

WE HAVE THE POWER

Pre Job Planning and Safety Inspections

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FirstEnergy Corp.

Richland County **Safety Council**November 21 2019

Pre Job Brief (PJB)

- A meeting of workers and supervisors conducted before performing a job to discuss the tasks involved, hazards, and related safety precautions.
- This meeting helps individuals to better understand what to accomplish and hat to avoid.
- PJB's helps participants avoids surprises in the field and reinforce the idea that there are no routine tasks.

Purpose

To instill consistent communication between the job lead and the employees working on that assigned job.

Pre Job Brief (PJB)

1926. 952 The briefing shall cover at least the following subjects:

- Hazards associated with the job
- Work procedures involved
- Special precautions
- Energy-source controls
- Personal protective equipment requirements.

■ FirstEnergy:

- Must be conducted prior to starting each assigned task
- Documented PJB is mandatory and lead by supervisor when two or more employees are working together.
- If working alone on non routine tasks, documented PJB is still required.

PRE-JOB BRIEF CHECKLIST

Check Items That Apply / Add Additional Information to Notes

Description of Work
Work Order # Operation Step Number #
Risk Score (FGBP-SAF-0034): 1-Green 2-Yellow 3-Orange 4-Rec
Roles & Responsibilities Define and Assign:
Assign Safety Advocate to lead 2-Minute Drill:
■ Interfaces: Operation, Tech Services, Environ, Safety, Security, etc.:
Clearance – Energy Source Controls (Electrical/Pressure/Stored Energy): Multiple Clearances Y / N Verify System prints Energy Check Verify Tagged Boundaries Clearance signed on / verified still on
Human Performance Tools / Techniques Task performed in the last six months? YES NO Procedures / Work Instructions: Stop Work Criteria:
☐ Job Hazards and Special Precautions – see page 2
Personal Protective Equipment – see page 2 Environmental Controls – see page 2 Foreign Material Exclusion (FME) Controls- (FOPR-OPS-0006)
■ SAFER Dialogue: ■ Summarize the critical steps, error-likely situations, and job hazards ■ Anticipate potential errors ■ Foresee probable and the worst-case consequences should an error occur ■ Evaluate Defenses to prevent and catch errors ■ Review recent and relevant operating experience related to the job
Housekeeping
ATTENDEES:

<u>Job Hazards, Energy Source Controls, Environmental Hazards & Controls, PPE, and Special Precautions,</u> Check Only Items That Apply and Add Any Additional Information to Notes

