

**OSC 12**  
Ohio Safety Congress & Expo

**WELL AT HOME. SAFE AT WORK.**

**134 Emergency Planning: Are You Really Prepared?**

Richard Artino, CSP

Thursday, March 29, 1 to 2 p.m.

**Ohio** Bureau of Workers' Compensation

**EMERGENCY PLANNING**  
*Are You Really Ready?*

Rick Artino, CSP



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 **MINIMUM REQUIREMENTS UNDER 1910.38 and 1926.35**

- Evacuation Routes documented and posted
- Procedures for operations shutdown
- Method of accounting for employees and visitors
- Assignment of rescue and medical duties
- Procedures for reporting fires and other emergencies
- Names of those who manage the plan
- Training and annual drills

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 **MINIMUM REQUIREMENTS – OTHER EMERGENCIES**

- Severe accidents and medical emergencies
- Weather emergencies, tornado, snow, floods
- Bomb Threats
- Chemical Spills
- Workplace Violence
- Civil Disturbance
- Armed Robbery

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 **SOME COMMON QUESTIONS ABOUT ELEMENTS OF THE WRITTEN PLANS**

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 **ESCAPE ROUTES**

- Posted
- Drills – annual to be considered “effective”
- After action reviews –documented
- 28 inch minimum width, 7 ½ foot clearance overhead
- Doors must swing in direction of exit if 50 or more people
- Must be evident from anywhere in the facility

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## ALARM SYSTEMS

- Life safety code NFPA 101 provides guidance
- Must be maintained and tested regularly
- Distinctive signal for each emergency i.e. one for evacuation = fire and one for weather = shelter in place
- Use of radios or word of mouth acceptable in smaller establishments

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## PROCEDURE FOR SHUTDOWN OF OPERATIONS

- Shut off gas, electric and possibly water
- Identify who will do it and when
- Have drawings showing where the shut-off valves and motor control centers are
- Document procedures for shutting down major equipment like ovens, or similar continuous processes

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## ACCOUNTING FOR EMPLOYEES AND VISITORS

- Have assembly areas designated on drawings –posted
- Have signs in the assembly areas
- Utilize sign in procedures and possibly card access systems
- Attendance records or time clock print outs
- Each area calls out “all clear” when accounting is complete

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## PROCEDURE FOR REPORTING EMERGENCIES

- Develop a strategy and document
- Call 911 or call Security or call front desk
- Do you have emergency numbers posted?
- To use or not to use a fire extinguisher (determines who gets trained)
- Emergency response team (incorporates the medical and rescue requirement)

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## TRAINING

- Orientation
- Annual – drills
- When machines, materials or processes change
- Cover the whole plan, and include roles and responsibilities for each type of emergency
- Include assignment of employees to assist handicapped employees

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## OTHER CONSIDERATIONS

- Emergency Response team – specialized training
- Include the fire department in your plans
- Identify a command center – stock with supplies
- Identify someone to meet emergency services
- Walk through with Fire and Police periodically
- Identify and train your incident commanders

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**OTHER CONSIDERATIONS**

- For PSM locations – Haz–Mat Trailer onsite
- Security considerations during and after the event
- Evacuated employee issues
- Communication capabilities
- Dealing with Media and Regulators
- Dealing with suppliers and customers
- Disaster Recovery

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**RESPONDING TO THE EVENT....  
CRISIS MANAGEMENT  
DISASTER RECOVERY**  
(NOW THE FUN BEGINS)

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**COMMUNICATION:  
INTERNAL**

- Senior Management / Owners
  - Have a list of names with home, work and cell numbers
  - Have a pre-determined command structure and train to it
  - Each person has a copy of the plan
  - Emergency response kits –with credentials
- Supervision and Employees who are off duty

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**COMMUNICATION:  
EXTERNAL**

- Emergency Services: Fire, Police
- Regulatory: OSHA, EPA, National Response Center
- TPA (safety, environmental, security advice)
- Legal
- Suppliers
- Customers

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**COMMUNICATION:  
EXTERNAL**

- Transport Services
- Insurance and Financial partners
- Media
- Establish a Hotline

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**MEDIA RELATIONS**

- Only one designated person speaks to the media!!
- Message developed by a team
- Tell the truth, only the facts
- Correct any inaccuracies immediately
- Be in front by contacting them
- Set up one place where you can update them all at once

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## EMPLOYEE CONCERNS

- Get them away from the site: Pre-arranged!!
- Food, Water, Porta Johns
- Notification of Families
- Notification of employees not on site (service, media)
- Grief Counseling
- Assign one contact for family of injured: (take care of their needs)

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## SECURITY CONCERNS

- Control access to site or department
- Need for additional security at a moment's notice
- Contractor access versus Employee access
- Theft prevention
- Industrial espionage
- Rogue Contractors
- Unauthorized Media access

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## EQUIPMENT CONCERNS

- Radios integrated
- Remote access to computer systems –wireless
- Phone in remote command centers
- Communications capability to employees not on site
- Access to generators
- Supplies for handling chemical spills
- Haz-Mat trailers for larger chemical processors

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## REGULATORY AGENCIES

- Explosions, Fatalities first investigated by law enforcement
- EPA, OSHA given designated location to stay for updates.
- In cases of fatality or multiple serious injuries OSHA escorted
- Regulators not always "in control" but interviewing and inspecting passively
- NO Trained Incident Commander, = Fire department or Haz Mat team takes control

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## 3<sup>RD</sup> PARTY PARTNERS

- Can provide unbiased investigation for facts
- One person directs investigation
- Should be done under Privileged Legal
- Forensic Engineering firm
- Security of the scene

