SCENARIO 11.1

Company ABC is a manufacturing facility with 20 employees. The facility operates weekdays from 8 a.m. to 5 p.m. There is an office, reception area for visitors, a break room, and a production area. The personnel are as follows:

- 1 company president
- 1 office manager
- 3 additional office employees
- 1 production manager
- 7 additional production employees
- 1 maintenance manager
- 3 additional maintenance employees
- 1 shipping/receiving manager
- 2 additional shipping/receiving employees

Each area manager has been trained in first aid and CPR. Critical operations are present in the manufacturing area. Because the facility has an exposure to fires due to the use of flammable liquids, management has determined there is a need for an emergency evacuation procedure.

To complete this activity, participants should have adequate knowledge of emergency planning. They should have an understanding as to the types of events that could require an emergency evacuation of a facility and criteria that can be used to develop an emergency evacuation plan.

SCENARIO 11.2

Smith Printing Inc. employs 50 people and prints plastic labels. A risk assessment determined the major emergencies that the company is exposed to include fire emergencies and natural disasters such as tornadoes, floods, and winter storms. The fire hazards are primarily from the use of flammable and combustible liquid inks. The inks are stored in 55-gallon drums prior to use in a flammable liquid store room. When needed, the drums are moved to the production area, where a hose system is used to transfer the ink from the drum to the printing presses. The width of the exits is 32 inches. The doors leading out of the shipping and receiving area to the loading docks cannot be used as emergency exits. A floor plan of the facility is in Figure 11–1.

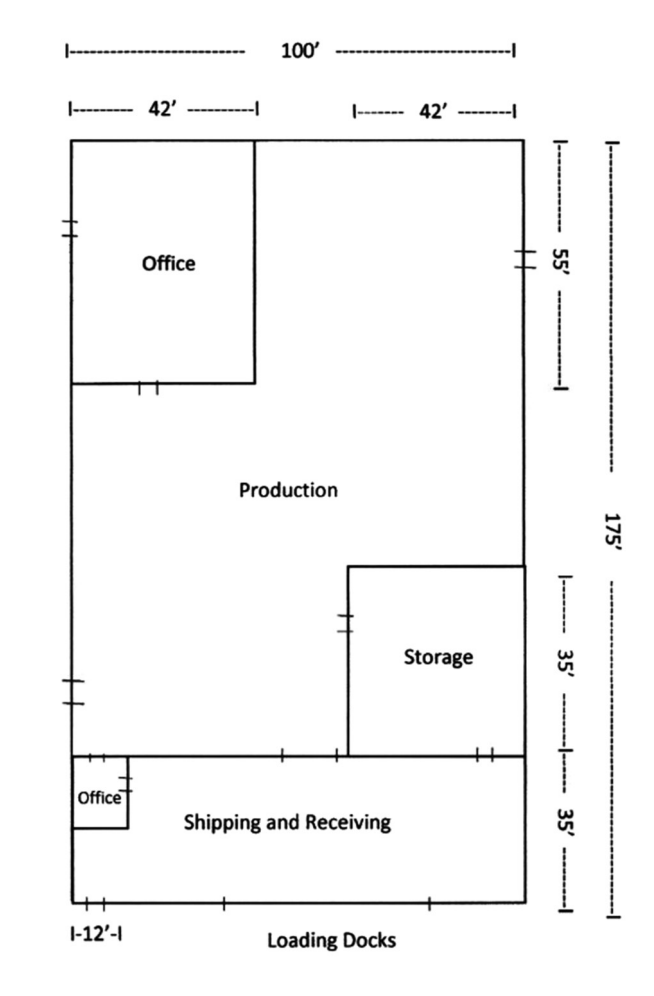

Figure 11–1. Smith Printing Inc. floor plan

SCENARIO 11.3

Due to their geographic location in the United States, a company located in a small mid-western town, with a population of 5,000 people, has significant exposure to tornadoes. The company operates 12 hours a day, Monday through Friday. The company does not have a response plan in place to deal with this type of emergency but would like to identify the different aspects of emergency response it needs to plan for. The town has a volunteer fire department and a police force that consists of one chief and three part-time officers. The town relies on the state police and a nearby city fire department for backup.

Activity 11.3 Emergency Response Checklist

Item	*Recommended Emergency Response Activities and Procedures*
1. Emergency identification/detection methods in place	
2. Notification and communication with first responders	
3. Activation of the Emergency Operation Plan (EOP)	
4. Activation of the Emergency Operations Center (EOC)	
5. Warning/watches issued	
6. Search and rescue	
7. Evacuation	
8. Caring for injured	
9. Response strategies to counteract the immediate emergency threat (e.g., fighting fires, protecting property from further damage due to high winds, shutting off damaged utilities, etc.)	

