OSHA Lessons Learned

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OSHA Lessons Learned

Jobsite Safety and Health Inspections/Audits

better known as;

PAPER WORK

You hate it,

Your safety director requires it,

OSHA loves it,

Does it really matter?

OSHA Lessons Learned

A case study of 3 Cleveland OSHA inspections were the employer's safety and health inspections (**paperwork**) played a large role.

Case Study #1

Reason for Inspection:

Compliance Officer drove past a jobsite and observed a fall hazard meeting the OSHA Falls in Construction Local Emphasis Program (LEP)

Work Activity

- 2 workers were removing plastic material from the roof
- roof was flat and approximately 16.5 feet above the ground
- Fall perimeter flagging placed on the roof
- Employees were observed and photographed working at or near the roof edge for approximately 5 to 10 minutes.

INSPECTION PROCEDURES

- **Opening Conference:**
  - Compliance Officer discusses reason for inspection with onsite management
  - Explains inspection protocols

- **Walkthrough Inspection:**
  - Photos, measurements, etc.

- **Employee and Management Interviews**
  - The purpose of the Interviews is to help the CSHO;
    - Understand the work activity
    - Manner the work is being conducted (or should have been conducted)
    - Who directs the work
    - Employee training
    - Company safety policies and procedures, etc.

INSPECTION PROCEDURES

- Types of documents OSHA requests from the employer.
  - **Types of documents:**
    - Employee training records (fall protection, scaffold, etc.)
    - Company Safety and Health Program
    - Jobsite safety inspections
    - Training, Tool box talks
    - Employee discipline records for SAFETY violations
    - Employer corrective actions for identified safety hazards

  - **Closing conference includes:**
    - Discussion of possible citations/violations.
    - Employer's rights under the OSH Act (how citations work).
    - Abatement (how did it get fixed) materials/documentation.
    - Citation posting requirements.
    - Employee's rights under Section 11(c) of the OSH Act to ensure employees are not discriminated against for participating in an OSHA inspection or raising safety and health concerns in the workplace.

WHAT WAS THE COMPANY DOING TO PREVENT THIS CONDITION

Site SPECIFIC Jobsite Safety Plan (*excerpt*)

3. Deliver materials onto the roof	Fall hazard while receiving materials	Have workers set roof anchors and tie off receiving materials
	Use gradall to deliver materials to roof	Make sure operator is trained and certified, us techniques, use a lookout if necessary on the sure no one is working under the load o
4. Install temp roof tarps (inside warning line zone)	Leading edge exposure	While working inside the warning line zone (ir a worker doesn't necessarily need to be tied c must be taken to ensure no trip hazards are p potentially lead to a worker stumbling off th worker remain aware of their surroundings outside of the warning line without positive
5. Install temp roof tarps (outside warning line zone)	Leading edge exposure	Have workers wear propper PPE which include retractable lanyard, and an approved anchor components of the fall protection system are each use.
		Set roof anchor points. Ensure to install ancho to the manufacturers recommend
		Have workers tie off while working outside zone

WHAT WAS COMPANY DOING TO PREVENT THIS CONDITION

Flagging installed on the roof to designate work zone

WHAT WAS COMPANY DOING TO PREVENT THIS CONDITION

Employee training

Fall Protection Awareness

Fatalities caused by falls from elevation continue to be a leading cause of death for construction w
accounting for 302 of the 828 construction fatalities recorded in 2013. Each year, roughly 100,000
are disabled (not broken bones or sprains but never to work again). **Those deaths and disablin
injuries were preventable.** The fall protection standard also continues to be the number one r
cited standard in our industry.

Harness Usage and Inspection

BAD GOOD

- Maintain a secure body harness without keeping the straps too tight in which it could rest
  blood circulation.
  - D-ring in the back of your harness needs to be between shoulder blades
  - Chest strap needs to be a secure fit and horizontally cross your sternum
  - Keep leg straps tight enough to fit 2 fingers in between straps and thigh
- Inspect your harness prior to use each day.
  - Check hardware for rust, cracks, deterioration, distortion and any other defects
  - Ensure stitching is not ripped
  - Sun and chemicals greatly reduce the strength of synthetic straps

Site Specific Rules:

