



Resident Officer In Charge of Construction MCB Camp Pendleton

Field Leadership Safety Conference

June 16, 2011



Agenda



- **ROICC's Welcome Remarks**
- **Andy's Safety Tool Box**
 - **Recent Incident/Near-Miss Recap**
- **Multiple Purpose Machines (MPMs)**
 - Break -----**
- **Safety Bulletin Boards**
- **Andy & Matt's Quick-Hitters**
- **STAR Award Presentations**
- **Closing Remarks**



Safety Conference Goals



- 1) Increase safety knowledge through safety training**
- 2) Maximize sharing of incident/near-miss lessons learned**
- 3) Maximize awareness of Camp Pendleton specific issues & procedures**
- 4) Provide a venue to network with fellow safety professionals**
- 5) Continually build upon a strong culture of safety**
- 6) Continually challenge contractor community to innovate and improve**

Good to World Class Safety

Good Construction Safety Program

- Articulate desires w/o backing with full compliment of resources
- Reacts to safety incidents and implements corrective actions to prevent recurrence
- Tracks and analyzes incidents trends



World Class Construction Safety

- Organization provides the
 - ✓ Right staffing
 - ✓ Right training
 - ✓ Right mix of resources
- Actively removes barriers and promotes a culture of safety
- Anticipates and Openly shares
 - ✓ Lessons Learned
 - ✓ Good Catches
 - ✓ Near Misses
 - ✓ Incidents
- Uses Leading Indicators
- Everyone actually believes zero safety incidents is achievable

Safety 360





Program Review



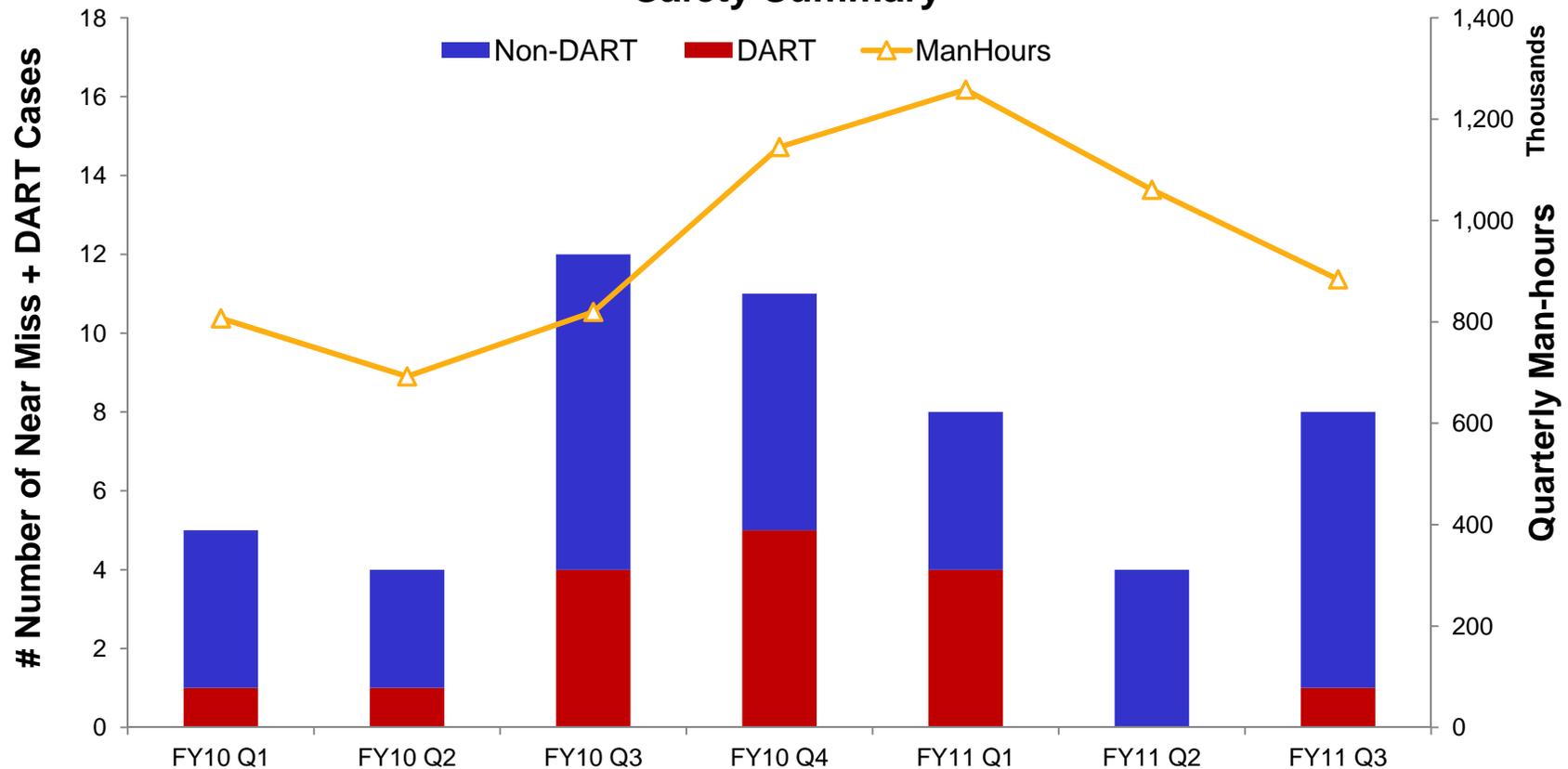
- **How are we doing?**
 - Nearly \$1.45B under contract
 - **Over 9M man-hours worked within last 3 years**
 - 16 DARTs & 6 lost time accidents
 - Sharing of lessons learned routine
 - Safety now a stand-alone acquisition source selection factor for future awards
 - “Model Safety Program for NAVFAC SW” per Mar SAV
- **Can we do better?**



ROICC Camp Pendleton Safety Trends

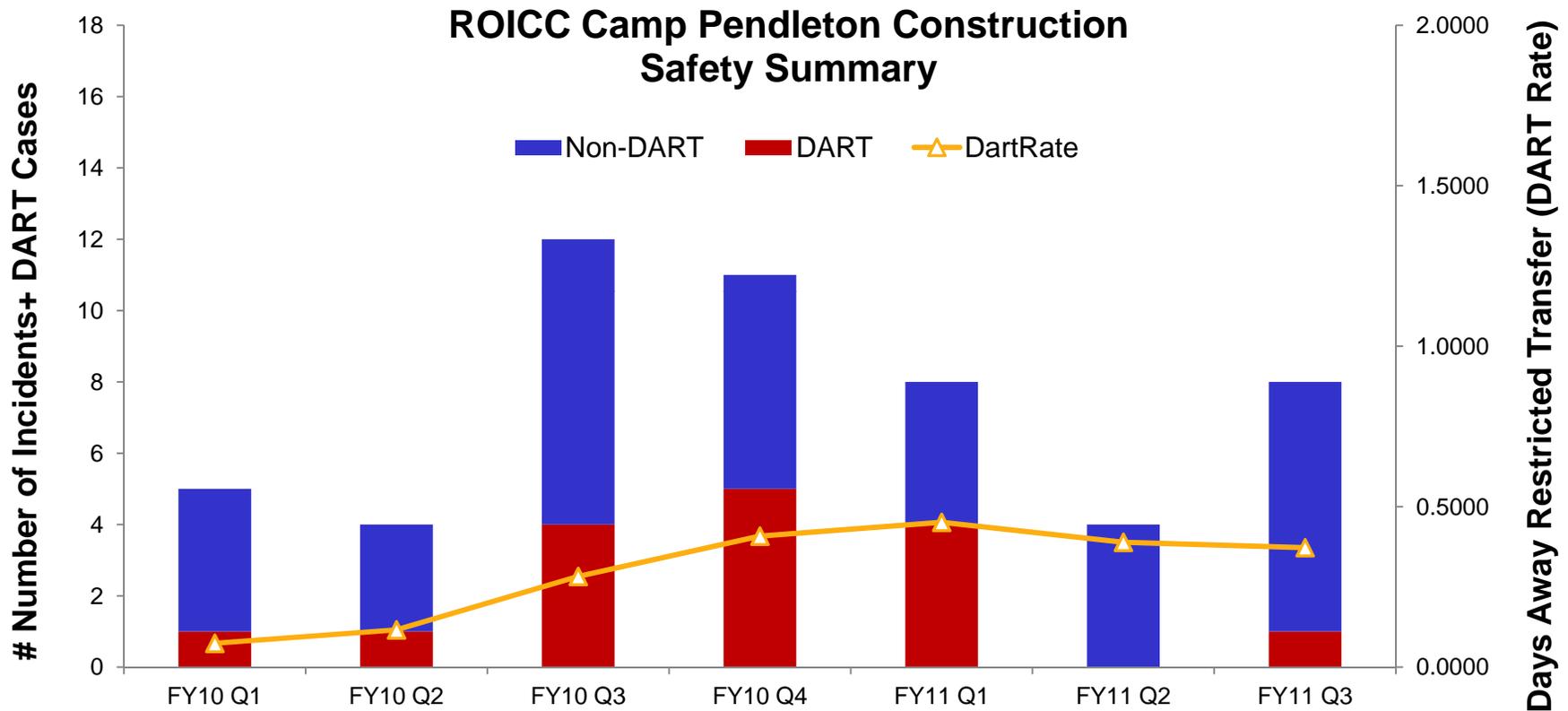


ROICC Camp Pendleton Construction Safety Summary





ROICC Camp Pendleton Safety Trends



What will you do starting tomorrow to make your safety program even stronger?

