



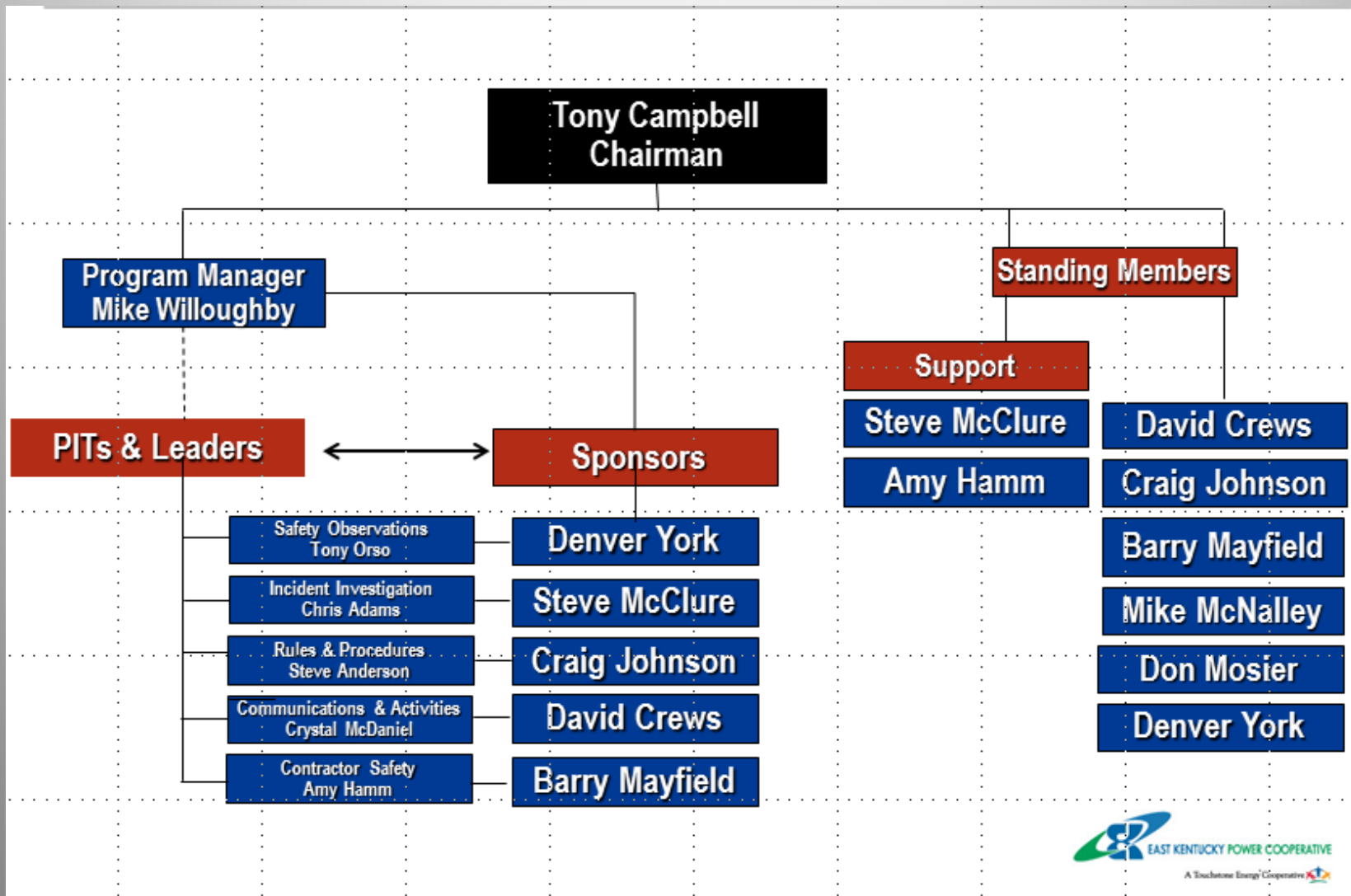
## **Safe Warehousing Practices: East Kentucky Power's Safety Evolution**

**Presented by: Mark Hounshell**

# Our Culture & The Industry Culture

- Keep the light's on
- Reliability is paramount
- No pain, no gain
- Get the job done

