Review of
Emergency Response under HAZWOPER

Review, Compliance Issues, & Guidance

NIEHS/USDA Avian Flu Conference

September 2007

OSHA Occupational Safety and Health Administration

This presentation will…

- Provide an overview of Emergency Response, paragraph (q)
- Provide an overview of the **newly revised** Emergency Response directive – CPL 02-02-073
- Present compliance assistance resources

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HAZWOPER's Scope and Applicability

- HAZWOPER applies to three distinct operations:
  - Cleanup operations conducted at uncontrolled hazardous waste sites – 1910.120(b)-(o).
  - Hazardous waste operations conducted at treatment, storage, and disposal facilities – 1910.120(p).
  - Emergency response operations for releases, or substantial threats of releases, of hazardous substances – 1910.120(q).
- Operations that do not fall within the above activities or where there is no potential for employee exposure to hazards are not covered by HAZWOPER.
- Incidental releases are not covered by (q).

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Written Emergency Response Plan and Procedures

- Emergency Response Plan (ERP) - 1910.120(q)(1)
  - Developed and implemented to handle anticipated emergencies prior to the commencement of emergency response operations.
- Emergency Action Plan – 1910.38
  - If employer -
    - Evacuates all employees;
    - Do not permit any of their employees to assist in handling the emergency;
    - Provide an EAP in accordance with 1910.38(a).
  - Then, they are exempt from the requirements of 1910.120(q).

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Written Emergency Response Plan and Procedures

Emergency Response Plan (ERP) – (q)(2) - Written plan must include:

- Pre-emergency planning and coordination with outside authorities
- Personal roles, lines of authority, training, and communication
- Emergency recognition and prevention
- Safe distances and places of refuge
- Site security and control
- Evacuation routes and procedures
- Decontamination
- Emergency medical treatment and first aid
- Emergency alerting and response procedures
- Critique of response and follow-up
- PPE and emergency equipment
- Local//State response plan may be substituted

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Written Emergency Response Plan and Procedures

- Procedures for handling an emergency response – 1910.120(q)(3)
  - Senior official shall become the individual-in-charge
    - Hazard identification / evaluation and implementation of appropriate controls / PPE.
  - Incident Command System (ICS) system.
  - Limiting no. of responders and use of the “buddy system.”
  - Designation and authority of safety officer.

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Skilled Support Personnel and Specialist Employees

- Skilled support personnel – 1910.120(q)(4)
  - Trained in the operation of certain equipment, such as earth moving equipment or cranes, who are needed temporarily to perform immediate emergency support work.
  - Must be provided initial briefing that includes PPE, what chemical hazards are involved, what duties to be performed, and any other appropriate safety and health precautions.
- Specialist employees – 1910.120(q)(5)
  - Specialist employees work with and are trained in the hazards of specific hazardous substances, and who will be called upon to provide technical advice or assistance to the individual in charge.
  - Shall receive training or demonstrate competency in the area of their specialization.

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Emergency Responder Training - 1910.120(q)(6)

- First responder awareness level – (q)(6)(i)
  - Individuals who are likely to witness or discover a hazardous substance release; limited to notifying the proper authorities.
  - Sufficient training or have had sufficient experience to objectively demonstrate competency.
- First responder operations level – (q)(6)(ii)
  - Individuals who respond for the purpose of protecting nearby persons, property, or the environment.
  - Defensive fashion only.
  - 8-hours or have objectively demonstrate competency.

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Emergency Responder Training

- Hazardous materials technician – (q)(6)(iii)
  - Individuals who respond for the purpose of stopping the release; more aggressive role.
  - 24 hours equal to operations level plus additional competencies.
- Hazardous materials specialist – (q)(6)(iv)
  - Respond with and provide support to hazmat technician.
  - 24 hours equal to technician level plus additional competencies.