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JOB HAZARDS	ENERGY SOURCE CONTROLS	SPECIAL PRECAUTIONS	SPECIAL PRECAUTIONS
☐ Slips / Trips / Falls ☐ Reduce clutter ☐ Designate "walk-ways" ☐ Temporary hazards marked ☐ Reroute traffic flow	Energized Elec Work Permit (X)-3680 Tagging / Clearance (FGPR-SAF-0037) Clearance Control 465 Worker Signature Sheet 462-C	Confined Space Permit (GEN-SAF-0003-01) Fall Protection (GEN-SAF-0005) Falls over 4 feet Man lift with fall protection Scaffold inspected/approved	Rigging and Lifting Crane Pre-operational cklist Inspect tools / rigging equip Erect barricades Tag line Rigging cklist (Gen-MNT-0002-1)
☐ Falling Objects ☐ Inspect tools / Rigging equip. ☐ Erect barricades ☐ Install toe boards / Netting ☐ Tie off tools / Use lanyards ☐ Install work platform	Additional Signature Sheet 462 Clearance Equip. Report 464 Workgroup Clear Cont 465WG Clearance Revision 472	Safety harness / tie off Erect barricades Floor opening Permit (X-4151) Rescue Plan (Self Rescue or X-4508)	Lift plan Signalman Qualified Crane Operator
	□ Pressurized System □ Pressure boundary verification □ Isolate, drain; Dbl block/bleed?	Trenching /Shoring Permit (X-4434)	☐ Chemical Handling ☐ Follow SDS instructions
☐ Loud Noise ☐ Post signs / Erect barricades ☐ Alternate communications	Isolate, drain; Dbl block/bleed? ENV HAZARDS & CONTROLS	Abnormal Operating and Maintenance Checklist (FGBP-OPS-0001-1)	Respirator use Special gloves Apron, slicker suit Face shield / Goggles
☐ Abrasions / Lacerations	☐ Containment device needed ☐ Absorbent material	Hot Work Permit (X-3959)	Containment needed? Lines drained & purged
 □ Be in proper position □ Get proper tools 	Follow SDS instructions Waste Disposal	☐ Thermal Burn ☐ Heat-reflecting barriers	Tag out / Isolate source Safety shower nearby
Guards in place Avoid "Line of Fire"	Fugitive Dust Drain Locations	Exposure (Heat, Cold, Rain, etc.) Drinking fluids	Chemical Compatibility
Strains / Sprains / Overexertion Get additional help Limbering / stretching exercises Proper positioning / posture	P.P.E. Hard Hat. Hearing Protection	Supplemental heat Temporary enclosure Stay / Action times	☐ Inhalation Hazards ☐ Review SDS ☐ Adequate room ventilation ☐ Supplemental ventilation ☐ Respirator use
Reduce repetitive stress, motion Obtain proper tools	☐ Eye and Face Protection ☐ Safety Eyeglasses ☐ Face Shield ☐ Goggles	Ladder Safety Inspect ladder Step ladder fully open	Air sampling / Monitoring Lines drained and purged Erect barricades
☐ Pinch Points ☐ Identify ☐ Guards in place ☐	Welding Hood Hand Protection Leather Cut resistant	☐ Tied off / Secured ☐ Proper footing ☐ Proper ladder size & type ☐ Spotter	Material Handling Forklift Pre-Operational cklist Travel Path
Moving / Rotating Equipment Proper fitting clothes	Chemical Foot Protection	4-to-1 slope for ext ladders	Secure Loads
Proper fitting clothes Secure / Remove loose articles Guards in place	Safety Toe Shoes Metatarsal Guards Rubber Boots	☐ Lead / Asbestos (GPSM) STOP and Notify Supervision Before Proceeding	Nature Insects: bees, spiders, ticks Animal
☐ Lighting ☐ Supplemental lighting ☐	Respiratory Protection. Type: Special Clothing:	Sampling Wetting agent Containment device /Structure	Plants

Job Safety Analysis / Pre-task (JSA):

- A detailed 3-step analysis that helps eliminate and/or reduce risk.
- This 3-step process breaks each task down into basic job steps
 - Step One: Describe the operation to be performed in the sequence of the basic job steps.
 - Step Two: Identify the hazards or potential hazards at each step.
 - Step Three: Assess the risk the hazard presents; describe how the hazard is controlled.
- Identifies existing and potential hazards associated with each step, and provides recommendations/procedures to eliminate, reduce, or control hazards, and the option of assessing potential severity.

Contractor Safety – Job Safety Analysis

	Contractor Job Safety Analysis Form X-3983 (REV. 08-15) Page 1 of 2						
PLANT	LANT PROJECT NAME						
JOB / TASK			WORK AREA		C	DATE / TIME	
REASON FO	R NOT USING JOB SPECIFIC SAFETY PLAN TEN	MPLATE			<u>'</u>		
RISK							
SCORE	STEPS OF THE TASK		HAZARD(S) A	ASSOCIATED WITH ST	TEP	SAFE PLAN TO	ELIMINATE OR CONTROL HAZARD(S)
\vdash							
lacksquare							
\perp	Ensure work area has been cleaned and left in a safe or	ondition					
TEAM MEN	MBER NAMES		CONTRACTOR JSA ADDITION	AL STEPS SHEET X-3983.1	REQUIRED TOTAL N	NUMBER OF ADDITION	ONAL SHEETS REQUIRED
	PRINT NAME	ļ ,	PRINT NAME	P	RINT NAME		PRINT NAME
The signatu	ure of the Supervisor certifies the review	of the hazard assess	sment and the Job Safety Analys	is Template			
	PERVISOR'S SIGNATURE DATE TIME						