DART Rate calculated from data compiled since 15 Aug 2008



SAFETY INNOVATION





SAFETY INNOVATION - CDM



CDM P-113 (AWT) Area 24

Base Emergency 1(760) 725-3333/911
SSHO (Kevin Sheik) 1(909) 214-0306
Site Superintendent
(Robert Mancino) 1(760) 267-0009
Game Warden 1(760) 725-3360

Directions to Tri-City Medical Center Emergency Room
1002 Vista Way • Oceanside, CA • (760) 724-8411

Directions from Water Treatment Plant Site (Main Gate)

- From site, go south on Vandegrift Blvd and exit Camp Pendleton
- From Camp Pendleton, merge onto I-5 south
- Merge onto CA-78 east toward Escondido
- Exit at College Blvd and turn left
- Turn right onto Vista Way
- Travel east to hospital entrance (on left)

Directions from Back Gate

- Follow Vandegrift Blvd southeast and exit Camp Pendleton
- Continue south on Vandegrift Blvd to College Blvd
- Turn left on College Blvd and follow it to Vista Way
- Turn left on Vista Way and travel east to hospital entrance (on left)



MCB CAMP PENDLETON

RECENT INJURIES, INCIDENTS, & NEAR MISSES FOREMAN'S RESPONSIBILITIES UTILITY DAMAGE AND REPAIR

**ANDY BROCHU
ROICC CAMP PENDLETON
SAFETY MANAGER**



Camp Pendleton Recent Injuries February 22 2011 – June 16 2011



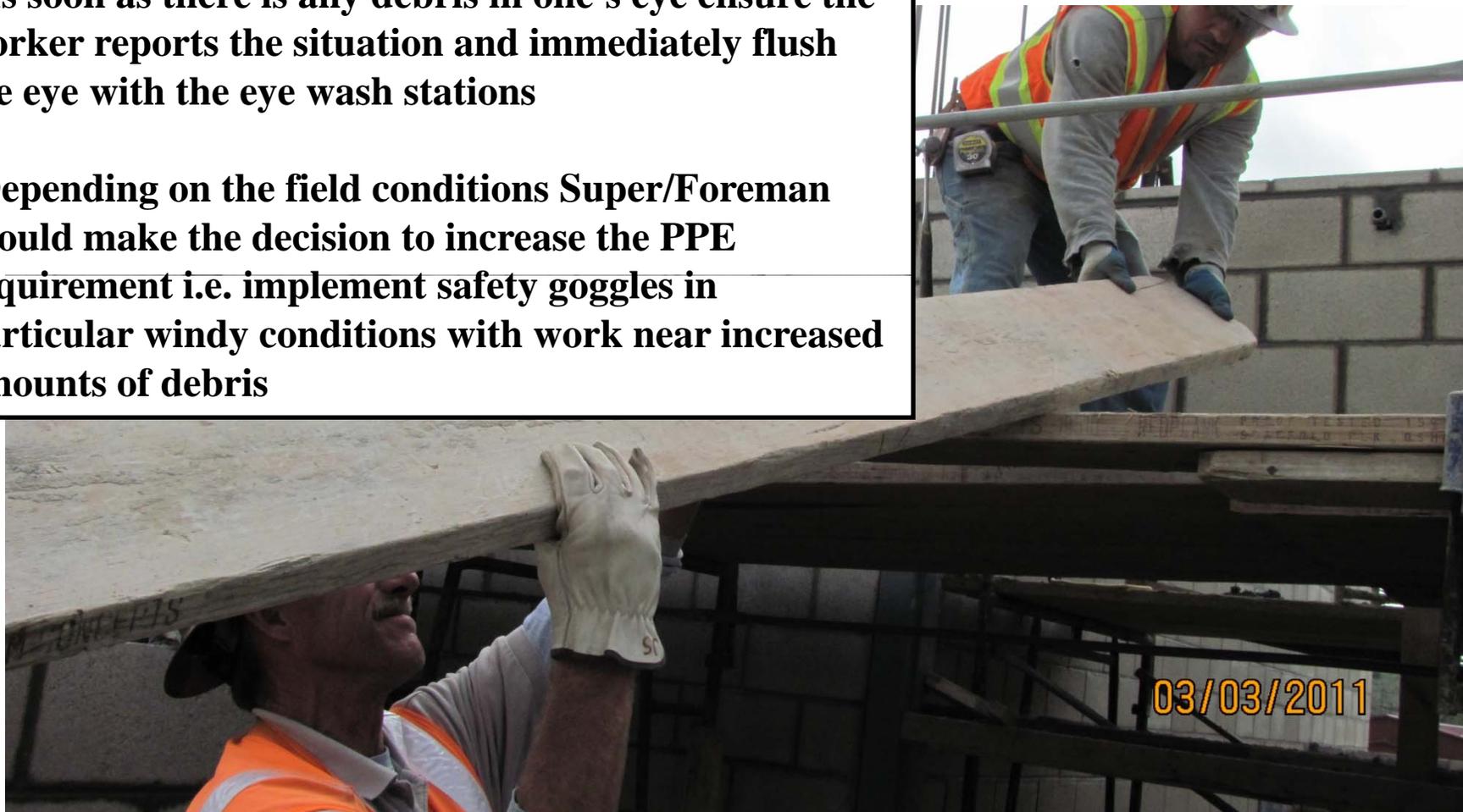
STATS

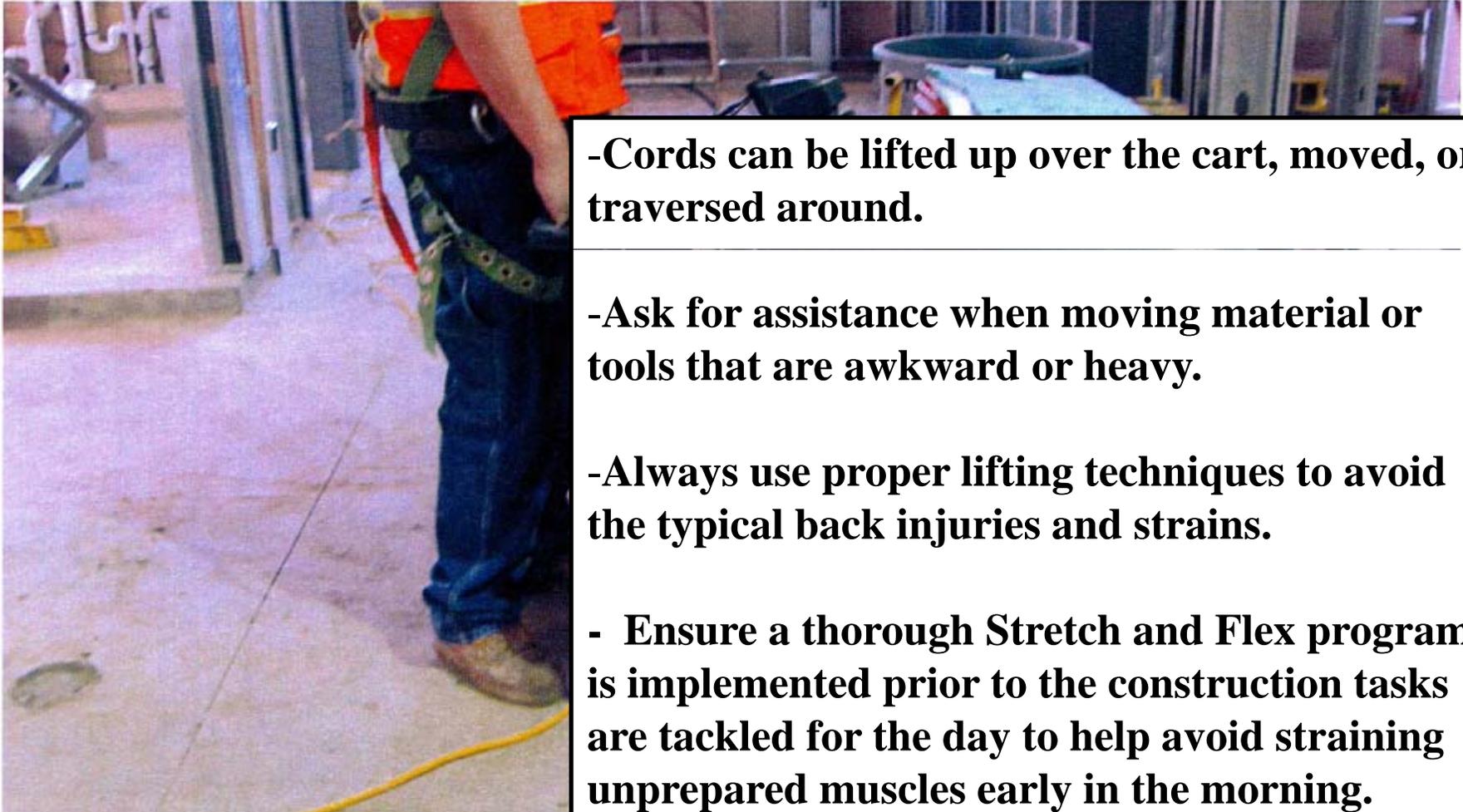
- 10 injuries resulting in off-site medical care
- 5 of the 10 injuries involved lacerations or punctures to the lower arm, wrist, or hand.
- 1 of the 10 was a **DART** case

Date: 23FEB11 Injury: Eye Injury

-As soon as there is any debris in one's eye ensure the worker reports the situation and immediately flush the eye with the eye wash stations

-Depending on the field conditions Super/Foreman should make the decision to increase the PPE requirement i.e. implement safety goggles in particular windy conditions with work near increased amounts of debris





-Cords can be lifted up over the cart, moved, or traversed around.

-Ask for assistance when moving material or tools that are awkward or heavy.

-Always use proper lifting techniques to avoid the typical back injuries and strains.

- Ensure a thorough Stretch and Flex program is implemented prior to the construction tasks are tackled for the day to help avoid straining unprepared muscles early in the morning.



Date: 14MAR11 Injury: Back Injury



- 1. Proper lifting technique reviewed with employees.**
- 2. Employees will stretch before lifting**



Date: 4APR11

Injury: Ankle Injury



- Situational awareness and focus on the task at hand.**
- Always maintain three points of contact when using a ladder climbing device.**
- Always make eye contact with your intended direction to ensure it is clear of debris and obstacles.**
- Safety should never be compromised for the sake of production; take your time and proceed safely.**





Date: 4APR11

Injury: Palm Laceration



-Thoroughly examine the work surface prior to proceeding with your task.

-Ensure trades clean their work space once they have completed their phase of work.

- Quality Control needs to verify the areas have been properly cleaned prior to opening the space for the next phase of work.