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Emergency Responder Training

- On-scene incident commander – (q)(6)(v)
  - Assumes control of the incident scene beyond the awareness level.
  - 24 hours equal to the 1st responder operations level plus additional competencies.

- All training hours are minimum hours.

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Examples of Competencies (varies for each training level)

- Ability to recognize the presence of hazardous materials in an emergency.
- Knowledge of hazard and risk assessment techniques.
- Know how to select and use proper PPE.
- Know how to perform control, containment and/pr confinement operations.
- Able to function within an assigned role in the ICS.
- Understand and implement decontamination procedures.
- Know how to implement local ERP

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Emergency Responder Training

- Emergency Response Trainers – 1910.120(q)(7)
  - Satisfactorily completed a training course for teaching subjects; or
  - Training and/or academic credentials and instructional experience necessary to demonstrates competent instructional skills and a good command of the subject matter.
- Refresher Training – 1910.120(q)(8)
  - 8-hours annually; does not need to occur all at one time.
  - Must be completed by anniversary training date
    - If not, reason why delayed and when it is scheduled.

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Medical Surveillance & Protective Clothing

- Medical surveillance and consultation – 1910.120(q)(9)
  - Baseline exam and medical surveillance as required by paragraph (f)
  - Employees who exhibit signs/symptoms resulting from exposure, either immediately or subsequently, shall be provided medical consultation as required in paragraph (f)(3)(ii)
- Chemical protective clothing – 1910.120(q)(10)
  - Specifies requirements for HAZMAT teams and hazardous materials specialists
  - Shall meet requirements of paragraphs (g)(3)-(g)(5)

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Post-emergency Response Operations

- Post-emergency response operations – 1910.120(q)(11)
  - Requirements for any necessary cleanup operations upon the completion of the emergency response.
  - Meet all requirements of (b) - (o); or
  - If on plant property and using plant personnel, follow 1910.38(a), 1910.134, 1910.1200, and other appropriate safety and health training such as PPE & decontamination.

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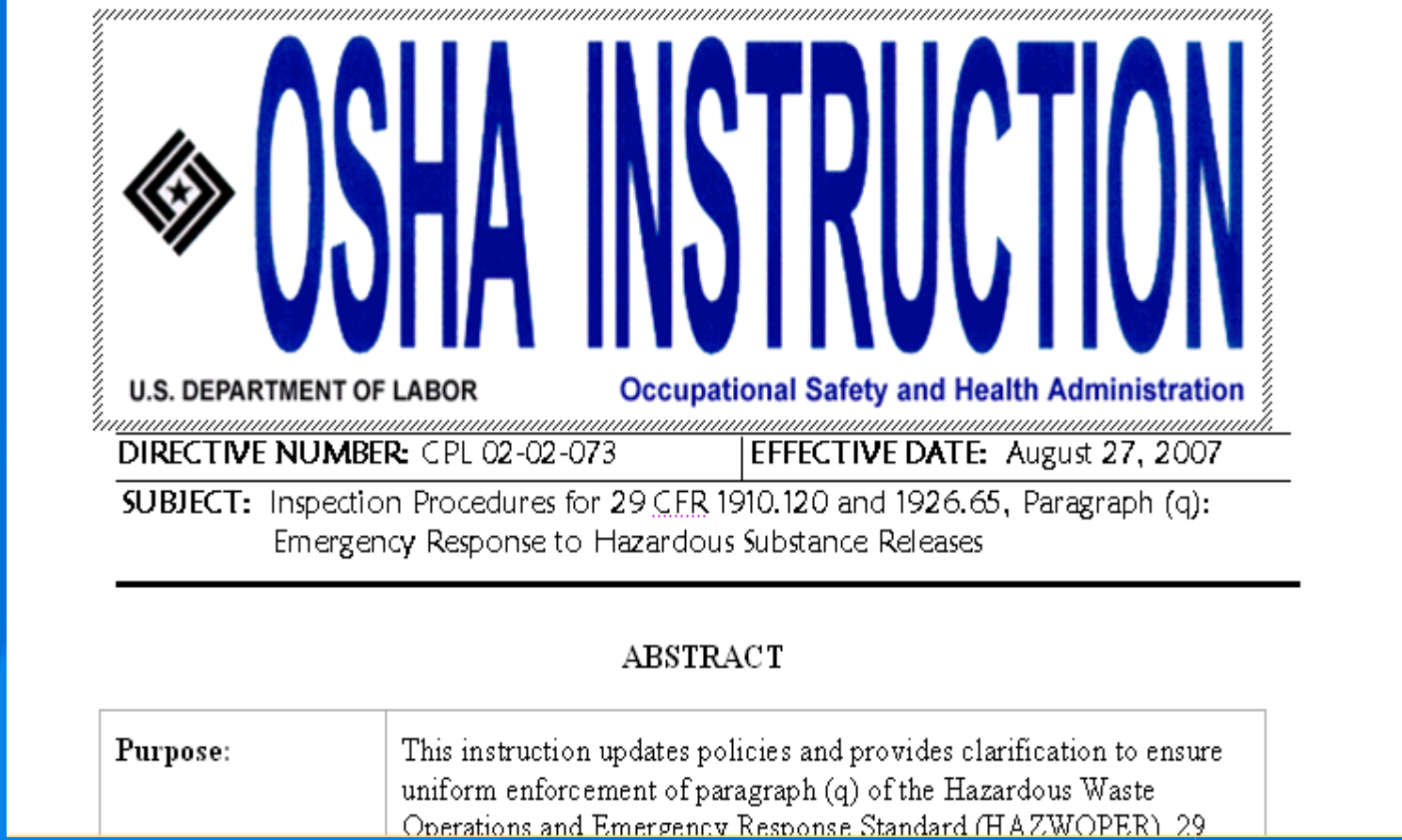
Emergency Response Directive **New**



