

Resident Officer In Charge of Construction MCB Camp Pendleton

Field Leadership Safety Conference

February 22, 2011



Agenda



- Program Review – How are we doing?
- Andy's Safety Tool Box
 - Recent Incidents/Near Misses
 - Foreman's Responsibilities
 - Utility Damage and Repair
- Fall Protection Discussion
- ROICC Safety Officer Intro
- Excavation/Trenching
- Multiple Purpose Machines (MPM)
- STAR Award Presentations
- Open Discussion / Q&A

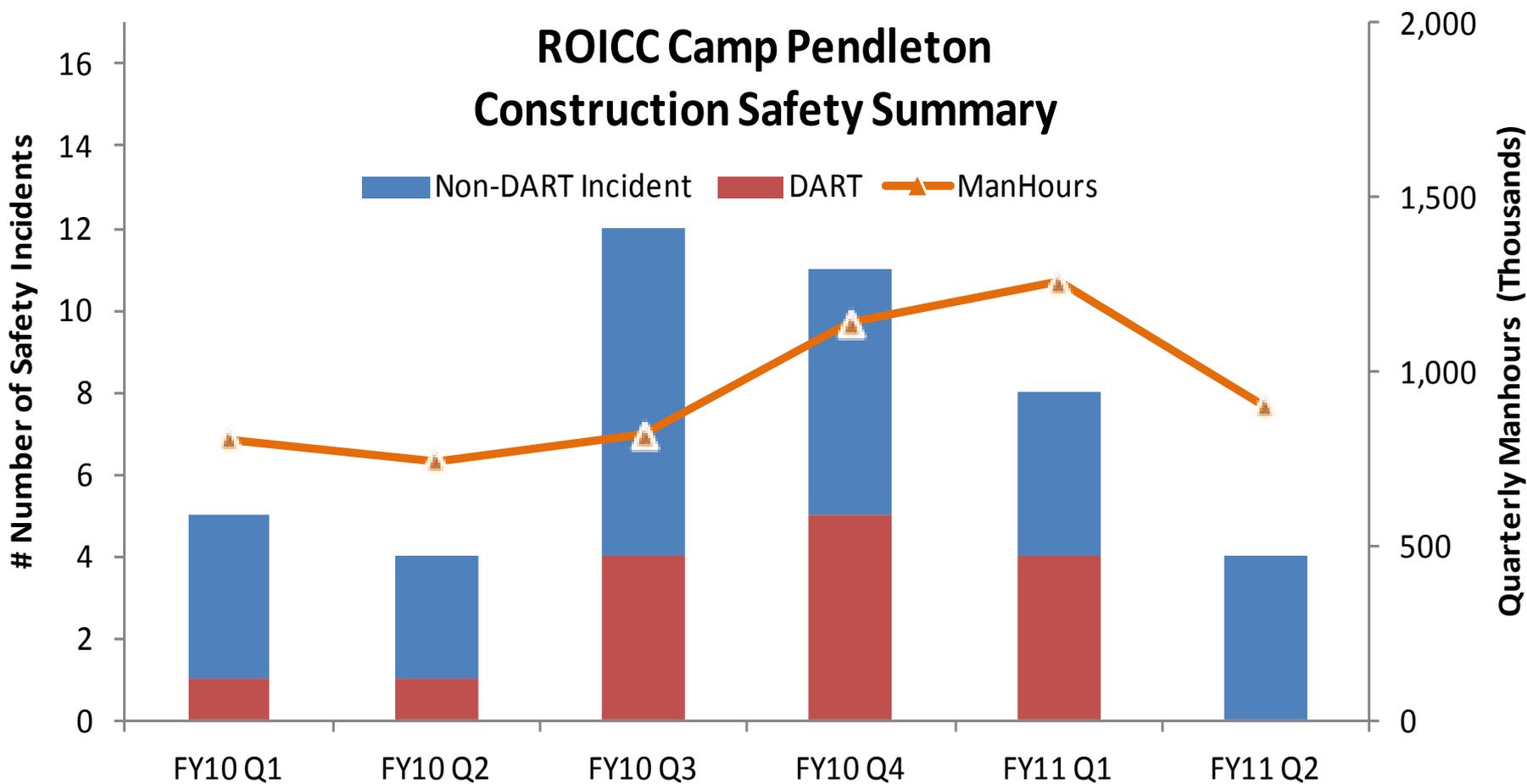


Program Review

- **How are we doing?**
 - Nearly \$1.8B under contract
 - Over 8.3M man-hours worked within last 3 years
 - 15 DARTs & 6 lost time accidents
 - Sharing of lessons learned routine (rear-view mirror)
 - Safety now a stand-alone acquisition source selection factor for future awards
- **Can we do better?**
 - How are you reaching every member of the crew?
 - Are you truly looking at leading indicators?
 - Are you sharing all incidents and good catches?
 - Is Safety a Priority....or is it a Value?