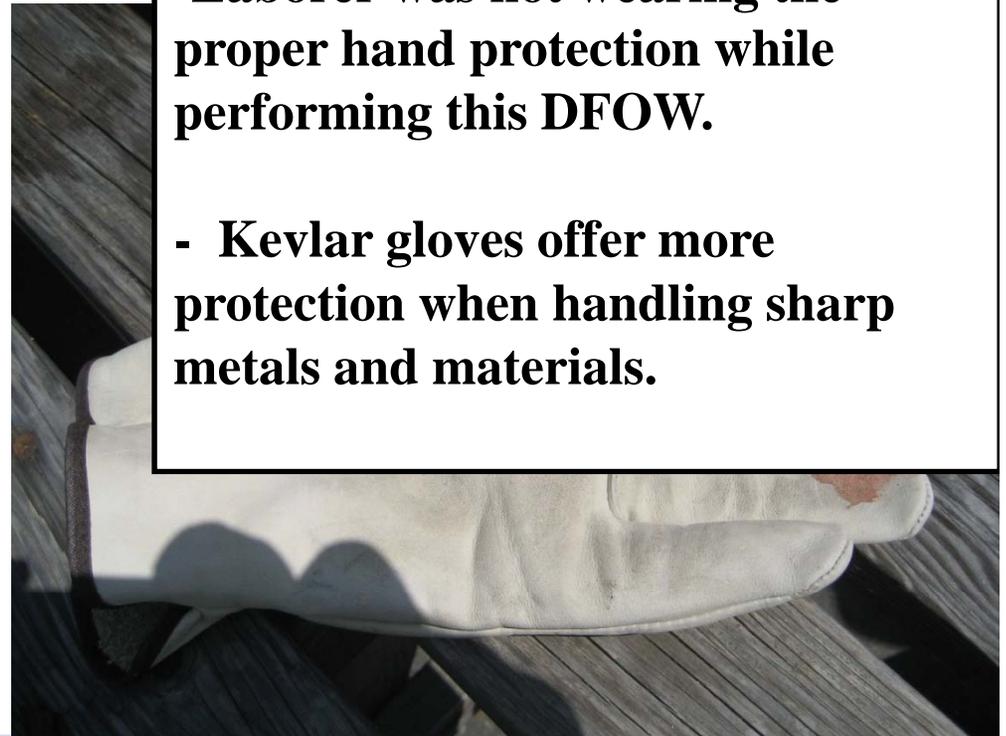
Date: 12APR11 Injury: Hand Laceration



-A hand tool, preferably some sort of pry bar, should have been used instead of pulling the material down by hand.

-Laborer was not wearing the proper hand protection while performing this DFW.

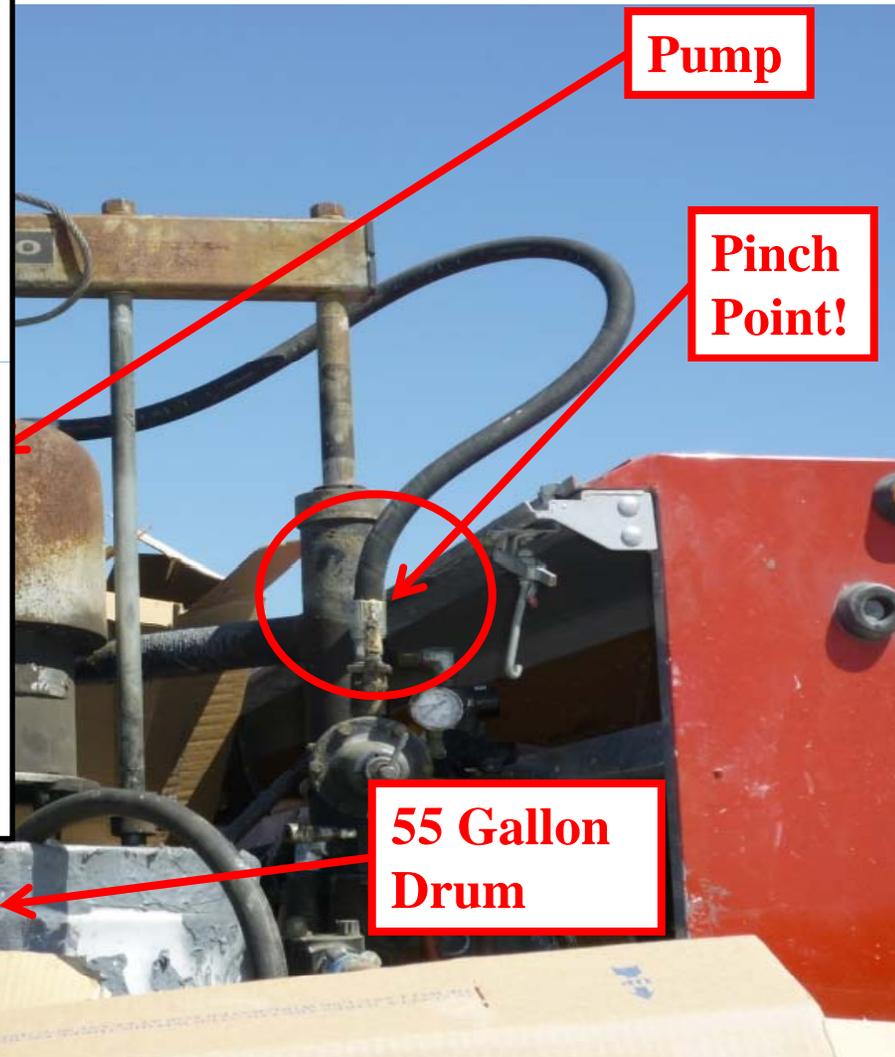
- Kevlar gloves offer more protection when handling sharp metals and materials.



- Never put any part of your body in a potential pinch point.

- Always have the owner's manual for any equipment readily available.

- In this incident the owner's manual of the GRACO High-Viscosity Pump was not available to determine the proper and safest way to move the pump along with the empty 55 gallon drum.



Date: 29APR11 Injury: Puncture Wound

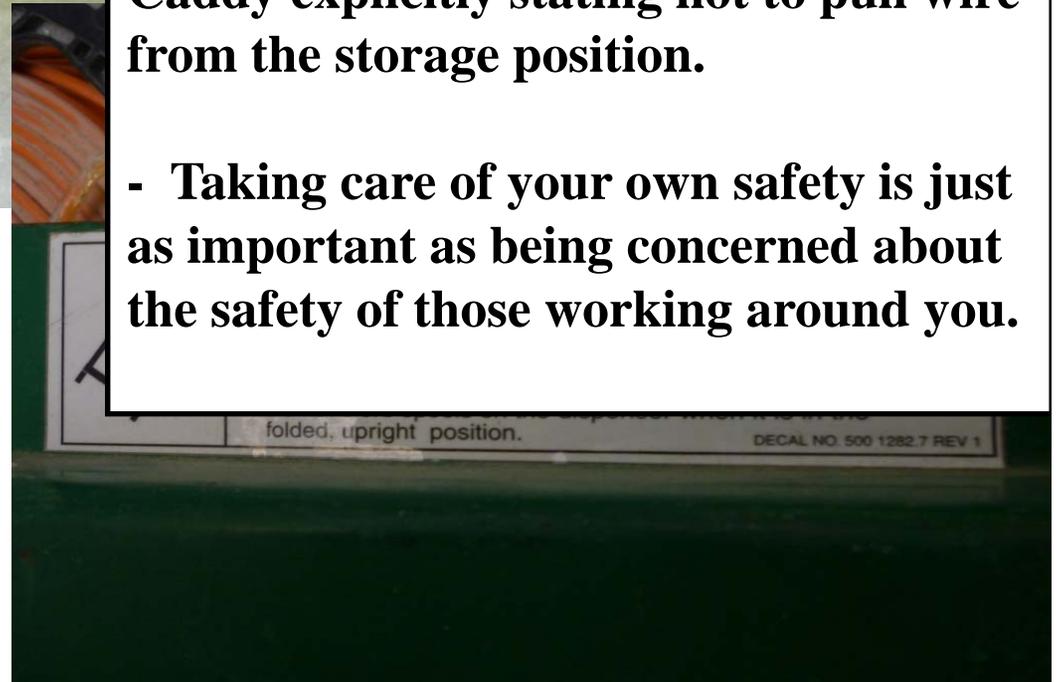


- Perform work activities in the proper order to prevent a possibly dangerous chain reaction.
- In this particular instance, proper order of work would have been to remove the interior T-Bar before the surrounding drywall and perimeter T-Bar.
- Situational awareness is paramount when working in the demolition phase. Ensure personnel are aware of the results and anticipate what may happen when one portion of the material/structure is removed or weakened.

Date: 5MAY11 Injury: Ankle Sprain



- All tools and equipment must be used according to manufacturer's directions.
- In this instance the Caddy was being used in the storage position. There was a warning label on the side of the Caddy explicitly stating not to pull wire from the storage position.
- Taking care of your own safety is just as important as being concerned about the safety of those working around you.

