TECHNICAL ASSISTANCE PROGRAM CORPORATE WEBINAR











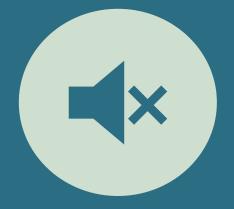
MODERATED BY

David Fisher

Manager of Supplier Diversity



HOUSEKEEPING



MUTE

PLEASE MUTE YOUR LINE THROUGHOUT THE PRESENTATION



CAMERA

WE ENCOURAGE YOU TO HAVE YOUR CAMERA ON.



QUESTIONS

HAVE A QUESTION? ASK IN THE CHAT.

WE WILL HAVE A Q&A SECTION AT THE END OF THE PRESENTATION



REACT

REACT! STAY ENGAGED WITH REACTIONS





THE PURPOSE OF TAP



- **❖** FIRST PROGRAM 2016
- ❖ BEHIND THE SCENES LOOK
- ❖ BEST PRACTICES / LESSONS LEARNED
- SMALL BUSINESS GROWTH















PRESENTED BY

Zack Carter-Cormier

Senior Safety Manager



SAFETY EXPECTATIONS



All injuries can be prevented.

Every one of us plays a role in creating a positive safety culture and safe place to work. Take action and make Hensel Phelps the safest company in our industry:

- 1 Integrate safety into everything you do.
- 2 Have a plan.
- 3 Observe your surroundings.
- 4 Stop work when we don't have the proper plan in place.
- 5 Recognize and reinforce safe practices.







HENSEL PHELPS' SAFETY SUPPORT









HENSEL PHELPS' SAFETY PROGRAM





① Purchasing >	2 Fre-Modelligation (uttal repection 5 hapes	
Activities by Process Step	QC Activities	Safety Activities	Other Team Member Involvement	Subcontractor Involvement
Procurement Phase It is fackages Check reterences Vesty scope	Check references Make subcontractor recommenda- tors		· Estimators	* Estimators
Suboproches convitment on: Advance to GC Proces Subrital Baise Creat reference Worth scope Centract resumes Contract fessione Contract fessione Contract fessione	Check Hair Assessment Detainase Elizare factors requirements Update Custly Process Log (QPL) with DFQW Review rough deaf subcontracts Review rough deaf subcontracts	 His based on 80 day schedule 	Estimators Project Manager Project Superrelendant Safety Manager Estimators Project Manager	Estrators Principal Principal Hansel Principa setternis,
I Tre Mobilester Merkey				
 Continue Causity consentments made during Purchasing Meeting Citatin submitment Citatin submitment Project Manager Explain process to subcentractor Project Manager Explain requirements to be settlefied peer to Propository Phase 	Communicate CC Process Outries occurrence for Proporation/ Meeting Update OTL with Jirks I thop visits I thop visits Submittal inview to devolop against for Preparatiny Meeting, Indoorance Collection Jirks submitted and approved	a Perview MIDS a Perview pertinent start-up	CC Manager Project Figures Super-interdents Designer Office Engineer Ordice Engineer Osterly Monager	Project Manager Project Engineer Superintendents Project Manager Project Engineer Honos Preips serbook
3. President the long				
Etraure subcontractor Foreman understands contract documents, 19ths 6 Justity Experiations Estatesh scope & schedules for intelligentian Consultation with after trades Techniq requirements	Lead & document trapection Review & finalize inspection checklet Upstate CPL	Fleviers of JHAs Review 90 day schedule for Pheparatory Meetings	Designer Drice Engineer Superintentiers Owner OA Team Safety Manager	Superitendents Ference Horsof Pholips softwork
A Intitud Enaporation				
Check materials for conformance Check individuos for conformance with plans is sewin Establish standard for construriance postation Train the Freid Engineers on trapaction procedures	 Lead & document impaction in flucture is finalize inspection checklist Update QPL 	 Noveme of JHA and modify 	Designer Field Engineer Office Engineer Superimendents Oerrar QA Team Superimendents Oerrar QA Team	Superidendents Ferenan Crow Leets GC Engineer Hennel Pheips setwork
E Patrow Up Enspection				
Check materials for conformance Check installation for conformance with plans is speed Establish survived for construence(p) Yield the check is installed Train the Field Engineers on Impacting procedures	 Lead & document impection Ensure required testing to performed Lipidate GPL 	 Review of JNA and modify 	Piets Engineer Bafety Manager	Provenan Orev Leads OCE Engineer Hensel Phelips setherik
R. Final Inspection				
Fi-house inspection Pre-final inspection			Project Manager Field Engineer Superintendents	Foreman Crew Leads GC Engineer Hensel Phase selfeark



