NATIONAL TRAINERS' EXCHANGE

EMERGING WORKPLACE HAZARDS:

Creating Adaptable and Innovative Safety and Health Training

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Hosted by

OTI Building Careers. Changing Lives.

In conjunction with

NIH National Institute of Environmental Health Sciences
Worker Training Program

Effective Systematic Plant Inspections and Audits: Driving Training Through Onsite Needs Assessments

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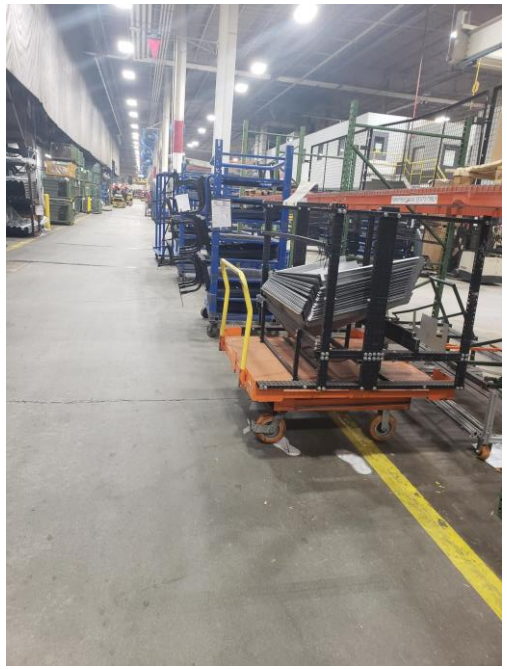
PRIMARY PURPOSE OF AN AUDIT IS RECOGNIZING AND ELIMINATING WORKPLACE HAZARDS



- "SAFETY IS NOT THE ABSENCE OF EVENTS; SAFETY IS THE PRESENCE OF DEFENSES"
  – Todd Conklin 'Pre-Accident Investigation'

WALKING WORKING SURFACES

WALKING WORKING SURFACES

ANNUAL JOINT H & S AUDIT

- An annual comprehensive health and safety audit of the workplace conducted jointly by Union and Management. The audit protocol and items included should be developed jointly utilizing materials from audit processes negotiated by the UAW at other companies, and/or the current employer audit process.

PURPOSE

- ✓ Provide a basic framework
- ✓ Jointly achieve high standards of Health and Safety performance
- ✓ Prevent serious injuries, illness, fatalities
- ✓ Protection and training for every worker
- ✓ Ensure compliance with federal state and local directives.

SCOPE

- ✓ Evaluation of established standards
- ✓ Government and company required training programs
- ✓ Program directives
- ✓ Recordkeeping requirements
- ✓ Facility floor assessments
- ✓ Interviews with employees

MEASUREMENT SYSTEMS

- MODULES
- COMMON CORE ELEMENTS
- FEDERAL & STATE STANDARDS
- RATING SYSTEM

MODULES

MODULE	Acceptable	Needs Improvement	Repeat Needs Improvement	N/A	Comments
Ergonomics	X				Joint Teams are effectively identifying and correcting stressors
Welding/ Cutting		X			Hot Work Permits – Fire Watch times incorrect

Common Core Scorecard

2019-20-21 Health & Safety Audit Sco0recard	(July 2019)	(July 2020)	(July2021)
Lockout/Tagout			
PIV			
Cranes/Hoists			
Injury/Illness			
Emergency Response Plan			
HazCom/GHS			
Confined Space			
Respiratory			
Hearing			
Ergonomics			
B.E.S.T.			
Fall Protection			
Contractor Safety			
Walking/Working Surfaces			
Machine Guarding			
Robotics & Cell Guarding			
Personal Protective Equipment			
Material Handling			
Electrical Safety			
Medical Surveillance			

GOVERNMENTAL & CONSENSUS STANDARDS

- Minimal Requirements
- Federal and State regulations
- OSHA 29 CFR 1910 – General Industry
- ANSI – NIOSH – NEC – NFPA – ASSE - CMAA
- Use OSHA Subparts as a Template*

* Related to your facility and worksite procedures

PRE-AUDIT PREPARATION

- SELF ASSESSMENT
- Advance Schedule Date and Duration of Audit
- Plant Receives 30 Day Notification of Audit
- Review and Discuss Previous Audit Results if Applicable
- Week Prior – Site Contacted To Establish Opening Conference Time and Audit Schedule

Cranes & Hoists: - The plant has documented and implemented an effective process of operating and maintaining all hoists and cranes as well as any associated lifting devices