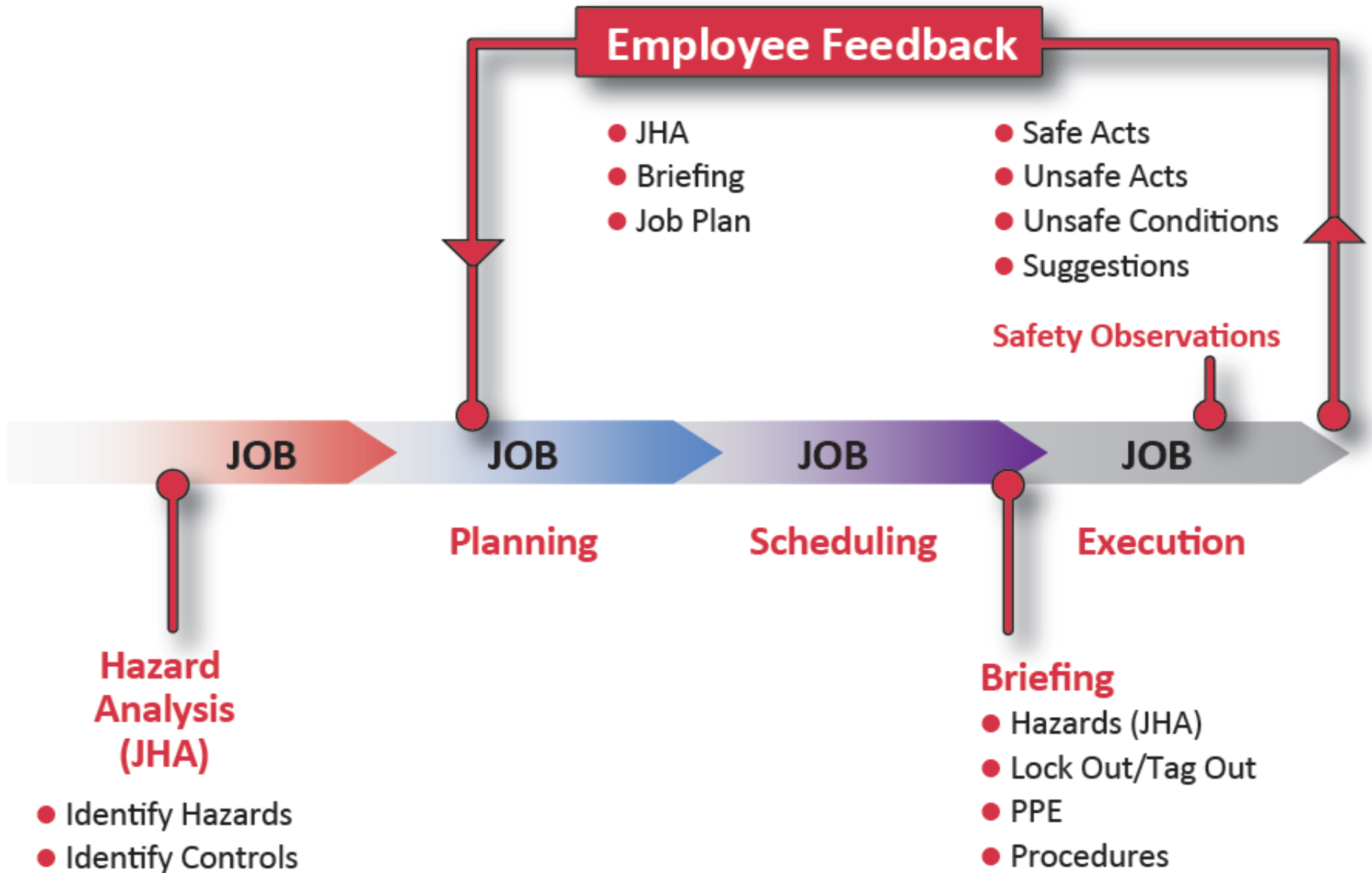
# Central Safety Committee



# EKPC Safety Teams – An Integrated Effort

- Incident Investigation
- Rules and Procedures
  - JHA
  - Management of Change
  - Human Performance
- Contractor Safety
- Communications
- Safety Observations