<u>Job Hazards, Energy Source Controls, Environmental Hazards & Controls, PPE, and Special Precautions,</u> Check Only Items That Apply and Add Any Additional Information to Notes

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JOB HAZARDS	ENERGY SOURCE CONTROLS	SPECIAL PRECAUTIONS	SPECIAL PRECAUTIONS
Slips / Trips / Ealls Reduce clutter Designate "walk-ways" Temporary hazards marked Reroute traffic flow Falling Objects Inspect tools / Rigging equip. Erect barricades Install toe boards / Netting Tie off tools / Use lanyards	Energized Elec Work Permit (X)-3680 Tagging / Clearance (FGPR-SAF-0037) Clearance Control 465 Worker Signature Sheet 462-C Additional Signature Sheet 462 Clearance Equip. Report 464 Workgroup Clear Cont 465WG Clearance Revision 472	Confined Space Permit (GEN-SAF-0003-01) Fall Protection (GEN-SAF-0005) Falls over 4 feet Man lift with fall protection Scaffold inspected/approved Toe boards, netting Safety harness / tie off Erect barricades Floor opening Permit (X-4151)	Rigging and Lifting Crane Pre-operational cklist Inspect tools / rigging equip Erect barricades Tag line Rigging cklist (Gen-MNT-0002-1) Lift plan Signalman Qualified Crane Operator
Install work platform Loud Noise	Pressurized System Pressure boundary verification Isolate, drain; Dbl block/bleed?	☐ Trenching /Shoring Permit (X-4434) ☐ Abnormal Operating and	 □ Chemical Handling □ Follow SDS instructions □ Respirator use
Post signs / Erect barricades Alternate communications	ENV HAZARDS & CONTROLS Containment device needed	Maintenance Checklist (FGBP-OPS-0001-1) Hot Work Permit (X-3959)	Special gloves Apron, slicker suit Face shield / Goggles Containment needed?
Abrasions / Lacerations/Tools Be in proper position Get proper tools Guards in place Avoid "Line of Fire"	Absorbent material Follow SDS instructions Waste Disposal Fugitive Dust Drain Locations	Thermal Burn Heat-reflecting barriers Exposure (Heat, Cold, Rain, etc.)	Lines drained & purged Tag out / Isolate source Safety shower nearby Chemical Compatibility
Strains / Sprains / Overexertion Get additional help Limbering / stretching exercises Proper positioning / posture Reduce repetitive stress, motion Obtain proper tools	P.P.E. Hard Hat. Hearing Protection Eye and Face Protection Safety Eyeglasses Face Shield	Drinking fluids Supplemental heat Temporary enclosure Stay / Action times Ladder Safety Inspect ladder Step ladder fully open	☐ Inhalation Hazards ☐ Review SDS ☐ Adequate room ventilation ☐ Supplemental ventilation ☐ Respirator use ☐ Air sampling / Monitoring ☐ Lines drained and purged ☐ Erect barricades
Pinch Points Identify Guards in place	Goggles Welding Hood Hand Protection Leather Cut resistant	☐ Tied off / Secured☐ ☐ Proper footing☐ ☐ Proper ladder size & type☐ Spotter☐ ☐ 4-to-1 slope for ext ladders	■ Material Handling ■ Forklift Pre-Operational cklist ■ Travel Path
■ Moving / Rotating Equipment ■ Proper fitting clothes ■ Secure / Remove loose articles ■ Guards in place	Chemical Foot Protection Safety Toe Shoes Metatarsal Guards Rubber Boots	Lead / Asbestos (GPSM) STOP & notify Supervision Sampling	Secure Loads Nature Insects: bees, spiders, ticks Animal
Lighting Supplemental lighting	Respiratory Protection. Type: Special Clothing:	Wetting agent Containment device /Structure	Plants

Utilities

Contractor Safety – Job Specific Safety Plan



FirstEnergy.