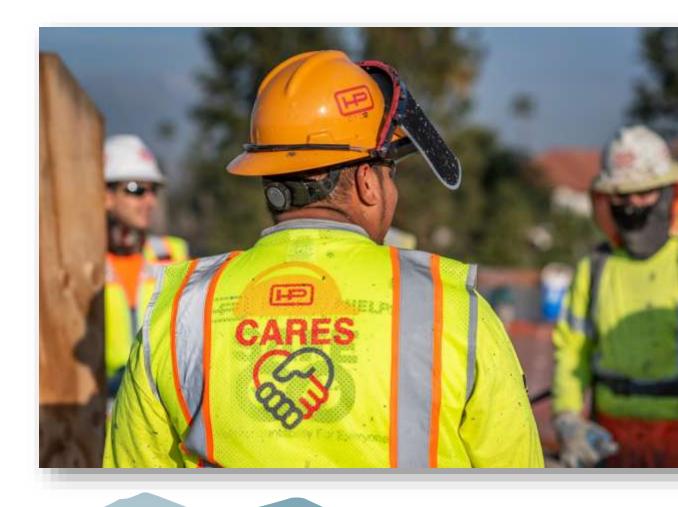


START-UP PACKET

TECHNICAL PROGRAM CORPORATE WEBINAR

Safety Plans

- Job Information Policy & Brochure (JIP)
- Accident Prevention Plan
 - Fall Protection and Rescue
 - Haz Com Plan
 - Hazardous Materials
 - Dig permits
 - Crane arrival forms
 - Additional Sections As Needed







PLANNING FOR SAFETY

TECHNICAL

CASSISTANCE

PROGRAM

CORPORATE WEBINAR

- Activity Hazard Analysis (AHA)
 - Identify and control risk
 - Completed by Trade Partner
 - Completed for each operation
 - Accepted by Hensel Phelps
 - Available in the field
 - Personnel are trained and sign the AHA
 - Update as necessary
- Competent Person
 - Identified for all Definable Features of Work (DFOW)
- Safety Task Assignment (STA)







PLANNING FOR SAFETY

TECHNICAL

CASSISTANCE

PROGRAM

CORPORATE WEBINAR

- Site-Specific Safety Plan
 - Injury and Illness Prevention Plan
 - Disciplinary Program
 - Hazard Communication Program
 - Heat Stress Prevention Plan
- Safety Data Sheets
 - Upload into MSDS Online
 - Chemical Questionnaire
- Training and Certifications
- Contractor-Specific Documentation (As applicable)
 - Fall Protection Program
 - Steel Erection Plan
 - Tabulated Data
 - Confined Space Program
 - Silica Exposure Control Plan
 - Lockout / Tagout Program