# The “Safe Work” Cycle



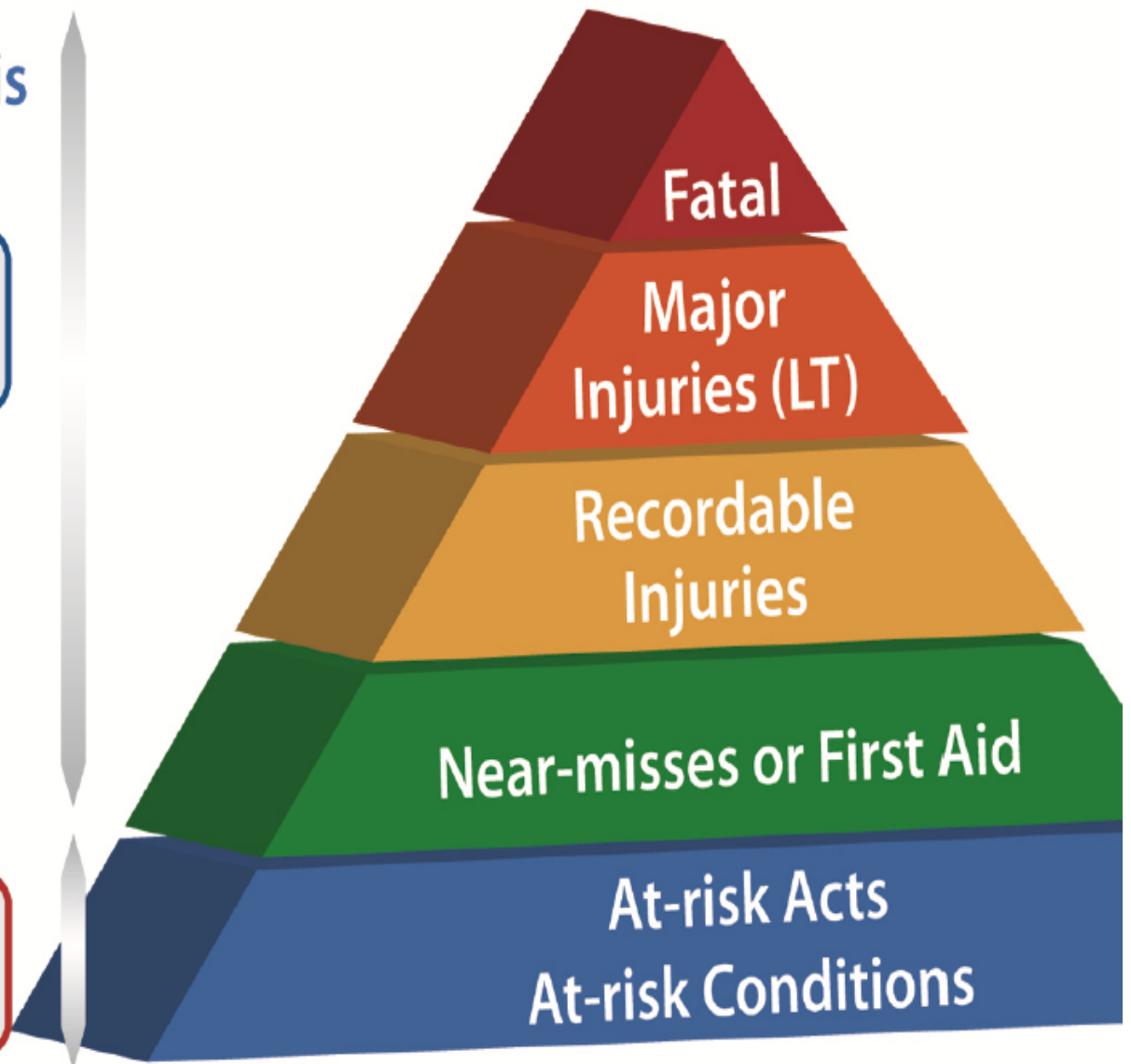
**Job Hazard Analysis (JHAs) are critical to any safety improvement effort. It is a PROACTIVE process.**

Shift emphasis  
from here

Incident  
Investigation

to here.

JHAs  
Help Prevent



# EKPC Cardinal Safety Rules

Willful or negligent violations of the following Cardinal Safety Rules could result in a serious injury. Violation of these rules may, upon completion of an investigation, result in disciplinary action up to and including termination:



Never order or direct another employee to violate any safety rule.



Never work while under the influence of drugs or alcohol.



Never smoke in hazardous areas.



Comply with confined space requirements.



Comply with fall protection requirements.



Never violate suspended load requirements.



Comply with lockout/tagout requirements.



Comply with requirements for working on energized lines or equipment.



Operate company equipment within its limits, with authorization and installed safety features.



Questions or Feedback: Steve Anderson  
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Willful or negligent violations of EKPC's Cardinal Safety Rules could result in a serious injury.