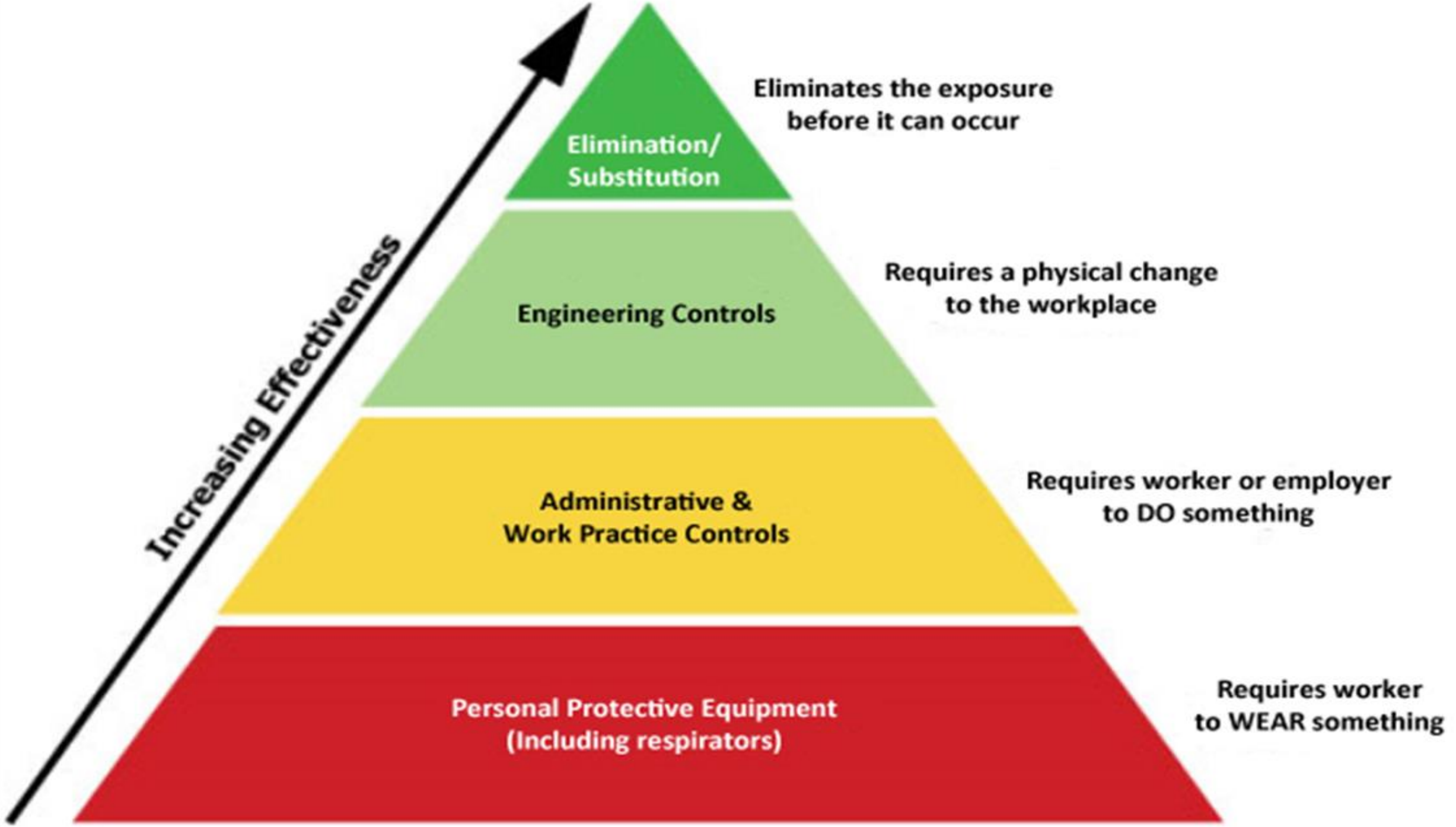
PROCESS FULLY IMPLEMENTED (ACCEPTABLE)	PROCESS PARTIALLY IMPLEMENTED WITH SUFFICIENCY PLANS	LIMITED OR NO IMPLEMENTATION OF PROCESS - NO SUFFICIENCY PLAN	Evaluation	*Auditor's Comments*
1) Plant follows a documented Crane/Hoist safety process	1) Plant follows an undocumented Crane/Hoist safety process.	1) Plant does not follow a formal plant Crane/Hoist process.		
2) A pre-operational safety inspection process and a preventive maintenance process for all cranes/hoists has been established	2) A pre-operational safety inspection process and preventive maintenance process is in place yet is not consistent throughout all operations.	2) A pre-operational safety inspection process and a preventive maintenance process for all cranes/hoists has not been established.		
3) All existing, new, modified, and/or altered cranes/hoists have written certification/documentation	3) Some existing, new, modified, and/or altered cranes/hoists have written certification/documentation	3) No existing, new, modified, and/or altered cranes/hoists have written certification/documentation		
4) Only employees who have documented training are allowed to operate and inspect cranes/hoists	4) Employees are trained to operate and inspect cranes/hoists yet it is not documented.	4) Employees are not trained on how to properly operate and inspect cranes/hoist.		
5) The rated load capacity of each crane/hoist is clearly marked on both sides of the bridge crane and legible from the floor.	5) The rated load capacity of some of the cranes/hoists is clearly marked on both sides of the bridge crane and legible from the floor.	5) The rated load capacity of each crane/hoist is not clearly marked on both sides of the bridge crane and legible from the floor.		
6) Remote pendant controls are always in the control of the operator to eliminate accidental	6) Remote pendants are sometimes in the control of the operator but other times are not.	6) Remote pendant controls are not always in the control of the operator to eliminate accidental movement or		
7) Loads on cranes/hoists are not left suspended when the controls are unattended	7) A few occasions of loads being left suspended whenthe controls are unattended were observed.	7) Loads on cranes/hoists are left suspended when the controls are unattended.		
8) Working under suspended loads does not occur and is not permitted.	8) Several instances of working under a suspended load were observed.	8) Working under suspended loads occurs and is permitted.		
9) All below-the-hook lifting devices have been load tested and certified by a qualified outside source	9) Some to most below-the-hook lifting devices have been load tested and certified by a qualified source.	9) All below-the-hook lifting devices have not been load tested and certified by a qualified outside source.		
10) Below-the-hook lifting fixtures are not made in-house	10) Some below-the-hook lifting fixtures were found to have been made in-house.	10) Below-the-hook lifting fixtures are made in-house.		
11) Cranes/hoists are inspected prior to usage on each shift. The inspections are documented.	11) Not all cranes/hoists are inspected and documented prior to usage on each shift.	11) Cranes/hoists are not inspected prior to usage on each shift.		
12) All cranes/hoists are inspected at least monthly to check the entire working system.	12) Some cranes/hoists are inspected at least monthly to check the entire working system.	12) No cranes/hoists are inspected monthly to check the entire working system.		
13) All cranes/hoists are inspected and certified annually by a reputable outside source. The inspection should include the entire length of the crane/hoist support system	13) Some cranes/hoists are inspected and certified annually by a reputable outside source. The inspection should include the entire length of the crane/hoist support system	13) No cranes/hoists are inspected and certified annually by a reputable outside source. The inspection should include the entire length of the crane/hoist support system		
14) Crane/Hoist Operation (29 CFR 1910.179): Upon initial assignment to job requiring the use of a crane or hoist. Employees required to operate a crane or hoist.	14) Some parts of the program, training documents, training program, or recordkeeping is missing or incomplete. Trainees may not be as proficient as they should be.	14) Major components of the program are missing or incomplete or the program does not exist. No training is documented and/or employees are not receiving training on this topic.		
		Record Results:		

