



# *Emergency Response/Preparedness and Prevention*

## *Small Quantity Generators*

February 2009

### **Emergency Response**

[Colorado Hazardous Waste Regulations 6 CCR 1007-3 Section 262.34(d)(5)(i),(ii), and (iv)]

Emergency response is critical to ensuring that the proper actions are taken to minimize hazards to human health and the environment from fires, explosions, spills, or other accidents. A small quantity generator (SQG) of hazardous waste must designate at least one individual to coordinate emergency response activities and respond to emergency situations. Also, emergency contact information that may be used during an emergency must be posted at facility telephones.

#### **The Emergency Coordinator**

One or more qualified employees must be onsite or on call at all times to coordinate emergency response activities in case of a fire, explosion, spill, or any other incident. The emergency coordinator's responsibilities during an emergency include the following:

- In the event of a fire, call the fire department or attempt to extinguish the fire.
- In the event of a spill, contain the flow of hazardous waste to the extent possible, and as soon as possible, clean up the hazardous waste and any contaminated materials or soil.
- In the event of a fire, explosion, or any other incident which could threaten human health outside of your facility or where a spill has reached surface water (including storm sewers), the emergency coordinator must immediately notify the National Response Center (1-800-424-8802). Other reporting requirements may also apply depending on the type, quantity, and location of material spilled. Spill reporting information is provided in the "Reporting Environmental Releases in Colorado" guidance document [[www.cdphe.state.co.us/hm/spillreportingguide.pdf](http://www.cdphe.state.co.us/hm/spillreportingguide.pdf)].

The Colorado Hazardous Waste Regulations do not specifically require a small quantity generator to identify an alternate emergency coordinator. However, if the emergency coordinator is not available (due to vacation, illness, etc.) and there is not another person responsible for fulfilling these duties, your facility could be cited for non-compliance with the hazardous waste emergency coordinator requirements. You may also be placing your employees at risk in the event of an emergency.

#### **Emergency Response/Contact Posting**

Emergency response and contact information must be posted next to the telephone. This includes telephones at your facility where hazardous waste is handled or stored and at any other telephones that may be used to call for assistance during an emergency. Emergency contact information must include:

- The name and telephone number of the emergency coordinator.
- The location of fire extinguishers, spill control material, and, if present, the location of the fire alarm or other response equipment.

- The telephone number of the fire department, unless your facility has a direct alarm.

An example emergency contact information form is included at the end of this document. A properly completed form of this type posted next to your telephone(s) will meet the emergency information phone posting requirements. Your facility must keep emergency response information up to date. Information that is out of date, incomplete, or missing could result in a violation.

## **Preparedness and Prevention**

[Colorado Hazardous Waste Regulations 6 CCR 1007-3 Sections 262.34(d)(4), 265.31-265.35, and 265.37]

Small quantity generators are required to plan and prepare for an emergency before one occurs at their facility. Planning and preparation will help minimize the severity of emergency incidents at your facility and allow for the immediate use of emergency response and control equipment. It will also help ensure suitable aisle space is available for emergency personnel and equipment to navigate the facility, and assist in familiarizing local emergency responders with the facility and the types of hazardous waste handled there.

Although small quantity generators are not required to have a written contingency plan, your facility may find it helpful to consider the elements presented in the “Large Quantity Generator Guidance – Contingency Plan Template” [[www.cdphe.state.co.us/hm/cptemplate.pdf](http://www.cdphe.state.co.us/hm/cptemplate.pdf)] when developing your emergency response, preparedness, and prevention plans.

## **Maintenance and Operation of Facility**

Facilities should be designed, constructed, maintained, and operated in a manner that minimizes the possibility for emergency incidents (fire, explosion, or any release of hazardous waste) through the use of fire protection systems, standard operating procedures, effective maintenance schedules and programs, and comprehensive emergency response procedures. In addition to these elements, incidents and any impacts can be further minimized through compliance with the regulatory requirements related to the management of hazardous waste itself. Some additional prevention and preparedness elements include:

- Locating hazardous waste containers and tanks away from high-traffic areas and uncontrolled floor drains (best management practice).
- Providing secondary containment in hazardous waste container storage/accumulation areas through the use of chemical-resistant coatings or secondary-containment pallets (best management practice and regulatory requirement for accumulation in tanks).
- Ensuring compatibility of waste with containers and tanks (regulatory requirement).
- Keeping incompatible wastes separated (regulatory requirement).
- Keeping containers closed and labeled for easy identification (regulatory requirement).
- Repairing cracked or damaged floors in hazardous waste storage areas (best management practice).
- Use of facility layout maps and drawings for quick reference in an emergency (best management practice). These maps and drawings should contain information that could be crucial to an emergency response (e.g. discharge points, emergency shut-off valves and location of response equipment).

### *Facilities Without Fire Protection Services*

If your facility is not provided with fire protection services by a fire protection district or municipal fire department, you must maintain and operate your facility in accordance with a fire protection and prevention plan that you have developed for your facility. Your fire protection plan needs to be approved by the Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division. Before submitting the plan to the Department for approval, it must be reviewed and approved by a professional engineer registered in Colorado that is experienced in fire protection. Your fire protection plan needs to:

- Provide for adequate fire protection and prevention at your facility based on the location and construction of the facility, and based on the types and amounts of hazardous waste managed at your facility.
- Specify what equipment is required as well as the availability and training of your staff.
- Be based on the Uniform Fire Code, the National Fire Code, the Uniform Building Code, and 29 Code of Federal Regulations (CFR) Chapter XVII, Part 1920, Subpart L, Fire Protection.

For additional guidance on the specific requirements for this plan, call the Hazardous Waste Compliance and Enforcement Unit at (303) 692-3361.