SCENARIO 11.4

Johnson Manufacturing is a small business employing 10 people who produce metal hand tools like rakes and shovels. Its largest customer is a chain of home improvement stores located in a western region of the United States. Other customers are small hardware stores located throughout the same region. The metal parts of the tools are stamped using power presses and are then attached to wooden handles. All operations take place in one facility, which is owned by the company. The company has two trucks, which are used to transport the products to the central warehouse of its largest customer. The trucks are parked outside the main facility at night in an unsecured lot. To get its tools to the smaller hardware stores, Johnson Manufacturing sells its tools to a distribution company, which then sells and distributes them to its hardware store clients. In this activity, students will be asked to identify the potential business interruption losses the company would be exposed to should the company face an emergency.

SCENARIO 11.5

The safety director of Acme Construction Company has determined there is a need for a training program on hazardous chemicals for employees who are using a paint remover on one of the job sites. Information from the Safety Data Sheet indicated the following precautions related to the safe handling of the product:

Hazards:
Danger! This product is an eye and skin irritant. Vapor harmful. Use only with adequate ventilation to prevent buildup of vapors.

Poison. May be fatal or cause blindness if swallowed. May cause nausea or vomiting. If vomiting results in aspiration, chemical pneumonia could occur. Swallowing this product could produce central nervous system depression and systemic effects. Swallowing this product may irritate the mucous membranes of the mouth, throat, and esophagus.

Signs and Symptoms of Exposure
Heart of cardiovascular disorders, kidney disorders, liver disorders, central nervous system disorders, respiratory system (including asthma and other breathing disorders), skin disorders, and allergies.

Personal Protective Equipment
Respiratory Equipment
For use in areas with inadequate ventilation or fresh air, wear a properly maintained and properly fitted NIOSH-approved self-contained breathing apparatus or powered air supply respirator or loose fitting hood.

Eye Protection
Chemical goggles or face shields are recommended to safeguard against potential eye contact, irritation, or injury.

Protective Gloves
Wear gloves with as much resistance to the chemical ingredients as possible. Use gloves such as nitrile rubber, neoprene, or PVC.

Ventilation
Use only with adequate ventilation to prevent buildup of vapors.

Hygiene Practices
Wash hands after use.
Do not eat, drink, or smoke in the work area.
Discard any clothing that cannot be decontaminated.

Using the information contained in the Safety Data Sheet, the safety manger plans to develop learning objectives that focus on the safe handling of the product and identify corresponding evaluation methods.

Activity 11.5 Learning Objectives and Evaluation Worksheet

Training Topic: _____		
Bloom's Revised Taxonomy Level	***Objective***	***Evaluation Method***
	1.	
	2.	
	3.	
	4.	
	5.	

SCENARIO 11.6

A medium-size city has begun the early stages of the emergency planning process for protecting its citizens from potential terrorist attacks. In the initial stages of planning, the city must conduct a risk assessment to determine what the major threats are facing the organization. The following are descriptions of the three major facilities within the jurisdiction the city has decided to assess.

1. **Municipal Stadium:** This is a 20,000-seat arena used for major sporting events, concerts, and shows. There have been no known threats made against the facility. There is limited security present. The facility does not screen bags or items brought into the stadium. There are no metal detectors in use. The security force consists of unarmed, part-time, contracted, security personnel.
2. **City Hall:** City Hall houses all divisions of the city government. The elected officials including the mayor, and all assemblypersons have offices in the building. The heads of all major city officials have offices in the building. Because of the nature of the activities in this building, it has been the target of bomb threats. However, to date, none were credible. Security consists of a screening process all visitors must go through, including a bag check and a metal detector. Government officials can use any one of five other entrances but do not go through a screening process at these other entrances.
3. **City Water Treatment Facility:** The city operates its own wastewater and drinking water treatment facility. The facility provides drinking water to all residents of the city and surrounding communities. In all, approximately 200,000 people rely upon this facility for their drinking water. There have never been any threats made against this facility. Security around the facility consists of 10-foot-high fencing, security cameras, and perimeter motion detectors. To gain access to the facility, all personnel must go through a main security gate, which is manned at all hours. Deliveries must be pre-arranged, and delivery personnel must go through background checks.

Activity 11.6 Vulnerability Rating Summary Sheet

Facility	*Asset Value Rating (Column 1)*	*Threat Rating (Column 2)*	*Vulnerability Rating (Column 3)*	*Overall Risk Rating (Column 1 × Column 2 × Column 3)*	*Recommendations*
1.					
2.					
3.					
4.					