Common Core #11 Machine/Equipment Safeguarding

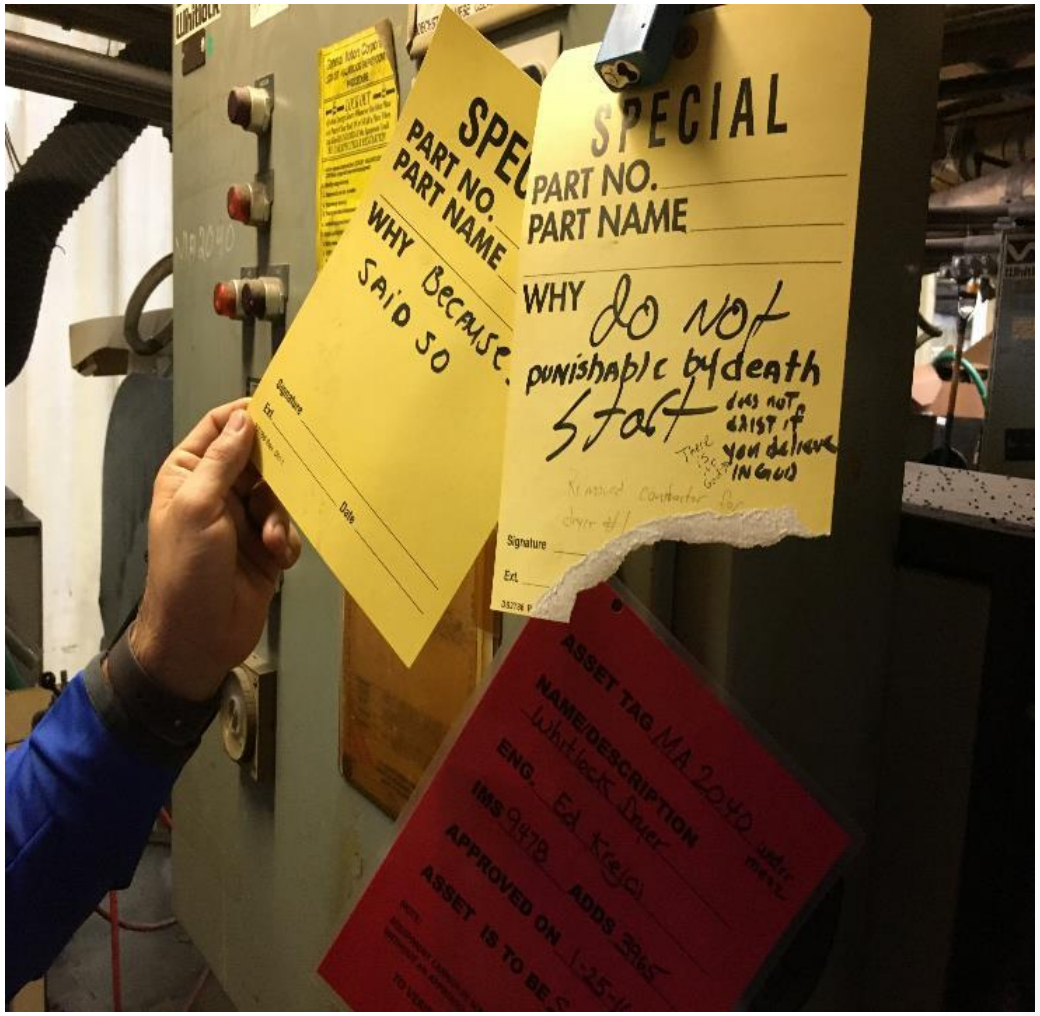
1a.	Are safeguards so designed and installed to protect operators from reaching over, under, around and through to gain access to a point of operation?	3	C
1b.	Are safeguards free of burrs, sharp edges and sharp corners?	4	C
1c.	Are safeguards designed in such a way that they safely contain all materials within the guarded area in case of a mechanical failure?	3	C
1d.	Are safeguards designed so not to create a safety hazard and to protect operators when running the machine / equipment? Example - Are guards sharp or door pressure closures safe?	3	C
1e.	Do safeguards permit proper visibility where required?	4	C
1f.	Do safeguards contain the coolant or lubricant from splashing out into walkways?	3	C
1g.	Are easy open safeguards, which cover pinch points, electrically interlocked so when the guard is opened or removed the machinery/equipment automatically goes into "E" stop mode?	4	C
1h.	Are rotary belts, pulleys, chains, sprockets, gears, shafts, etc. safeguarded?	3	C
1i.	Are shear, crushing, cutting, grinding, coupling operations safeguarded?	4	C
1j.	Are turnover or roll over fixtures and stations safeguarded?	n/a	C
1k.	Do fixed safeguards require personnel to use a tool to remove the guard(s)?	3	C
2a.	Machinery/equipment that uses 2 hand control is it anti tie down / anti repeat?	4	C
2b.	When a machine has a one handed activation switch, are there other safeguards in place to keep personnel from gaining access to a pinch point?	4	C
2c.	Are safety switches / machine limit switches reviewed during SOT walks to prohibit access to pinch point areas?	3	C
2d.	Are any safety switches / limit switches rendered ineffective or tied back on machinery/equipment?	1	C
2e.	Are electrical safety mats functioning properly, keeping the workforce out of the machine/equipment danger zone?	n/a	C
3a.	Are pre-operational checks being completed on all machinery/equipment light curtains?	2	C
3b.	Do all light curtain applications conform to the safe distance requirements? (63 inches or 160 centimeters)	3	C
3c.	Do all light curtains function properly and protect the person from the safety hazard?	3	C
3d.	Are machinery/equipment safeguards in place to keep people from reaching around a light curtain?	4	C
3e.	Are light curtain applications part of the machinery/equipment preventative maintenance program?	4	C
3f.	Does the light curtain control safety circuit meet all the requirements outlined in the Nexteer Application of Light Curtains?	4	C