OSHA INSTRUCTION

U.S. DEPARTMENT OF LABOR — Occupational Safety and Health Administration

DIRECTIVE NUMBER: CPL 02-02-073 | EFFECTIVE DATE: August 27, 2007

SUBJECT: Inspection Procedures for 29 CFR 1910.120 and 1926.65, Paragraph (q): Emergency Response to Hazardous Substance Releases

ABSTRACT

Purpose:	This instruction updates policies and provides clarification to ensure uniform enforcement of paragraph (q) of the Hazardous Waste Operations and Emergency Response Standard (HAZWOPER), 29

Emergency Response Directive Expanded Guidance

- CPL 02-02-073, issued August 2007
- Revision expands on such issues as:
  - HAZWOPER training requirements.
  - Medical surveillance for emergency responders.
  - Skilled support personnel.
  - Incidental release verses emergency response.

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Emergency Response Directive New Guidance

- New guidance information addresses:
  - Unique events (e.g., terrorist attacks).
  - OSHA's role under the NRP and Worker Safety and Health Support Annex.
  - "First Receivers."
  - Shelter-in-place.
  - Damaged packages during shipping.

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National Response Plan (NRP)

- OSHA's role under the activation of the National Response Plan (NRP):
  - Protect Federal assets, and coordinate with other Federal, State, local agencies, and private-sector organizations.
  - OSHA lead Federal agency for worker safety and health under the Worker Safety and Health Support Annex.
  - May provide technical assistance in lieu of enforcement.

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Worker Safety and Health Support Annex

- Worker Safety and Health Support Annex
  - OSHA responsibilities include:
    - Providing occupational safety and health technical advice.
    - Identifying and assessing safety and health hazards.
    - Undertaking site-specific safety and health plan development.
    - Collecting and managing data (e.g., exposure data, accident/injury documentation, etc.).
    - Resolving technical, procedural, and risk assessment conflicts.

