

**EMERGENCY PREPAREDNESS –
ARE YOU READY?**

**START YOUR RESPONSE
BEFORE THE EMERGENCY**

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Director, Hazardous and Chemical Incidents**



ARE YOU PREPARED?



**MARION
ENVIRONMENTAL
INCORPORATED**

**Excuse me,
how do you
get to
Carnegie
Hall?**



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**Practice,
Practice,
Practice!**

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**I'm a firm believer in that you play
the way you practice. – Larry Bird**

**Practice does not make perfect.
Only perfect practice makes
perfect. – Vince Lombardi**

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Let's look at...

Emergency Response

**Planning,
Preparedness,
And Practice:**

- **Requirements**
 - **Elements**
 - **Benefits**



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An Emergency is...

A hazardous materials emergency exists when an incident or accident (e.g., derailment, collision, fire, explosion, natural disaster, civil disturbance, loss of containment) has occurred which:

- Involves a real, potential, or suspected release of that material from its intended containment;**
- Poses a real or potential threat to life, property, or the environment; and**
- May require some action to mitigate the potential consequences.**

--Shawn Burress, Burress Advisory Group

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An Emergency is...

- **An emergency is a bad situation under control**

But...

- **A disaster is a bad situation out of control.**
- ***Terry Corson, Canadian National RR***



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**Going back to my premise of starting your
Response before the Emergency**

**Ponder this...IF you're a facility operator
or a responder and your response does
not start with the emergency...**

**When does your response
really begin?**

ARE YOU PREPARED?



**IMHO,
as a response
community,
we should be in
response mode
NOW...**

**PREPAREDNESS
BEFORE THE
RESPONSE**



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**Response
preparedness is not
just the
right thing to do...**

**It is a regulatory
requirement...that
includes:**

- **Planning**
- **Education**
- **Training**
 - **Drills**



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To be clear...**WHO** is required to participate in all this preparation?

29 CFR Part 1920 (OSHA)

Subpart H (Hazardous Materials)

.120 (HAZWOPER)

- (a) ***Scope, application, and definitions***—(1) ***Scope***. This section covers the following operations, unless the employer can demonstrate that the operation does not involve employee exposure or the reasonable possibility for employee exposure to safety or health hazards:
- (i) **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 (including, but not limited to, the EPA's National Priority Site List (NPL), state priority site lists, sites recommended for the EPA NPL, and initial investigations of government identified sites which are conducted before the presence or absence of hazardous substances has been ascertained);**
 - (ii) **Corrective actions involving clean-up operations at sites covered by the Resource Conservation and Recovery Act of 1976 (RCRA) as amended (42 U.S.C. 6901 *et seq.*);**
 - (iii) **Voluntary clean-up operations at sites recognized by Federal, state, local or other governmental bodies as uncontrolled hazardous waste sites;**
 - (iv) **Operations involving hazardous wastes that are conducted at treatment, storage, and disposal (TSD) facilities regulated by 40 CFR parts 264 and 265 pursuant to RCRA; or by agencies under agreement with U.S.E.P.A. to implement RCRA regulations; and**
 - (v) **Emergency response operations for releases of, or substantial threats of releases of, hazardous substances without regard to the location of the hazard.**

ARE YOU PREPARED?



Now that we know
WHO is required to
respond,

WHAT preparations
are operators and
responders required
to do?

What do federal
regulations say
about ER
preparedness.



ARE YOU PREPARED?



29 CFR Part 1920 (OSHA) Subpart H (Hazardous Materials) .120 (HAZWOPER)

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 - (iii) Voluntary clean-up operations at sites recognized by Federal, state, local or other governmental bodies as uncontrolled hazardous waste sites;
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 - (v) Emergency response operations for releases of, or substantial threats of releases of, hazardous substances without regard to the location of the hazard.

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29 CFR Part 1920 (OSHA) Subpart H (Hazardous Materials) .120 (HAZWOPER)

b) Safety and health program.

NOTE TO (B): Safety and health programs developed and implemented to meet other Federal, state, or local regulations are considered acceptable in meeting this requirement if they cover or are modified to cover the topics required in this paragraph. An additional or separate safety and health program is not required by this paragraph.

(1) *General.* (i) ***Employers shall develop and implement a written safety and health program*** for their employees involved in hazardous waste operations. The program shall be designed to identify, evaluate, and control safety and health hazards, and provide for emergency response for hazardous waste operations.