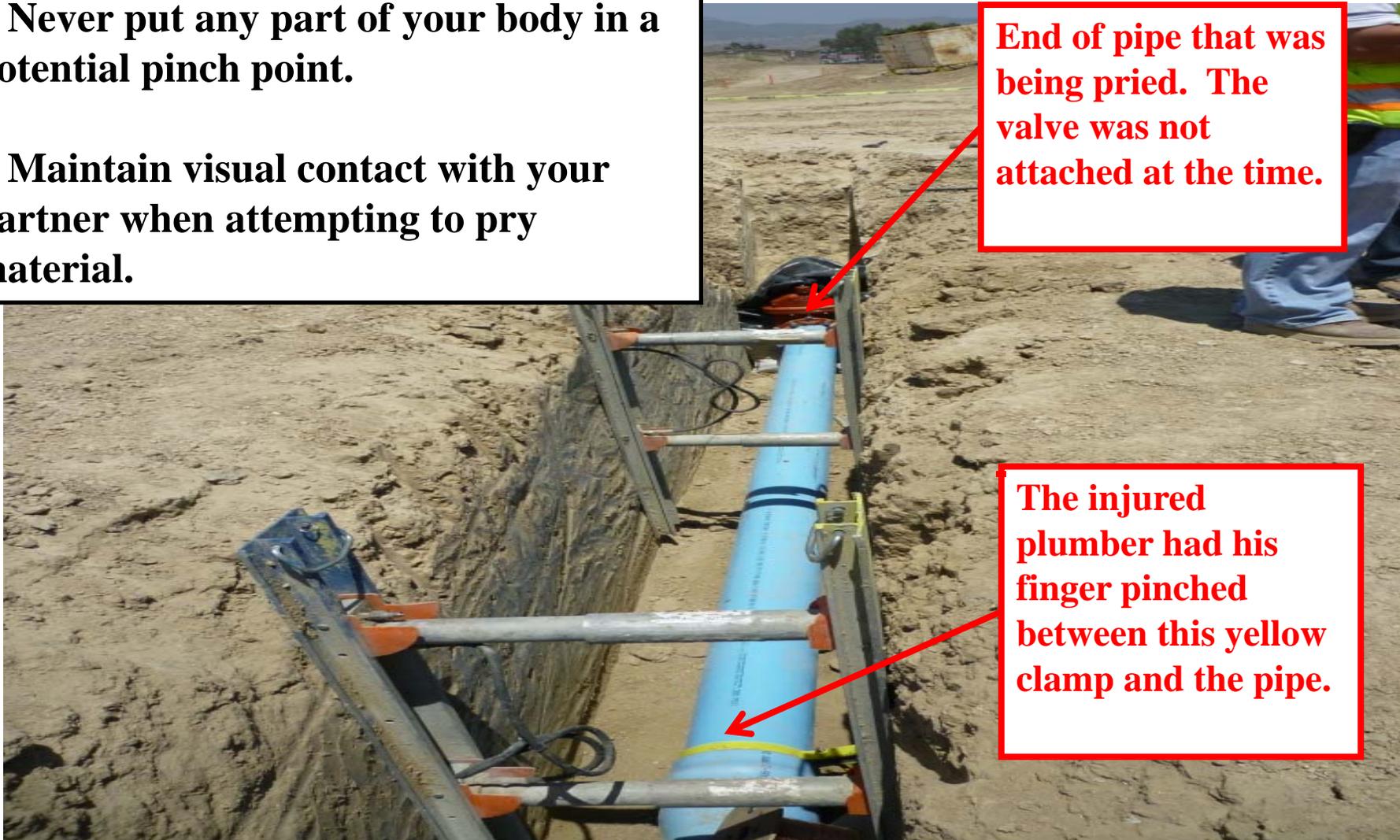


Date: 6MAY11 Injury: Finger Pinch

- Never put any part of your body in a potential pinch point.
- Maintain visual contact with your partner when attempting to pry material.

End of pipe that was being pried. The valve was not attached at the time.

The injured plumber had his finger pinched between this yellow clamp and the pipe.





MCB CAMP PENDLETON

NEAR MISSES

ANDY BROCHU
ROICC CAMP PENDLETON
SAFETY MANAGER



Near Miss: 01 APR 2011



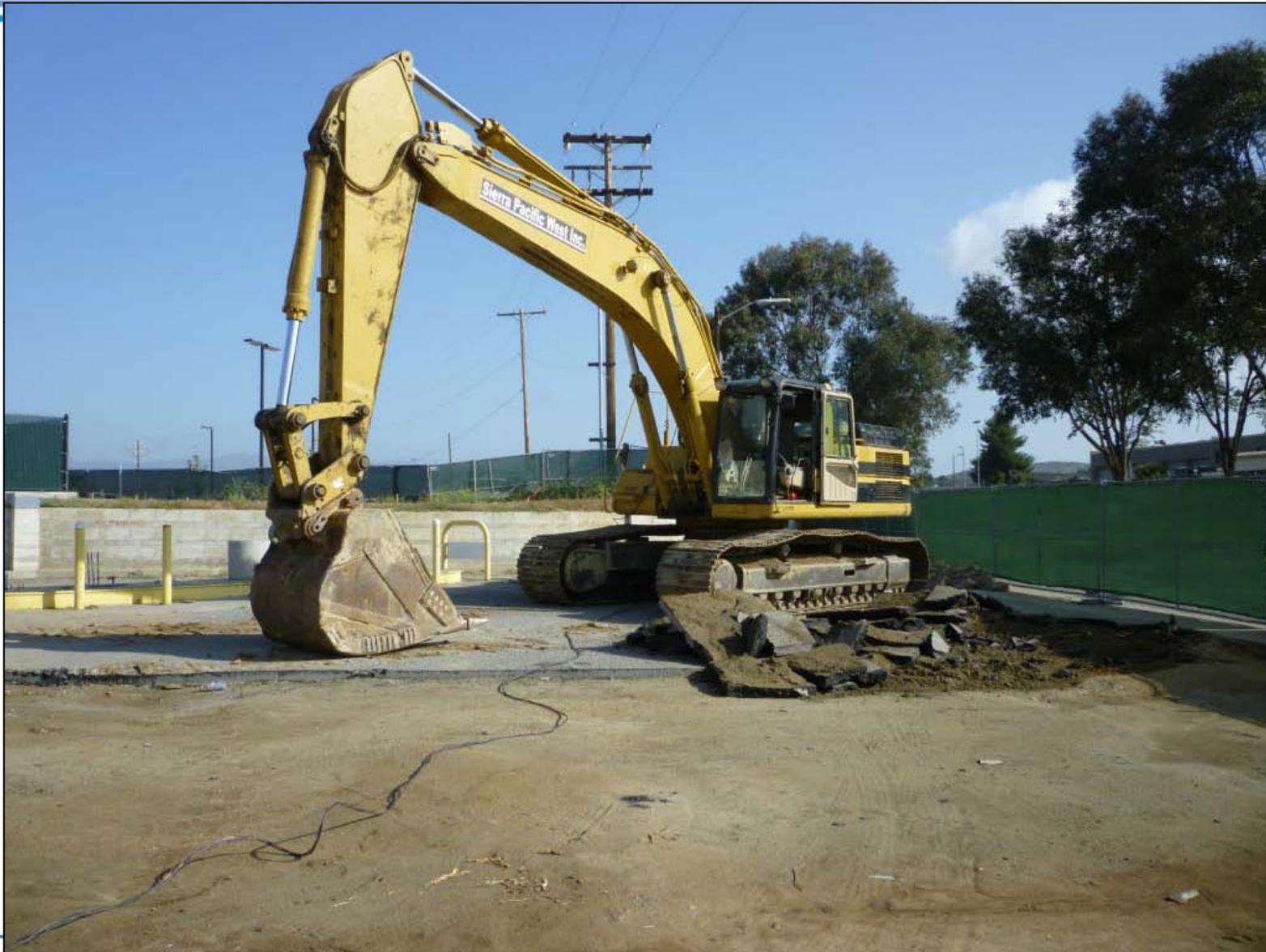
- **Directional Bore striking underground electrical line**
 - **Utility mark outs were previously completed but had faded over time**
 - **Instead of requesting new mark outs, the crew went ahead with the DFOW and struck the previously identified power line**

Near Miss: 10 MAY 2011





Near Miss: 20 MAY 2011



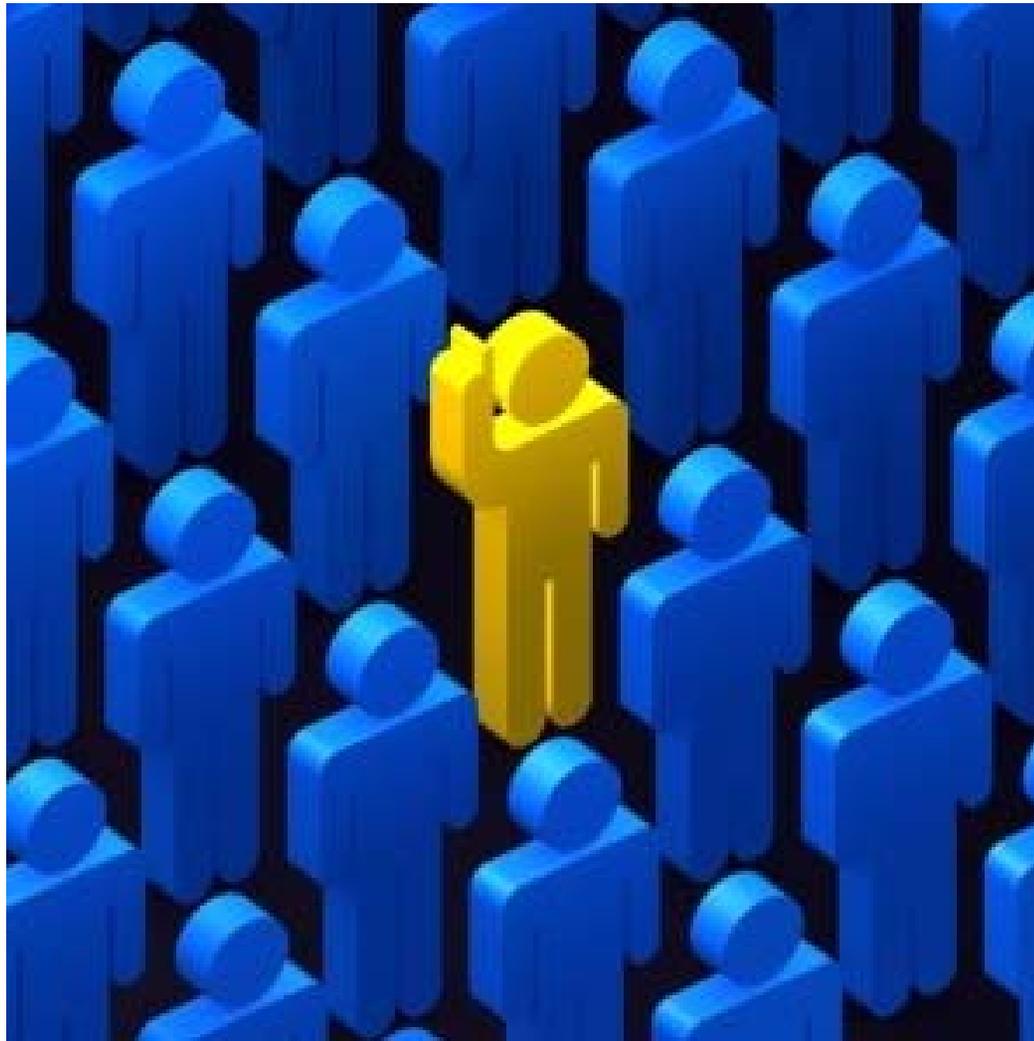
ROICC Camp Pendleton

Near Miss: 26 MAY 2011





SAFETY INNOVATION



SAFETY INNOVATION – HARPER





MCB CAMP PENDLETON

MULTI-PURPOSE MACHINE (MPM)

MATTHEW MEYER
ROICC CAMP PENDLETON
SAFETY MANAGER



WHAT IS AN MPM?



An MPM is any piece of equipment (other than cranes and line construction digger/derricks) used to make suspended load lifts with rigging. The two most common pieces of equipment used in this manner are forklifts and excavators.

The prevalence of this type equipment on our jobsites is increasing due to lower cost (vs. cranes), mobility and multi-functional use.



WHY IS MPM USE REGULATED?



