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HAZARDOUS WASTE OPERATIONS

EMERGENCY RESPONSE PLAN DEVELOPMENT GUIDELINES (Elements of an Emergency Response Plan)

WELCOME!

This sample program is provided to assist you as an employer in developing programs tailored to your own operation. We encourage you to copy, expand, modify and customize this sample as necessary to accomplish this goal. Please also see our sample "Hazardous Waste Operations Policy" which is also available from the Consultative Services Bureau.

This document is provided as a compliance aid, but does not constitute a legal interpretation of OSHA Standards, nor does it replace the need to be familiar with, and follow, the actual OSHA Standards (including any North Carolina specific changes.) Although this document is intended to be consistent with OSHA Standards, if an area is considered by the reader to be inconsistent, the OSHA standard should be referred to and followed. Of course, we welcome your comments and feedback!

The North Carolina Department of Labor OSH Consultative Services Bureau can be contacted for further assistance such as helping you set up your individual program and even with on-site surveys. Feel free to contact us at 1-800-NCLABOR or at 919-807-2899. You may also want to visit the Consultative Services Bureau website at: <http://www.nclabor.com/osh/consult/bcs1.htm>

Remember: A written safety/health program is only effective if it is put into place!

**HAZARDOUS WASTE OPERATIONS
EMERGENCY RESPONSE PLAN DEVELOPMENT GUIDELINES
(Elements of an Emergency Response Plan)**

1910.120(q)(2)

(i) Pre-emergency Planning and Coordination with outside parties

Facilities are required in the Superfund Amendments and Reauthorization Act (SARA) title III to coordinate their activities with outside response organizations and emergency response organizations.

The emergency response plan (ERP) should address coordination with outside emergency response organizations, such as fire departments and ambulance/hospital emergency room services and privately operated emergency response companies.

The employer should notify the organizations listed that they are part of the company's ERP, and should detail their expected involvement in the event of an incident. Note that employee involvement and required training will be minimized where involvement by outside response teams is maximized.

Phone numbers and contact personnel must be readily available and correct.

(ii) Personnel roles, lines of authority, training and communication

Response roles should be clearly defined by naming individuals and their projected role in emergency response operations. Although specific HAZWOPER titles are not required, there should be parallel positions that are identifiable and are trained in accordance with 1910.120(q)(6). A minimum where response activities exceed the defensive action stage, there must be an on-scene incident commander and two hazardous material technicians identified.

Lines of authority must also be clearly spelled out. Initial communication channels should be directed to the on-scene incident commander quickly in the event of an emergency. Although first responder awareness level respondents may be expected to inform their supervisors (as opposed to the on-scene incident commander or hazmat response team) in the event of an emergency, the supervisor should be trained to inform the emergency response personnel.

Training - Once an incident has been determined to require an emergency response by an appropriately trained individual (i.e. first responder awareness level or above) the incident should not be investigated further without the coordinated effort of trained emergency responders. However, if untrained individuals report an incident to their supervisor, and the supervisor is trained to at least the first responder awareness level, the supervisor may investigate the incident, limiting his/her actions to those for which he/she has been appropriately trained.

Provisions for employee training should be incorporated into the emergency response plan. This might include the training course outline for each of the various levels of emergency responder included in the

ERP. The plan should also address the required refresher training schedule and refresher course content. Training certifications should be renewed based upon employee duties and functions.

Lines of communication need to be clearly delineated in the emergency response plan. Essentially all employees that may encounter the uncontrolled release of hazardous substance that requires an emergency response should be addressed in the ERP. The employees must understand to whom they are to report a release. These preordained lines of communication need not be developed for each individual employee, but rather can be developed for different groups of employees from different areas within a facility which report to the same individual in the event of an emergency.

Means of communication to be used during an emergency response must be established and written into the emergency response plan. This might include dedicated radio frequencies, hand signals and siren blasts.

A system to communicate evacuations of all potentially affected employees who are not designated as emergency responders must be developed, consistent with 29 CFR 1910.38 (a).

(iii) Emergency Recognition and Prevention

This is an extremely important issue because it is here that the question of incidental releases and emergency responses must be addressed and clearly defined. There is a continuum of releases that may occur. Some are clearly incidental, i.e. a liter of paint thinner, limited quantity of dilute acid, etc. Regardless of where this spill occurs it simply does not pose a safety and health hazard that would require a coordinated response from personnel outside of the release area.

On the other end of the spectrum, there are releases that require an emergency regardless of other circumstances surrounding the incident.

In the middle of the continuum are releases that may or may not require an emergency response. In this gray area, the distinction becomes a function of the sophistication of the personnel in the immediate release area, their understanding of the hazards and the equipment they have on hand. The emergency response plan must define exactly what may be handled as an incidental release and what type of release requires an emergency response.

The employer has the option of developing a full HAZMAT emergency response program (1910.120(q)) or using Hazard Communication (1910.1200) to deal with simple spills/mishaps and total evacuation under 1910.38(a), if the situation exceeds the scope and intent of the hazard communication standard. When the employer selects the hazard communication/evacuation compliance approach, all employees must be trained to the level of first responder awareness level. The competencies to be demonstrated are given in paragraph 1910.120(q)(6)(i). The written hazard communication program and the training program must include this information to be in compliance. Also, all employees must be able to demonstrate competency at the first responder awareness level.

