to suggest or provide training specific to the chemical risks at their facility, and many industry trade associations offer free training for emergency responders.

(9) Methods and schedules for exercising the emergency plan.

The LEPC should use the Homeland Security Exercise and Evaluation Program (HSEEP): https://training.fema.gov/programs/hseep/roleofexercises.

The emergency plan should be exercised at least annually—and more frequently if there are changes that occur at the facilities that may affect it. These exercises might include call-down notification drills, tabletop exercises, and full-field exercises. The exercises can cover one facility or several facilities. Most active LEPCs currently exercise their plan at least twice a year, and some conduct exercises three to four times a year. The plan should include a schedule for such exercises.

Tabletop exercises should include all the members of the LEPC and TEPC. LEPCs and TEPCs should include the RRT and the state, county and local response community when conducting exercises. The public should be notified of these exercises and be invited to participate or observe.

The LEPC/TEPC plan must include a plan for at least an annual exercise. This exercise can be a table-top, full-scale exercise, or a call down of the phone numbers, including the emergency phone contact numbers in the plan. The after-action report or hot wash meeting can be used to identify areas that need to be updated.

While the EPCRA Section 303 emergency plan requirement is specific to facilities that handle EHSs, there are other facilities or chemicals in commerce that may also pose a threat to human life, including other health effects or injuries, or the environment. In addition, two new hazards facing a community may be marijuana-growing operations and ethanol production. Chemicals handled at these types of facilities should also be considered in your emergency response plan.