### **Required Emergency Equipment**

Equipment required for emergency response must be provided by your facility, unless none of the hazards posed by the facility would require a particular type of equipment.

#### *Internal and External Emergency Communication*

An easily accessible internal communications system capable of providing immediate emergency instruction to facility personnel is required for your facility. The type of internal communication system may vary depending on your facility's size and function. For small shops, the human voice may be sufficient to alert personnel. For larger shops, or for facilities with multiple work areas, an intercom or loud speaker system, fire pull stations, or other types of alarm or communication systems may be necessary.

For external emergency communication, a telephone, hand-held two-way radio or other intrinsically-safe communications device must be available to contact outside emergency personnel such as the police, fire department, or local emergency response teams. Intrinsically-safe means that the device does not contain any components that produce sparks or hold enough energy to produce a spark or heat sufficient to cause ignition in an explosive atmosphere.

Whenever hazardous waste is being handled at your facility, all personnel involved must have immediate access to an alarm or emergency communication device, or be able to notify another employee through visual or voice contact. If there is only one employee onsite while the facility is operating, they must have access to a device capable of summoning external emergency help. Alarms and communication devices must be provided in locations that can be rapidly and easily accessed in an emergency situation by the personnel handling the hazardous waste.

#### *Fire Protection, Spill Control, and Decontamination Equipment*

You must have fire control equipment, spill control equipment, and decontamination equipment appropriate for the needs of your facility. For fires that can be extinguished with water, sufficient

water must be available for emergency use. Water must be available at adequate volume and pressure for sprinklers (if installed), hydrants, and fire hoses.

For fires that cannot be extinguished with water, special extinguishing equipment may be required. Special extinguishing equipment may include foam, dry chemical, carbon dioxide, metal/sand, wet chemical, or vaporizing liquid. The type of fire must be known before attempting to extinguish the fire so that the correct fire extinguishing equipment is used. Not using the correct type of extinguisher can spread the fire.

### **Testing and Maintenance of Equipment**

All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment must be tested and maintained as necessary to assure its proper operation in time of emergency. The frequency of testing and maintenance will vary depending on the specific equipment, its role in an emergency situation, the reliability of the individual pieces of equipment, and any manufacturer-recommended maintenance/testing schedules. It would be a best management practice to document such testing and maintenance activities to prove compliance with this requirement.

### **Required Aisle Space**

Adequate aisle space must be maintained to allow unobstructed movement of emergency response personnel and equipment. The hazardous waste regulations do not specify the width of aisle space. This is a performance-based standard which is dependent on the type of containers, tanks, waste, and waste management practices at your facility. From a practical standpoint, aisle width should be wide enough for equipment used to move containers of hazardous waste in response to an emergency and for the inspection of tanks and containers. The Occupational Health and Safety Administration (OSHA) and many fire departments require a minimum aisle space of 28 inches.

Examples of aisle space violations would be hazardous waste containers that are arranged more than two deep against a wall or configured so that access to the containers is blocked by equipment or debris. Your facility would be cited for non-compliance with the hazardous waste regulations if you are unable to remove a hazardous waste container with a dolly without moving other equipment, containers, or vehicles out of the way.

### **Arrangements with Local Authorities**

You must attempt to make arrangements with local authorities such as police, fire, local health departments, emergency response teams, and local hospitals to familiarize the local authorities with your facility layout, waste handling activities, and the types of injuries or illness that could result from fires, explosions, or releases at your facility. You may want local responders to tour your site and review the chemicals used and wastes generated onsite. If more than one police or fire department might respond to an emergency at your facility, you should develop an agreement with these agencies designating the primary emergency authority.

Risks associated with your site need to be communicated to the response agencies. Authorities should be informed of the properties of the hazardous wastes handled at your facility, the hazards associated with the waste, the layout of your facility and where personnel would be working,

entrances to roads inside the facility, and evacuation routes. You need to ensure that your facility will get an immediate and appropriate emergency response from local authorities.

The arrangements agreed to by the local police department, fire department, hospitals, contractors and any State and local emergency response teams should be documented in your facility operating records. If state or local authorities decline to enter into an arrangement, you should document this refusal in your operating records.

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**For more information please contact:**

Colorado Department of Public Health and Environment  
Hazardous Materials and Waste Management Division  
4300 Cherry Creek Drive South  
Denver, Colorado 80246-1530

Customer Technical Assistance Line:  
(303) 692-3320  
(888) 569-1831 ext. 3320 toll-free

Division website:  
[www.colorado.gov/cdphe/hm](http://www.colorado.gov/cdphe/hm)

E-mail:  
[comments.hmwmd@state.co.us](mailto:comments.hmwmd@state.co.us)

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This is designed to provide guidance on the appropriate management of wastes based on Colorado solid and hazardous waste statutes and regulations only. Other statutes and regulations may also apply.

# Emergency Contacts Telephone Posting

Post this sheet near the telephone(s) in areas where hazardous waste is handled or stored

<b>Company Emergency Coordinator(s)</b>	<b>Work Phone</b>	<b>Pager # or Home Phone</b>
_____	_____	_____
_____	_____	_____

**Fire Department** Phone \_\_\_\_\_

**Police Department** Phone \_\_\_\_\_

**Hospital** Phone \_\_\_\_\_

**Colorado 24-hour Emergency Response Line** Phone 1-877-518-5608

**National Response Center (24-hour)** Phone 1-800-424-8802

## Location of Emergency Response Equipment

\*Fire Extinguishers \_\_\_\_\_

\_\_\_\_\_

\*Fire alarm (if present) \_\_\_\_\_

\*Spill control material \_\_\_\_\_

\*Special equipment  
(if present) \_\_\_\_\_

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(Fulfills emergency contact telephone posting requirements for SQG's)