

tion of sulfur dioxide exceeding 2 ppm in the atmosphere (refer to Par. 4.1 and Appendices A and B).

7.6 IMMEDIATE ACTION PLAN

Each contingency plan should contain a condensed "Immediate Action Plan" to be followed by designated personnel any time they receive notice of a potentially hazardous hydrogen sulfide or sulfur dioxide discharge. For the protection of personnel (including the general public) and abatement of the discharge, this "Immediate Action Plan" should include, but not be limited to, the following provisions:

- a. Alert and account for facility personnel.
 1. Move away from the hydrogen sulfide or sulfur dioxide source and get out of the affected area.
 2. Don proper personal breathing equipment.
 3. Alert other affected personnel.
 4. Assist personnel in distress.
 5. Proceed to the designated emergency assembly area.
 6. Account for on-site personnel.
- b. Take immediate measures to control the present or potential hydrogen sulfide or sulfur dioxide discharge and to eliminate possible ignition sources. Emergency shutdown procedures should be initiated as deemed necessary to correct or control the specific situation. When the required action cannot be accomplished in time to prevent exposing operating personnel or the public to hazardous concentrations of hydrogen sulfide or sulfur dioxide, proceed to the following steps, as appropriate for the site specific conditions.
- c. Alert the public (directly or through appropriate government agencies) that may be subjected to an atmosphere exposure exceeding 30 ppm²¹ of hydrogen sulfide or 10 ppm of sulfur dioxide.
- d. Initiate evacuation operations.
- e. Contact the first available designated supervisor on the call list (refer to Par. 7.4.a). Notify the supervisor of circumstances and whether or not immediate assistance is needed. The supervisor should notify (or arrange for notification of) other supervisors and other appropriate personnel (including public officials) on the call list.
- f. Make recommendations to public officials regarding blocking unauthorized access to the unsafe area and assist as appropriate.
- g. Make recommendations to public officials regarding evacuating the public and assist as appropriate.
- h. Notify, as required, state and local officials and the National Response Center to comply with release reporting re-

quirements (i.e., 40 *Code of Federal Regulations Parts 302 and 355*) (refer to Par. 4.4).

- i. Monitor the ambient air in the area of exposure (after following abatement measures) to determine when it is safe for re-entry.

Note: This sequence (Par. 7.6) should be altered to fit the prevailing situation. Certain actions, especially those dealing with the public, should be coordinated with public officials.

7.7 EMERGENCY TELEPHONE LISTS

A list of emergency telephone numbers should be prepared and maintained as a part of the contingency plan, considering the need to contact any of the following:

- a. Emergency Services
 1. Ambulances
 2. Hospitals
 3. Medical personnel (e.g., doctors)
 4. Helicopter services
 5. Veterinarians
- b. Government Agencies and Contacts
 1. Local Emergency Planning Committee
 2. National Response Center
 3. State Emergency Response Commission
 4. State and Local Law Enforcement Agencies
 5. Civil Defense
 6. Fire Departments
 7. Other applicable government agencies.
- c. Operator and Contractors
 1. Operator personnel
 2. Contractor personnel
 3. Applicable service companies
- d. Public

7.8 TRAINING AND DRILLS

The value of training and drills in emergency response procedures for oil and gas operations involving hydrogen sulfide or sulfur dioxide cannot be over emphasized. All personnel identified in the plan shall have appropriate training. It is important that the training conveys a full appreciation of the importance of each role and the effect that each person has on implementing an effective emergency response.

Exercises or drills that simulate an emergency in which personnel perform or demonstrate their duties are important tools that can convey the importance of contingency plans and result in their being kept current. The exercise can be a tabletop or classroom discussion; or can be a realistic drill in which equipment is deployed, communication equipment is tested, and "victims" are sent to hospital facilities with simulated injuries. Public officials should be informed of (and preferably involved in) these exercises. After a plan is tested, it should be revised and retested until those responsible for the plan are confident the plan is operational. Refer to *NRT-1: Hazardous Materials Emergency Planning Guide*.

²¹Emergency Response Planning Guide Level 2 (ERPG-2), refer to Reference 27. ERPG-2 is defined as the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms that could impair an individual's ability to take protective action.