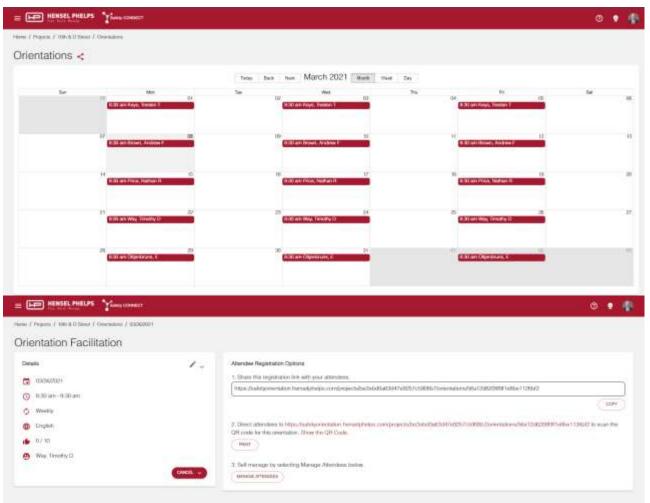




SAFETY ORIENTATION



- Required for all personnel prior to entering site
- Overview of project and general safety guidelines
- Enroll your employees using Safety Connect
- Upload competent person designations and training records







ACTIVITY HAZARD ANALYSIS

TECHNICAL

ASSISTANCE

PROGRAM

CORPORATE WEBINAR

- Submit for Review Prior to Prep Meeting
- Must be Accepted to Have the Prep Meeting
- Be Detailed
 - Avoid repetitive items
- Review and Amend as Necessary
 - Change in tool, material etc.
 - Incident or near miss occurs
 - Change in site logistics
- Train Employees







UNACCEPTABLE AHA



Activity Hazard Analysis (AHA)

Activity/Work Task: Various things	1,400	Overall Risk Assessment Code (RAC) (Use highest code)							
Project Location: 1234 West Utopia		Risk Assessment Code (RAC) Matrix							
Contractor:	Barely Makin It, LLC	Coverity		Probability					
Date Prepared: 11/1/2013		Severity	Frequent	Frequent Likely Occasion		al Seldom	Unlikely		
Prepared by (Name/Title): John		Catastrophic	E	E	Н	H	M		
Prepared by (Name/Title). John		Critical	E	H	H	M	L		
Reviewed by (Name/Title):		Marginal	H	M	M	L	L		
Reviewed by (Namer Title).		Negligible	M	L	L	L	L		
Notes: (Field Notes, Review Comments)		Review each "Hazard" with identified safety "Controls" and determine RAC (See above) "Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely. RAC Chart							
		"Severity" is the outcome/o accident did occur and ident Marginal, or Negligible	al.	E = Extremely High H = High Risk					
		Step 2 Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the							
		top of AHA.		276		L = Low Risk			

Job Steps	Hazards	Controls	RAC
Using power tools	Injury to body	Use appropriate PPE	L
Working at heights	Falling	Use fall protection	L
Working around backhoe	Being hit by equipment	Be careful when working around the backhoe	L
Working near an excavation	Cave in	Make sure you always have a hardhat on	L
Using ladders	Falls	Be careful when using your ladder	L





UNACCEPTABLE AHA



Equipment to be Used	Train	ing	Inspection Requirements
Different tools throughout the work	Already trained		Already inspected by shop
•			
	equiring a Competent or Qualific		
Activity			d Competent or Qualified Person
		Safety Guy	





EXAMPLE OF AN ACCEPTABLE AHA



Activity Hazard Analysis (AHA)

Activity/Work Task: Using step ladder to access overhead work	Overall Risk Assessment Code (RAC) (Use highest code)						
Project Location: 1937 Main Street	Risk Assessment Code (RAC) Matrix						
Contractor. Doing It Right Mechanical	Soverity		Probability				
Date Prepared: 11/1/2013	Severity	Frequent Likely Occasio		Occasiona	Seldom	Unlikely	
Dranged by (Name/Title): Bill Smith Supplement	Catastrophic	€	E	H	H	M	
Prepared by (Name/Title): Bill Smith - Superintendent	Marginal H	H	H	M	L		
Reviewed by (Name/Title): John Jones - HP Superintendent	Marginal	H	M	M	L	L	
Reviewed by (Name/Title). John Jones - Hr Supermendent	Negligible	M	L	L	L	L	
Notes: (Field Notes, Review Comments) -Need to add comment about "no aluminum ladders" allowed on site	Review each "Hazard" with identified safety "Controls" and determine RAC (See above)						
	"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely. RAC Chart						
-Need copy of training records for crew -Need Competent Person qualifications and letter	"Severity" is the outcome/o		E = Extremely High				
from Company	accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible H = Hig					ligh Risk	
	Step 2: Identify the RAC (Preach "Hazard" on AHA. Ann				1 = Moderate	e Risk	
	top of AHA.	otate the Overall I	inginest road	o at the	_ = Low Ris	k	