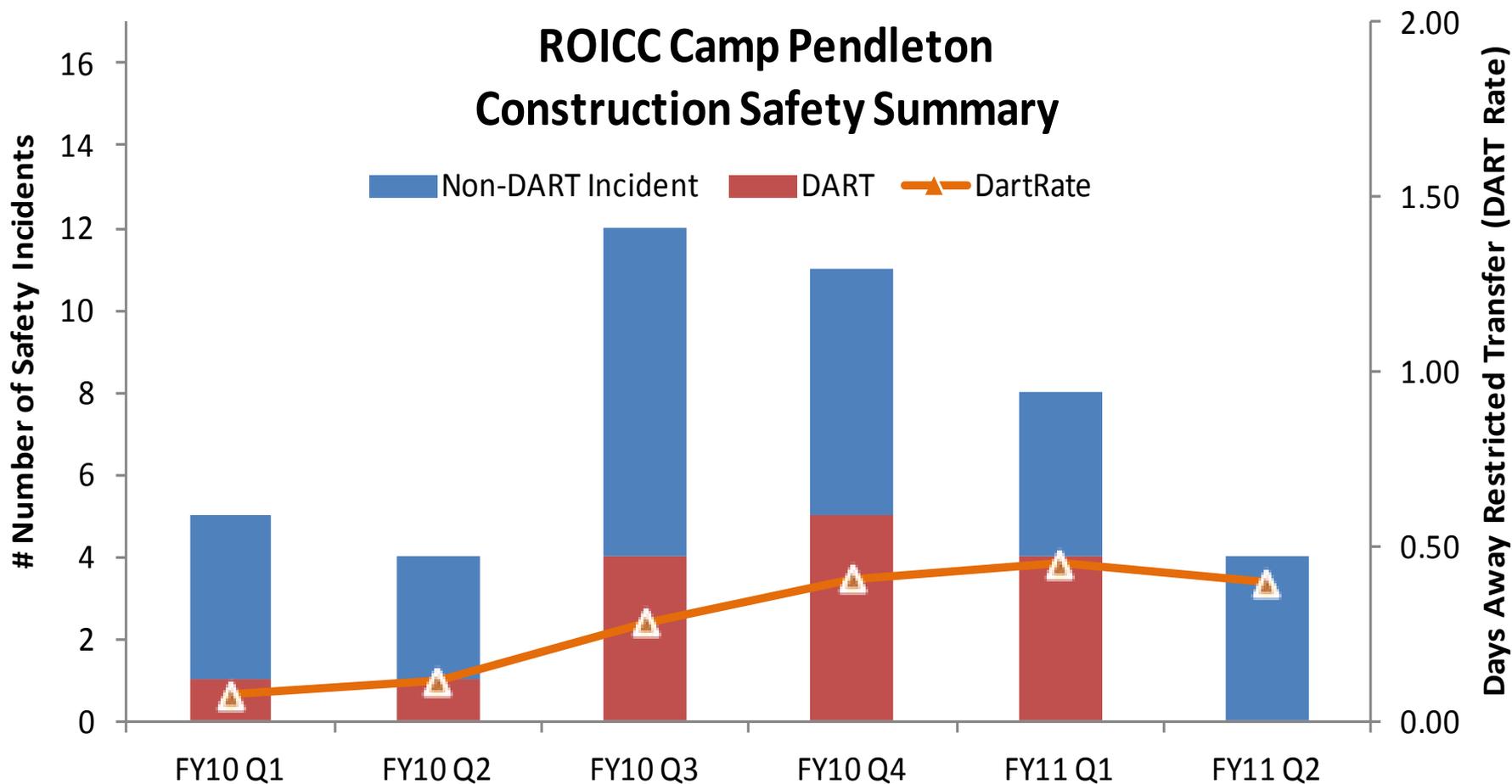


ROICC Camp Pendleton Safety Trends





ROICC Camp Pendleton Safety Trends



DART Rate calculated from data compiled since 15 Aug 2008

Scenario: 15 Month contract
3-weeks remaining before CCD
Conductors still need to be bolted inside live 12kV cabinet
Base requires 30 days to coordinate an outage
No preparatory had been held/scheduled for DFOV
Subcontractor possesses keys to gov't substation
Gov't allowed dual-hat Super/SSHO
Approved Super/SSHO possesses limited high-voltage exp.



What would you have done?

Would you have been aware?

Date: 22NOV10 Injury: Electric Shock



Date: 22NOV10 Injury: Electric Shock



- 1. Thorough Preparatory Meetings shall be held for every DFOW**
- 2. No contractors shall have access to government-controlled utility infrastructure.**
- 3. Hot work shall only take place when authorization is provided by the OICC MCIWEST**
- 4. Lock-Out/Tag-Out procedures shall always be followed.**
- 5. Never access a live utility without an outage**
- 6. Wear proper PPE!**
- 7. NEVER SACRIFICE SAFETY FOR PRODUCTION!**





CONTRACTOR SAFETY INNOVATIONS



**FOR BASE
RESCUE/EMERGENCY/POLICE
CALL
760-725-3333**

CONTRACTOR SAFETY INNOVATIONS





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

November 9 2010 – February 22 2011



STATS

- 7 injuries resulting in off-site medical care
- 3 of the 7 involved injuries to the back
 - And two of the back injuries were **DARTS**
- 3 of the 7 were **DART** cases
- 2 near misses



- 1. Only use approved work platforms.**
- 2. Take the time to plan work appropriately and ensure availability of proper tools.**
- 3. Never put production ahead of safety.**

- 1. Be aware of your surrounding at all times.**
- 2. Be alert and conscious of changing jobsite conditions.**
- 3. Never leave a trench or excavation unprotected.**



- 1. Never put any part of your body in a potential pinch point.**
- 2. Pay attention to your surroundings and avoid complacency when performing simple activities.**
- 3. Request assistance when moving a load that is difficult for one person to handle.**



Date: 27JAN11 Injury: Back Injury



- 1. When standing on a work platform, look down and assess your surroundings before descending.**
- 2. Consider using cordless tools to prevent trip hazards from extension cords.**
- 3. Immediately report all incidents and injuries to your supervisor.**

2 Reported Eye Injuries

- **24 JAN 2011**: A tiny piece of metal was blown into a worker's eye by gusting winds. The injury was not reported from the subcontractor to the prime contractor until 5 days later, and by then a rust ring had developed on the eyeball.
- **10 FEB 2011**: An eye irritation was reported by a worker performing overhead framing. The eye was flushed on-site, but 5 days later the eye was still irritated and the worker went to the clinic where it was flushed and cleaned by a doctor.



MCB CAMP PENDLETON

NEAR MISSES

ANDY BROCHU
ROICC CAMP PENDLETON
SAFETY MANAGER

- 1. Operators shall ensure trailer kingpin is locked into tractor's fifth wheel as part of a standard comprehensive pre-departure vehicle inspection.**





- 1. Do not park equipment near or under power lines.**
- 2. Stay 10 feet back from all power lines.**
- 3. Clearly mark and define the power line hazards to the ground operation crew.**
- 4. Do not rely on memory alone to know where power lines are.**



FOREMAN'S RESPONSIBILITIES



- **Treats his workers with respect**
- **Knows his people**
- **Is diligent throughout the day**
- **Knowledgeable of the EM 385-1-1 and the chapters that relate to his work**
- **Acts as the first line of safety QC**
 - Tools**
 - PPE**
 - Equipment**

Safety Task Assignment Checklist



- Evaluate the experience level of the employee
- Explain what to do
- Explain how to do it safely
- Explain and provide for P.P.E. requirements
- Review and explain the MSDS
- Explain the potential hazards

Safety Task Assignment Checklist



- Inspect the work area for potential hazards
- Inspect equipment/tools
- Communicate expected results
- Does the employee understand?
- Follow up