- **NAVFAC record keeping has revealed an increase in MPM contractor incidents.**
- **ROICC CP field personnel recognizes the need for a regulatory process to ensure that this high risk activity is being properly planned.**
- **A lack of basic rigging knowledge by the worker's performing the lifts has the potential to contribute to an incident and/or OSHA citations.**
- **Equipment manufacturer's instruction for correct operation need to be followed. Most manufacturer's do not allow rigging to be attached directly to their equipment without a manufacturer approved suspended load attachment point.**

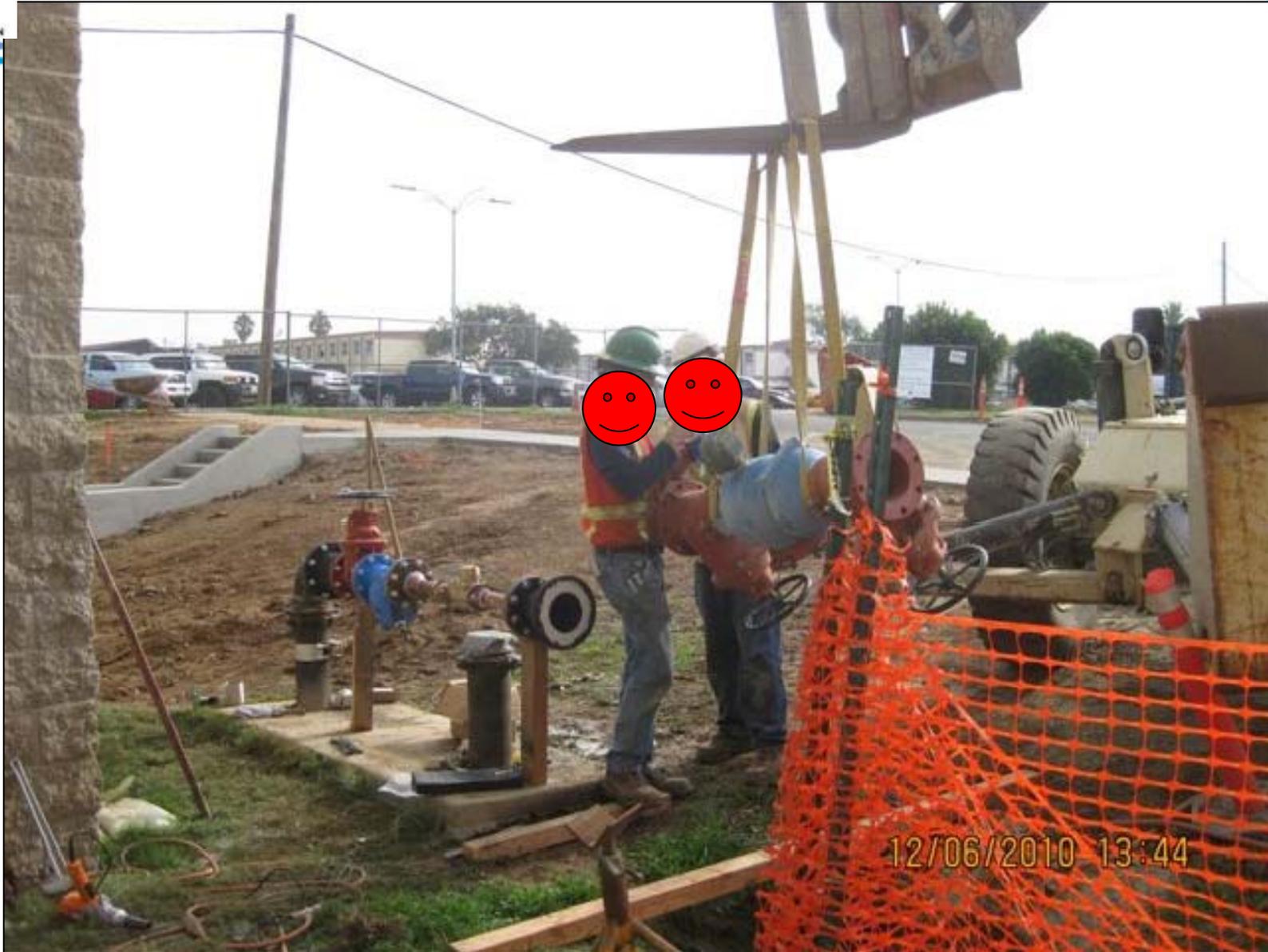
INCORRECT MPM USE EXAMPLES



The following eight slides show examples of MPM's being used incorrectly.

A lot of these pictures may look familiar to operations currently taking place on your job site. Would you recognize these examples as a hazardous operation?

INCORRECT MPM USE



INCORRECT MPM USE



INCORRECT MPM USE



INCORRECT MPM USE



INCORRECT MPM USE



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INCORRECT MPM USE



INCORRECT MPM USE



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INCORRECT MPM USE



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INCORRECT MPM USE

Watch out for holes that have been burned into the end of the forklift forks. This is a practice that is usually done to create a rigging attachment point. These modifications are not allowed by manufacturers. The forks must be immediately taken out of service.



INCORRECT MPM USE

Heating the forks to burn the hole weakens the tempered steel. These forks were on the same forklift. Notice how the fork on the left has actually broken off where it was illegally modified.



INCORRECT MPM USE





HOW IS MPM USE REGULATED ON ROICC CP?



Certificate of Compliance (CoC)

- **The CoC is a certification process performed by the General Contractor**
 - **One CoC for each MPM in use on the job site**
 - **Multiple operators may be named on a single CoC**
 - **The CoC must be signed by both a contractor company official and a Government Designated Authority (GDA)**
 - **The CoC is good for as long as the MPM is in use on that particular contract (no expiration date)**



CERTIFICATE OF COMPLIANCE

This certificate shall be signed by an official of the company that provides multi-purpose machines (MPM's, construction equipment other than cranes used to lift loads suspended by rigging gear, i.e. forklifts and excavators) for any application under this contract on a ROICC MCBCP jobsite. Post a completed certificate on each MPM or in the contractor's on-site office for rigging operations.

PRIME CONTRACTOR

SUBCONTRACTOR

CONTRACT NUMBER

CONTRACT NAME & AREA LOCATION

MPM ID NUMBER

MPM OWNER (if rental)

MPM MANUFACTURER/ TYPE/ MAXIMUM CAPACITY

MPM OPERATOR NAME(S)

I certify that:

1. The above noted MPM and all rigging gear conform to applicable Fed-OSHA, EM-385-1-1, and ASME B30 standards.
2. The operators noted above have been trained and are qualified for the operation of the above noted MPMs.
3. The operators noted above have been trained not to bypass safety devices during lifting operations.
4. The operators, riggers and company officials are aware of the actions required in the event of an accident as specified in the contract.

COMPANY OFFICIAL NAME/TITLE

DATE

COMPANY OFFICIAL SIGNATURE

GDA SIGNATURE OF ACCEPTANCE



MPM CERTIFICATE OF COMPLIANCE



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COMPANY OFFICIAL NAME/TITLE

DATE

COMPANY OFFICIAL SIGNATURE

GDA SIGNATURE OF ACCEPTANCE



HOW DOES AN MPM OPERATOR BECOME QUALIFIED?



Currently there is not an official training program for a MPM operator. A company official is responsible for designating an employee as being a MPM operator. Similar to naming a Competent Person for Fall Protection or Excavation/Trenching, the subcontractor must give a letter to the general contractor designating the operator(s) that they feel are qualified to operate a MPM.



HOW DOES AN MPM OPERATOR BECOME QUALIFIED?



If the subcontractor is the company official who signs the Certificate of Compliance, then the accompanying letter from the sub designating the operator(s) is not required.

If the general contractor is the company official signing the CoC for a subcontractor, than the letter is required.

A letter is not required for a general contractor signing for their own personnel.



WHO IS THE GDA SIGNING THE CoC?



The Government Designated Authority (GDA) who signs the CoC should be the assigned job site ROICC Engineering Technician (ET). If the ET is unavailable than the assigned “buddy” ET or job site ROICC Construction Manager (CM) may sign. Another option in the event of the ET’s absence is to contact ROICC Safety.



WHAT IS REQUIRED FOR THE GDA'S SIGNATURE?



- **A completed CoC**
- **Rated Capacity (load chart) posted on the MPM**
- **Well maintained, manufacturer approved attachments and/or attachment points**
- **Rigging that is OSHA compliant and in good condition**
- **Owner's manual and fire extinguisher located on the equipment**
- **A working equipment back-up alarm**



HOW ELSE IS MPM USE REGULATED ON ROICC CP?



THE MPM DAILY LIFT CHECKLIST

The Checklist is to be completed by the MPM operator before performing any lifts. It is understood that many lifts may be made by the same operator in the same MPM throughout the day. In this situation the operator should fill out the checklist with the most hazardous or challenging lift in mind. If another lift is to happen that day that is more challenging or hazardous, then another checklist shall be prepared.

A good comparison for the thought process of the MPM Pre-Lift Checklist is the Excavation/Trench Entry Checklist. If conditions change or become more hazardous, the checklist shall be performed again.



MPM DAILY CHECKLIST



After completing the MPM Daily Lift Checklist it is signed by the operator. This helps to reinforce the idea to the operator that it is a hazardous activity that he is responsible for and it needs to be taken seriously.

MPM OPERATOR'S NAME (PRINT)	MPM OPERATOR'S SIGNATURE
<input type="text"/>	<input type="text"/>
MPM ID NUMBER	DATE
<input type="text"/>	<input type="text"/>
NOTES:	

CORRECT MPM USE



ROICC Camp Pendleton



CORRECT MPM USE



ROICC Camp Pendleton

CORRECT MPM USE



CORRECT MPM USE



CORRECT MPM USE



CORRECT MPM USE



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CORRECT MPM USE



CORRECT MPM USE





OTHER NOTES AND CONSIDERATIONS



- **If a forklift, excavator, or other equipment is being used for “normal” activities and not suspended load lifting it is not considered an MPM.**
- **For forklift MPM’s the operator must have a forklift operator’s license.**
- **Pay close attention to the way the equipment and attachments are being used together. Passing a visual test doesn’t necessarily mean it’s correct!**

See the following case study for an example...

MPM CASE STUDY

The Sky-Trak model 6042 forklift is engineered and rated for a maximum 12' truss boom per the load chart and operator's manual. There is a 15' truss boom attachment that looks identical (other than size) made for larger Sky-Trak models.



MPM CASE STUDY

Model # 6042 is stamped on the 15' truss boom tag.



MPM CASE STUDY

To further complicate matters there is a JLG model G6-42A that looks similar in size to Sky-Trak model 6042 that has been engineered and rated for a 15' boom.