Job Steps	Hazards	Controls	RAC
Using step ladders	Falls	-Make sure the correct size ladder is being used for the task	M
	Ladder Failure Dropped	-Ladder must be inspected prior to use – damaged / defective ladders shall be tagged and taken out of service	2000
	Objects	-Ladder shall be set up correctly on firm level ground and spreader bars locked	
		 -Ladder shall be used in accordance with the manufacturers guidelines and warning labels on the ladder -3 points of contact shall be maintained while going up or down the ladder and user shall face the ladder while going up or down 	
		-Personnel shall not stand on the top two steps of the ladder	
		-Personnel shall not stand backwards on ladder	
		-If ladder is going to be used in a high traffic area (hall way / corridor) the area around the ladder will need to be flagged off or a spotter used to control the area so the ladder is not bumped causing user to fall from the ladder – same thing applies when working near doorways	
		-Do not set or store tools and material on top of the ladder	
		-When finished with the ladder make sure it is properly stored - out of the way and secured if necessary	





EXAMPLE OF AN ACCEPTABLE AHA



Equipment to be Used		ning	Inspection Requirements
Fiberglass step ladders "GC does not allow aluminum ladders on the project	Ladder Safety	3	Inspect daily before each use Documented inspection required quarterly
	-	-	
Activities R	equiring a Competent or Quali	fied Person – Attach Proof of	Competency
Activity	a desired of square	Designate	d Competent or Qualified Person
Ladder use		Dave Sullivan - Foreman	

This AHA has been reviewed by Hensel Phelps for general compliance with the jobsite safety requirements. The Hensel Phelps review, however, does not relieve Subcontractor of the responsibility for compliance with all applicable safety laws, regulations, ordinances, and contractual requirements. Subcontractor is responsible for reviewing this AHA with all personnel involved with the Definable Feature of Work (DFOW) on a regular basis and must notify Hensel Phelps and adjust the AHA as necessary whenever the plan for performing the DFOW is modified or following an unplanned event.

Modified: 11.2013 Page 2 of 5 Form SH B06,01





COMPETENT PERSON AND OPERATOR QUALIFICATIONS



A Competent Person must be assigned for all Trade Partners and any qualified operator information must be kept on file.

- Competent Person Examples
 - Fall Protection
 - Confined Space
 - Silica
 - Scaffolds
 - Trench / Excavation
 - Crane Assembly / Disassembly

- Qualifications Examples
 - Boom Lift
 - Scissor Lift
 - Forklift
 - Rigger
 - Heavy Equipment
 - Crane (requires evaluation)

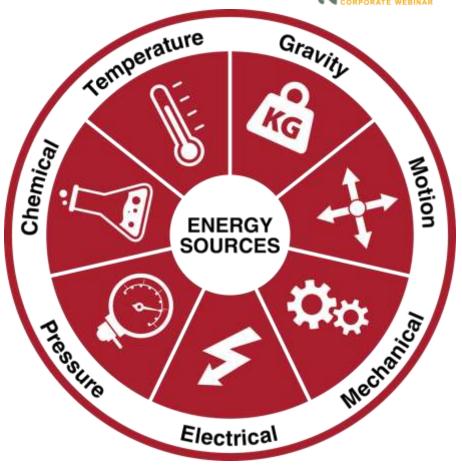




SAFETY TASK ASSIGNMENT (STA)



- Daily Documented Pre-Task Plan
- Capture Specific Tasks, Hazards, and Controls
- Opportunity for the Supervisor to Align Crew
- Set Expectations
- Review Chemicals, Access, Material Handling, etc.
- Followed by Stretch and Flex







CHEMICAL MANAGEMENT

TECHNICAL

ASSISTANCE

PROGRAM

CORPORATE WEBINAR

HazCom and Hazardous Material Questionnaire

Are hazardous materials being used to perform scope of work? Will you require storage for these hazardous materials?