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Terrorist Incidents

- Does OSHA expect employers to address terrorist incidents in their workplace emergency plans?
  - "Terrorist events are not considered foreseeable emergencies that OSHA expects an employer to reasonable anticipate in the workplace."
  - If an employer chooses to develop an emergency plan to safeguard their employees from the possibility of a terrorists event, OSHA recommends the employer contact the local emergency planning committee.

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Hospital Staff "First Receivers"

- What PPE is required for hospital staff that decontaminate victims ("First Receivers")?
  - Selection based on worst-case employee exposure scenarios; hospitals role in community emergency response evaluation.
- What training is required for hospital staff that decontaminate victims?
  - First Responder Operations level.
  - Sufficient to respond in a safe and effective manner.
- First Receivers document provides extensive guidelines.

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Medical Surveillance

- Medical surveillance
  - Under (f)(3), medical examinations must be made available to those involved in hazardous waste operations.
  - Under (q)(9), members of a HAZMAT team shall receive a baseline examination as required in paragraph (f).
  - As such, in order for an individual to qualify as a HAZMAT team member (or hazardous materials specialist), that individual must undergo the medical examination.

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Shelter-in-Place

- Shelter-in-place
  - The ERP must address safe distances and places of refuge.
  - If the employer intends to implement a shelter-in-place policy for any anticipated emergencies, the ERP must:
    - Identify who is responsible for making the determination.
    - What situations may require it.
    - All associated procedures.

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Computer/Video-based Training

- Computer/Video-based training
  - Can be used as part of an overall training program.
  - Employer must assure employee has sufficient knowledge/skills.
  - Instructor must be available to respond to questions.
  - Sufficient hands-on training (e.g., first responder operations level and higher would require hands-on training).

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Responder Training

- How does an employer determine if area municipal responders are adequately trained to provide emergency responses?
  - Employer must contact outside parties to determine their preparedness.
- What level of training is required for on-site responders under HAZWOPER?
  - Responders need to be trained & equipped for reasonably anticipated exposures; Dependent on the level in the incident command structure (for instance, first responder awareness vs. hazardous material specialist).

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EMS Personnel

- What training do EMS personnel need?
  - Because EMS personnel are often the first on the scene, they should be given first responder awareness level (q)(6)(i) even if they are not expected to handle contaminated victims.
  - If handling contaminated victims (or those superficially decontaminated) they must be trained to the first responder operations level (q)(6)(ii).

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Incidental vs. Emergency Release

- Appendix A: Incidental vs. Emergency Release
  - Three distinct groups:
    - Releases that are clearly incidental regardless of the circumstances;
    - Releases that may be incidental or may require an emergency response depending on the circumstances; and
    - Releases that clearly require an emergency response regardless of the circumstances.

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Clearly Incidental

- Does not pose a significant safety or health hazard to employees in the immediate work area or to those assigned to clean it up.
- Does not have the potential to become an emergency within a short time frame.
- Limited in quantity, exposure potential, or toxicity.
- Example – small leak from a repair being made by maintenance personnel.

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May Be Incidental or Require an Emergency Response Depending on the Circumstances

- Must consider properties of the hazardous substance
  - Toxicity, volatility, flammability, explosiveness.
- Circumstances of the release
  - Quantity, confined space considerations, ventilation.
- Mitigating factors in the work area
  - Knowledge of employee in the work area, PPE at hand, pre-established SOPs, engineering controls.
- Example – fuel spill from tanker truck

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Emergency Response Regardless of the Circumstances

- Poses a significant threat to health and safety that, by their very nature, require an emergency response regardless of the circumstances or mitigating factors.
- Examples include:
  - Response from outside the immediate release area;
  - Release poses or has potential to pose a condition of Immediately Dangerous to Life or Health (IDLH);
  - Uncertainty whether employees in the work area can handle the severity of the hazard with the PPE and equipment provided;
  - Serious threat of fire or explosion;

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Response to Damaged Packages

- Appendix B: Response to Damaged Packages
  - Discusses employer responsibilities for protecting employees who may discover, respond to, or clean-up potentially hazardous substances from damaged packages during shipping.
  - Includes Q&A addressing procedures, training, and PPE.
  - Includes example scenarios.