Job Specific Safety Plan

Work planning for personnel, environmental, and equipment safety



Company Name

Project Name

Station Name

Project ID Number

Document Author

FirstEnergy Generation



No Job is Routine

This document is designed to assist your company in the development of a Job Specific Safety Plan for use on FirstEnergy Jobsites. This plan is to cover personnel safety, environmental safety, and equipment safety. Sections I-III are intended to aid you in the gathering of information and the planning of your work. Information gathered in these sections will be utilized in their entirety during completion of Section IV, your Hazard Mitigation plan. This plan will then be used to generate pre-job briefs that will be reviewed with all involved employees prior to each task. All information is to be shared with all employees at the job site and direction provided that no task is to proceed unless it is in accordance with their pre-job brief. The use of 2-Minute drill cards is mandatory and must be discussed during pre-job briefs. Photographs should be utilized whenever their inclusion provides additional clarity. Additional pages should be created as necessary.

Note: A new plan is required for each and every job.

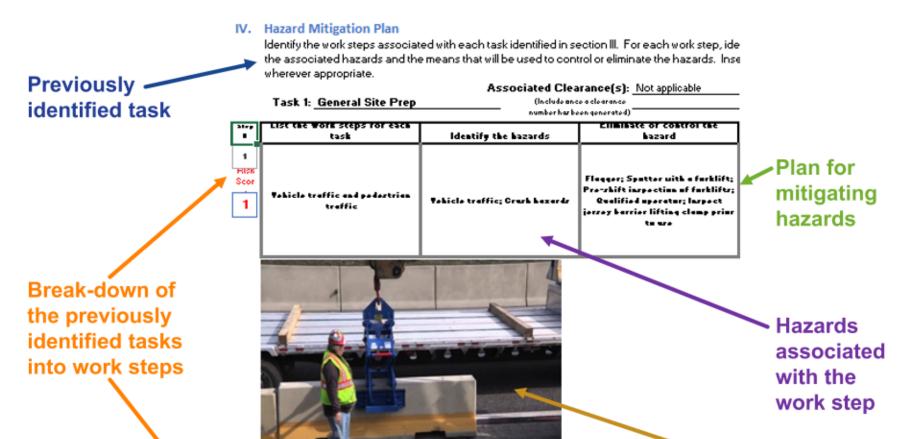
Job Specific Safety Plan (JSSP)

- Fulfill contractual obligations as specified in the "Contractor Safety Requirements" document
- Holistic safety approach to include personnel safety, environmental safety, and equipment safety
- Job Specific Plans tell us how the job will be executed

Utilize a template to:

- ✓ Improve consistency
- ✓ Increase the level of detail
- ✓ Trigger areas to be considered
- ✓ Minimize time requirements to complete

