HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE

29 CFR 1910.120

SCOPE:
This standard covers employees involved in:

- Clean-up operations required by a governmental body, whether federal, state, local or other, involving hazardous substances that are conducted at uncontrolled hazardous waste sites;

- Corrective actions involving clean-up operations at sites covered by Resource Conservation and Recovery Act (RCRA);

- Voluntary clean-up operations at sites recognized by federal, state, local or other governmental bodies as uncontrolled hazardous waste sites;

- Operations involving hazardous wastes that are conducted at treatment, storage and disposal facilities licensed under RCRA;

- Emergency response operations for release of, or substantial threats of release of, hazardous substances. (This includes any substance listed by the DOT as a hazardous material in 49 CFR 172.101.)

Exceptions are permitted if the employer can demonstrate that the operation does not involve employee exposure or a reasonable possibility of such exposure to hazards.

GENERAL REQUIREMENTS:

- Safety and health program - must be developed by each hazardous waste site employer to identify, evaluate, and control safety and health hazards, and provide for emergency response.
- **Preliminary evaluation** - of the site's characteristics prior to entry by a trained person to identify potential site hazards and to aid in the selection of appropriate employee protection methods. Included would be all suspected conditions immediately dangerous to life or health, or which may cause serious harm.

- **Site control program** - must be implemented to protect employees against hazardous contamination of employees. At a minimum it must have a site map, site work zones, site communications, safe work practices and identification of the nearest medical assistance. Also required is the use of a "buddy system" as a protective measure in particularly hazardous situations so that employees can keep watch on one another to provide quick aid if needed.

- **Training** - of employees before they are allowed to engage in hazardous waste operations or emergency response that could expose them to safety and health hazards. However, experienced workers will be allowed to continue operations and then be given refresher courses when appropriate. Specific training requirements are listed for clean-up personnel, equipment operators, general laborers and supervisory employees and for various levels of emergency response personnel. Persons completing specific training for hazardous waste operations shall be certified; those not certified nor with proper experience shall be prohibited from engaging in those operations specified by the standard. (See additional details in this fact sheet.)

- **Medical Surveillance** - must be conducted at least annually and at the end of employment for all employees exposed to any particular hazardous substance at or above established exposure levels and/or those who wear approved respirators for 30 days or more on site. Such surveillance also will be conducted if a worker is exposed by unexpected or emergency releases.

- **Engineering controls, work practices and personal protective equipment** - or a combination of these methods, must be implemented to reduce exposure below established exposure levels for the hazardous substance involved.

- **Air monitoring** - to identify and quantify levels of hazardous substances with periodic monitoring to assure that proper protective equipment is being used.

- **Informational program** - with the names of key personnel and their alternates responsible for site safety and health; and the listing of these requirements of the standard.

- **Decontamination procedures** - must be implemented before any employee or equipment may leave an area of potential hazardous exposure; operating procedures to minimize exposure through contact with exposed equipment, other employees, or used clothing; and showers and change rooms where needed.
Emergency response plan - to handle possible on-site emergencies must be developed and implemented prior to beginning hazardous waste operations. Such plans must address: personnel roles; lines of authority, training and communications; emergency recognition and prevention; safe places of refuge; site security; evacuation routes and procedures; emergency medical treatment; and emergency alerting.

Off-site emergency response plan – must be established to better coordinate emergency action by the local services and to implement appropriate control action.

TRAINING REQUIREMENTS:
Training requirements will vary with the type of operation involved. The various operations and their dependent training requirements are:

Uncontrolled hazardous waste operations mandated by various levels of government. These workers must have 40 hours of initial training before entering a site and at least three days of actual field experience under a trained, experienced supervisor. Employees visiting the site occasionally need only 24 hours of prior training and one day of supervised field experience. Managers and supervisors directly responsible for clean-up operations must have an additional eight hours of specialized training in waste management. Annual refresher training of eight hours is required for regular site workers and the managers.

Sites licensed under RCRA. Employees must have 24 hours of training plus eight hours of annual refresher training.

Emergency response operations at other than RCRA sites or uncontrolled hazardous waste site clean-ups. This will apply to most hazardous material incidents. Different levels of initial training are required depending on the duties and functions of each responder plus demonstrated competence or annual refresher training sufficient to maintain competence.

(1) First responders - awareness level: These are the individuals who are likely to witness or discover a hazardous substance release and whose only responsibility is to initiate the emergency response by notifying others. They are not to become involved in the response in any other way. They must demonstrate competency in such areas as recognizing the presence of hazardous materials in an emergency, the risks involved, and the role they should perform.

(2) First responders - operations level: These are the individuals who respond defensively for the purpose of protecting property, persons, or the nearby environment without actually trying to stop the release. They must have eight hours of training plus "awareness level" competency or demonstrate competence in their role.
(3) **Hazardous materials technicians:** These are the individuals who respond to stop the release. They must have 24 hours of training equal to the "operations level" and demonstrate competence in several specific areas.

(4) **Hazardous materials specialists:** These individuals support the technicians but require a more specific knowledge of the substances to be contained. They must have 24 hours of training equal to the technical level and demonstrate competence in certain areas.

(5) **On-scene incident commanders:** These individuals assume control of the incident scene beyond the "awareness level". They must have 24 hours of training equal to the "operations level" and demonstrate competence in specific areas.