- ☐ Site Logistics Re
  do so will result
  and wrappers a
- ☐ No smoking or
- ☐ No radios or pe
- ☐ For fires or othe
  horn. Internal r
  External r
- ☐ Report any inju
  or life-threateni
  call needs to be
- ☐ MSDS/SDS book
  trailer/office. F
- ☐ Other comment
  - Parking o

WHAT WAS COMPANY DOING TO PREVENT THIS CONDITION

Documented Jobsite Safety Inspections with corrective actions

within 100'; 3000 square feet; refuel ops >25',<75' and inspected on a monthly basis	Compliant
3.6 Walking/Working surfaces are free of trip/slip/fall hazards. (Including Ice, snow, and water)	Deficiency
 Appendix 3 2/10/17 1:33 PM	
3.7 Is Housekeeping in safe and sanitary condition?	Compliant

WHAT WAS COMPANY DOING TO PREVENT THIS CONDITION

Discipline for jobsite SAFETY Infractions

Violation Description: Was standing on top of a collapsed step ladder, 7'.

Copy forwarded to:

- ☐ Site Foreman
- ■ Project Manager
- ■ Violator's Company Office
- ■ Superintendent
- ☐ Safety Manager
- ☐ Other (List) _____

Check appropriate category and level based on violation:

Safety Violation Category 1 - Exposure, if not corrected immediately, could result in serious injury or significant property damage. Examples include, but are not limited to, failure to establish proper mandatory fall protection at six (6) feet, not testing a confined space environment prior to entry, failure to properly protect a working excavation, failure to execute proper lock-out/tag-out procedures, etc.

■ 1st Offense – The rest of the day plus (1) twenty-four (24) hour suspension of employee from the project. Verbal

No Citations

Why NO citations

- Information learned from employee interviews
- Warning lines erected 15’ from roof edge that met OSHA requirements
- Effective implementation of work rules
- Site Safety plan
- Job Hazard Analysis
- Jobsite Safety Inspections
- Safety Training (Tool Box Talks)

Case Study #2

Reason for Inspection:

CSHO observed a fall hazard meeting the OSHA Falls in Construction Local Emphasis Program (LEP)

Work Activity

- A parking garage was being constructed using pre-cast concrete panels.
- Employees were actively erecting the 2nd floor of the parking garage deck.
- Erection and detail work was taking place.
- Employee was observed walking outside of a warning line without fall protection or actively engaged in the pre-cast erection.

Inspection Photo

Inspection Photo

Inspection Photo

The employer was implementing an alternative fall protection plan for pre-cast leading edge work.

OSHA Standard

1926.501(b)(12): "Precast concrete erection." Each employee engaged in the erection of precast concrete members (including, but not limited to the erection of wall panels, columns, beams, and floor and roof "tees") and related operations such as grouting of precast concrete members, who is 6 feet (1.8 m) or more above lower levels shall be protected from falling by guardrail systems, safety net systems, or personal fall arrest systems, unless another provision in paragraph (b) of this section provides for an alternative fall protection measure.

Exception: When the employer can demonstrate that it is infeasible or creates a greater hazard to use these systems, the employer shall develop and implement a fall protection plan which meets the requirements of paragraph (k) of 1926.502.

Note: There is a presumption that it is feasible and will not create a greater hazard to implement at least one of the above-listed fall protection systems. Accordingly, the employer has the burden of establishing that it is appropriate to implement a fall protection plan which complies with 1926.502(k) for a particular workplace situation, in lieu of implementing any of those systems.

WHAT WAS COMPANY DOING TO PREVENT THIS CONDITION

Written Alternative Fall Protection Plan

FALL PROTECTION PLAN

FOR

STRUCTURAL PRECAST ERECTION

SPECIFICALLY FOR THE FOLLOWING PROJECT

PROJECT NAME:

WHAT WAS COMPANY DOING TO PREVENT THIS CONDITION

Written jobsite safety audit

G. Flagmen wearing orange traffic vests — Y

2. Housekeeping & Sanitation:

A. Work areas free of waste and trash. — Y
B. Disposable drinking cups provided. (BOTTLED WATER) — N/A
C. Storage area's clean and neat. — Y