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## DISASTER RECOVERY BUSINESS CONTINUITY

- Employee safety concerns rule: Building Inspector / Structural Engineer / Safety Partners
- Utilities and Building Services
- Computer Data recovery
- Document Preservation
- Temporary offices / Storage

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## DISASTER RECOVERY BUSINESS CONTINUITY

- Facility Restoration Services
- Waste removal
- Rental Agreements (generators, equipment , space etc.)
- Transportation Companies
- Customers

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## EXAMPLE: FATALITY

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## FATALITY

- Show respect for the victim: cover, control access to site, call emergency services
- Stop operations (decide when start up is appropriate)
- Meet with employees who are there and all employees next day

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## FATALITY

- Arrange for grief counseling
- Internal communications / External communications twice per day
- One contact immediately with family

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## FATALITY

- Engage independent Investigator ( TPA Safety person, Independent Safety Consultant, Forensic Engineering firm)
- Contact Legal Partner
- Identify witnesses and have them write out statements, sign and date (Independent investigator will interview them again)

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## FATALITY

- Prepare for OSHA inspection: training records, preventive maintenance, written plans, disciplinary records, machinery manuals etc.
- Take equipment out of service until Forensic engineer and lead investigator complete their investigation

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## FATALITY

- Prepare Media statement, have Company contact reach out to media outlets with information.
- Senior manager or owner should have same statement

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## EXAMPLE: FIRE

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## FIRE

- Employee / Visitors Safety first concern. Evacuate, Account for everyone
- Contact Emergency Services
- Have drawings ready for utility companies to shut off gas and electric.....shut down hazardous processes
- Internal / External Communications
- Media Statement
- Setup remote command center

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## FIRE

- Consider environmental impacts: contact vendors, prepare for EPA visit
- Contact environmental partner internal or external
- Contact safety partner internal or external
- Prepare for OSHA visit
- Contract with Forensic engineer to assist in investigation(Fire Marshal will take lead)

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## FIRE

- Deploy pre-arranged plan to get employees to a safe site via buses etc.
- Make sure safe site has access to communication for employees to call families
- Safe site needs to have access to food, water and restrooms
- Food Water and porta johns for emergency services and contractors

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## FIRE

- Deploy Disaster Recovery Plan for Business Continuity
- Deploy additional security plan for controlled access to site during and after event
- Set up Hot line for next day

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## EXAMPLE: WORKPLACE VIOLENCE

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## WORKPLACE VIOLENCE

- Several Categories
  - Lone Wolf
  - Personal Issues
  - Retaliatory
  - Criminal Activity
- Have policies documented and training
- Identify - Intervene - Escalate Before Violence Occurs
- Get outside assistance if you need the expertise

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## WORKPLACE VIOLENCE

- When Violence Occurs
  - Call Law Enforcement at 911 immediately
  - If the offender is still on the property and armed: Senior manager directs employees to a safe place
  - If the offender is still on the property and not armed: Senior manager with escort confronts and calms offender to keep them in area until law enforcement arrives

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## WORKPLACE VIOLENCE

- Stop Operations
- Grief Counseling
- Employee meetings
- Internal / External Communications
- Security
- Media

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## EXAMPLE: WEATHER - SNOW

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## SNOW LOADS ON ROOFTOPS

- Drifted snow should be removed first after snow storm
- Only if safe to do so!!
- Drifts will form around mechanical vents, skylights, parapet walls, penthouse walls, refrigeration units
- Use plastic shovels / fall protection and remove down to two inches
- Using salt will void roof warranties

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## SNOW LOADS ON ROOFTOPS

- Design load = dead load + live load + wind load + snow load. All these will be present year round except for snow load
- When to initiate roof top snow removal plan
  - Building structure is visually deformed
  - Wood structure is cracked or split
  - Sprinklers are pushed down lower than normal
  - Doors begin sticking
  - Utility piping becomes bowed
  - Creaking, cracking or popping sounds

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## SNOW LOADS ON ROOFTOPS

- Roof top snow removal plan:
  - When snow load exceeds design load
  - After storm, clear drain outlets and inlets
  - Evacuate that portion of the building
  - Calculate snow load
  - Contractors with expertise brought in

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## SNOW LOAD ON ROOFTOPS

- Use capped piece of PVC pipe of any diameter , longer than the snow is deep.
- Stick pipe vertically into snow and collect full depth sample
- Mark the depth on the pipe
- Turn pipe upside down and let it melt -measure water line inside pipe

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## SNOW LOAD ON ROOFTOPS

- Calculate Snow loading  
 $P = 5.2 H$  where:  
 $P =$  Estimated Roof Snow load in pounds per square foot  
 $H =$  Height of water in the pipe in inches

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## QUESTIONS??

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## FIRE PREVENTION PLAN

- Under OSHA 1910.39 Must have a written plan available for review
- Training Requirement:
  - Upon initial assignment - orientation
  - When responsibilities change
  - When the plan changes
  - Include parts of the plan necessary for self protection (ie fire extinguishers, pull boxes, evacuation routes in ER plan)

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## FIRE PREVENTION PLAN MAIN ELEMENTS

- List a major fire hazards
- Proper handling and storage of flammables
- Potential ignition sources and control procedures
- Type of fire protection systems in place to control each hazard
- Procedure to control accumulation of flammables and combustibles

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## FIRE PREVENTION PLAN MAIN ELEMENTS

- Procedure for preventive maintenance on heat producing equipment
- Names and job titles of those responsible for the plan, control systems and fuel sources

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# QUESTIONS??

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