FACILITY FLOOR ASSESSMENT

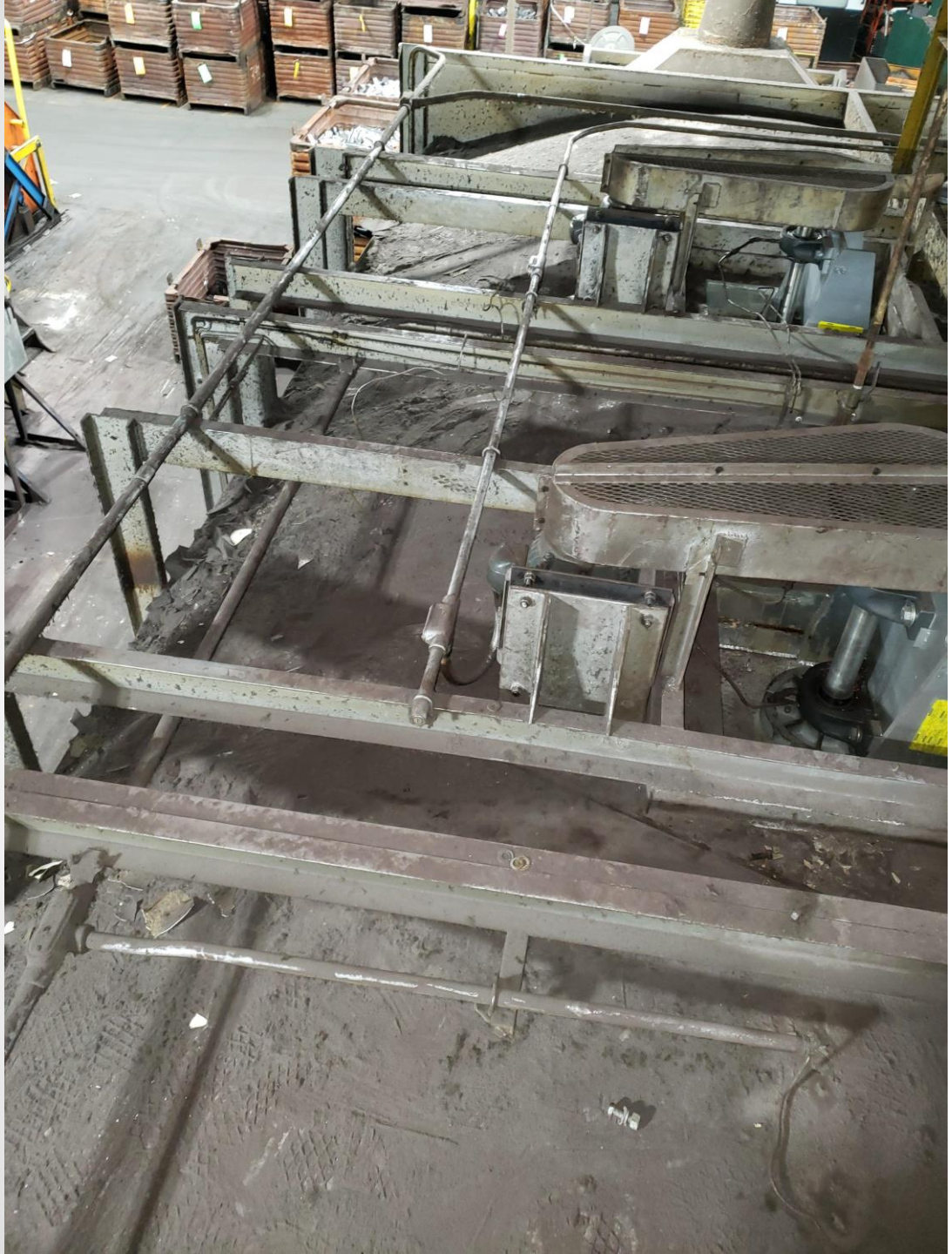
- Wall to Wall
  - Roof to Basement – Outbuildings, Garages, Storage Rooms, Cabinets, Mezzanines, Catwalks, Docks, Yards, Medical, Maintenance, Etc.
- Discussions with employees –
  - Safe Work Practices knowledge – Training requirements current – Emergency Response Knowledge - Issues of Concern
  - Mobile & Fixed Equipment Pre-Op inspections, PM records, Sampling
- Engineering Controls
  - Anchorage points, Interlocks, Guards, Chemical storage and use, Load ratings
- Workstation Safety
  - SUI's, SOP's, PPE, Ergonomics, Guarding, Ventilation
- Pedestrian Safety
  - Industrial truck interface, intersections, ramps, elevators