MCB CAMP PENDLETON

UTILITY DAMAGE AND REPAIR

ANDY BROCHU
ROICC CAMP PENDLETON
SAFETY MANAGER

UTILITY DAMAGE AND REPAIR



UTILITY DAMAGE AND REPAIR



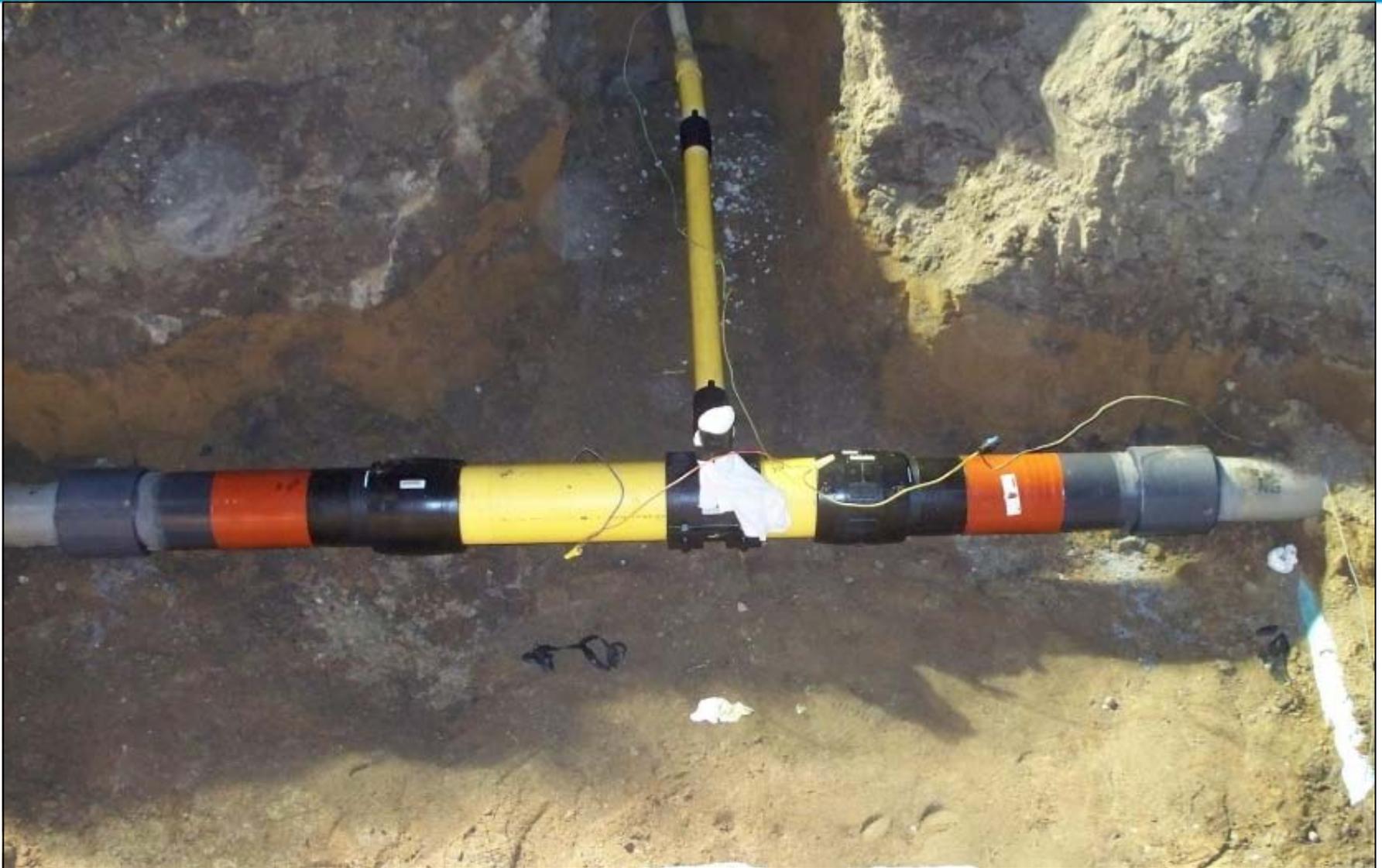
UTILITY DAMAGE AND REPAIR



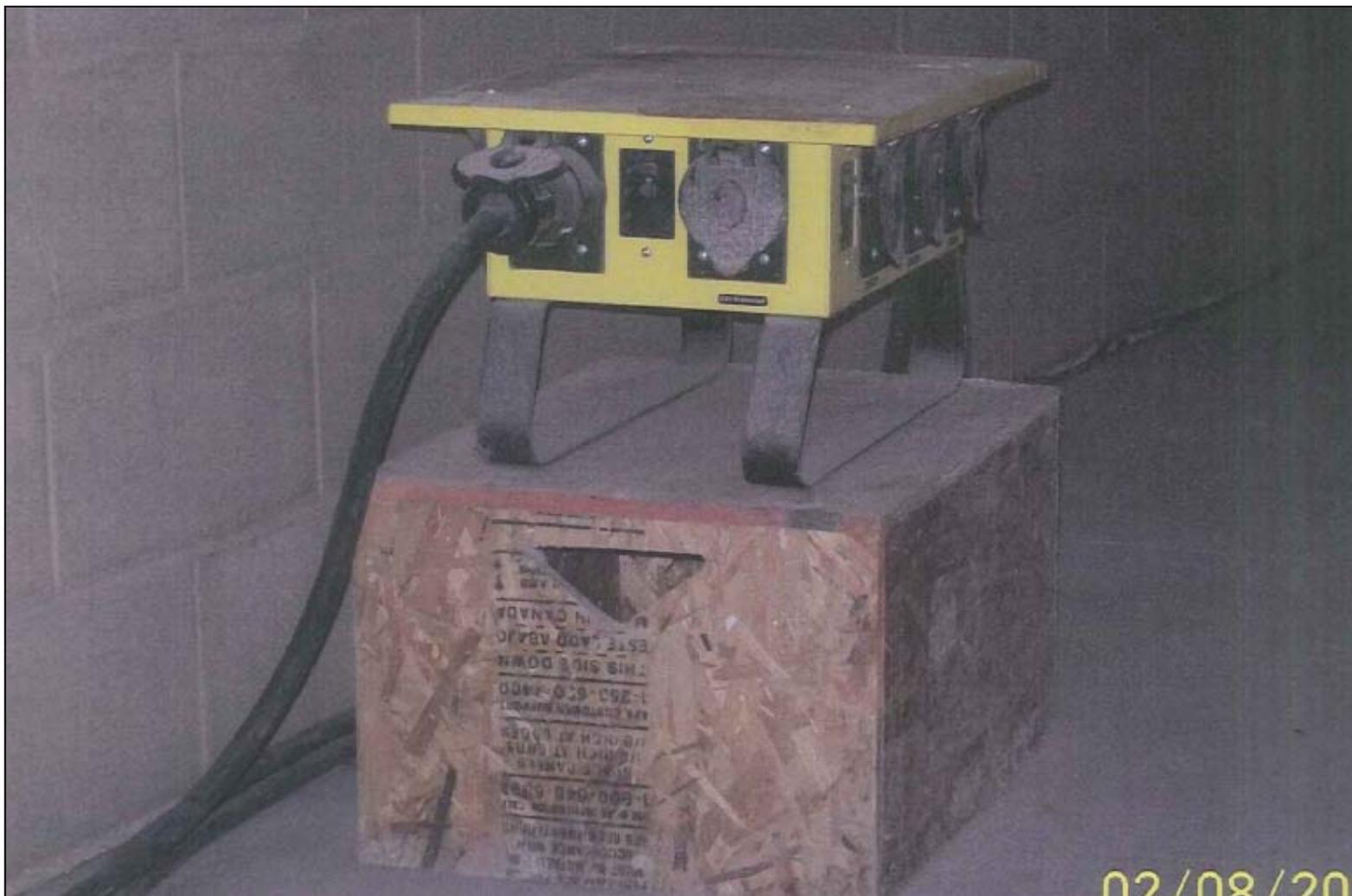
UTILITY DAMAGE AND REPAIR



UTILITY DAMAGE AND REPAIR



CONTRACTOR SAFETY INNOVATIONS





MCB CAMP PENDLETON

**SITE SPECIFIC FALL PROTECTION
AND PREVENTION PLAN**

MATT MEYER
ROICC CAMP PENDLETON
SAFETY MANAGER



SSFPPP



ROICC Camp Pendleton

FSC Camp Pendleton

Site-Specific Fall Protection and Prevention Plan

This plan shall describe, in detail, the specific practices, equipment, and methods used to protect a worker from falling from a height of 6 feet or greater, or when working from any height over an impalement hazard. The plan shall be updated as conditions change. Refer to Chapter 21 FALL PROTECTION in the EM-385-1-1 while preparing the plan.

Contract Number, Title, and Area Location

Prime Contractor

Subcontractor

Plan Preparer Name and Title



SSFPPP



A. Identify the Competent Person, Their Responsibilities and Qualifications

A Competent Person in fall protection is defined in Appendix Q of EM-385-1-1 as "a person designated in writing by the employer to be responsible for the immediate supervision, implementation and monitoring of the fall protection program, who through training, knowledge and experience in fall protection and rescue systems and equipment, is capable of identifying, evaluating and addressing existing and potential fall hazards and, who has the authority to take prompt corrective measures with regard to such hazards."

Competent Person Name:

Qualifications:

Alternate Competent Person Name:

Qualifications:

B. Description of the Project or Tasks to be Performed

SSFPPP

C. Design of Anchorages/Fall Arrest/Restraint/HLL Systems

1. It is recognized that the provision for fall protection is difficult for the first person up for establishing anchorages. In this situation, fall protection may not be required, but this exception applies ONLY to the individual installing anchorage points, and only while actively engaged in that activity. After anchorages are installed, fall protection is required for all personnel at risk.
2. Explain in detail how the work will be performed safely and what fall protection equipment will be used. Include the make/model of all connectors and anchor devices, and attach the corresponding anchor specifications/manual to this plan.
3. The contractor shall identify all locations where anchorages need to be established. The maximum angle of swing away from the tie-off point should not be more than 15 degrees. Attach a layout/drawing/sketch with this plan showing the layout of the anchorages.
4. Horizontal Lifeline Systems
 - a. HLL systems must be purchased from a reputable fall protection manufacturer. They cannot be job built. Attach the corresponding HLL specifications/manual to this plan.
 - b. A site specific detail for the HLL anchorage system (a combination of anchorage and anchorage connector) must be designed by a Qualified Person (registered engineer). Attach the Qualified Person's stamped and signed design and directions for the implementation of the anchorage system to this plan.