Violation of these rules may, upon completion of an investigation, result in disciplinary action up to and including termination.

# **The JHA**

**An Important Safety Tool  
& Backbone of the “Safe Work Cycle”**



# What is a Job Hazard Analysis?

- **A technique that focuses on job tasks as a way to identify hazards before they occur**
- **Focuses on relationships between worker, task, tools and work environment**
- **Identifying hazards and eliminating them or controlling them as early as possible will help prevent injuries and illnesses**
- **Goal is to identify uncontrolled hazards and take steps to eliminate or reduce them to an acceptable risk level**

# **JHA Core Focus**

**Specifically, this JHA procedure and all safety efforts shall focus on six core fundamentals of safety by ensuring that all employees:**

- Possess the required skills to perform the job**
- Use the right tool for the job**
- Wear appropriate personal protective equipment**
- Conduct required Job Briefings**
- Stop work if there is a safety concern or question**
- Report all near misses**

# What are the OSHA Requirements?

- OSHA 3071
- OSHA 1910.269 (a) (b) (c) – Electric Utilities

# Rules & Procedures Team Action

- **The EKPC Safety Rules & Procedures Team:**
  - Identified EKPC need for JHA documentation
  - Incorporated JHA procedure need with others to be written
  - Researched JHA programs, processes, and templates
  - Wrote JHA Procedure & Supporting Documents
    - JHA Form
    - JHA Tool Kit to assist in assessing needs and writing JHAs
  - Gathered information from operating groups
    - Inventory of top 10 most dangerous jobs & work environments
    - Top 10 jobs eligible for JHAs based on hazards and risks

# **EKPC State At Beginning of Process**

- Safety hazards & preventive measures are currently being addressed via job briefings and in specific work procedures**
- EKPC has relied on experienced, knowledgeable employees, work procedures and job briefings to address safety concerns and measures**
- “Tribal knowledge” is a factor**
- Documented JHAs will support OSHA compliance**

# **EKPC Initial Concerns**

- **Lack of formal documentation**
  - **Assurance, consistency, OSHA**
- **Reliance on “Tribal Knowledge”**
  - **EKPC’s changing workforce**
- **Industry Attributes**
- **Type of Work & Working Environment**

# Why is a Job Hazard Analysis Important?

- Many workers are injured or killed at the workplace daily in the U.S.
- Safety and health can add value to your business, your job & your life
- Workplace injuries and illnesses can be prevented by looking at workplace operations, establishing proper job procedures, and ensuring all employees are trained properly
- One of the best ways to determine & establish proper work procedures is to conduct JHAs
- JHAs are a one component of the large commitment of a safety & health management system

# Hazard Control Measures

**The Job Hazard Analysis shall be used as a guide to determine actions necessary to eliminate or minimize hazards Associated with the job.**

- For each Hazard identified, list the Hazard Control Measures to be taken to protect the worker from the Hazard**
- Hazard Control Measures according to OSHA 3071 include:**
  - Engineering Controls (i.e. design safety measures)**
  - Administrative Controls (i.e. written procedures)**
  - Personal Protection Equipment**



# What is the Value of a Job Hazard Analysis?

- Supervisors can use findings of JHAs to eliminate potential hazards
- Likely results are:
  - Fewer worker injuries
  - Safer, more effective work methods
  - Reduced workers compensation costs
  - Increased productivity
- JHAs can be a valuable tool for training employees in the steps required to perform their jobs safely
  - For JHAs to be effective, management must demonstrate a commitment to safety & follow through to correct any uncontrolled hazards identified
  - Failure to follow through will damage credibility & may discourage employees from exposing dangerous conditions

# What Jobs are Appropriate for JHAs?

- **Jobs with highest injury or illness rates**
- **Jobs with potential to cause severe or disabling injuries or illness, even if there is no history of previous accidents**
- **Jobs in which one simple human error could lead to a severe accident or injury**
- **Jobs that are new to the operation or have undergone changes in process or procedures**
- **Jobs complex enough to require written instructions**

# Where Do I Begin?

- **Involve your employees**
  - **Unique understanding of job, valuable for finding hazards**
  - **Minimizes oversights, ensures quality analysis**
  - **Ensures employee “buy-in” and ownership**
- **Review accident history**
  - **History of accidents & illnesses, losses, & near misses indicate where existing hazard controls (if any) may be inadequate**
- **Conduct preliminary job review**
  - **Discuss hazards that employees know exists in current work or surroundings, brainstorm for ideas to eliminate or control them**

