

Chemical Spills

This safety talk is designed for discussion leaders to use in preparing safety meetings. Set a specific time and date for your safety meeting. Publicize your meeting so everyone involved will be sure to attend.

Review this safety talk before the meeting and become familiar with its content. Make notes about the points made in this talk that pertain to your workplace. You should be able to present the material in your own words and lead the discussion without reading it. Collect whatever materials and props you will need ahead of time. Try to use equipment in your workplace to demonstrate your points.

BEGINNING OF MEETING

Give the safety talk in your own words. Use the printed talk merely as a guide. The purpose of a safety meeting is to initiate discussion of safety problems and provide solutions to those problems. Encourage employees to discuss hazards or potential hazards they encounter on the job. Ask them to suggest ways to improve safety in their area.

Don't let the meeting turn into a gripe session about unrelated topics. As discussion leader, it's your job to make sure the topic is safety. Discussing other topics wastes time and can ruin the effectiveness of your safety meeting. At the end of the meeting, ask employees to sign a sheet on the back of this talk as a record that they attended the safety meeting. Keep this talk on file for your records.

GENERAL DISCUSSION

You've all seen the news stories. A chemical spill from a railcar sent a toxic cloud over the whole community. And many of us remember what happened in 1984 in Bhopal, India, where a leak from a chemical plant killed 2,500 people and injured over 100,000. Chemical spills, leaks, and explosions are all too common on construction sites. Of course, our first priority is to prevent emergencies like these. But if they do happen, we need to know how to respond. Following state and local requirements, management has drawn up emergency plans for this site. At today's meeting, we'll look at what those plans say.

You or a crewmember may want to add a personal story about chemical spills, leaks, or explosions.

On sites with a significant amount of hazardous chemicals, we are required to have a Hazardous Materials Business Plan. Even a 55-gallon drum of a liquid hazardous chemical is considered a 'significant amount'. These plans are different in different communities (depending on local agency regulations). However, most of them contain similar types of information.

On this site, we: ___do ___do not have a Hazardous Materials Business Plan.

(If applicable:) Show the crew the copy of the plan that you brought to the meeting.

You can see a copy of our plan anytime at:

Point out location:

On this site, we have these hazardous chemicals at these locations- (If applicable:) Give chemical names and locations:

Ask the Crew these Questions:

After each question, give the crew time to suggest possible answers. Use the information following each question to add points that no one mentions.

1. We're also required by OSHA to have an Emergency Action Plan (EAP) for the site. It describes the procedures we should follow if there's any type of emergency whom to notify, who's in charge, who should do what, and how to evacuate. Everyone on the site needs to be trained on our EAP. Has everyone here been trained?

- If not, see me after this meeting.

On this site, we: ___do ___do not have an EAP.

(If applicable:) Show the crew the copy of the EAP that you brought to the meeting. You can see a copy of our EAP anytime at:

Point out location:

2. What should you do if there is a chemical spill?

Follow the procedures spelled out in the site's Emergency Action Plan. On most sites, the EAP will list steps similar to these:

- Notify your supervisor.
- Notify coworkers and others in the area.
- Activate emergency alarms.
- Call 911 (or other emergency phone number) to get help.
- Don't try to rescue or help injured people unless you're sure you will be safe.
- Keep people out of the area.
- Leave the area if the spill cannot be readily contained, or if it presents an immediate danger to life or health. Follow the evacuation rules in the EAP. In general, evacuate upwind, not downwind.

Don't try to clean up a spill yourself except where permitted by site rules and the EAP. Leave the cleanup to trained personnel, such as a Hazardous Materials (HAZMAT) team.

On the job, emergency phone numbers (fire, police, medical, HAZMAT) are posted-

Point out locations:

3. How can you tell if a spill is hazardous or requires special cleanup procedures?

1. Identify the chemical(s) involved in the spill.
2. Use Material Safety Data Sheets (MSDSs) for the chemicals involved to find out the effects of exposure, what protective equipment is needed, and spill cleanup procedures. Since some chemical spills can lead to fires or explosions, the MSDS may also give you firefighting instructions. The law requires the site to have MSDSs for all chemical products in use. Everyone working on the site has a right to see MSDSs.

On this job, you can get MSDSs from: Give the name and location of the person to see: _____

(MSDSs are covered in more detail during basic Hazard Communication training, which everyone on the crew should already have completed.)

4. What emergency equipment do we have on this job, and where?

- First aid kits
- Fire extinguishers
- Fire blankets
- Eye washes
- Emergency showers - Communications (radios, alarms, etc.) - Stretchers or baskets for moving injured people - Confined space rescue equipment

For each item above, explain what types are available on the site and their locations:

OSHA Regulations:

Most of the safety measures we've talked about are required by OSHA or by other state and local agencies. We have to take these precautions, it's the law. I have a Checklist of the various regulations related to chemical spills. If you'd like to know more, see me after the meeting.

Company Rules:

(Only if applicable.) We have some additional company rules about chemical spills. Discuss company rules:

Comments from the Crew:

Ask the following: Do you have any other concerns about chemical spills? Do you see any problems on our job? What about other jobs you've worked on? Have

you had any experience with chemical spills that might help us work safer on this job?

GENERAL SAFETY REVIEW

This is a time to review all safety concerns, not just today's topic. Keep your notes on this page before, during and after the safety meeting.

Are you aware of any safety hazards from any other crews? Point out any hazards other crews are creating that this crew should know about. Tell the crew what you intend to do about those hazards.

Do we have any other safety business? Discuss any past issues or problems. Report any progress of investigations and action taken.

Have there been any accidents, near misses or complaints? Discuss any accidents, near misses, and complaints that have happened since the last safety meeting. Also recognize the safety contributions made by members of the crew.