Pre-requisites to Job Specific Safety Plan What must be Safety pre-qualified through PICS Substance abuse verified through MMC done before this Site orientation completed Site specific plan approved Commitment to use 2 - minute drill plan is put Commitment to STOP work for any hazard not identified in this plan together Job planning Detailed Job Scope Site preparation, foundation work, and construction of new piping systems for Unit 3 flash tank drains, Unit 3 fuel oil relocation, Unit 3 Primary and Secondary air heaters washdown drains, with all mechanical equipment, associated piping, and electrical systems as described in bid package. Rehabilitation/modification of existing concrete, foundations and/or Scope existing structures as required to facilitate the Scope of Work will be the Contractor's responsibility unless otherwise directed. Coordination of outages (both water and power) with Site personnel is required during each stage of the installation and demolition. All outages must be minimized and fully coordinated with all departments and contractors. of work Contractor shall perform demolition work as shown or implied on the contract drawings. All openings in walls, floors, enclosures, etc., caused by removal of equipment, piping, conduit, etc., shall be capped, sealed, or repaired as required. The Contractor must coordinate all work with the Electrical Contractor prior to de-energizing equipment at the outage, and prior to re-energizing the equipment before start-up. Permits, certifications, or special qualifications (i.e. OSHA competent person) Rigging Rigging ☐ Scaffolding ☐ Electrical / Arc. flash Specialty tools/equipment. Asbestos Excavation/Trenching Charte operator Qualified Signalman P. Hotwork Confined space Fall Protection Floor Opening Fork Lift Operator Clearance (LO/TO) Items to consider Other: Arbertar checked only far augreness Tools and equipment to be utilized List all electric or pneumatic power tools that will be used during this job Drill (with clutch) Band saw Chipping hammer Porta power Drill (without clutch) Circular saw Angle grinder Milling machine Shearing tool Tapping machine Tools and List all mechanical tools that will be used during this job Chainfail Auto-retract knife Strong back Dolly equipment that **▼** Cart Chinel Conduit bender will be used to List all other tools or equipment that will be used during this job execute the Cutting torch Wilding machine Full protection (specify) □ X-ray Safety goggles Face shield Weld helmet (auto-dim) ✓ Sings Specialty gloves (specify) Fall prevention Weld helmet (non-auto) Clevises/Shackies job scope Water hoses (>500 psi): □ Explosives Oller: Steel-toodboots FR Clathing Wolding glover Camprossed Gar Cutrosistant glavos List all industrial equipment that will be used during this job Fork lift Crane □ Vacuum truck
 □ ✓ Aerial lift Excavator Pump(ii) ☐ Doper ☐ Backhoe Oller: Camerata Truck



Risk score for individual work step

Ertablishing employee access

Establishing employee access

Slip/trip/fall

Ertablishing for designated walkney

insert ony relevant photo(r) Add additional steps as required Picture to ensure that communication is clear (will be separate files)

2

HISK

Video

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Purpose Safety Inspection / Observation

- The purpose of the Safety Observation Program is to improve the awareness of hazards and unsafe acts before they result in an incident.
- This program has at its core, a respectful and open dialog between those involved to address all safety aspects of the job.
- It will provide a system/process that identifies unsafe conditions and behaviors; to train, coach, and empower employees to perform work safely. The goal of the program is to prevent injuries and reinforce proper safety behaviors.

The Safety Observation Program ...

Is a tool to reinforce safe actions while improving the awareness of hazards and identify unsafe acts before they can become an incident.

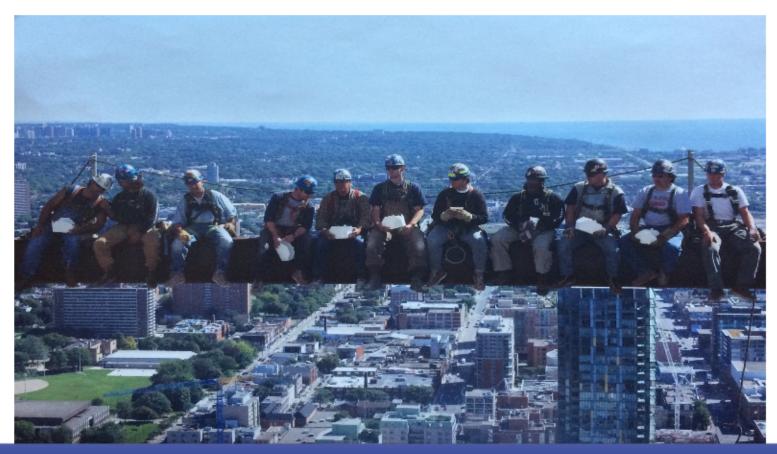


Observation and Coaching of Standards



What get's Reinforced get's Done!

Observation and Coaching of Standards



What get's Reinforced get's Done!

Why Observe & Coach?

- People are Human
- Risk perception is not always accurate for routine low risk activities
- A person's risk perception comes from personal judgment about a situation



Positive Reinforcement; It's more than just saying "good job"...