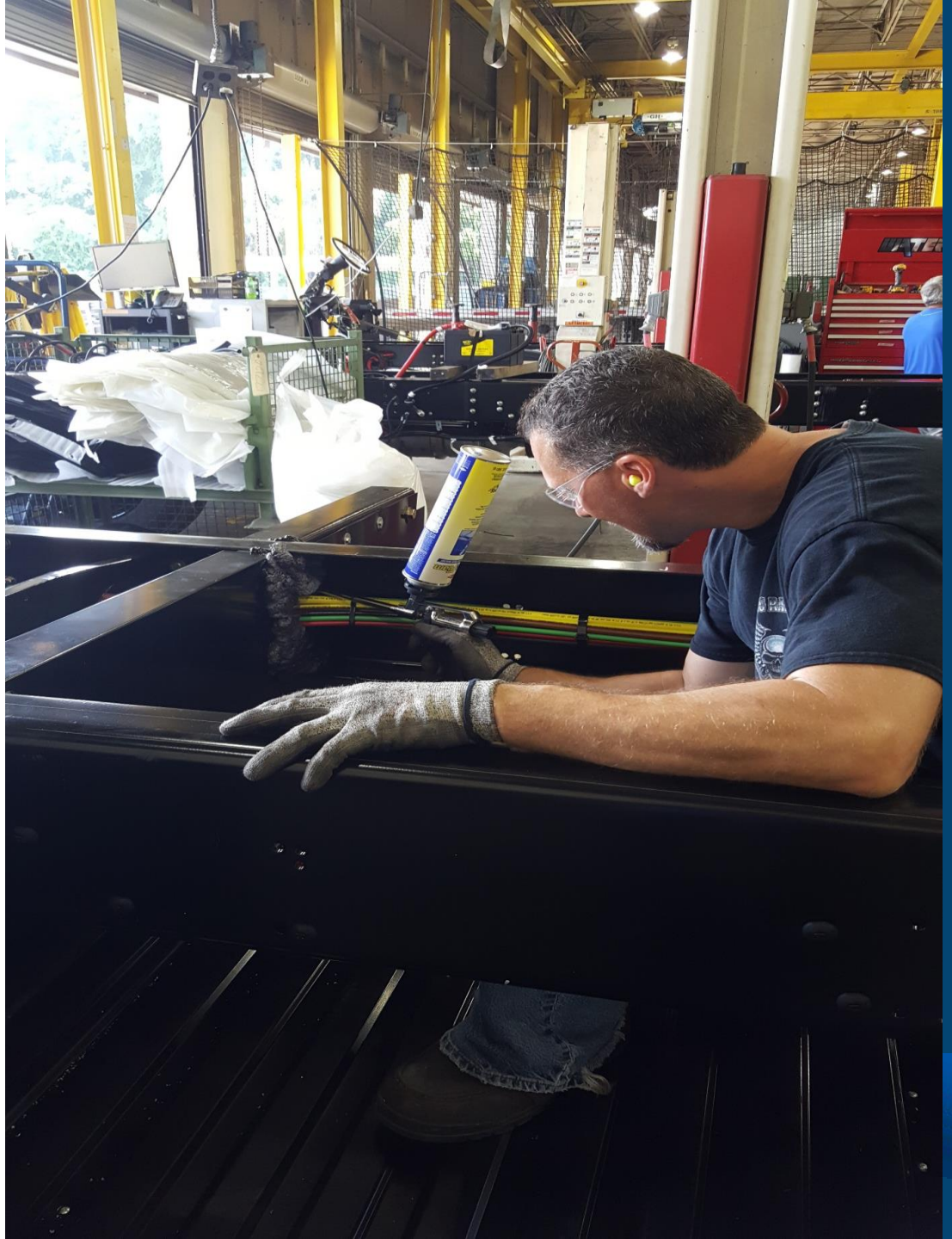

Increasing Effectiveness
Elimination/
Substitution
Eliminates the exposure
before it can occur
Engineering Controls
Requires a physical change
to the workplace
Administrative &
Work Practice Controls
Requires worker or employer
to DO something
Personal Protective Equipment
(Including respirators)
Requires worker
to WEAR something