(ii) The written safety and health program shall incorporate the following:

(A) An organizational structure;

(B) A comprehensive workplan;

(C) A site-specific safety and health plan which need not repeat the employer's standard operating procedures required in paragraph (b)(1)(ii)(F) of this section;

(D) The safety and health training program;

(E) The medical surveillance program;

(F) The employer's standard operating procedures for safety and health; and

(G) Any necessary interface between general program and site specific activities.

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29 CFR Part 1920 (OSHA) Subpart H (Hazardous Materials) .120 (HAZWOPER)

- (l) Emergency response by employees at uncontrolled hazardous waste sites—(1) Emergency response plan. (i) An emergency response plan shall be developed and implemented by all employers within the scope of paragraphs (a)(1) (i)-(ii) of this section to handle anticipated emergencies prior to the commencement of hazardous waste operations. The plan shall be in writing and available for inspection and copying by employees, their representatives, OSHA personnel and other governmental agencies with relevant responsibilities.

ARE YOU PREPARED?



Environmental Protection Agency

- **40 CFR Part 68 Chemical Accident Prevention**
- **Subpart E Emergency Response**
- **§68.95 Emergency response program**

(a) The **owner or operator shall** develop and implement **an emergency response program** for the purpose of protecting public health and the environment. Such program shall include the following elements:

(1) An emergency response plan, which shall be maintained at the stationary source and contain at least the following elements:

- (i) Procedures for informing the public and local emergency response agencies about accidental releases;
 - (ii) Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures; and
 - (iii) Procedures and measures for emergency response after an accidental release of a regulated substance;
- (2) Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance;
 - (3) Training for all employees in relevant procedures; and
 - (4) Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the stationary source and ensure that employees are informed of changes.

ARE YOU PREPARED?



- **So, how does one “plan” for an emergency?**
- **Doesn’t “emergency” imply unknown or unexpected?**



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- **Regardless, we (hazardous materials owners and responders) are mandated to have a “plan.”**
- **We have to “plan” for the unknown!**



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- **While it can be argued that one cannot plan for everything...**
- **There are elements that are common to all emergency responses.**



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- **OSHA and EPA capture some of these elements in the regulations related to ER Programs and Plans**



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40 CFR Part 68 (EPA)

Elements of an ER Program

- **Emergency Response Plan**
- **ER equipment SOPs**
- **Responder training**
- **ER Plan review and update SOP**

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40 CFR Part 68 (EPA)

Elements of an ER PLAN

- **Notification plan (public and response agencies)**
- **Documentation procedures**
- **Response procedures**

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29 CFR Part 1920.120 (OSHA)

Elements of an ER PLAN

- **Pre-emergency planning**
- **Roles, responsibility, authorities established – lines of communication**
- **Emergency recognition & prevention training**

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29 CFR Part 1920.120 (OSHA)

ER Plan Elements

- **Identified safe distances/refuge**
- **Defined site security & control**
- **Evacuation routes established**
- **Decontamination procedures**
- **First aid/medical treatment**
- **Emergency notification procedure**
- **Response critique and follow-up**

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- **And last but not least...**

29CFR1910.120(I)(iv)

(iv) The emergency response plan shall be **rehearsed regularly** as part of the overall training program for site operations.

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**How does ER
preparedness
happen?**

**It starts with
education.**



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Responders should know the nature of the hazards (chemical, physical, biological, rad) and how to PROTECT themselves from those risks.

PPE is frequently the first thought.



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**How many of you
prefer to work while
wearing gloves?**

**We practice individual
tasks.**

**We practice tasks in
PPE.**

Like installing a C kit.



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However, the level of protection is dependent on the concentration of chemical hazard.

So monitoring is critical.

Know what you are measuring.



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So...you've been in the soup, completed your task, saved the planet from those mean chemicals.

Time to jump in the truck and head home? Not so fast.

Decontamination! Even that takes training and practice.



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Above all else...

DO IT SAFELY!

Medical Monitoring



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So, we have:

- **Educated**
- **Trained (enhanced skills)**
- **Remember “rehearse regularly”**
- **Now we put it all together and act it out in a DRILL.**



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Who gets an invitation to the drill?

- **ER responders of course**
- **Local Fire Department?**
- **LEPC, EMA, SERC?**
- **Local, state, federal regulators?**
- **Nearby industries?**
- **\$\$\$**

- **Consider Table Top Exercises!**

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Table Top Exercise:

- **Allows for opportunities to establish relationships between owners, responders, regulators.**
- **Practice lines of communication.**



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Participants:

- **Fire, police, EMS, EMA, LEPC, hospital, school, highway, utility, county/city/town departments, media and local business managers, workers and employees.**



ARE YOU PREPARED?