Qualified Person Name:

State of registration:

Registration number:



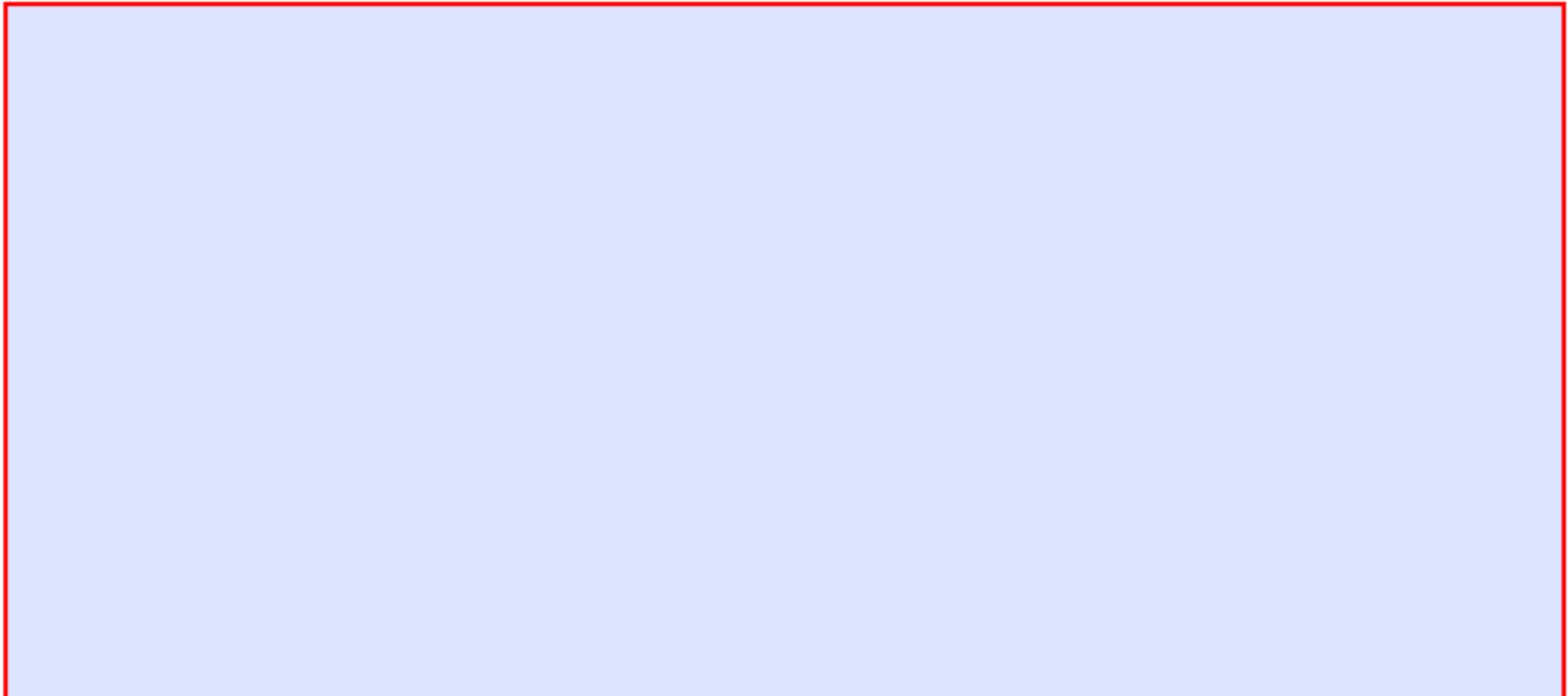
SSFPPP



D. Rescue Plan and Procedures

The contractor must have a plan to self-perform the rescue of a fallen worker without relying on Base Emergency's assistance. However, Base Emergency must still be contacted in the event of a fall.

BASE EMERGENCY PHONE #: (760) 725-3333



E. Inspection, Maintenance, and Storage Procedures of Fall Protection Equipment

1. Fall protection equipment, including anchorage systems, shall be inspected by the end user prior to each use. Any component of the system with significant defects (i.e.: cuts, tears, abrasion, mold, undue stretching, alteration or additions, which will affect its efficiency, and damage due to deterioration, contact with acids, fire, or corrosives, distorted hooks or faulty springs, tongues unfitted to the shoulder buckles, loose or damaged mountings, nonfunctional parts or any wearing or internal deterioration of the ropes) must be taken out of service immediately and should be tagged or marked as unusable and destroyed.
2. A competent person for fall protection shall inspect the equipment at least once semi-annually and whenever equipment is subjected to a fall or impact. The competent person's inspection shall be documented.
3. Fall protection equipment shall be inspected, stored, and maintained in accordance with the manufacturer's specifications.

F. Incident Investigation Procedures

G. Evaluation of Plan Effectiveness

List the procedures in place to audit and evaluate the site-specific fall protection and prevention plan effectiveness.

H. Additional Comments/Notes

I. Fall Protection Training Roster

1. All affected workers must review and understand the Site Specific Fall Protection and Prevention Plan.
2. All contractors and subcontractor workers exposed to fall hazards shall be trained accordingly by non-Governmental trainers.
3. **All personnel signing this form indicate that they understand the fall hazards on this job site, and that they have been trained in the proper use of and will use the selected fall protection equipment and methods. Review and sign again if hazards, methods, or work change.**

ANSI Z359.1-2007

EM-385-1-1 21.H.05

a) Snaphooks and carabiners shall be self-closing and self locking capable of being opened only by at least two consecutive deliberate actions. Snaphooks and carabiners having a gate strength of 3,600 lbs (16 KN), per ANSI Z359.1-2007, shall be used.

➤ *Existing snaphooks and carabiners meeting ANSI Z359.1-1992 (R1999) may continue to be used but shall be replaced with ANSI Z359.1 – 2007 compliant equipment within 2 years of effective date of this manual.*



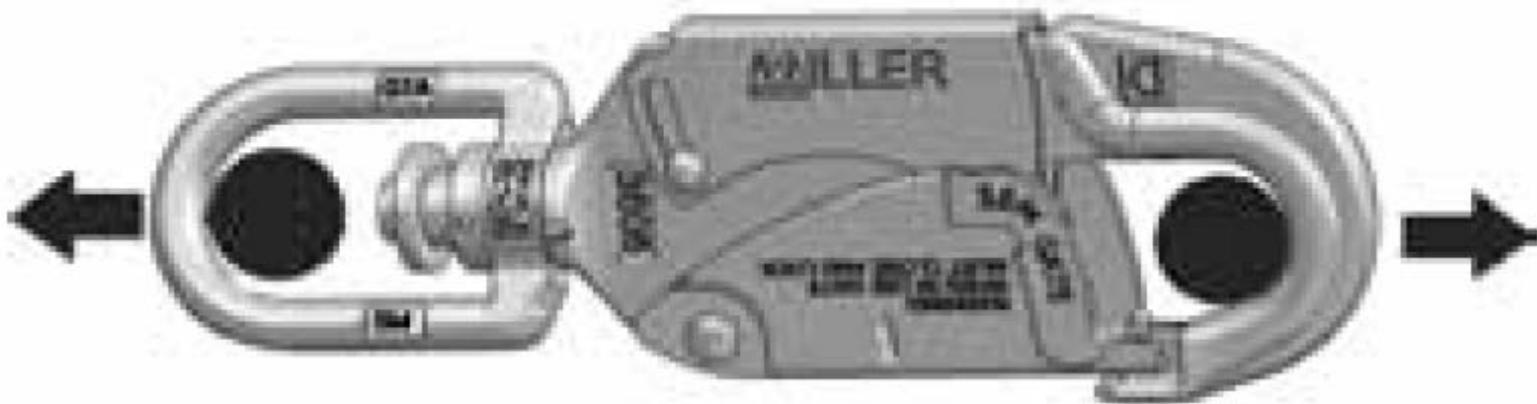
ANSI/ASSE



- **The two year grace period for replacing the snaphooks and carabiners ended January 2011.**
- **The new EM 385 Fall Protection addendum that took effect on all contracts after November of 2010 reads:**