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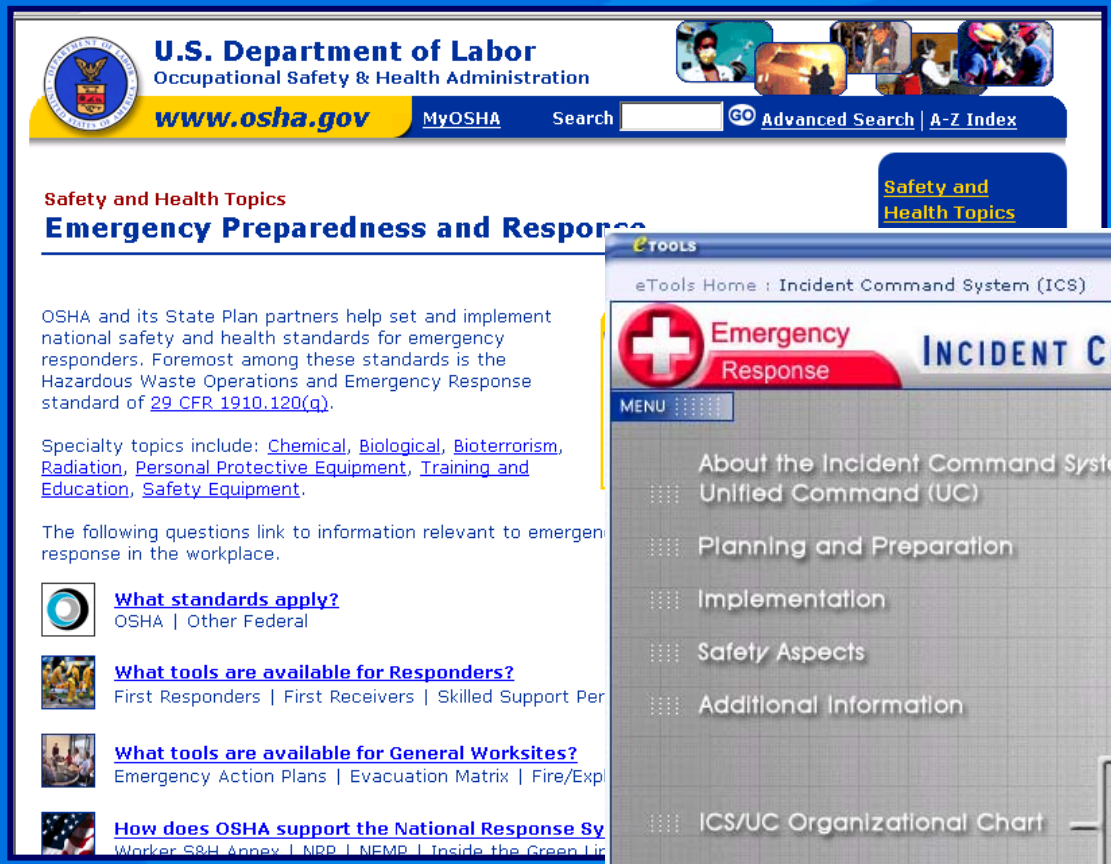