Floor Assessment



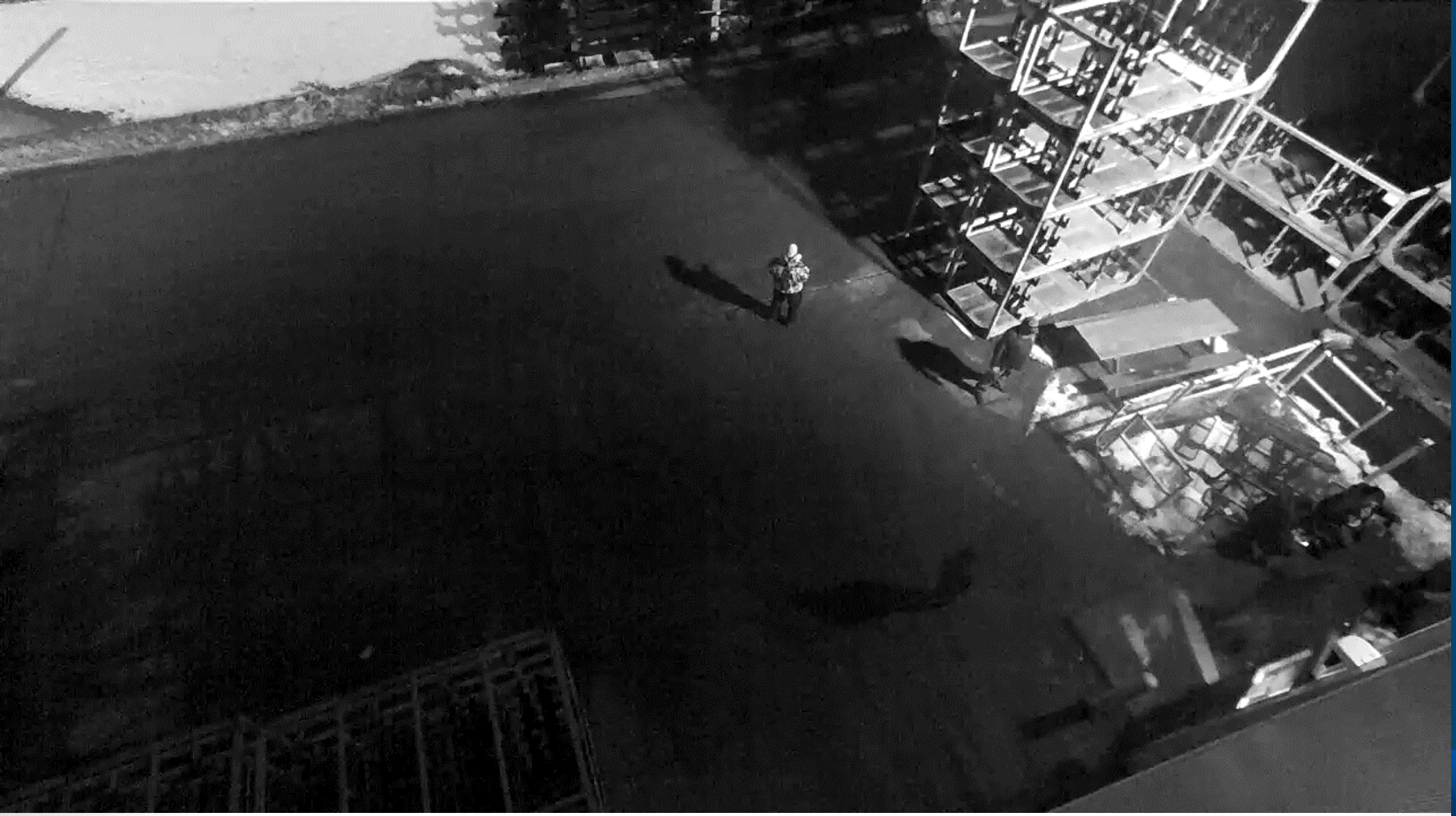
KEEP AISLES CLEAR AND ORGANIZED






DO NOT ENTER
FORKLIFT


TOYOTA
3901



Module/Element/Documentation Review

- Evaluation of recordkeeping requirements
  - Self assessment results
  - TRAINING RECORDS
  - Medical* – Facility – Maintenance
  - Open Health and Safety complaints/grievances
  - OSHA/State citations
  - Any other items found during floor assessment
  - PM's and required inspections on PIT's, Cranes/Hoists
  - LOTO assessments for Qualified Employees, Placards

*Medical - cleaning schedule, med storage, declination forms, Initiated Ergo RFC's, training records

