

MARSH

## Monitoring of Construction Projects

Managing Contractor Safety



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### Purpose

- **Objective:** develop best strategies for control of contractor exposures to protect your:
  - Operations
  - Public
  - Facilities/equipment
  - Workers
  - Name/reputation
- Contractor exposures may involve new construction, modification or renovation, maintenance, or demolition work

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### Background

1. About 90 percent of construction companies employ fewer than 20 workers.
2. Many contractors have little formal safety programs in place.
3. One of every five workplace fatalities is a construction worker.
4. Accident trends in the industry have steadily improved.
5. Traditional safety vs. best practices.



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### OSHA Position

#### Draft Proposed Safety and Health Program Rule

- The **host employer's** responsibilities are to:
  - Provide information about hazards, controls, safety and health rules, and emergency procedures to all employers at the workplace and
  - Ensure that safety and health responsibilities are assigned as appropriate to other employers at the workplace
- The responsibilities of a **contract employer** are to:
  - Ensure that the host employer is aware of the hazards associated with the contract employer's work and what the contract employer is doing to address them and
  - Advise the host employer of any previously unidentified hazards that the contract employer identifies at the workplace.

*Host employer is an employer who is in charge of coordinating work or who hires other employers to perform work at a multi-employer workplace.*

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### OSHA Multi-Employer Policy

- OSHA has moved from a position of enforcing "employer-employee" relations to one that is based on **contractual responsibility**. Therefore the controlling contractor will have the ultimate responsibility in **monitoring** project site safety.

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**OSHA Multi-Employer Policy**  
The Controlling Employer

- Controlling employer:
  - The entity responsible for overall site coordination, scheduling, etc. May be held liable for citation under OSHA.
  - Overall site safety issues are the responsibility of the controlling employer.
  - If the controlling employer assigns safety responsibilities to others, they should still apply some level of control.
  - In the event of an accident, multiple contractors may be held liable in a tort liability case.
- Control can be established by:
  - Contract or
  - By the exercise of control in practice.
- Application of “reasonable care”

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**OSHA Multi-Employer Policy**  
Evaluating Reasonable Care

- Considerations of controlling employer’s exercise of **reasonable care**:
  - Conducted periodic inspections of “appropriate frequency”
  - Implemented an effective system for promptly correcting hazards
  - Enforces the other employer’s compliance with safety and health requirements with an effective, graduated system of enforcement and follow-up inspections

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**OSHA Position**  
Process Safety Management

*Note: PSM applies to those companies that deal with any of more than 130 specific toxic and reactive chemicals in listed quantities, it also includes flammable liquids and gases in quantities of 10,000 pounds (4,535.9 Kg) or more.*

**Contractor Selection** (PSM std. only)

- Employers:
  - Must obtain and evaluate information regarding the contractor’s safety performance and programs (injury/illness rate history, references)
  - (Host) must ensure the contractor has appropriate skills, certifications, etc.; work methods and experience should be evaluated

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**OSHA Position**  
Process Safety Management

**Monitoring Contractor Activity (PSM std. only)**

- Employers (cont.):
  - ensure contractors are instructed in the potential emergency situations and in the applicable provisions of the emergency action plan
  - evaluate performance of contractors in fulfilling their obligations
  - maintaining a site injury and illness log for contractors
- The contractor must:
  - ensure that employees are trained to perform their job safely
  - ensure employees are instructed in the potential emergencies and in the provisions of the emergency action plan
  - ensure employees follow the facility safety rules and safe work practices
  - advise the (host) of any hazards presented by the contractor's work.

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**Contractor Role and Responsibility**

- A prime contractor may be the owner or operational management of a plant, the construction management or engineering staff of a large premises owner, or a professional construction management company, but does not include...owners, or others with little or no experience in construction work.
- Should such inexperienced parties hire a general contractor to construct facilities from plans and specifications prepared by others who will not otherwise be involved at the jobsite, **such a general contractor becomes the prime contractor**, and must assume all the safety related duties and responsibilities of the prime contractor
- The prime contractor may assign certain specific safety activities to other contractors. These contractors will then **share** a corresponding responsibility for jobsite safety.