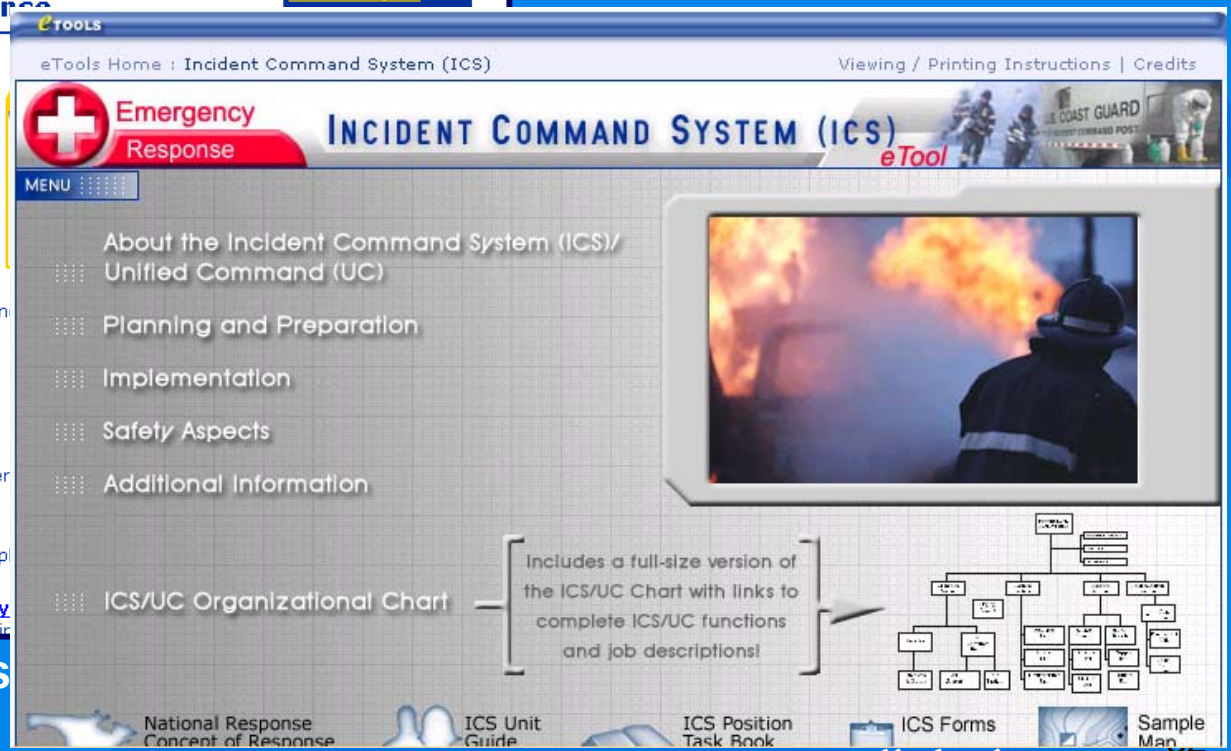
Web Page and eTool