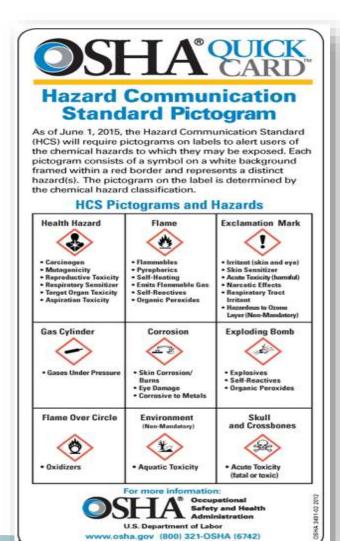




CHEMICAL QUESTIONNAIRE



prompt	y dispose of any and all t	ezerdous waste during the performance o	f work.		
		f all Hensel Phelps' contractors to manag		dous mate	efialls an
	te generating hazardou 165, attach Site-Specific	i weste? lazardous Weste Management Procedure		□ Yes	II No
	here will this material be :	entin			
12222		Sous materials on-site between shifts?		□ Vest	□ N
		the Subcontractor SDS Log by checking to will be using on this project.	he box for 'hazardous		
	lous Material Questions outlizing hazerbous meta	sire: risks to perform the scope of work?		D Yes	II N
	Phelps for review, prior			Che	ck One
3.	Submit this questionnel	e, the Subcontractor SDS Log and all site			
	check the box	on the SDS Log indicating it is deemed a school Waste Determination Document for	hazardous material.		
- 2	determine whether it me	ets the criteria of a hazardous material or meets the criteria of a hazardous material or	hazardous waste.		
	be bringing onto the pro	ictor Safety Data Sheet Log (attached) for ject site. The log must be specific to this p Sheet (SDS) for each chemical you are b	voject only.		
Instruc	The state of the s	atas Baltas Paris Mand Law (all 14 19 4	and the same of th		
Locato	n where work is to be per	formed			
			Completion Date:		
Descrip	tion of Scope of Work:				
	and Title of Preparer.				
	of Company				
Allegree o					





WHY A SILICA PLAN?





- Every year more than 200 workers in the United States die from Silicosis
- Silica comprises over 90% of the earth's crust
 - e.g.; granite, sandstone, sand



Non-Crystalline Silica NOT HARMFUL



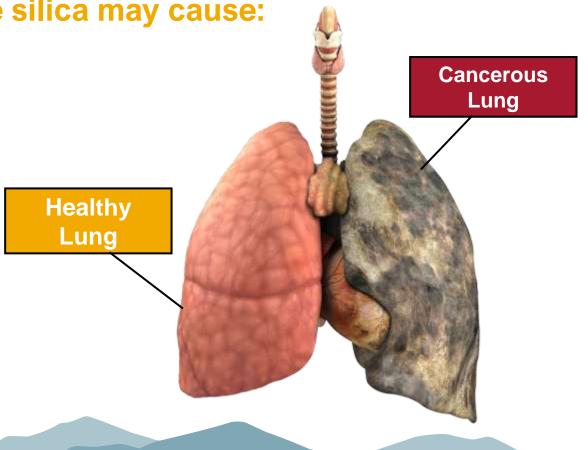


EXPOSURE TO RESPIRABLE CRYSTALLINE SILICA



Over-exposure to respirable crystalline silica may cause:

- Lung cancer
- Chronic obstructive pulmonary disease
- Tuberculosis
- Kidney disease
- Immune system diseases
- Silicosis







SILICA STANDARDS

From the OSHA fact sheet for silica:

What is crystalline silica? Crystalline silica is a basic component of soil, sand, granite, and many other minerals. Quartz is the most common form of crystalline silica. Cristobalite and tridymite are two other forms of crystalline silica. All three forms may become respirable size particles when workers chip, cut, drill, or grind objects that contain crystalline silica.