MPM CASE STUDY

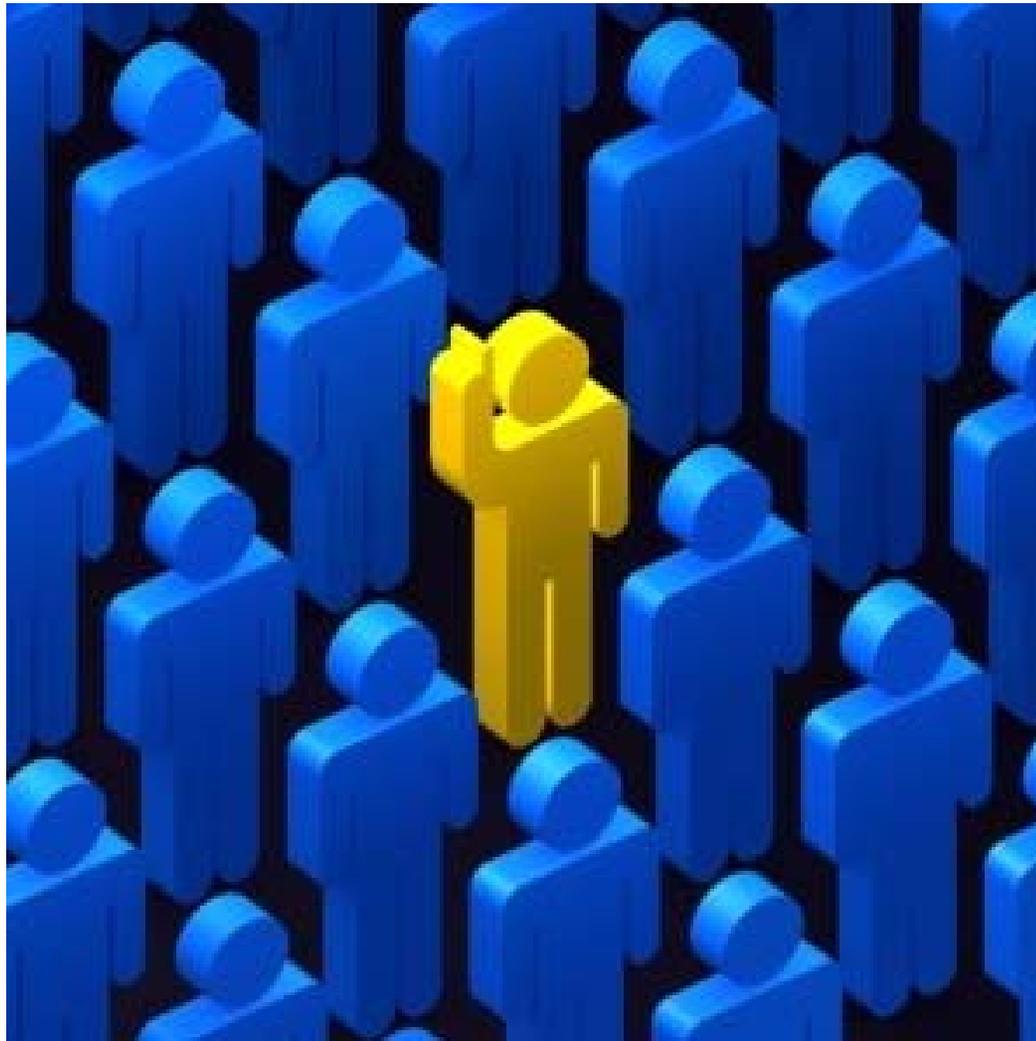


The contractor sent the picture of the tag and the 15' truss boom to Sky-Trak. Sky-Trak responded that several companies manufacture attachments that are not approved for use on their equipment, and that the boom is not one of theirs. At this time the manufacturer of the boom has not been discovered.

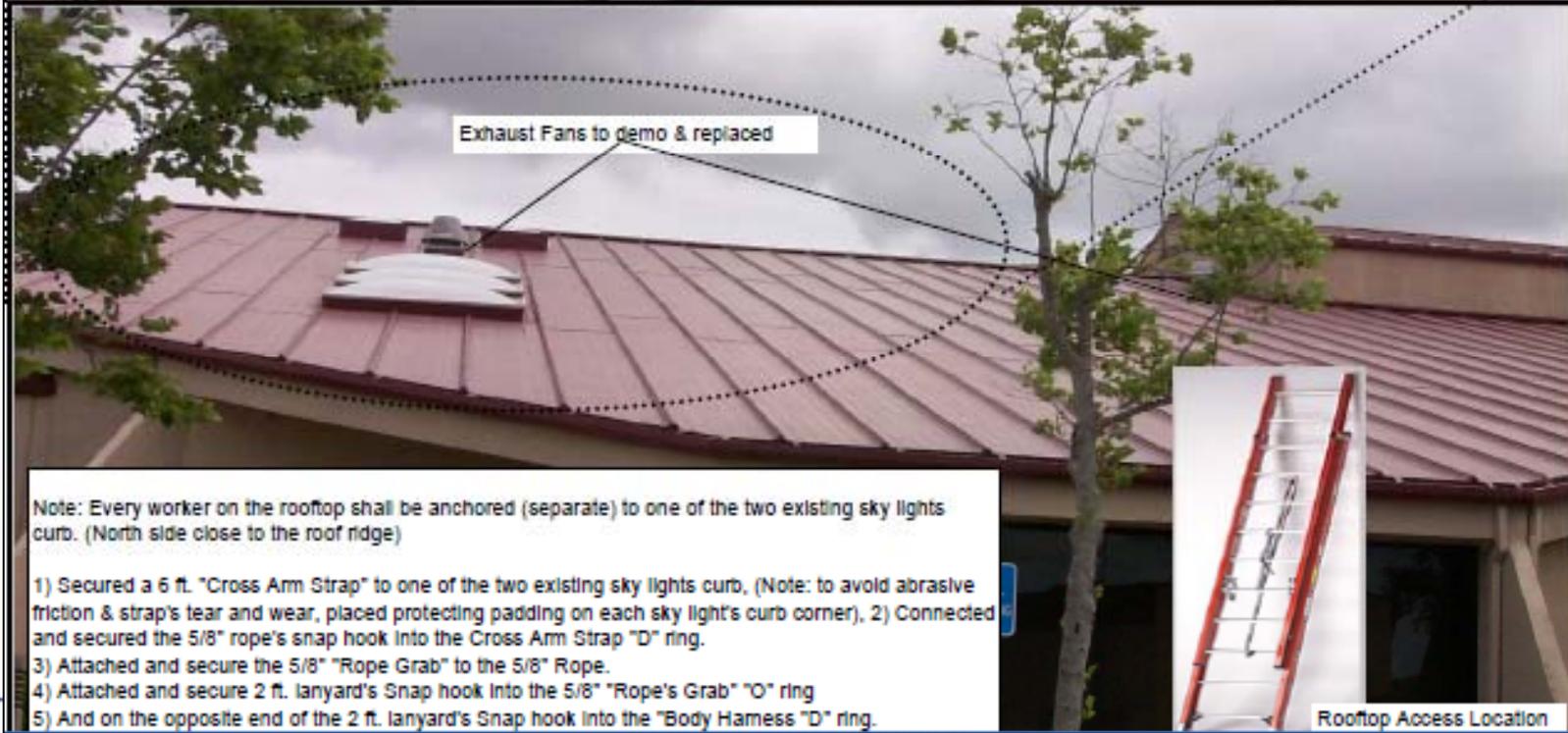
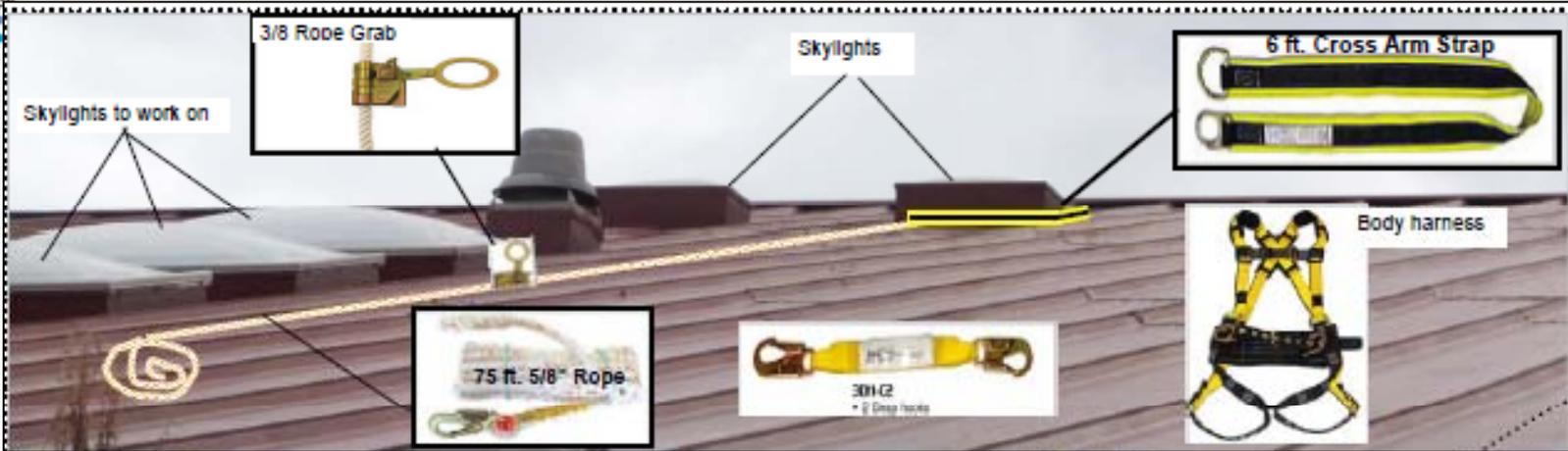
The contractor's close attention to important details prevented what could have been a serious accident. Would you have made the same "Good Catch" on your job site?



SAFETY INNOVATION



SAFETY INNOVATION – ALLEN ENG.



Note: Every worker on the rooftop shall be anchored (separate) to one of the two existing sky lights curb. (North side close to the roof ridge)

- 1) Secured a 6 ft. "Cross Arm Strap" to one of the two existing sky lights curb, (Note: to avoid abrasive friction & strap's tear and wear, placed protecting padding on each sky light's curb corner), 2) Connected and secured the 5/8" rope's snap hook into the Cross Arm Strap "D" ring.
- 3) Attached and secure the 5/8" "Rope Grab" to the 5/8" Rope.
- 4) Attached and secure 2 ft. lanyard's Snap hook into the 5/8" "Rope's Grab" "O" ring
- 5) And on the opposite end of the 2 ft. lanyard's Snap hook into the "Body Harness "D" ring.