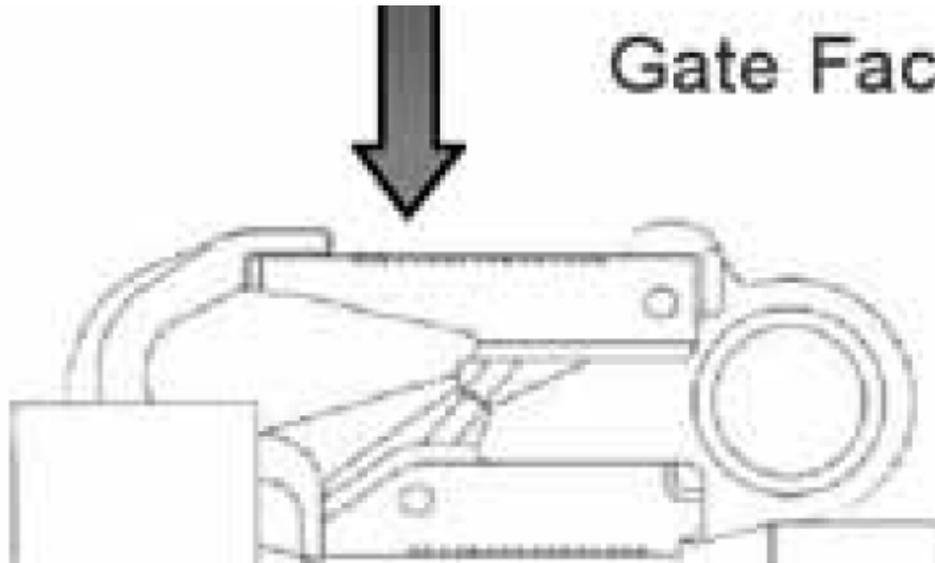
Paragraph 21.H.05.d (3) (a), change reference: “ANSI/ASSE Z359.1 – 2007” to “ANSI/ASSE Z359, Fall Protection Code,”;

Tensile loads that a snap hook and carabiner must withstand remain the same as the existing Standard – 5,000 lbs. (22.2kN)

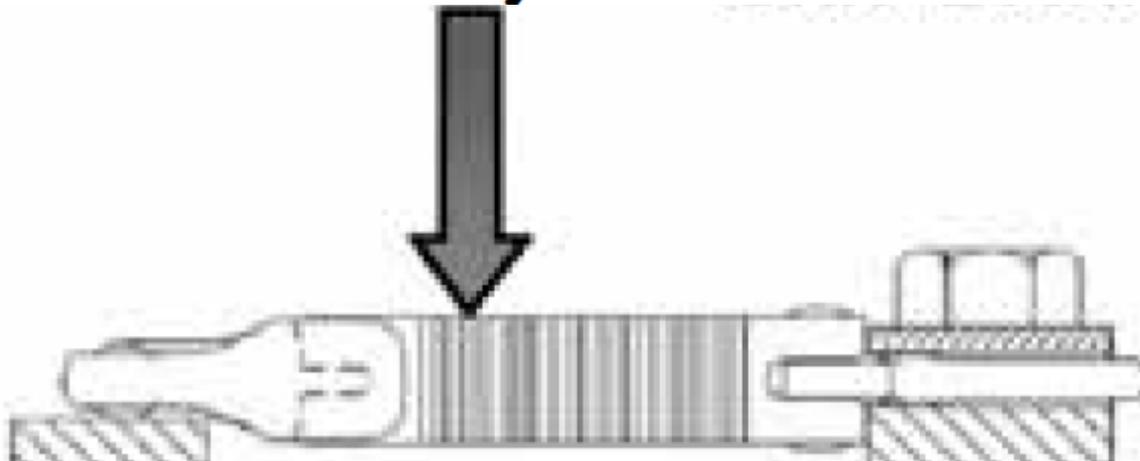


Gate face strength requirements have changed from 220 lbs. ($1kN$) (old Standard) to 3,600 lbs. ($16kN$) (new Standard).

Gate Face Test



Side of gate strength requirements have changed from 350 lbs. ($1.55kN$) (old Standard) to 3,600 lbs. ($16kN$) (new Standard).



CONTRACTOR SAFETY INNOVATIONS





MCB CAMP PENDLETON

SAFETY OFFICER INTRODUCTION

LT RU TOYAMA
ROICC CAMP PENDLETON
SAFETY OFFICER



Mission of the Safety Officer



- Admin support to the ROICC's Safety Managers
- Provide real-time Safety Incident feedback to facilitate sharing of lessons learned
- Ensure efficient flow of message traffic with Incident/Accident Reporting Procedures up the ROICC and OICC Chains of Command



ROICC CAMP PENDLETON CONTRACTOR INCIDENT/ACCIDENT REPORTING PROCEDURE



Follow this procedure AFTER the initial jobsite treatment of the injured worker.

This procedure is required for any incident that involves the victim being sent off base for medical treatment. Always send someone to the medical facility along with the injured worker who is knowledgeable in the handling of potential DART cases.

STEP 1

Notify the ROICC of the incident through a phone call immediately. Call the ROICC in the following order until making positive contact, unless making it through to option 6, in which case leave a detailed message of the incident.

- 1. The project ROICC Construction Manager (CM)**
- 2. The project ROICC Engineering Technician (ET)**
- 3. ROICC Safety Andy Brochu (760) 224-8604**
- 4. ROICC Safety Matt Meyer (619) 708-8820**
- 5. ROICC Office BLDG 22101 (760) 725-8200**
- 6. ROICC After Hours CDO (760) 468-0598**

STEP 2

Submit an Initial Contractor Significant Incident Report (CSIR). The CSIR form can be found on the pre-con disk or online at the NAVFAC Safety Shack. The Initial CSIR must be submitted to the ROICC within 4 hours of the incident. For the Initial CSIR submit the information that is immediately available. The missing information can be filled in on the follow-up CSIR, which is due within 5 days of the incident.

Refer to 29 CFR part 1904.7 General Recording Criteria for a guide to recording occupational injuries and illnesses.



SAFETY INCIDENT

LOCATION: MARINE CORPS BASE CAMP PENDLETON

DATE: 4 NOVEMBER 2010, 9:00 A.M.