- Is the most effective way to change any behavior.
- Is another word for "user-friendly."
- Highly personal and must be earned.
- Must be frequent and immediate.

How do you positively reinforce people?







C.O.A.C.H.

Care ...

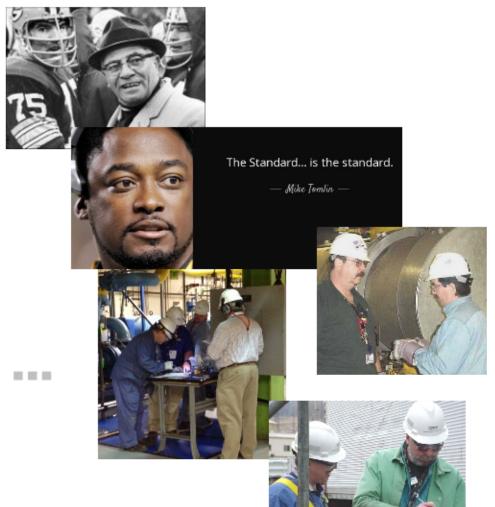
Observe

Analyzes

Communicates

Helps ...

Utilities



It's Not An Observation Unless There is a Conversation!

Safety Inspections

- Use checklists
- Typical hazards fall into several major categories, such as those listed below
- Each workplace will have its own list:
 - General housekeeping
 - Slip, trip, and fall hazards
 - Electrical hazards
 - Equipment operation
 - Equipment maintenance
 - Fire protection
 - Work organization and process flow (including staffing and scheduling)
 - Work practices
 - Workplace violence
 - Ergonomic problems
 - Lack of emergency procedures

Conducting Inspections

- Conduct regular inspections of all operations, equipment, work areas and facilities.
 - Have workers participate on the inspection team and talk to them about hazards that they see or report.
- Include all areas and activities in these inspections:
 - such as storage and warehousing, facility and equipment maintenance, purchasing and office functions, and the activities of onsite contractors, subcontractors, and temporary employees.
- Regularly inspect both plant vehicles (e.g., forklifts, powered industrial trucks) and transportation vehicles (e.g., cars, trucks).

Performing a Safety Observation

- To perform a Safety Observation, it is preferred that the Observer first complete the Safety Observation Training. This training will give the observer the skills to correctly:
 - Inform the employee of the things he or she is doing safely.
 - Observe an employee at work and determine a safe way to stop the work; if an unsafe act is taking place.
 - Discuss with the employee; possible consequences of the unsafe act (if any) and mention a safer alternative.
 - Get the employee's agreement to work safely in the future (if an unsafe act was taking place).
 - Discuss other safety issues/concerns of the job.
 - Thank the employee.

Coaching **Technique**

- 1. Break the Ice
- 2. What do you see?
- 3. Wait for Response ...
- 4. Discuss the Standard
- 5. Ask for Solution ...
- 6. Wait for Response ...
- 7. Agree on Solution



Always ask: Can I Count on You?