3. Personal Protective Equipment:

A. Eye Protection. — Y
B. Respirators. — Y
C. Head Protection. — Y
D. Fall Protection. — Y

4. Flammable Gas & Liquid Storage Area's:

A. Fire extinguisher located within 75' of flammable & combustible liquid storage areas. — Y
B. Fire extinguishers fully charged. — Y
C. Fire extinguishers serviced within the past year. — Y
D. "No Smoking" signs posted. — Y
E. All containers properly labeled. — Y
F. Propane cylinders stored outside of buildings. — Y

5. Welding & Cutting:

A. Cylinders secured in an upright position. — Y
B. Valve protection caps on while in storage. — Y
C. Cylinders separated by 20'/1 hr. fire wall. — Y
D. Fire extinguishers available. — Y
E. Flammable materials away from operation. — Y
F. Welding leads in good repair. — Y
G. No lead repairs within 10' of stinger. — Y

7. Fall Protection:

A. Covers secured & marked "Hole" or "Cover". — N
B. Guardrails capable of 200 lb. force. — Y
C. Stairways equipped with handrails. — Y
D. Cable guardrails flagged every 6'. — N/A
E. Control lines erected not less than 6', nor more than 60' from the leading edge. — N — IMMEDIATE
F. Safety monitor & connectors wearing bands. — N
G. Site specific fall protection plan on site. — Y
H. Safety Monitor present. — N
I. Fall protection used properly — N

NEEDS IMMEDIATE ATTENTION!

8. Cranes and Rigging:

A. Slings, hooks & chokers in good condition. — Y
B. Crane at safe distance away from power lines. — Y
C. Fire extinguisher/load chart present in rig. — Y
D. Swing radius barricaded. — Y
E. Equipment glass in good repair. — Y
F. Hook throat opening closed. — Y
G. Employees clear of overhead loads/hazards — Y

9. Ladders/Tools:

A. Secured against displacement. — Y
B. Extend three feet above landings. — Y
C. Ladders in good working condition. — Y
D. Tools in good condition. — Y
E. All mechanical safeguards in operation.

10. Electrical Installations:

A. G.F.C.I.'s provided as required. — Y
B. Cords in good condition. — Y

11. Other Items and/or Notes:

FALL PROTECTION NEEDS ADDRESSED!

MIKE WILL ADDRESS TOMORROW

If for any reason a condition can not be corrected immediately, if you require assistance, or have any questions or comments, please contact Michael Hudgins at our Twinsburg office. *(Sign & Send to Safety Department when items are corrected and within 7 days).*

Foremans Signature IN LIFT Date 10/15/14

WHAT WAS COMPANY DOING TO PREVENT THIS CONDITION

- Safety monitor

- Control lines erected properly

- Erector was behind lines while welder was working

RESULT OF INSPECTION

No citations

Why **NO** citations

- safety inspection was conducted by the superintendent
- Superintendent identified fall protection problems
- Safety manager came to site the next day to correct
- CSHO found employees were working in accordance with the fall protection plan
- Employer disciplined employees for violations of company safety policies.

Case Study #3

Reason for Inspection:

OSHA was notified an employee was killed in a trench collapse by the local police/fire department.

Work Activity

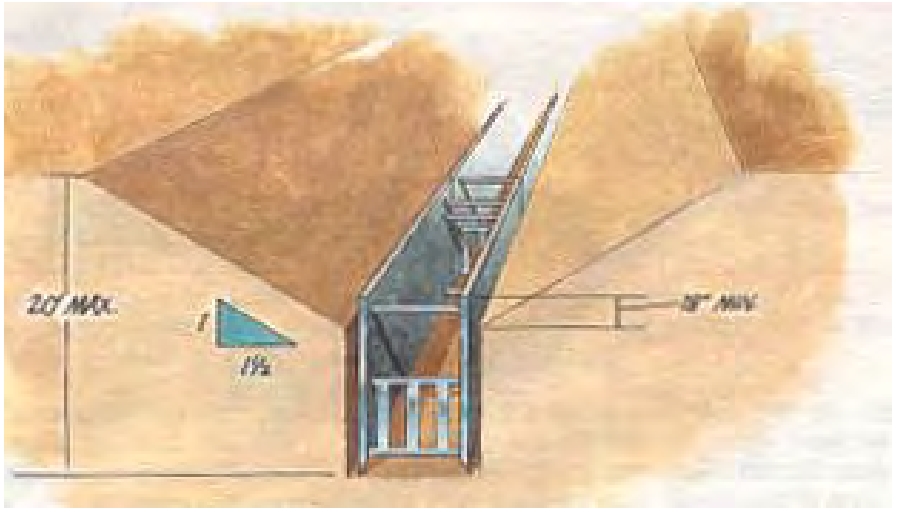
- 3 employees and a foreman were working at a jobsite to install a water line
- Work was part of a road widening project.
- Trench was dug 4.8 feet to approximately 8 feet deep
- When trench collapsed employee was inside the trench for about 1 minute