TYPE OF INCIDENT

INC-11

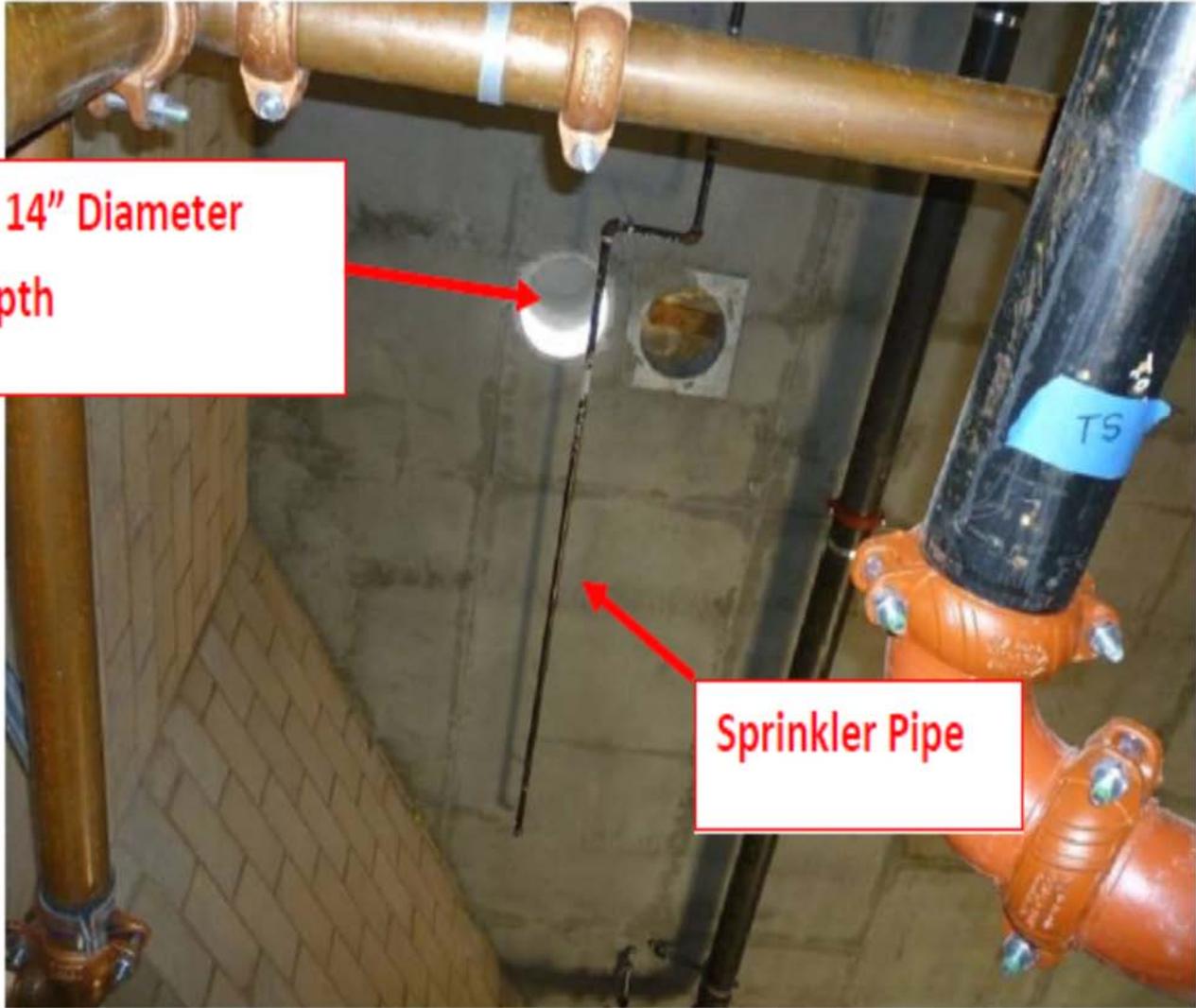
1. Near Miss 2. First Aid On Site 3. First Aid Off Site
4. Recordable 5. DART Days Away 6. DART Restricted 7. Other: _____

SUMMARY OF INCIDENT

A demolition crew was preparing to core drill a hole in a concrete roof deck for an exhaust pipe. The foreman, working from a scissor lift raised to the underside of the concrete deck, was positioned to "catch" the 14" diameter by 6.5" deep core so that it did not damage a sprinkler pipe positioned approximately 6" below the roof deck and directly beneath the core. The foreman underestimated the weight of the concrete core(which was approx. 75lbs). As the foreman attempted to catch the core, it pinched his finger at the second knuckle directly above his left ring finger between the sprinkler pipe and the edge of the concrete core, severing off 3/4 of his finger. Base emergency was immediately notified and arrived within 10 minutes of the injury, and he was taken to the hospital. The finger was not re-attached.

LESSONS LEARNED

- Positive mechanical means should have been used to protect the opening or to prevent the concrete core from falling on people or equipment below.
- A worker's body should never be placed between moveable objects in such a manner that creates a pinch point.
- Crews should properly plan their work, accurately estimating and mitigating all potential hazards. In this case, the foreman severely underestimated the weight of the falling concrete core.
- Ensure thorough Activity Hazard Analyses (AHAs) for all Definable Features of Work(DFOWs). In this case, a general AHA for demolition existed, however it lacked sufficient detail about the hazard of the concrete core. Both the AHA and the Preparatory Meeting for the activity was not sufficient.
- Crews should always consider the sequencing of construction activities when planning and executing their work. In this case, the sprinkler pipe should have been installed after the coring operation was performed, or since it had already been installed, it should have been removed from the area prior to the coring operation.



Coring- 14" Diameter
6.5" depth

Sprinkler Pipe



SAFETY INCIDENT

LOCATION: MARINE CORPS BASE CAMP PENDLETON

DATE: 5 JANUARY 2011, 6:45 A.M.

TYPE OF INCIDENT

INC-14

1. Near Miss 2. First Aid On Site 3. First Aid Off Site
4. Recordable 5. DART Days Away 6. DART Restricted 7. Other: _____

SUMMARY OF INCIDENT

As a truck driver was transporting steel casing pipe on a flatbed trailer to a new construction site, the trailer disconnected from the tractor's fifth wheel while the rig was traveling inbound from the main gate on Vandergrift Blvd in the area where Ysidora Flats terminates. The driver noticed the trailer separating from the fifth wheel and began moving to the right shoulder of the road, where the trailer became completely disengaged. No other vehicles were involved and no injuries occurred. An air pressure relief valve for the buried water main along Vandergrift was damaged and water was leaking onto the adjacent grass area. The steel piping remained on the trailer and was not visibly damaged. PMO arrived on the scene and closed off the right lane just before the accident location. Also at the scene were the SSHO and the Superintendent from the prime KTR, the ROICC Safety Engineering Technician, Engineering Technician, Construction Manager, and FMD's Water Department Distribution Superintendent. The tractor truck's fifth wheel locking mechanism was checked and found operational, implying that the rig may not have been fully or properly locked in place. An inspection report from a third party subject matter expert regarding the mechanical functioning of the fifth wheel locking mechanism was completed, and shows that the tractor's fifth wheel was working properly. A crane was brought to the site to lift the trailer from the ground and allow it to be connected to another fifth wheel brought to the accident location. The newly connected rig then completed the route to the jobsite safely without further mishap or incident. The water air release valve was subsequently repaired successfully.

LESSONS LEARNED

- Truck drivers are to ensure before proceeding with their rigs that their semitrailer kingpin is locked into the tractor's fifth wheel as part of a standard comprehensive pre-departure vehicle inspection.
- Please refer to the Holland Manufacturing Fifth Wheel Operator's Manual accompanying this report for the proper operation of fifth wheels during tractor trailer coupling. Note that this is the Operator's Manual for a leading manufacturer's brand of fifth wheel. It is important that the Manufacturer coupling procedures for the particular fifth wheel installed on a truck tractor be reviewed to insure safe operations of that vehicle.

See photo below of detached trailer:





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**

CONTRACTOR SAFETY INNOVATIONS



**APPROVED
TRUCK
ENTRY**

DATE: _____

SIGNED: _____

**WATCH FOR PEDESTRIANS
AND OTHER VEHICLES
KNOW THE HAUL ROUTE
STAY ON THE HAUL ROAD**

**CHECK YOUR LOAD FOR
SHIFTING BEFORE
REMOVING STRAPS
DO NOT MOVE LOAD WITH
STRAPS REMOVED**

**WHEN YOU ARE OUT
OF THE TRUCK**

WEAR ALL PPE:

- ∞ **HARD HAT**
- ∞ **SAFETY GLASSES**
- ∞ **SHIRT WITH SLEEVES**
- ∞ **SAFETY TOE BOOTS**
- ∞ **LONG PANTS**
- ∞ **GLOVES**



MCB CAMP PENDLETON

BREAK – 15 MINUTES

**Reminder: Please fill
out your comment cards
and sign in sheets!**



MCB CAMP PENDLETON

EXCAVATION/TRENCHING PLAN

ANDY BROCHU
ROICC CAMP PENDLETON
SAFETY MANAGER



E/T PLAN



ROICC Camp Pendleton

FSC Camp Pendleton

Excavation/Trenching Plan

This plan shall describe, in detail, the specific practices, equipment, and methods used to protect a worker from excavation and/or trenching hazards. An Excavation/Trenching Plan and AHA are required for excavations and trenches greater than 5' deep. Excavations and trenches less than 5' deep require an AHA but the plan is optional. Refer to Chapter 25 EXCAVATIONS AND TRENCHING in the EM 385-1-1 while preparing the plan.