# Where Do I Begin (continued)

- **List, rank and set priorities for hazardous jobs**
  - **List jobs with hazards that present unacceptable risks based on those most likely to occur and with most severe consequences**
  
- **Outline job steps or tasks**
  - **Watch employee perform job**
  - **List each step as the worker takes it**
  - **Enough information to describe job, but not overly detailed**
  - **Not so long or broad as to lose basic steps**
  - **Input from other workers who have performed jobs**
  - **Review steps with employee to avert omissions**
  - **Emphasize that analysis is of job, not employee performance**
  - **Include employee in all phases of analysis**
    - **From reviewing job steps & procedures to discussing uncontrolled hazards & recommended solutions**

# How Do I Identify Workplace Hazards?

**JHAs are an exercise in detective work with the goal of discovering:**

- What can go wrong?**
- What are the consequences?**
- How could it arise?**
- What are the other contributing factors?**
- How likely is it that the hazard will occur?**

**Document answers to these questions in a consistent manner.**

**This will help ensure that efforts to eliminate the hazard & Implement hazard controls target the most important contributors to the hazard**

# Elements of Good Hazard Assessment Scenarios

**Good hazard scenarios describe the following:**


- Where it is happening (environment)?**
- Who or what is it happening to (exposure)?**
- What causes the hazard (trigger)?**
- What are the potential consequences?**
- What are the other contributing factors?**

# A Risk Assessment Tool

## Useful as a JHA Guideline

<b>Difficulty</b>	<b>X</b>	<b>Danger</b>	<b>X</b>	<b>Hazard</b>	<b>X</b>	<b>Financial Risk</b>	<b>X</b>
Check only one cell/block in a vertical column, more than one cell/block may be checked in a row.							
Most complex jobs that take many steps and or many personnel to coordinate.		Most dangerous job where death or serious injury is a possibility if procedure was not followed.		Hazards present that could result in death or serious injury.		Greatest risk costing EKPC large amounts of \$ and a large negative impact on the budget.	
Complex steps to complete job or multiple personnel required to accomplish task.		Dangerous job task that requires multiple personnel to accomplish.		Hazard present that could result in serious injury.		Substantial risk greater than \$500,000	
Complex steps required, the addition of personnel simplify this task.		Some danger but the use of proper PPE negate the danger.		Some hazards associated with the job but these hazards could be minimized with the proper PPE.		Risk of loss of \$500,000	
Complex job but one person still capable of finishing task alone.		Some danger but task can be accomplished safely alone.		Some hazards but likely effect would be minimal.		Risk of loss of \$50,000	
Least complex job with few steps.		Least dangerous jobs with little or no inherent danger.		No Hazards present.		No risk of financial loss.	

# JHA Form

 <b>JOB HAZARD ANALYSIS (JHA)</b>		Date:	JHA Number:
EKPC Plant/Facility:	Department:	Area: Warehouse	Location:
Job Title: Forklift Operation			<input type="checkbox"/> New JHA <input type="checkbox"/> Revised JHA
Job Performed By: Warehouse Personnel	Analysis By: SME <input type="checkbox"/>	Supervisor: Steve Dobson SME <input type="checkbox"/>	Concurred By - Safety Coordinator:
Required Standards:			
General Notes:			
Tools and Equipment:			
Required Personal Protective Equipment:			
Lessons learned from previous work.			
Sequence of Job Steps	Potential Hazards	Hazard Controls	



# Applying Warehouse Safety

- Cardinal Rules
- Safety Moments
- Job Procedures
- Job Briefings
- JHAs
- Safety Observations
- Safety Work Practices
- Forklift Inspection Log
- Safety Town Hall Meetings
- Warehouse Audits
- Safety Work Practices
- Forklift Inspection Log
- Good Housekeeping & Organization