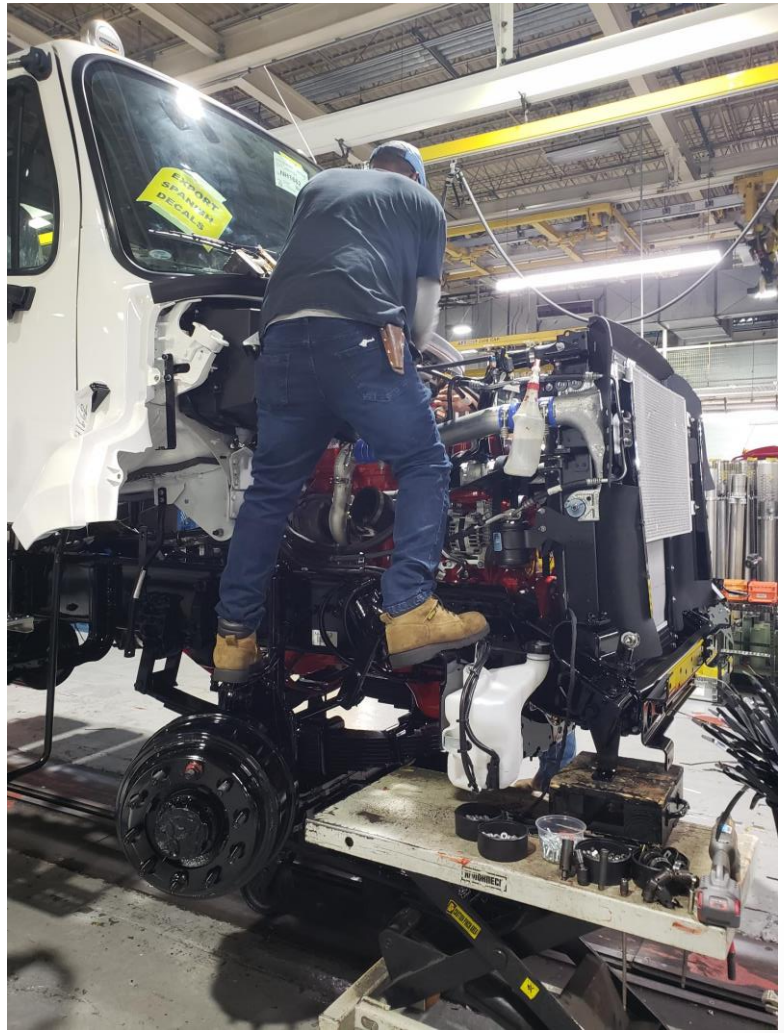
Module/Element/Documentation Review

Critical Elements Committees

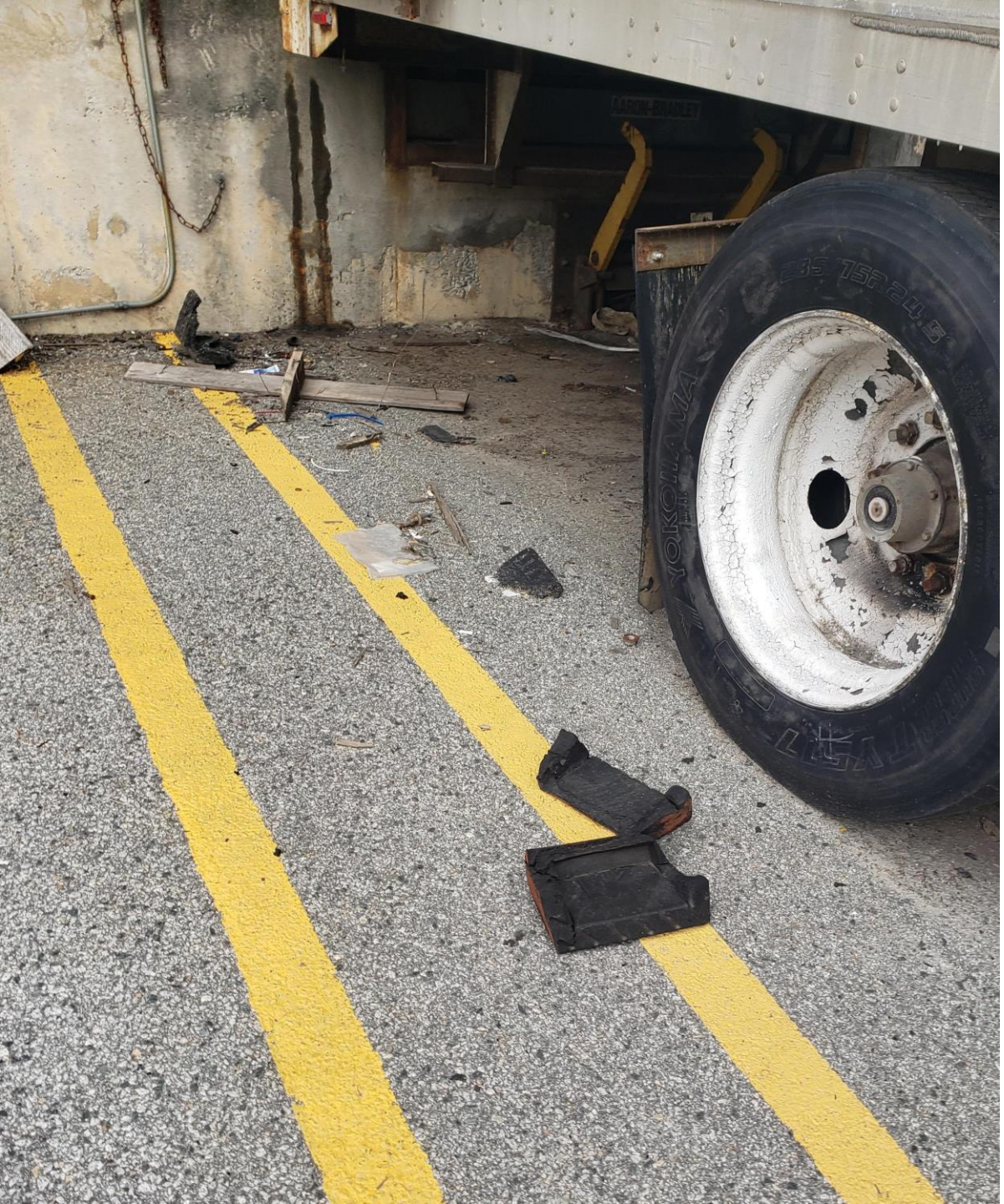
- Recommend Joint Committees be formed for Critical Audit Modules/Elements and be reviewed at least quarterly.
  - Confined Space Entry Procedures
  - Electrical Safety
  - Fall Hazard Control
  - Health and Safety Training
  - Lockout Procedure
  - Operator Instructions, Procedures, Information
  - Review of Technology
  - PRE-OPERATIONAL INSPECTIONS OF EQUIPMENT- FIXED AND MOBILE