Inspection Photo

WHAT WAS COMPANY DOING TO PREVENT THIS CONDITION

Excavation Work Order (written safety form).

- The excavation work order required the crew leader to determine the;
  - soil classification
  - methodology used to determine soil classification
  - type and method of cave-in protection used



B. TRAFFIC CONTROL

- ✓ Motorist warning signs have been placed in/along street
- ✓ Traffic cones are set out in street in appropriate locations
- ____ Flagmen are being utilized (when necessary)
- ____ Was traffic flow heavy or light?
- ____ Was the road dry, wet, or icy?

C. SOIL CLASSIFICATION (If protective system, shoring or shielding is to be used)

VISUAL ANALYSIS

1. Estimate Range of Particle
   - ✓ A. Fine grained = cohesive material
   - ____ B. Coursed grained = sand & gravel

2. Observe Soil as it is Excavated
   - ✓ A. Clumps = cohesive material
   - ____ B. Breaks up easily = granular material

3. Observe Open Excavation
   - ✓ A. Layered soils
   - ____ B. Layers sloped towards the excavation
   - ____ C. Fissures present - sides of excavation
   - ____ D. Fissures present - adjacent to excavation

4. Water Conditions
   - ____ A. Surface water
   - ____ B. Run off
   - ____ C. Seeping from sides
   - ____ D. Ground water
   - ✓ E. None

5. Vibration Present
   - ____ A. General area
   - ____ B In excavation
   - ✓ C. None

MATERIAL ANALYSIS (Indicate methodology used)

✓ Thumb penetration test

Results (average)

- ✓ Barely able to penetrate with thumb pressure
- ____ Penetrate to back of thumb nail
- ____ Easily penetrate and able to mold with light finger pressure

____ Rocket Penetrometer

Results (average)

- ____ 1.5 or greater
- ____ Greater than 0.5 but less than 1.5
- ____ 0.5 or less

CLASSIFICATION (Based on visual and manual analysis)

____ Type A ____ Type B ✓ Type C

D. CAVE-IN PROTECTION (Excavations 5' or deeper or less than 5' if potential for cave-in)
_____ Sloping is being performed – angle of slope is: ¾ - 1 (A), 1-1 (B), 1.5-1 (C)
_____ Benching is being performed (not allowed in Type C soil
__A__ Shoring equipment (at least 2 sets) is being used (manufacturer's tabulated data is at jobsite
_____ Approved plywood (3/4") is being used (if use of plywood is supported by tabulated data)
_____ Trench box is being used (manufacturer's data is at jobsite)
_____ Trench box is stable from horizontal movement and is relatively even
_____ Trench boxes and/or shoring equipment are less than 2' from the bottom of hole
_____ Surface encumbrances and structures (ex: street lights, signs, poles) are supported

E. TWO FOOT RULE
__A__ Spoils and all equipment are kept at least 2' from the excavation edge

F. PERSONAL PROTECTIVE EQUIPMENT
__A__ Steel toed safety shoes are worn by all crew members
__A__ Hard hats are being worn by all (only exception is machine operator in cab)
__A__ High visibility clothing is worn by all working in or near street
_____ Reflective traffic vests are being worn by flagger (always) and by all crew members when dark
__A__ Eye/face protection equipment is worn by all using pipe saw and jackhammer
__A__ Hearing protection used when exposed to high noise levels (ex: using pipe saw)
__A__ W.A.V.E. Policy followed at all times

G. MEANS OF EGRESS (LADDERS)
__A__ Ladders in use in excavations 4' or deeper and are secured from falling
__A__ At least one ladder is provide for every 25' of lateral travel
__A__ Ladders extend at least 3' from top edge of excavation