Equipment / Task	Table 1 Engineering and Work Practice Control M		Respirator Require Assigned Protect	ments and Minimun tion Factor (APF)
Clean-up	Must use SWEEPING COMPOUND or HEPA VACUUM must be used to minited one. Not Allowed: Dry Sweeping, Dry Brushing, Blowing Compressed		None Required	None Required
Stationary masonry saws	Use saw equipped with integrated WATER delivery system that continuously for bindle. Operate and maintain tool in accordance with manufacturer's instructions to menissions.		None Required	None Required
Handheld power saws (any blade diameter)	Use saw equipped with integrated WATER delivery system that continuously feeds water to the Islade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	When used OUTD OORS	None Required	(APF 10)
		When used INDOCRS or in an enclosed area.	(APF 10)	(APF 10)
Handheld power saws for cutting fiber- coment board (Mth blade diameter of a inches or loss)	For tasks performed outdoors only: Use saw equipped with commercially available DUST COLLECTION SYSTEM. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emiseions. Dust collector must provide the airflow recommended by the tool manufacturer, or greater, and have a filter with self- or greater efficiency.		None Required	None Required
Walk-behind saws	Use saw equipped with integrated WATER delivery system that continuously feeds water to the blade.	When used OUTDOORS	None Required	None Required
	continuously reads water to the blade. Ciperate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	When used INDOCRS or in an enclosed area.	(APF 10)	(APF 10)
Rig-mounted core saws or drills	Use tool equipped with integrated WATER delivery system that supplies water to cutting surface. Operate and maintain tool in accordance with manufacturer's instructions to minimize duet effective.			None Required
Handheld and stand- mounted drills (including impact and rotary hammer drills)	dille COLLECTION SYSTEM			None Required
Jackhammers and handheld powered chipping tools	 Use tool with WATER delivery system that supplies a continuous stream or spray of water at the point of impact. 	When used OUTDOORS	None Required	(APF 10)
	on	When used INDOCRS or in an enclosed area.	(APF 10)	(APF 10)
	Use tool equipped with commercially available shroud and DUST COLLECTION SYSTEM. Coerate and maintain tool in accordance with manufacturer's	When used OUTDOORS	None Required	(APF 10)
	instructions to minimize dust emissions. Dust collector must provide the affilion recommended by the tool manufacturer, or greater, and have a filter with self- or greater efficiency and a filter-cleaning mechanism.	When used BIDOCRS or in an enclosed area.	(AFF 10)	(APF 10)
Handheld grinders for mortar removal (i.e., tuckpointing)	Use grinder equipped with commercially available shroud and DUST COLLECT SYSTEM. Operate and maintain tool in accordance with manufacturer's instructions to m		A-A-	A
	dust errissions. Dust collector must provide as cubic feet per mirute (ofm) or greater of airflow of wheel claraneter and have a filter with early or greater efficiency and a cyclon preseparator or filter-cleaning mechanism.	per Inch	(APF 10)	(APF 25)
Handheld grinders for uses other than mortar removal	For tasks performed OUTDOORS only: Use grinder equipped with integrated WATER delivery system that continuously grinding surface Operate and maintain tool in accordance with manufacturer's instructions to meritations.		None Flequired	None Required
	Use grinder squipped with commercially available shroud and DUST COLLECTION SYSTEM.	When used OUTD CORS	None Required	None Required

When used INDOORS or in an enclosed area.