MCB CAMP PENDLETON

BREAK – 15 MINUTES

**Reminder: Please fill
out your sign in sheets!**



MCB CAMP PENDLETON

SAFETY OFFICER INTRODUCTION

LT RU TOYAMA
ROICC CAMP PENDLETON
SAFETY OFFICER

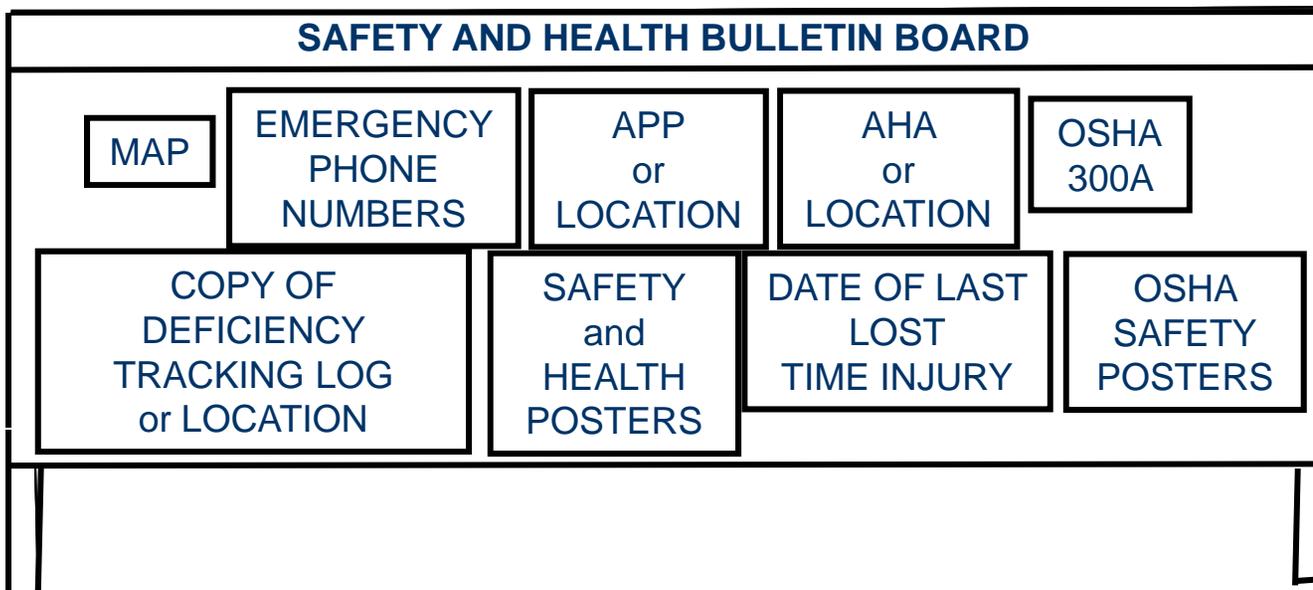


CONTRACT GENERAL SAFETY REQUIREMENTS



01.A.06

- **THE CONTRACTOR SHALL ERECT AND MAINTAIN A SAFETY AND HEALTH BULLETIN BOARD IN A COMMONLY ACCESSED AREA IN CLEAR VIEW OF THE ON-SITE WORKERS BY WORKERS. THE BULLETIN BOARD SHALL BE MAINTAINED AND UPDATED AND PLACED IN A LOCATION THAT IS PROTECTED AGAINST THE ELEMENTS AND UNAUTHORIZED REMOVAL.**





Any Questions?



- If you or other project Supers and SSHOs are not receiving these emails, please contact me:
 - Desk Phone: (760)-725-8967
 - Cell Phone: (760)-468-6936
 - Email: **teruo.toyama@navy.mil**

 - https://portal.navfac.navy.mil/portal/page/portal/navfac/navfac_ww_pp/navfac_navfacsw_pp/oicc_mci_west/safety_briefs**



SAFETY INNOVATION





SAFETY INNOVATION – TURNER-PENICK



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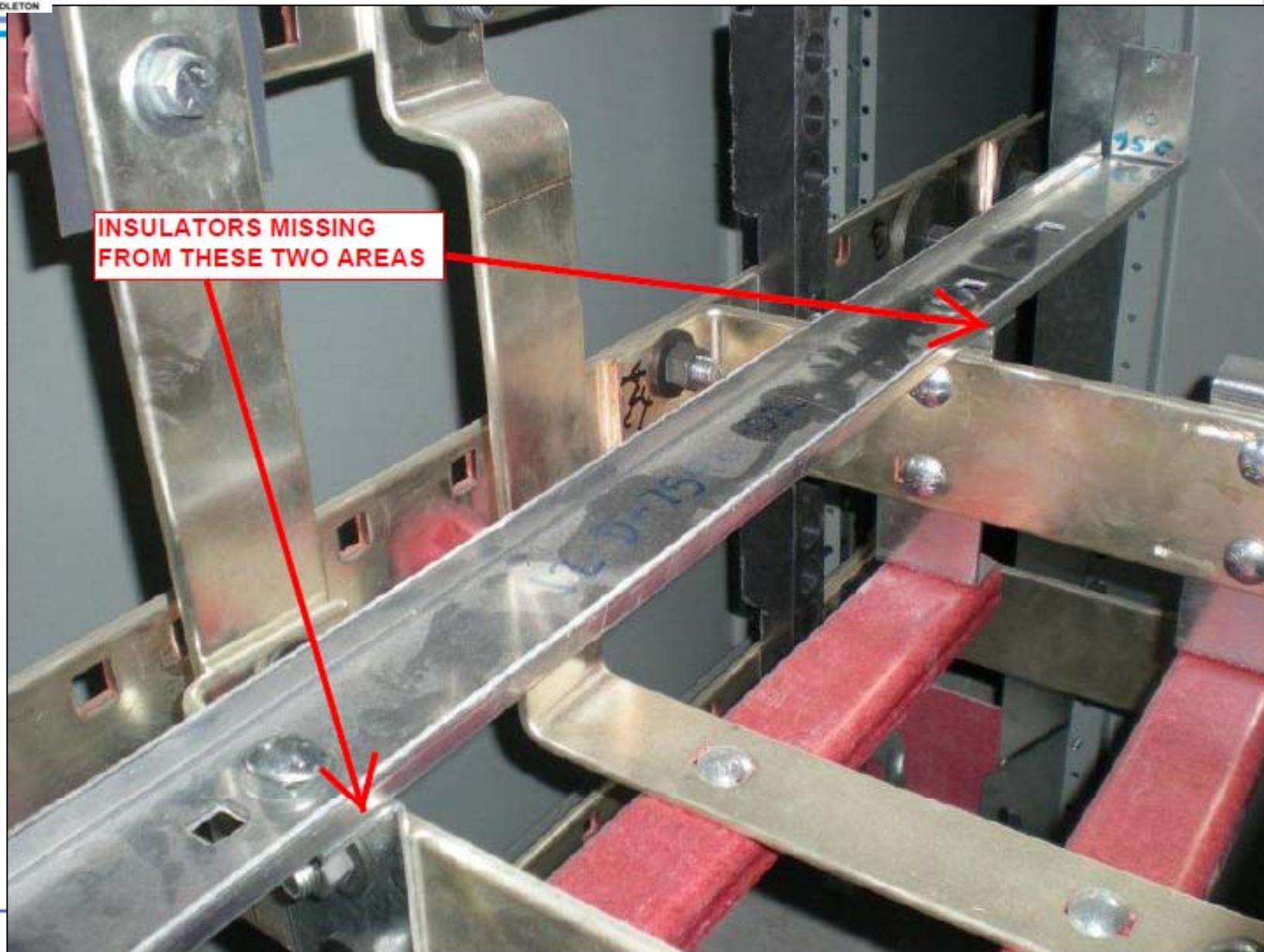
SAFETY QUICK HITTERS
“Vital Info for Work on Camp Pendleton”

ANDY BROCHU and MATTHEW MEYER
ROICC CAMP PENDLETON
SAFETY MANAGERS

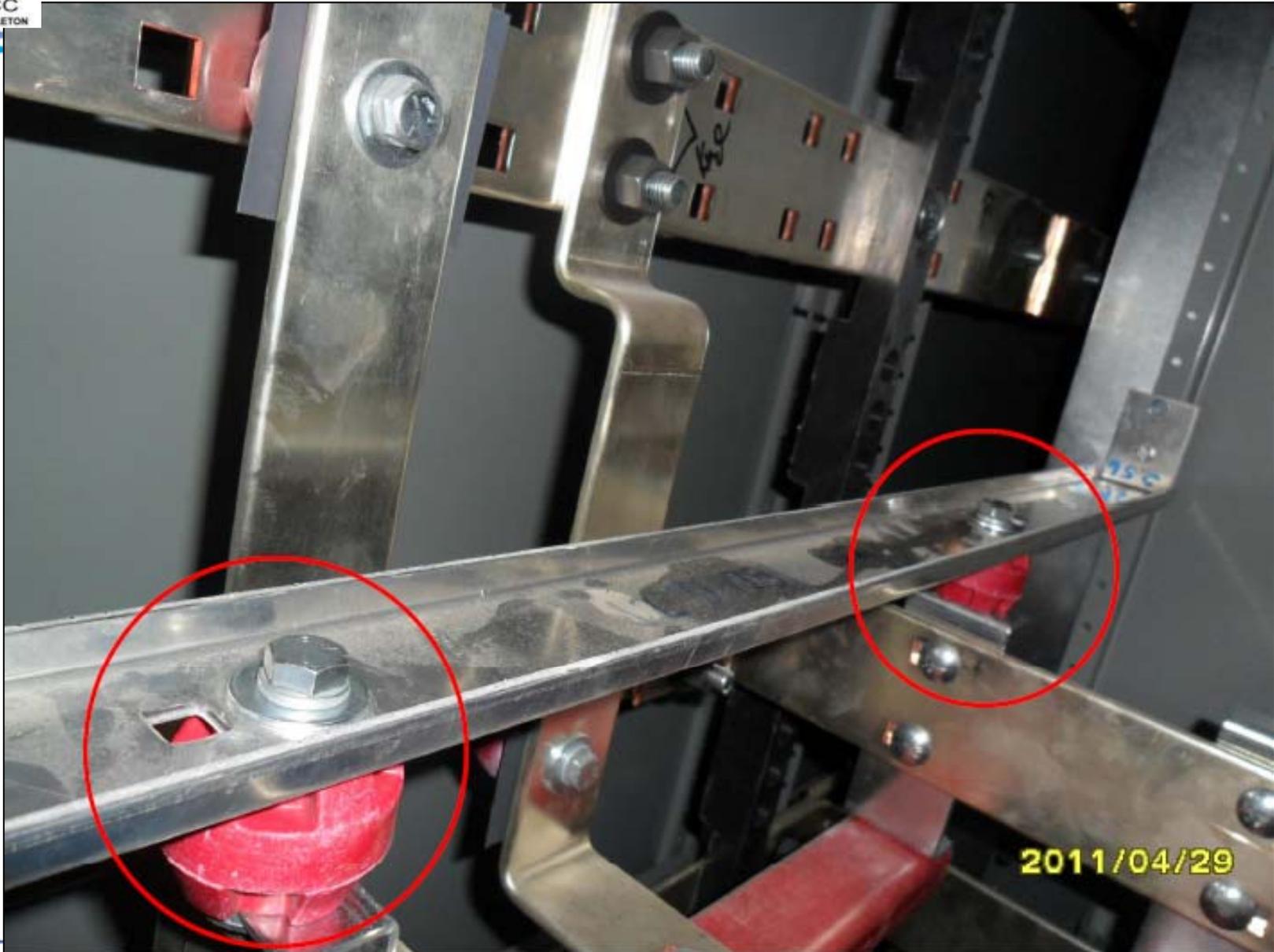
ELECTRICAL “GOOD CATCH”