Emergency Preparedness and Response Web Page

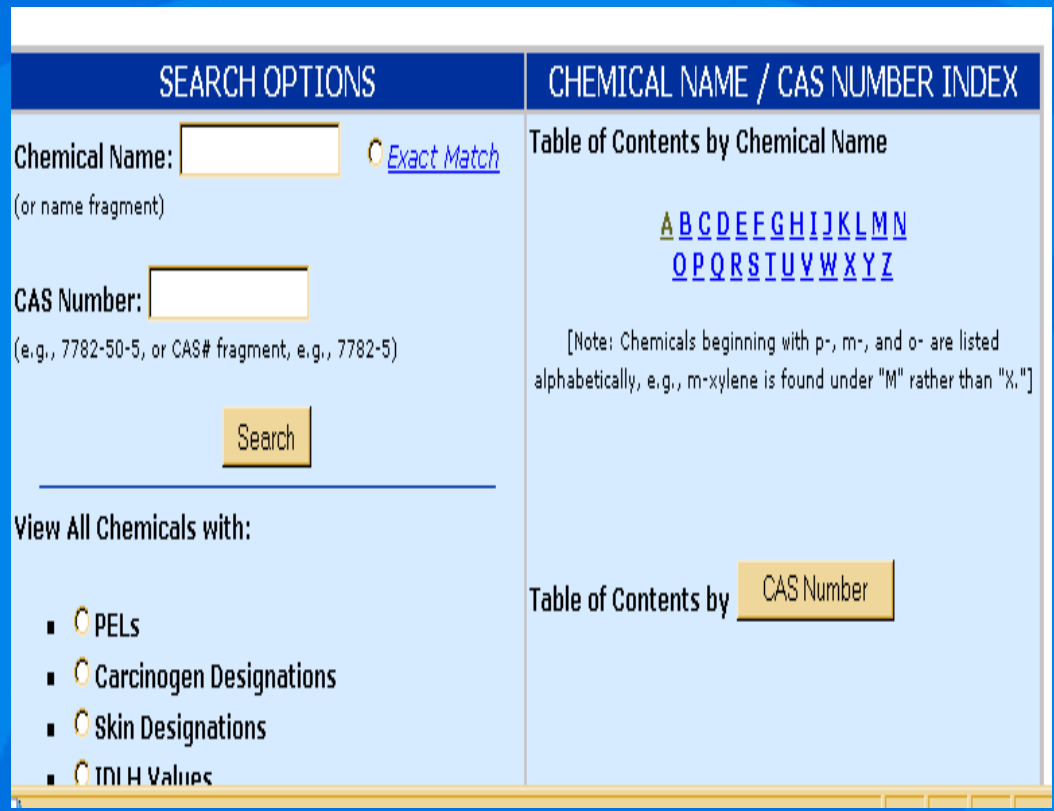
Incident Command System/Unified Command e-Tool



Occupational Chemical Database

http://www.osha.gov/web/dep/chemicaldata/#target

- Web-based platform
- Searchable by
  - Chemical name
  - CAS#
- Table of contents by
  - Chemical name
  - CAS#



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OSHA/EPA Occupational Chemical Database

Chemical Identification

Chemical Name: BENZENE

CAS #: 71-43-2 **UN No:** 1114 **Formula:** C6H6

Synonyms: Benzol; Phenyl hydride

Physical Properties

Physical Description: Colorless to light-yellow liquid with an aromatic odor. [Note: A solid below 42ºF.]

BP: 176ºF	**MW:** 78.1	**LEL:** 1.2%	**NFPA Fire Rating:** 3
FRZ/MLT: FRZ: 42ºF	**VP:** 75 mmHg	**UEL:** 7.8%	**NFPA Health Rating:** 2
FP: 12ºF	**VD:** NA		**NFPA Reactivity Rating:** 0
Sp. GR: 0.88	**IP:** 9.24 eV		**NFPA Sp. Inst.:** NA

Exposure Limits

OSHA	NIOSH	Related Information
PEL-TWA ppm: 1	**REL-TWA ppm:** 0.1	**AIHA Emergency Response Planning Guidelines - ERPG-1/ERPG-2/ERPG-3:** 50 ppm/150 ppm/1000 ppm
PEL-TWA mg/m3: NA	**REL-TWA mg/m3:** NA	
PEL-STEL ppm: 5	**REL-STEL ppm:** 1	
PEL-STEL mg/m3: NA	**REL-STEL mg/m3:** NA	
PEL-C ppm: NA	**REL-C ppm:** NA	
PEL-C mg/m3: NA	**REL-C mg/m3:** NA	**Carcinogen Classifications:** IARC-1, NIOSH-Ca, NTP-K, OSHA-Ca, TLV-A1
Skin Notation: No	**Skin Notation:** No	
Notes: SEE 29 CFR 1910.1028, FOR INDUSTRIES EXEMPT FROM THIS		

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Summary

- Updated Emergency Response Directive guidance.
- OSHA will continue to advocate worker safety and health at future incidents.
- Common compliance questions and answers are available – 1-800-321-OSHA.
- OSHA guidance and information available in Directives and Safety and Health Topic Links.

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