Contract Number, Title, and Area Location

Prime Contractor

Subcontractor

Plan Preparer Name, Title, and Company

A. Identify the Competent Person, Their Responsibilities and Qualifications

A Competent Person in Excavation and Trenching is defined in Appendix Q of EM 385-1-1 as a person “who has been designated in writing by the employer to be responsible for the immediate supervision, implementation and monitoring of the excavation/trenching program, who through training, knowledge, and experience in excavation/trenching is capable of identifying, evaluating, and addressing existing and potential hazards and, who has the authority to take prompt corrective measures with regard to such hazards.” The Competent Person is also responsible for completing the daily (and when conditions change) Excavation/Trench Inspection and Entry Authorization form.

Competent Person Name:

Qualifications:

Alternate Competent Person Name:

Qualifications:

(attach certificates)

An alternate competent person may be named in the event of the competent person's temporary absence. This is optional.



E/T PLAN



B. Description of the Project or Tasks to be Performed

1. In the box below provide a written description of the DFOW.
2. Attach a diagram/sketch of the work area and mark the location of the proposed excavation or trench. Include in the diagram/sketch any adjacent or nearby structures. Include in the diagram/sketch all adjacent or nearby utilities and mark the location of the corresponding shut-off valves.

When filling out each of these boxes, do not repeat information that is already written in the plan. Be concise yet detailed and eliminate any unnecessary filler. In rare instances of the box becoming filled or the text becoming too small, continue in section M or attach another sheet of paper. The training roster located at the end of the plan is to be signed in the field and does not have to be signed ahead of time for GDA plan acceptance.



E/T PLAN



C. Proposed Method for Damage Prevention

1. Explain methods for preventing damage to overhead utility lines, trees, and other man-made facilities or natural features designated to remain within or adjacent to the construction rights-of-way.
2. Attach a copy of the Utility Coordination Report.
3. In the event of utility damage contact the Camp Pendleton Unity Room.

UNITY ROOM PHONE #: (760) 725-4348

Depending on the location of work this box may be N/A.

E/T PLAN

D. Projected Dimensions of the Excavation/Trench

Include the projected minimum-to-maximum depth, length and width.

E. Projected Soil Type

Attach a copy of the site soils report.

Solid Rock

Type A

Type B

Type C

One or more of these boxes may be selected at a time.

F. Planned Method of Shoring, Sloping, and/or Benching

1. Describe planned shoring, sloping, and/or benching methods.
2. If shoring will be used, attach the corresponding Tabulated Data.

G. Access and Egress

A means of egress out of the excavation/trench must be located within 25' of any worker. Explain the intended method of meeting that standard.

Ladders? Ramps? Stairs? Personnel hoists? Or a combination? See 25.B.05 through 25.B.07 of the EM 385-1-1.

H. Confined Space

Is the excavation/trench a confined space? If yes, complete corresponding Confined Space Plan for GDA acceptance.

Yes

No

One of these buttons must be selected.



E/T PLAN



I. Perimeter Protection

Explain how the perimeter of the trench/excavation will be protected from other workers or the public. Refer to Q-55 in the appendix of EM 385-1-1 for perimeter protection definitions.

See section 25.B.01 and pages Q-55 and Q-56 of the EM 385-1-1.

J. Plan for Traffic Control

Attach a copy of the GDA accepted Traffic Control Plan (TCP). If the Traffic Control Plan has not been accepted or developed, this Excavation/Trenching Plan can still be submitted and accepted, but any work that impedes traffic cannot proceed until there is an accepted Traffic Control Plan.

Traffic control plans are required if the work will interfere with traffic outside of the job site perimeter fence. Per EM 385-1-1 08.B.01 b. "Traffic flagging procedures shall be in accordance with the DOT Federal Highway Administration's MUTCD."

K. Plan for Management of Excavated Soil, Asphalt, Concrete

1. Spoils must be placed a minimum of 2' from the edge of the trench/excavation.
2. Attach a copy of truck haul route if applicable.

E/T PLAN

L. Rescue Plan and Procedures

The contractor must have a plan to self-perform the rescue of an injured or engulfed worker without relying on Base Emergency's assistance. However, Base Emergency must still be contacted to provide rescue and/or injury support.

BASE EMERGENCY PHONE #: (760) 725-3333

DO NOT include accident reporting procedures in this box. Explain how injured workers will be removed from the trench or excavation so they can be accessed and tended to by medical professionals.

M. Additional Comments/Notes

Another option for this box is to use the space to continue a section where the font may be getting too small to be legible.



E/T PLAN



N. Excavation/Trenching Training Roster

1. All affected workers must review and understand the Excavation/Trenching Plan.
2. All contractors and subcontractor workers exposed to excavation and trenching hazards shall be trained accordingly by non-Governmental trainers.
3. **All personnel signing this form indicate that they understand the excavation and/or trenching hazards, and the accepted methods of control of these hazards, on this job site. Review and sign again if hazards, methods, or work change.**

PRINT NAME

SIGNATURE

Excavation/Trench Inspection and Entry Authorization Form

This form will be completed by the Competent Person daily (at a minimum) or when site conditions change. The completion of this form is mandatory prior to work in any excavations or trenches 4' in depth or greater. A corresponding Excavation/Trenching Plan must be accepted by the ROICC prior to work in any excavations/trenches 5' in depth or greater.

PRIME CONTRACTOR:		SUBCONTRACTOR:	
COMPETENT PERSON:		LOCATION:	
DATE:	TIME:	NUMBER OF CREW MEMBERS:	

Dimensions	Depth =	Min.	Max.	Soil Type			Manual Test Measurement		
	Top =	Width	Length	Solid Rock		Type B		Penetrometer	
	Bottom =	Width	Length	Type A		Type C		Thumb Penetration	

HAZARDOUS CONDITIONS* (visual)	Yes	No	PERIMETER CONSIDERATIONS	Yes	No	n/a
Saturated soil/standing or seeping water?			Spoils located at least 2' away from edge?			
Bulging walls?			Materials located at least 2' away from edge?			
Rapid drying / shrinkage?			Class 1, 2, or 3 perimeter protection in place?			
Vibration from equipment / traffic?			Backhoe located at end of trench?			
Cracked or fissured walls?			Spotter working with the backhoe?			
Undercutting?			Exposed to the general public?			
Floor heaving?			<i>MPM requirements completed?</i>			
Super imposed loads?			LADDER/EGRESS LOCATION	Yes	No	n/a
Exposed utilities?			Located within protected area?			
Atmospheric testing required?			Located within 25 feet of safe travel?			
Structures adjacent to trench?			Extends 36" above landing and secured in place?			
Trees or roots in the work area?			Maximum ramp angle without cleats 25°?			

*If the hazards listed above result in a fall hazard or confined space, a corresponding Site Specific Fall Protection and Prevention Plan (SSFPPP) or Confined Space Plan (CSP) must be developed and accepted before work can commence.