ELECTRICAL “GOOD CATCH”



ELECTRICAL “GOOD CATCH”





FALL PROTECTION - SSFPPP



- Please erase the old version of the SSFPPP
- Instruct your subcontractors who are completing the form to read the form and all the notes in entirety before beginning.
- The beginning section needs to be filled in **COMPLETELY**.
- The field box in Section C should be written with training purposes in mind and with clear step by step directions on how the FPE will be utilized.
- Rescue Procedures in Section D for work from aerial lifts must contain a secondary way to rescue an unconscious worker other than relying solely on the ground controls.
- Section F “Incident Investigation Procedures” should state:
See Section 8 Paragraph B of the job site APP.



FALL PROTECTION - SCAFFOLDS



EM 385-1-1 21.J.02

For workers erecting and dismantling scaffolds, an evaluation shall be conducted by a Competent Person for fall protection to determine the feasibility and safety of providing fall protection if fall protection is not feasible. An AHA detailing rationale for infeasibility of use of fall protection shall be submitted and accepted by the GDA.



ACCIDENT PREVENTION PLAN (APP)



- **Do you know what an APP is?**
 - It is a safety and health policy document.
 - Prepared by the contractor specifically for each contract.
 - Accepted by the GDA prior to the start of work.
 - Considered to be part of the contract.
- **Do you know where to find the outline for the APP?**
 - Appendix A of the EM 385
- **Do you know where the APP for your job is located?**
 - Must be available on the work site.
- **Have you been updating your APP?**
 - Must be updated as work progresses and evolves.



ACCIDENT PREVENTION PLAN (APP)



What documents are considered part of the APP?

- AHA's
 - SSFPPP
 - Excavation/Trenching Plan (ETP)
 - Crane Lift Plans
 - MPM Information
 - Traffic Control Plans
 - Confined Space Plans
- Essentially any written portion of the job site safety and health program is considered part of the APP.**



FED OSHA UPDATE



- **Last visit to Camp Pendleton was 08 APR 11.**
- **Planned to set up for 4-5 days and visit as many jobs as possible.**
- **Called back to headquarters in Oakland due to the possibility of a government shutdown.**

ALWAYS BE PREPARED!



JOB BOXES (OSHA MAGNETS!)



- **What do we mean by Job Box?**
 - Any tool or material container located on the job site
- **Common violations found by ROICC Safety:**
 - **Damaged tools that are not tagged out of service**
 - **Compressed air stored in a non-ventilated container**
 - **Oxygen and acetylene stored in the box and/or together**
 - Place in Ventilated Area, Separate, Secure, Remove Regulator and Cap!
 - **“Indoor Use Only” power strips**
 - **Chemicals stored improperly without labels and/or MSDS**
 - **Oil based chemicals being stored around regulators**
 - **Flammable Liquids (fuels) stored in a non-ventilated area**
 - **Rigging and/or Fall Protection Equipment kept on the floor**
 - **Powder Actuated Tools and Power Loads stored improperly**
 - **Obstructed walkways and aisles**

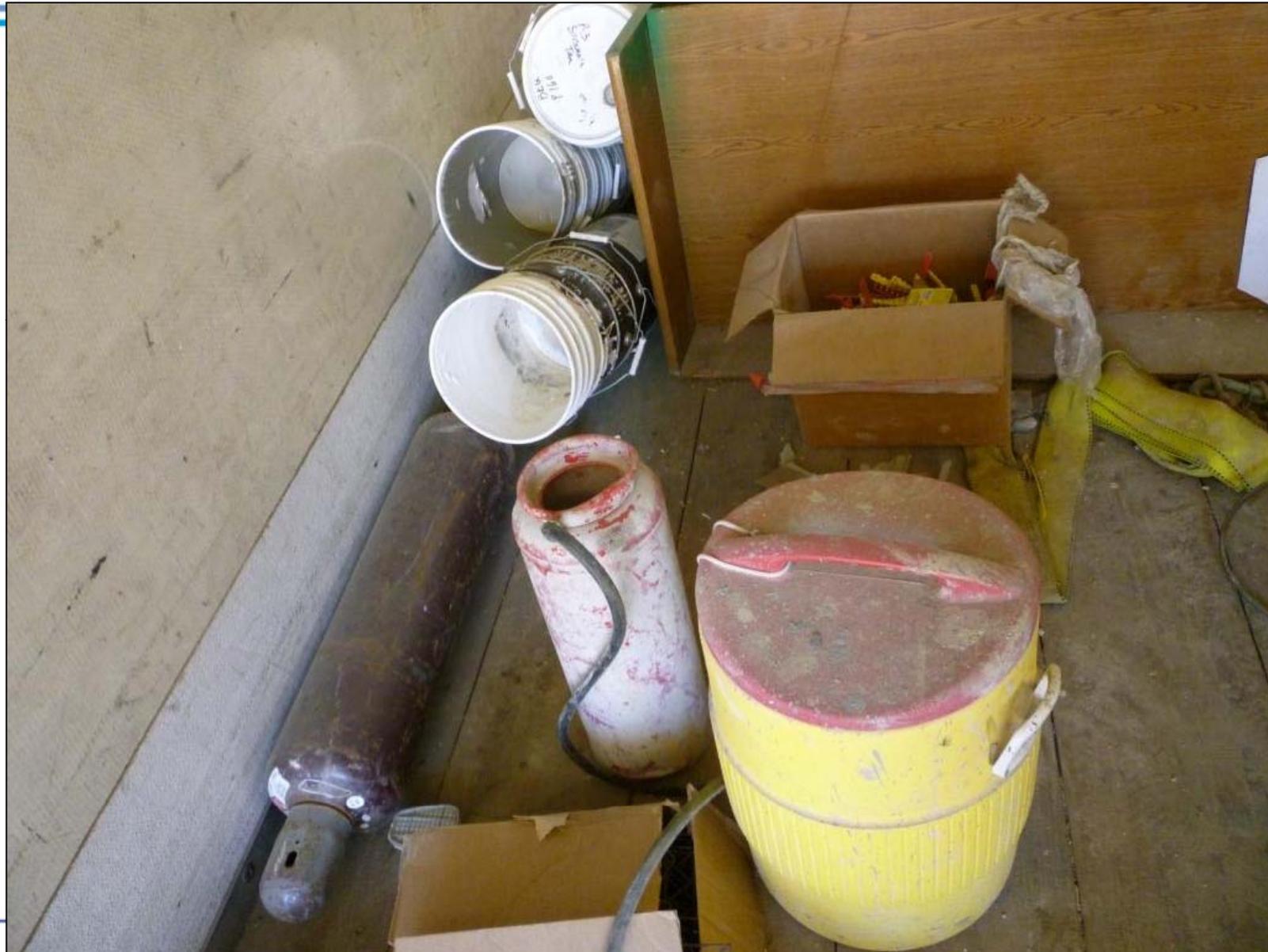
JOB BOXES (OSHA MAGNETS!)



JOB BOXES (OSHA MAGNETS!)



JOB BOXES (OSHA MAGNETS!)





EXCAVATION/TRENCHING



The rule of 4, 5, and 6

4 foot depth = ladder, ramp, or stairs

5 foot depth = shoring, sloping, or benching and ETP

6 foot depth = fall protection and SSFPPP



ALTERNATE SSHO and Superintendent



- **Do you have an alternate SSHO and/or Superintendent to cover your job site in the event of the primary SSHO or Superintendent's temporary absence?**
- **Are they familiar with the job site?**
- **What if your first alternate can't make it?**



STAR Award Presentations



- Safety Through Awards and Recognition
- Awarded upon completion of contracts \geq \$100,000 w/o Safety Incidents

COMPANY	BOD	PROJECT
Pacific West Builders	14JAN11	INSTALL EFFICIENT BOILERS AND WATER HEATERS BLDG. 520446
Harper Construction	09FEB11	DELUZ CHILD DEVELOPMENT CENTER
R.A. Burch	14FEB11	1 st MLG and Battalion HQ & Military Police Company
Soltek Pacific Construction, Inc.	12MAR11	1 st MLG Operations Center & Armory
Straub Construction	18MAR11	52 Area Consolidated Communication/Electric Maintenance Storage



STAR Award Presentations



- Safety Through Awards and Recognition
- Awarded upon completion of contracts \geq \$100,000 w/o Safety Incidents

COMPANY	BOD	PROJECT
Weston Solutions	2APR11	51 to 53 Area Natural Gas Line Repair
Courseault Commercial Inc.	11APR11	4 th Tanks Battalion Washrack
SUNDT-WILLIAMS SCOTSMAN A JOINT VENTURE	22 APR11	P-1117 Preparation & Interim Facilities
RQ Construction	2MAY11	41 Area West Facilities
Courseault Commercial Inc.	13MAY11	4 th LAR Battalion Washrack



Q&A / Discussion



- What are you doing differently than before?
- Is your Safety Culture improving?
- Is your message reaching Every crew member?
- What do you plan to do differently tomorrow?