Safety Observation Card

SAFETY OBSERVATION						
FOSSIL SAFETY O	FOSSIL SAFETY OBSERVATION CARD					
Observation Guidelines:	Department Observed:					
Make your presence known	Plant Operations					
Comment on safe work practice	Yard Operations					
Comment on at-risk (unsafe) behaviors	Mech Maintenance					
 Ask for agreement to work safely 	Elec Maintenance					
5. Thank	Inst & Controls					
PPE (Personal Protective Equipment)	Administration					
ALL SAFE	Body Position					
AT - RISK:	ALL SAFE					
Head	AT - RISK:					
Eye / Face	Pinch point potential					
Hearing	Struck by potential					
Respiratory	Awkward Position					
Hands / Gloves	Improper Lifting					
Feet	In Line of Fire (In Harm's Way)					
Fall Protection	Overextended					
Appropriate apparel for job	3-points of contact					
Other PPE (Field Entry)						
	Tools & Equipment					
Permits & Procedures: (ifapplicable)	ALL SAFE					
ALL SAFE	AT - RISK:					
AT - RISK:	Right tool for the job / task					
Lock Out / Tag Out	Tool used correctly					
Confined Space	Condition of tool / equipment used					
Hot Work Permit	As Left (Unsafe) Conditions					
Hot Work - Burn Blankets	Ladders					
Hot Work - Screens	Scaffolding					
Hot Work - Extinguishers/Hose present	Barricades/Warnings					
MSDS (chemicals)	Ventilation					
Job Quality Description (JQD) available	Rigging					
Job Safety Analysis (JSA) available	Secondary Container Labeling					
Operating Procedure available	Human Performance					
Maintenance Procdure available	ALL SAFE					
Ventilation	AT - RISK:					
	3-Part Communication					
Housekeeping	Phonetic alphabet					
ALL SAFE	Procedure adherence - critical steps					
AT - RISK:	Effective Job Brief					
Lighting	Questioning attitude (2 minute drill)					
Job site orderliness	Self / Peer Check					
Slip / Trip / Fall hazards						
Garbage / trash						
Spils						
Furnes / Vapors						
Dust						
	<u> </u>					
WE WILL WATCH OUT FOR EACH OTHER'S SAFETY						
WE WILL WATCH OUT ON EACH OTHER O'GALETT						

Observer's Name:	Date:	
Observer's Title:	Day of Work Schedule:	
Plant:	Weather	
Shift:	Job Description	
Work Description:	Emergent □ Scheduled □ Outage	
Hours on Job:	# of Employees O bserved	
Pre-Job Brief Document	ation Reviewed during Safety Observation? ☐ Yes ☐ No	
Reaction of Individuals b	eing Observed:	
Safe Acts Observed:		
Unsafe Acts Observed:		
	Target	
Observer's Comments:	Zero	(0)
	TOD	AVI
	Safety & Human P	Portormaneo
	Salety & Human P	enormance

FirstEnergy CONTRACTOR SAFETY WALKDOWN FORM X-3956 (REV. 05-12)

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¬(PA	GE 1	OF 2)	

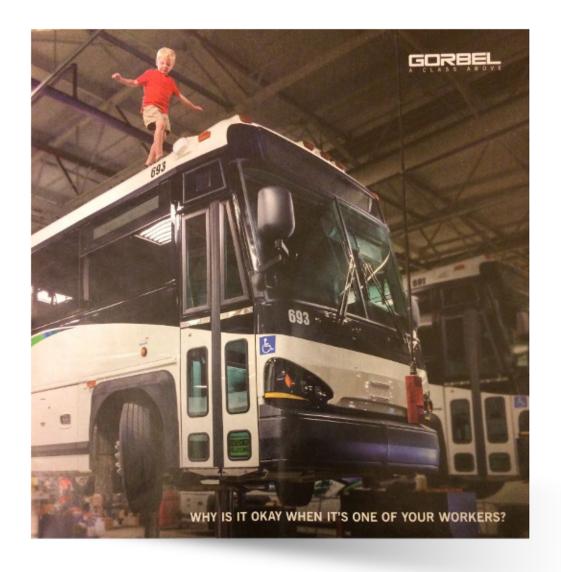
WER STATION	PROJECT	DATE	
NTRACTOR(S) OBSERVED			
RTICIPANTS			

LOCATION	ITEMS NOTED	COMMENTS	ASSIGNED TO	CORRECTED (Yes/No)

Feedback

- Two kinds of feedback ... Success and Guidance
- Feedback, that is timely, sincere, specific, behavioral.
- You are delivering the feedback to reinforce safety or correct unsafe behavior because by so doing you may be able to save a life."
- In safety it is good feedback to correct someone and reduce, control or eliminate the exposure by requesting safe desirable behavior.
- If our intent is safety, there is nothing negative about it, and we must be comfortable that we are providing this feedback for the right reasons.

Why Is It Ok When It's One Of Your Workers



Thank You

WE HAVE THE POWER