SHORING	Yes	No	COLOR CODE FOR UTILITY MARKING based on ANSI Z-53.1			
Manufacturer tabulated data sheets on site?			PROPOSED EXCAVATION			WHITE
Shoring inspected for defects/damage?			ELECTRIC POWER LINES, CONDUITS, LIGHTING CABLES			RED
Trench shield in use?			POTABLE WATER			BLUE
Speed shores in use?			GAS, STEAM, CONDENSATE, OIL COMPRESSED AIR			YELLOW
Speed shores pumped to design pressure?			TELECOMMUNICATIONS, ALARM OR SIGNAL LINE			ORANGE
Plywood or sheeting to be used?			TEMPORARY SURVERY MARKINGS			PINK
SLOPING			SEWER AND STORM DRAINS			GREEN
Type A soils at a minimum of ¾:1 (53°)?			RECLAIMED WATER, IRRIGATION, CHILLED LINES			PURPLE
Type B soils at a minimum of 1:1 (45°)?			OTHER			LIGHT BLUE
Type C soils at a minimum of 1 ½:1 (34°)?			EXCAVATION/TRENCH COMPETENT PERSON SIGNATURE X			
BENCHING						
Type A and B soils benched? (NO Type C)						
Max height of Type B soil bench 4'?						

Names of personnel authorized to enter the excavation/trench:



CONTRACTOR SAFETY INNOVATIONS



THE STOP™ SAFETY OBSERVATION CYCLE

DECIDE → STOP → REPORT → ACT → OBSERVE → STOP

The STOP™ Observation Checklist

Actions	
Unsafe	Safe
Reactions of People All Safe <input type="checkbox"/>	Personal Protective Equipment All Safe <input type="checkbox"/>
<ul style="list-style-type: none"> Adjusting Personal Protective Equipment Changing Position Rearranging Job Stopping Job Attaching Grounds Performing Lockouts 	Head-to-Toe Check <ul style="list-style-type: none"> Head Eyes and Face Ears Respiratory System Arms and Hands Trunk Legs and Feet
Positions of People All Safe <input type="checkbox"/>	Tools and Equipment All Safe <input type="checkbox"/>
Injury Causes <ul style="list-style-type: none"> Striking Against or Being Struck by Objects Caught In, On, or Between Objects Falling Contacting Temperature Extremes Contacting Electric Current Inhaling, Absorbing, or Swallowing a Hazardous Substance Repetitive Motions Awkward Positions/Static Postures 	<ul style="list-style-type: none"> Right for the Job Used Correctly In Safe Condition
	Procedures All Safe <input type="checkbox"/>
	<ul style="list-style-type: none"> Available Adequate Known Understood Followed
	Orderliness All Safe <input type="checkbox"/>
	Standards
	<ul style="list-style-type: none"> Known Understood Followed

STOP00-OCL-ENG-0001

The STOP™ Observation Checklist

ELIMINATE UNSAFE CONDITIONS... PREVENT INJURIES

THE STOP™ SAFETY OBSERVATION CYCLE

Conditions	Unsafe	Safe
Tools and Equipment All Safe <input type="checkbox"/>		Safe acts observed
Are They		
<ul style="list-style-type: none"> Right for the Job In Safe Condition 		
Structures and Work Area All Safe <input type="checkbox"/>		
Are They		Unsafe acts observed
<ul style="list-style-type: none"> Clean Orderly Right for the Job In Safe Condition 		
Environment All Safe <input type="checkbox"/>		
Is It		
<ul style="list-style-type: none"> Clean Orderly In Safe Condition 		Name
		Date
Orderliness All Safe <input type="checkbox"/>		Site
Standards		Area
<ul style="list-style-type: none"> Available Adequate 		Shift
		Time spent on observation
		# of People Contacted <input type="checkbox"/>
		# of People Observed <input type="checkbox"/>

Additional STOP™ Observation Checklists can be obtained by contacting DuPont. Please visit www.safety.dupont.com for contact information or to place an order on-line. Copyright © 2010 DuPont. All rights reserved. STOP™ and the STOP™ logo are registered trademarks of DuPont.



MCB CAMP PENDLETON

MULTI-PURPOSE MACHINE (MPM)

**MATTHEW MEYER
ROICC CAMP PENDLETON
SAFETY MANAGER**



WHAT IS AN MPM?



Any 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.



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 injury and/or OSHA citations.**
- **Equipment manufacturer's instruction for safe operation need to be followed. Become familiar with the load capabilities and specifications for MPM configurations.**

INCORRECT MPM USE



INCORRECT MPM USE



INCORRECT MPM USE



INCORRECT MPM USE



INCORRECT MPM USE



INCORRECT MPM USE



INCORRECT MPM USE



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, and the fork 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.





HOW IS MPM USE REGULATED?



Certificate of Compliance (CoC)

- **The CoC is a certification process performed by the General Contractor**
 - **One CoC per MPM in use on the job site**
 - **Multiple operators may be named on a single CoC**
 - **The CoC must be signed by both a company official (the owner or a designated representative) and a Government Designated Authority (GDA)**
 - **The CoC is good for as long as the MPM is used 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 MCBOP 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



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



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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**
- **Working equipment back-up alarm**



HOW ELSE IS MPM USE REGULATED?



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

MPM ID NUMBER

DATE

NOTES:

CORRECT MPM USE



CORRECT MPM USE



CORRECT MPM USE



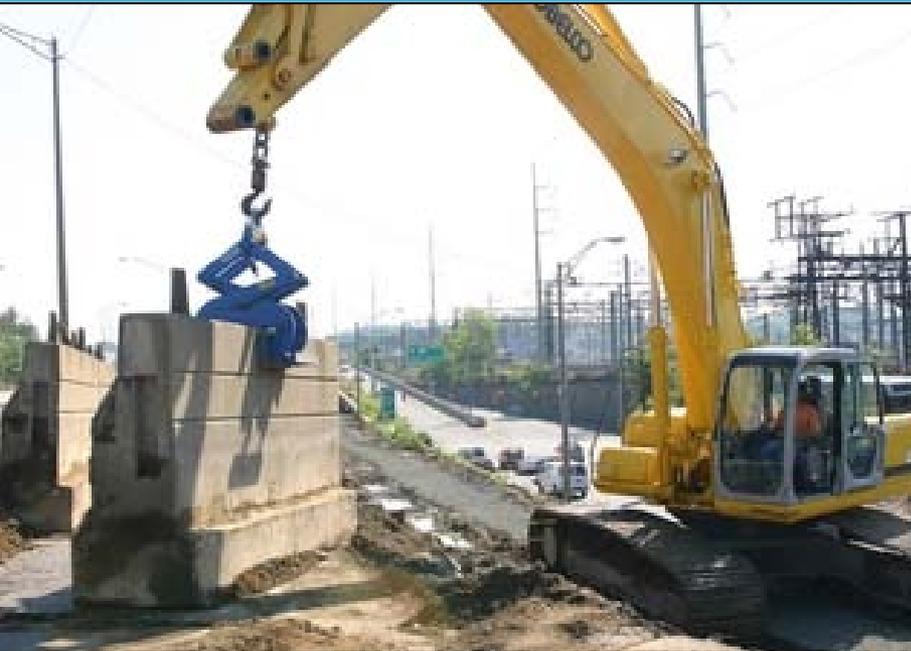
CORRECT MPM USE



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 to Sky-Trak model 6042 that has been engineered and rated for a 15 ft. 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?

CONTRACTOR SAFETY INNOVATIONS





STAR Award Presentations



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

COMPANY	PROJECT
Stronghold Engineering	43 AREA 4 kV to 12kV ELECTRICAL DISTRIBUTION SYSTEM ONVERSION AND AREA 43 TO AREA 53 12 kV TIELINE
Pacific West Builders	INSTALL EFFICIENT BOILERS AND WATER HEATERS BLDG. 520446
Synergy Electric	PHOTOVOLTAIC SYSTEM
Soltek Pacific Construction	REPAIRS TO BACHELOR ENLISTED QUARTERS BUILDING 210636
Harper Construction	DELUZ CHILD DEVELOPMENT CENTER



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?