# Commonly Used JHAs for EKPC's Warehouses

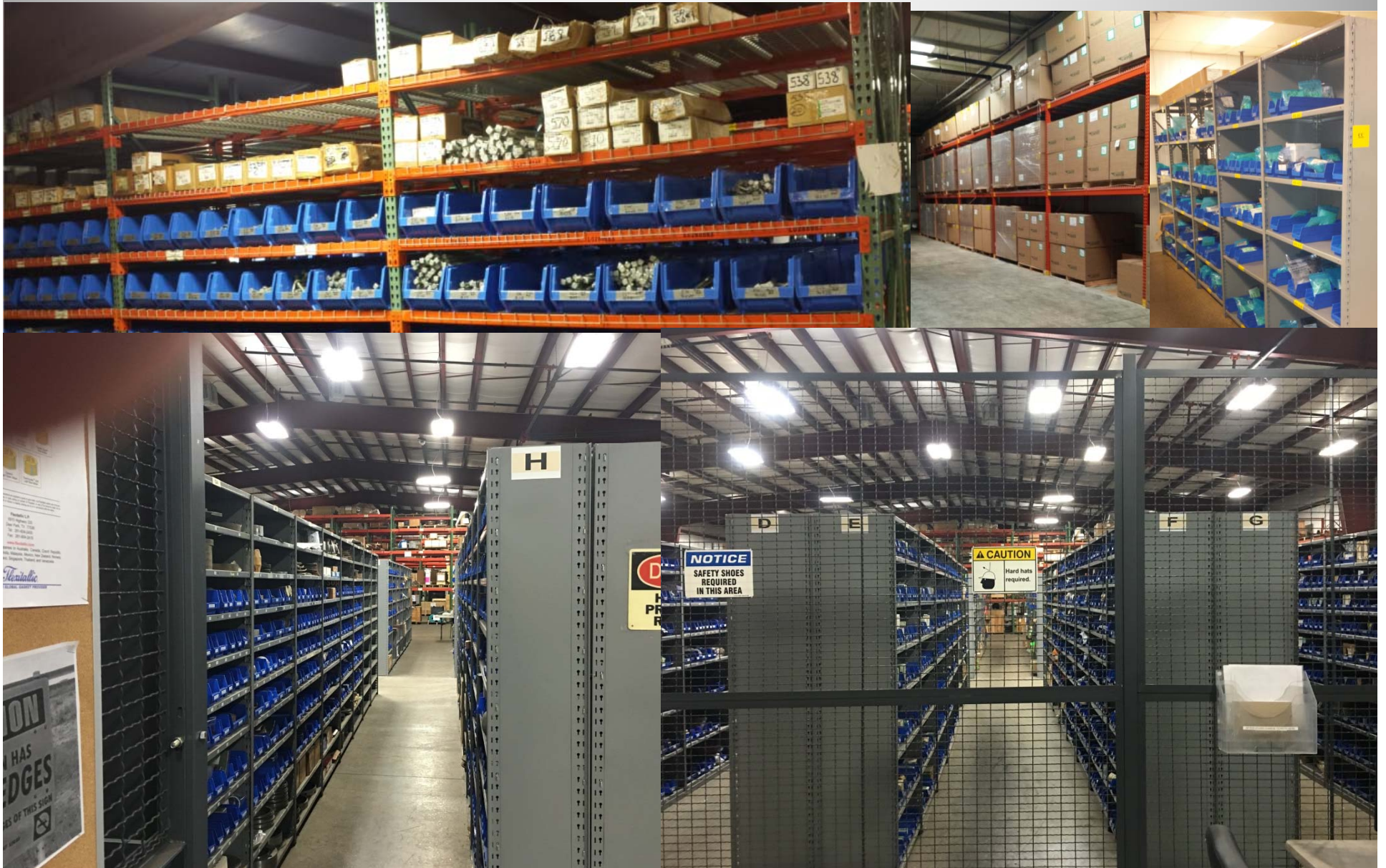
- Constructing Steel Racking
- Forklift Operation
- Steel Strapping (Banding material)
- Loading and Unloading of Trucks and Trailers
- Transporting material
- Propane tank change out (forklift)

# Know Skill Limits & Tools Don't Exceed Them.



**EKPC warehouse employees avoid rigging and operating equipment outside their expertise.**

# Good Housekeeping, 5S, & Signage





# Good Housekeeping, Work & Storage Practices Keep Everyone Safe



## Good Housekeeping (continued)





# Leadership Makes a Difference in Life & Death

## EKPC

“We understand that this is a long term commitment to the way we approach work every day. We don’t just want to be average... We want to strive for safety excellence.

And it’s worth it, because our employees are worth it.”



*Anthony Campbell*

Anthony “Tony” Campbell Pres. & CEO  
East KY Power Cooperative



# Questions & Discussion



**Safe by choice, not by chance - always go home safely.**



# Thanks from EKPC, your friends in Kentucky



A Rushmore Energy Cooperative