

Chapter 6

Civilian Chemical Hazards

Every nation in the world has some form of hazardous chemical production or storage facility. Most of these chemicals are used for peaceful purposes and are considered to be in one of the following categories:

- Agricultural - includes insecticides, herbicides, fertilizers . . . etc.
- Industrial - chemicals used in manufacturing processes or for cleaning.
- Production and Research - chemicals (as well as biological agents) used in research or are produced in a facility.

Damage or destruction of a facility or storage site; or any act that creates the unexpected release of civilian chemical products into the environment will present unique challenges to U.S. and allied Armed Forces, as well as the citizens of the Host Nation (HN). Once released, these hazards may cause immediate or delayed incapacitation or death. To safeguard friendly forces and civilians from the potential hazards, peacetime and tactical chemical contamination avoidance principles must be carefully blended.

Civilian chemical compounds may not be detectable by the standard chemical detection devices of tactical units (see Chapter 3 description of these devices). Civilian compounds may not be detectable with the human senses and may cause symptoms that are different than those symptoms from war chemicals.

To minimize the effects or hazards resulting from the damage or destruction of a chemical or biological facility, prior planning must occur. When friendly units are required to operate in an area where such a facility exists, the chemical staff must:

- Coordinate, through G5/S5, with the HN emergency response teams. These teams may be from the HN government, armed forces or from the facility itself.
- Identify what chemical or biological material is present, what type of contamination hazard is present, and how far will the contamination hazard extend.
- Determine whether standard Chemical Defense Equipment (e.g., protective mask, boots, suit, gloves) will protect against the potential harmful effects of released compounds.
- Coordinate with Divisional Chemical for technical assistance
- Coordinate with higher headquarters and HN to identify the availability of CAIRA (Chemical Accident/Incident Response and Assistance) teams Technical Escort units or similar civilian agencies available to assist if required.

- Establish evacuation procedures for noncombatants. Identify a chain-of-command for supervision and coordination of the clean-up effort.

In the event civilian chemical compounds are released the following steps should be taken immediately by the tactical units within the area:

- Notify higher, lower, and adjacent units.
- Start continuous monitoring with available detection equipment. Assume MOPP4.
- Secure the area around the facility. Establish a security perimeter of 620 meter radius around the sight. From this perimeter, draw a 10 km radius to indicate the potential downwind hazard zone (refer to Figure 6-1).
- Evacuate all personnel from within the 620 meter security zone. All personnel within the 10 km hazard zone should assure full chemical protection (MOPP4) or be evacuated from the area. Maintain this posture until relieved by appropriate response team or Military Police.
- The perimeters of the security or hazard zone may increase or decrease after the response team(s) arrive on scene depending upon agent involved, extent of damage and weather conditions.

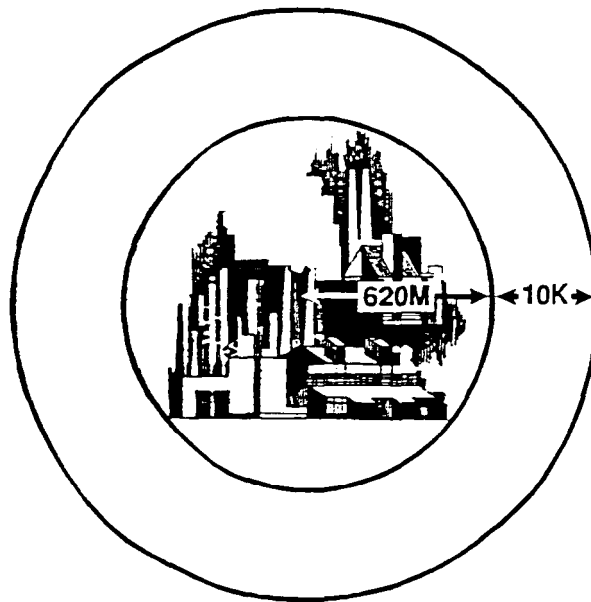


Figure 6-1. Security and Hazard Zones.