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10

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**Construction Industry Institute (CII)**  
“The Owners Role in Construction Safety”

- CII comprised of more than 100 leading owner, engineering-contractor, and supplier firms from both the public and private arenas
- Research paper: “The Owners Role in Construction Safety”
- “It was concluded that the owner’s involvement significantly influences project safety performance. Better project safety performances are achieved when owners:
  - “Set safety objectives
  - “Select safe contractors
  - “Participate in safety management during construction”

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11

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### Contractor Safety Process

- Contractor selection
- Contract preparation
- Contract award
- Orientation and training
- Audit and monitor



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### Best Practices Pre Construction



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### Pre Construction Contractor Qualification and Selection

- **Qualification:** General criteria established to allow contractors to be able to bid or be included on bidder's list
- **Selection:** Criteria more specific to type and scope of work and the health and safety requirements associated with the expected project hazards
- Qualification and selection often combined during bid process



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### Pre Construction

#### Contractor Qualification—Trailing and Leading Indicators

- Trailing indicators reflect **past** performance (EMRs, IR, WC and GL Claims, OSHA Citations, References)
- Trailing indicators help identify **historic** systemic strengths/weaknesses
- Leading indicators give clues about the nature of system strengths and weaknesses (formal safety program, awards/recognition, training program, accountability process)
- A Web search can provide some interesting information

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### Pre Construction

#### Risk Assessment of the Project

- The relative risk associated with the work being performed should be assessed in order to be able to determine the extent to which controls be administered
- In general, considers the probability of an incident occurring against the possible outcomes
- Must consider the types of risks (worker safety, public safety, operational impacts, grants, etc.)

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16

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### Safety in Contracts

- Contractual safety:
  - Requirements to comply with all regulations should be in the contract. (consider NFPA, ANSI and others)
  - Any safety requirements more stringent than OSHA should be included in construction documents.
  - Risk-based assessments (high-risk issues addressed?)
  - There should be a discipline clause and a termination clause for noncompliance with contractual provisions

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17

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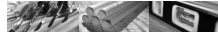
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### Preparing Contract Safety Specifications (General)

- Sole safety responsibility to be assigned to construction manager/contractor
- Require a site safety plan detailing safety process to be practiced
- Require identification of competent persons responsible for safety
- Consider submission of workers' compensation experience modification for subcontractors **and** how those with a marginal indicators will improve their safety performance on your jobs

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18

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### Project Pre Bid Meetings

- A pre-bid meeting is scheduled and all qualified contractors for the specific project are invited:
  - The nature of the job discussed
  - Safety requirements communicated
  - Contractors ask questions related to the submission of the bid
- Bid specifications are distributed
- Any contractor not in attendance cannot bid
- Walk the site and discuss the project
- Communicate known site hazards such as underground utilities, special public protection, security, etc.

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**Best Practices**  
Construction

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## Pre-Job Safety Planning

- Conduct overview of safety provisions with project management:
  - Site safety plan
  - Specific contractors' activities/responsibilities
  - Ensure controls meet your minimum requirements
  - Evaluate worker orientation and training plan
- Establish communication requirements (safety meetings, reports, protocols)
- Review safety inspection and audit procedures
- Incident reporting/investigation requirements
- Identify contractors' safety reps and competent persons

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## Managing Contractors

- If the owner acts as the construction manager or prime contractor, it has site safety responsibility
- Exercise basic controls:
  - Make regular safety inspections
  - Conduct Weekly Tool Box Talks and monitor Subcontractors' Tool Box Talks
  - Give notification, in writing, to any subcontractor observed violating contractual safety provisions
  - Remove contractors, if necessary
  - Documentation is critical

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"Gloves, mask, goggles, hard hat,  
safety-training certificate. Okay,  
you can go in."

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### Audit and Monitor Performance Indicators

- Toolbox meetings/training
- Documentation (crane inspections, incident reports, inspections)
- Participation by management:
  - On audits
  - In training
  - On accident investigations
- Current safety procedures, hazard analyses
- Number of audit items outstanding

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### Benefits of Safety Controls

- For the contractor employee:
  - No injury/incidents
- For the contractor:
  - Revenue/profits
  - Improved performance
  - Improved turnover
  - Fewer (insurance) losses
- For the owner:
  - Lower overall construction costs
  - Improved construction schedule
  - Reduced risks

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