H. ATMOSPHERIC TESTING
_____ Required before entering an excavation 4' or greater in depth. In excavations where oxygen-deficient or hazardous atmospheres exist or could reasonably be expected to exist such as in:
- Excavations in landfill areas; or
- Excavations in areas where hazardous substances are stored nearby; or
- Excavations adjacent to or near gas stations and/or gasoline distribution centers

I. MISCELLANEOUS
__A__ Employees are not permitted underneath suspended loads
_____ De-watering has been performed and majority of water removed
_____ "After hour" protection (ex: barricades, fencing) is provided to prevent against someone falling into open hole

J. CREW MEMBERS

WHAT WENT WRONG

1. No one reviewed the Work Order

- Foreman/employee did not understand what he was completing
- Foreman did not know what tabulated data was
- Shoring equipment required
  - at least 2 sets of shores
  - manufacturer's tabulated data at job-site

WHAT WENT WRONG

2. The safety manager or other management never came to the jobsite to conduct an inspection

- No one came to the jobsites to inspect if cave in protection was used properly or at all

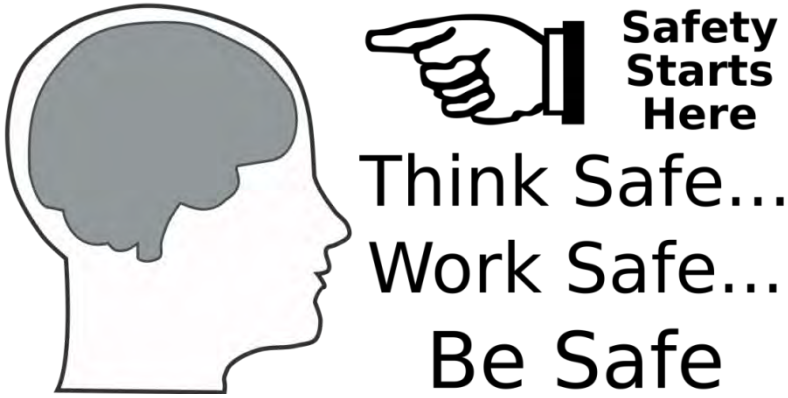
WHAT WENT WRONG

3. No one knew what to do with the Work Order once it was complete

- Work Order was turned in at the end of the job, but no one followed up to see if it was filled out properly or correctly
- Employer only checked to ensure work order was completed

WHAT WENT WRONG

4. **No one ensured all employees were trained in trench safety**
   - The foreman thought it was the office's job to provide safety training to employees
   - The company provide some safety training 2 months after the employee started working in trenches
   - No coordination on what safety training the employee received
   - No coordination on what type of work the employee would be performing



RESULT OF INSPECTION

Citations:

- 6 citations issued

Penalty:

- 6 citations accepted
- $39,800 in fines paid by the employer
- Employer and Union created a joint safety committee

How does OSHA use the paperwork

Jobsite inspections, safety training, tool box talks, etc., help paint the picture to OSHA; is this employer doing what is required to protect their employees

- Employer must prove the hazardous condition was an **Isolated Incident**
  - **Employer must prove all four for no citation to be issued:**
    1. Have a work rule (policies and procedures)
    2. Rule is communicated (training, equipment use)
    3. Monitor compliance (frequent and regular inspection by supervisor, manager, owner, etc.)
    4. Discipline (consistently enforced)

DOES PAPER WORK MATTER

Official Government Answer:

YES and NO

What Matters

1. What is **purpose** of the safety inspection
   - why is the safety inspection/audit being performed?
   - what is the safety inspection /audit trying to accomplish?
   - who needs to perform the safety inspection/audit ?

2. What is the **goal** of the safety inspection
   - Is it just to turn something in to the office/general contractor per a contractor requirement or to really help identify hazards?
   - Does the person responsible for the safety inspection/audit understand what they inspecting/completing

3. How is the safety inspection **Used**
   - how is the safety inspection followed through with?
   - Is it only the responsibility of the safety director, project manager, foreman?
   - Are employees informed of the results and/or corrective actions?
   - How are results/corrective actions tracked?


QUESTIONS?