Please remember, we want to hear from you about any health and safety issues that come up. If we don't know about problems, we can't take action to fix them.

ENDING THE MEETING

Circulate Sign-Off Form.

Assign one or more crew member(s) to help with next safety meeting.

Refer action items for follow-up.

Do you have any Safety Recommendations?

Do you have any Job Specific Topics you would like us to discuss?

Have you reviewed the M.S.D.S Sheet for this safety topic? Yes____ No____
N/A____

Comments:

SAFETY TALKS REVIEW

General:

The site has a written Hazardous Materials Business Plan that has been approved by local authorities. (Plans are required if the total amount of hazardous chemicals present is at least 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of gas. Specific points covered in a plan may vary depending on local agency regulations.)

If there is a Business Plan, it includes procedures such as:

1. Who has authority during a hazardous materials emergency
2. Roles of specific personnel in an emergency
3. Training for those with defined roles in an emergency
4. Whom to notify, and how, when there is an emergency
5. Pre-emergency planning
6. Emergency and personal protective equipment available
7. Evacuation routes, refuge, and safe distances
8. Site security and control
9. Emergency first aid and medical treatment
10. Evaluation of responses to emergencies, and follow-up

Our Business Plan is available at:

The site has an Emergency Action Plan (EAP). (This must be in writing if there are more than ten workers; otherwise it is still required but need not be written.) The plan covers incident reporting; rescue and evacuation procedures; communications and alarms; responsibilities of designated personnel during emergencies; and required training for those with such responsibilities.

All employees have received training on the EAP, and copies of the EAP are available to employees.

Our EAP is available at:

Materials and conditions on the site, which might lead to major chemical spills, leaks, explosions, or other emergencies, have been identified.

Emergency phone numbers are properly posted on the site, and are easy to read.

Locations where numbers are posted:

Local emergency responders know how to access the site and where the main office is, to obtain directions to the location of an emergency.

Hazardous Materials Emergencies and Spills:

1. The company has a written Hazard Communication Program.
2. All workers have received basic Hazard Communication training.
3. Everyone potentially exposed to hazardous materials has received specific training in health effects, safe use, minimizing exposure, personal protective equipment, proper disposal, and emergency procedures.
4. All containers of chemical products are properly labeled.
5. Material Safety Data Sheets (MSDSs) are available on the site for all hazardous materials, which are present.
6. Workers know where to find MSDSs and how to understand them.
7. Personnel working in adjoining areas of the job site, including subcontractors, are aware of the work and the hazards.
8. Appropriate cleanup materials are available for leaks or spills.
9. If the site receives, stores, uses, generates, disposes of, or transports hazardous waste (as defined by state law), it complies with:
 - All requirements of its own Hazardous Materials Business Plan.
 - All requirements of the OSHA standard on Hazardous Waste Operations and Emergency Response (HAZWOPER).
 - All requirements of the California Environmental Health Standards for the Management of Hazardous Waste. (The above include requirements for registration, licensing, hazard identification, labeling, training, work practices, storage, disposal, inspection,

record keeping, personal protective equipment, transportation, shipping manifests, cleanup, and emergency response.)

Personal Protective Equipment for Emergencies and Clean-up:

1. If necessary, personal protective equipment (PPE) is provided by the company and worn by workers. The types used are appropriate for the work and give adequate protection.
2. Appropriate respiratory protection is worn to supplement engineering and work practice controls if exposure to chemicals during an emergency or cleanup may exceed OSHA limits.
3. Respirators are properly stored and maintained.
4. The proper types of respirators and cartridges for the work are used.
5. Respirators, cartridges, and replacement parts have been approved by the Mine Safety and Health Administration or the National Institute for Occupational Safety and Health (NIOSH).
6. Workers who wear respirators have been medically evaluated, fit-tested, and trained.
7. If respirators are used, the company has a written Respiratory Protection Program.
8. Impermeable gloves of the correct type are worn to prevent skin contact with chemicals during an emergency or cleanup, except where gloves might become caught in moving parts or machinery. (To determine the appropriate glove for the substance, consult the MSDS for the product, or contact the glove supplier or manufacturer.)
9. Full protective clothing (coveralls, etc.) is used to minimize skin contact with chemicals where necessary.
10. Eye and face protection is used where there is risk of chemicals splashing or spraying into eyes. Eye and face protection meets the requirements of American National Standards Institute (ANSI) Z 87.1 1979, American National Standard Practice for Occupational and Educational Eye and Face Protection.

Emergency Equipment and First Aid:

1. Fire extinguishers of the proper type are readily available wherever flammable liquids are stored, transported, or used. Types and locations of fire extinguishers on this site:

2. Other fire control devices (such as fire blankets, sand for extinguishing fires, sprinklers, and standpipes) are available if necessary.
3. Emergency eye washes and showers are available if workers may be exposed to hazardous or corrosive materials. These facilities are readily accessible and in good working order.

4. Effective communication procedures and means of communication exist to notify supervisors and medical personnel of an emergency anywhere on the site. Emergency communication devices (telephones, intercoms, megaphones, radios, alarms, etc.) are available.
5. (If applicable:) For work areas 48 feet or more above or below ground, a Stokes basket, stretcher, or other equipment for moving injured people is provided. Equipment is properly stored and in good condition.
6. (If applicable:) If workers enter confined spaces, there is a written confined space program and all procedures are followed. Confined space rescue equipment (respirators, harnesses, hoists, communication devices, etc.) is available and in good repair. Workers are trained in rescue procedures, and training is documented.
7. First aid equipment is available. There are personnel trained in first aid, or a designated medical clinic nearby.
8. There is proper equipment for prompt transportation of injured workers to the nearest appropriate medical facility.
9. All emergency equipment is properly and clearly marked.