EXPOSURE CONTROL OPTIONS



OSHA'S NEW SILICA STANDARD SPECIFIES TWO OPTIONS FOR CONTROLLING RESPIRABLE SILICA:

Specific Exposure Control

PREFERRED

Alternative
Exposure
Control





HEAT ILLNESS PREVENTION



MOST EFFECTIVE



ELIMINATION



SUBSTITUTION



ENGINEERING









CONTROLS





OSHA-NIOSH



Weather-related

Cause of Death in

the U.S.

1,500

Estimated Annual

Death toll in the U.S.

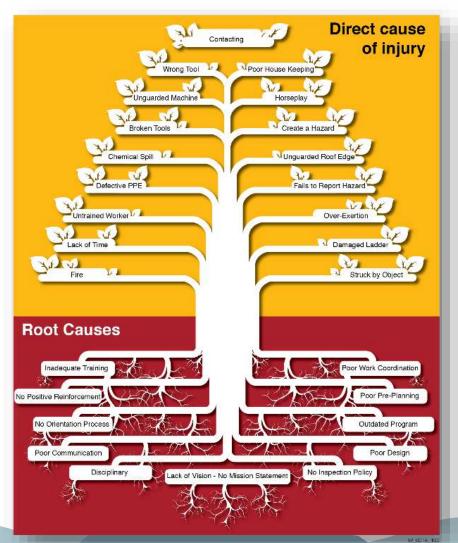


ACCIDENT INVESTIGATION



- Report accidents to Hensel Phelps
- Return to work for injured employees
- Impact on Business
- Near miss investigation









VIOLATIONS



Safety violations that may result in disciplinary action or removal from site:

- Repeat offenses
- Poor safety attitude
- Fall protection
- Trench / excavation
- Lock out / tag out

- Removal from jobsite
- Removal of safety devices
- Horseplay
- Drug / alcohol use
- Others, as this list is not all inclusive





S.A.F.E.

Safety Accountability for Everyone

- Safety is a human issue
- Communication with respect
- Education and Training
- Positive Reinforcement
- Culture of Accountability
- Trade Partner Management
- Outstanding Performance







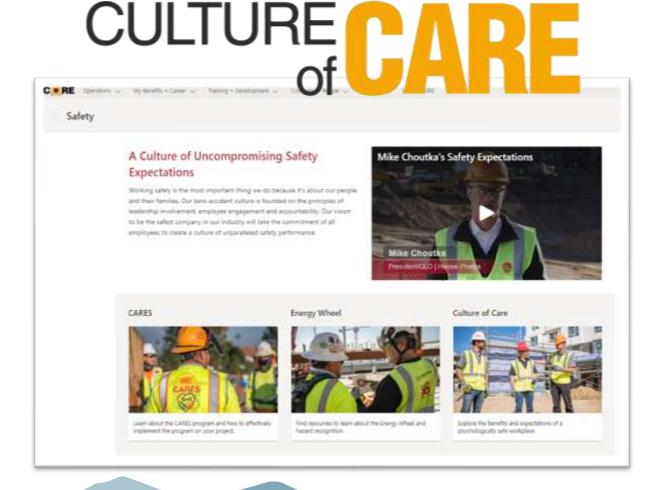
CULTURE OF CARE



 50% of construction workers will experience a mental health issue in their lifetime

Suicide in the construction industry is 4X the national average.

Culture of Care is the umbrella under which Hensel Phelps will provide resources and tools to support our people - our greatest asset.







CARES

ASSISTANCE PROGRAM

Craft Awareness, Recognition and Engagement in Safety

- Craft based safety committee
- Encourages open communication
- Improves culture
- Improve problem solving
- Meeting frequency







YOUR RESPONSIBILITIES

- Work safely
- Stop the operation if it's unsafe
- Do not proceed with work unless the AHA has been reviewed
- Notify your supervisor if conditions change
- Report unsafe conditions
- Do not use unsafe tools or equipment
- Communicate your concerns
- Keep your work area clean



