Employees may be required to shut down processes, close emergency valves and otherwise secure operations before evacuating in the event of an emergency (note: 1910.120 requires the evacuation of all non essential personnel in the event of an emergency). These procedures need to be carefully delineated, and employees must be trained to be able to perform these pre-evacuation procedures safely. Employees instructed to evacuate during an emergency (i.e. not trained in compliance with 1910.120) may not perform pre-evacuation procedures in the “danger area”.

Emergency responders may take action in the danger area necessary to stop the incident from increasing in severity (first responder operations level) before the emergency response team arrives, only if they have

informed the incident command structure of the emergency incident and have adequate personal protective equipment and training and employ the buddy system. This kind of response must be addressed and examined in detail with ERP and emergency responders must act within the capabilities of their training and equipment, have clear guidance and training in this determination, and be clearly told that they may evacuate without employer penalty if they subjectively believe it is beyond their capabilities.

This action assumes that the emergency response team is en route, and that the action taken is immediately necessary to prevent the incident from increasing in severity drastically (i.e. to prevent a catastrophe or an environmental disaster). It is important that employers make clear to employees that they should evacuate when they lack the capabilities to respond to an emergency; failure to do so is a frequent cause of employee death.

(iv) Safe distance and places of refuge

The ERP should contain a site map with safe places of refuge identified for each section of the facility. Ideally the map should contain the location of all buildings, structures, equipment, emergency apparatus, first aid station, routes of entry and exit, emergency exit routes, staging areas and safe places of refuge.

The safe places of refuge will be the areas in which accounting of all employees will be performed. This can be critically important for identifying individuals that did not get out and estimating where they may be in the facility. Allowances should be made to ensure that this information is given to the emergency response organization in a timely fashion.

(v) Site safety and control

Areas surrounding the danger area need to be controlled during emergencies by prohibiting unauthorized personnel from entering the exclusion zone, or hot zone. Methods of excluding areas and defining various zone need to be addressed in the ERP.

Emergency responses need to be coordinated from a command post some safe distance from the exclusion zone. Creation of a command post must be addressed in the plan.

(vi) Evacuation routes and procedures

All employees that are not trained in emergency response and who will not serve as response employees during the response operation need to be evacuated from the exclusion zone. This aspect of the emergency response plan must be in compliance with 1910.38 (a) as described above.

(vii) Decontamination

The ERP must contain provisions for decontamination of emergency responders leaving the exclusion zone. Individuals who will assist the responders as they leave the exclusion area must be trained in decontamination procedures. These individuals should wear personal protective equipment at the same level or one level below the emergency responders they are supporting.

Accidental contamination of response personnel should also be addressed in the plan including the location and availability of showers, water hoses and eye flushes.

Decontamination of response equipment and the contaminated area may be handled in the post-emergency response and therefore decontamination procedures for these areas do not necessarily need to be part of

the emergency response plan. However, if emergency responders are expected to decontaminate their own equipment or the contaminated area then the procedures to be followed must be included in the emergency response plan.

(viii) Emergency medical treatment and first aid

This section of the emergency response plan should list all qualified emergency medical technicians on site, their certifications and how to best contact them during an emergency. Additionally, hospitals that are capable of receiving or responding to accident victims that may arrive contaminated, must be listed.

Where indicated by the notice of hazards at the worksite, arrangements must be made for the handling of contaminated victims with ETM's on site, or community EMT's and area hospital facilities. If victims must be decontaminated at an area hospital, coordination with the hospital is required prior to the emergency in order to ensure the hospital has personal protective equipment, methods of containing the hazardous material waste water, etc., and staff trained to at least the operations level who are capable of performing decontamination.

(ix) Emergency alerting and response procedures

This section of the emergency response plan should address how employees will be informed that an emergency exists, and how they should respond. There are two important questions that need to be addressed: (1) Who needs to be made aware of the emergency?, and (2) What do they need to be told to do? The alarm systems must inform all affected personnel that a potential emergency exists and what their immediate response should be.

Depending on plant size and the magnitude of the potential emergency "all affected employees" may include all employees, or just employees from a limited area. If the facility intends to evacuate employees from limited areas in response to emergencies, it must have alerting procedures in place that can communicate to those employees that must evacuate and to only those employees.

The following information is critical to inform employees of what their immediate response should be:

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| 1. Notification | Making the existence of the emergency situation known. |
| 2. Level & Type of Response | The required response based on the extent and type of emergency. |
| 3. Nature of the Emergency | The type of emergency condition (fire, explosion, vapor release, chemical spill, medical). |
| 4. Location | Critically important in large facilities. |
| 5. Ambient Conditions | Environmental factors that influence evacuation or response procedures (wind speed and direction). |

(x) Critique of response and follow-up

Emergency response plans are based on site specific needs and experience. It is important to consider previous accidents in preparing a facility's emergency response plan. It is just as important to consider new information, experience and incidents with the goal of enhancing the emergency response plan and keeping it current.

Formalized procedures for the critique of an emergency response must be written into the emergency response plan. Appropriate changes should be made in the emergency response plan in accordance with the results of a critique of a specific incident.

Time spent by emergency response employees critiquing incidents can be credited towards their refresher training requirements.

(xi) Personal protective equipment and emergency equipment

This section of the emergency response plan should list the facility's inventory of personal protective equipment (PPE) and emergency response equipment. The ERP should include instructions on how the PPE and equipment is to be used, their limitations, and when emergency responders should use them.

HAZWOPER requires emergency responders to be trained in selection of proper PPE, and the incident commander must be aware of the equipment and PPE available during an emergency. However, it is important that the emergency response plan pre-arrange the use of PPE.

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