**So, we have
rehearsed.**

We have our

- **program,**
- **plan**
- **an educated,
trained, and
practiced team.**



ARE YOU PREPARED?



Are we done with preparation?

Is it one and done?

Not at all.

Preparation never, ever stops!



ARE YOU PREPARED?



Benefits Of Plan, Prepare, Practice!



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BENEFITS

- **Minimize risk to employees, neighbors, responders, environment, and facility.**
- **Limit damage**
- **Minimize liability**
- **Establish relationships between regulators, responders, facility management, neighbors.**



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BENEFITS

- ***Relationships:*** An Emergency Response is no time to be introduced to your regulator or contractor.
- ***Trust:*** A critical and essential element of the Emergency Response business.



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CASE STUDY

- **Warehouse fire at major pool bleach manufacturer**
- **FD uses 200k+ gallons of water on the fire.**
- **Resulting in a chlorine release.**



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CONSEQUENCES

- **Product loss**
- **Facilities loss**
- **Production loss**
- **Claims**
- **Fines**
 - **FEDERAL EPA**
 - **OSHA**
 - **STATE EPA**
 - **COUNTY**
 - **CSB**

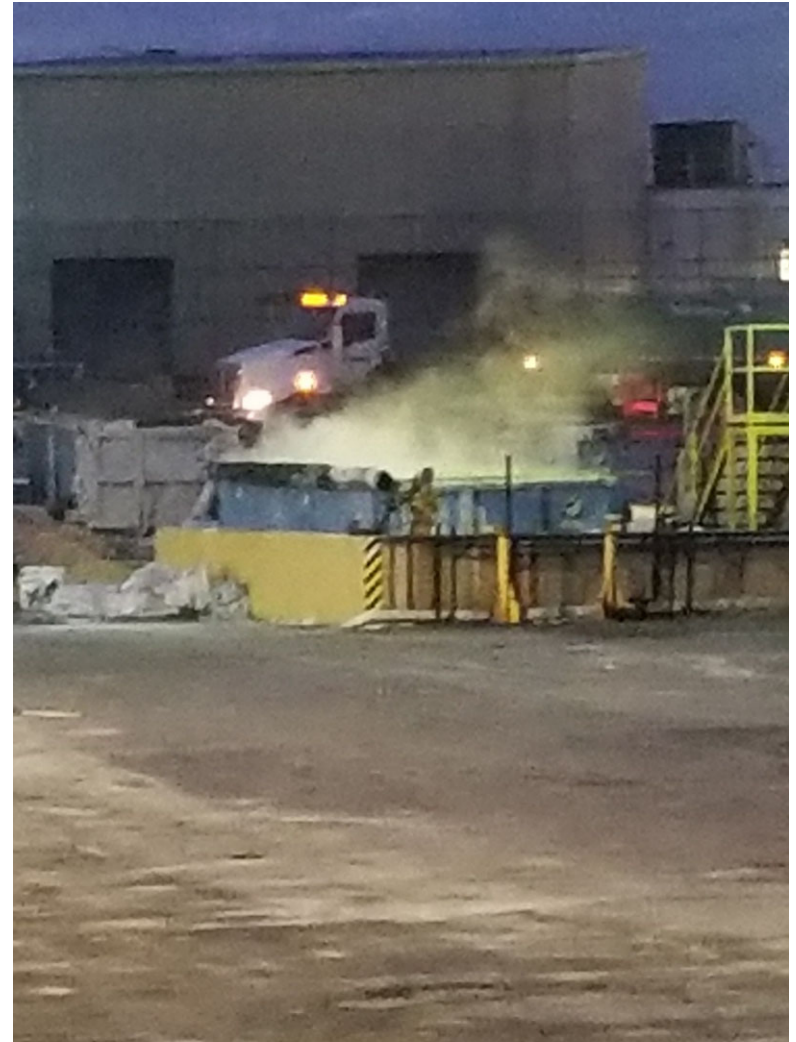


ARE YOU PREPARED?



WHAT IF...

- **Prevent the fire?**
- **More effective FD response**
- **Much less loss**
- **Fewer claims**
- **Lower fines**
 - **FEDERAL EPA**
 - **OSHA**
 - **STATE EPA**
 - **COUNTY**
 - **CSB**



ARE YOU PREPARED?



- **“If you learn it right, you'll do it right the rest of your life. If you learn it wrong, you'll do it wrong and spend the rest of your life trying to learn to do it right.”**
– **Steve Prazenka**
- **“The harder the training, the more troops will brag.”**
- **David Hackworth**



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**How do you
get to
Carnegie
Hall?**