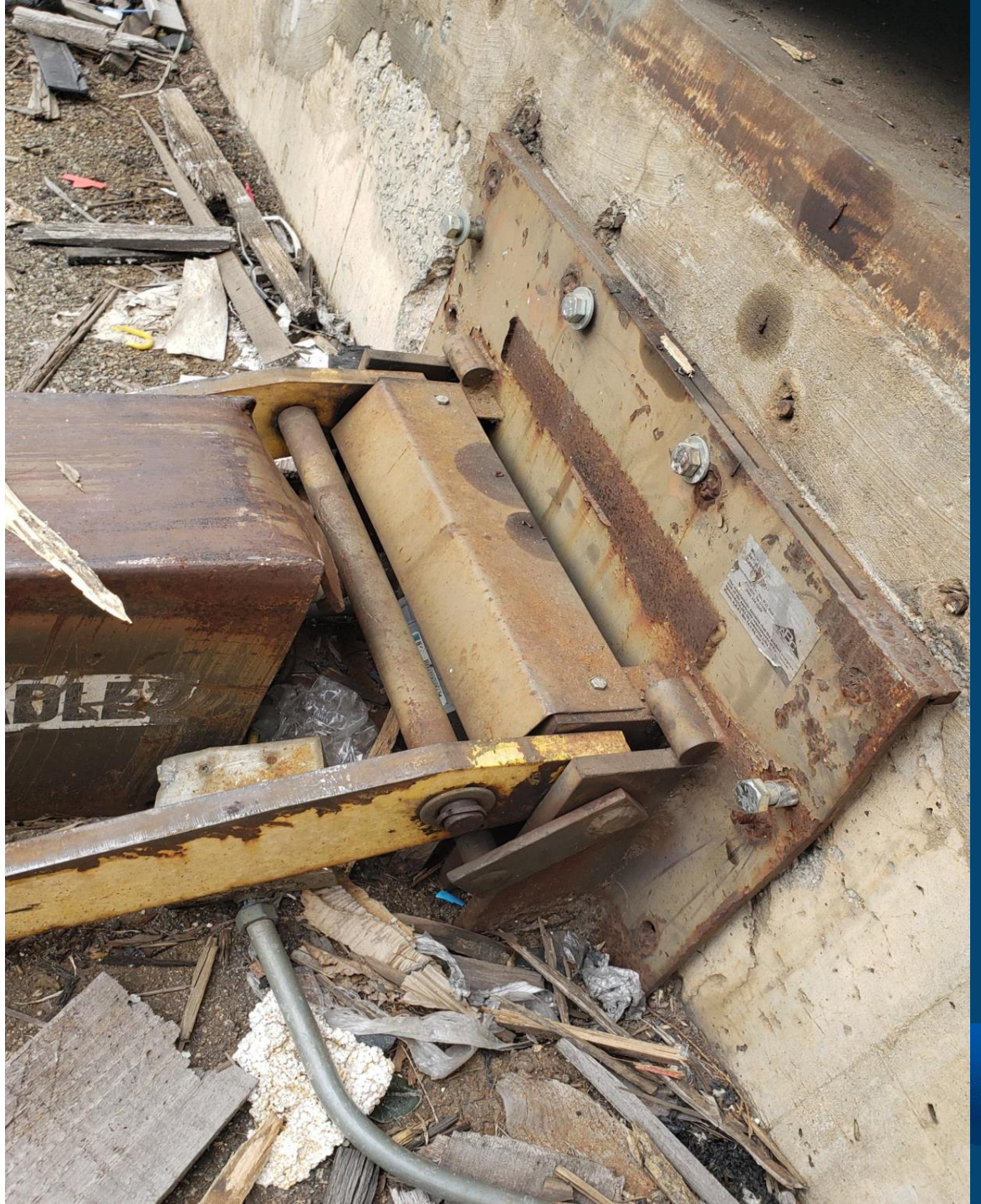
ENGAGE WITH EMPLOYEES

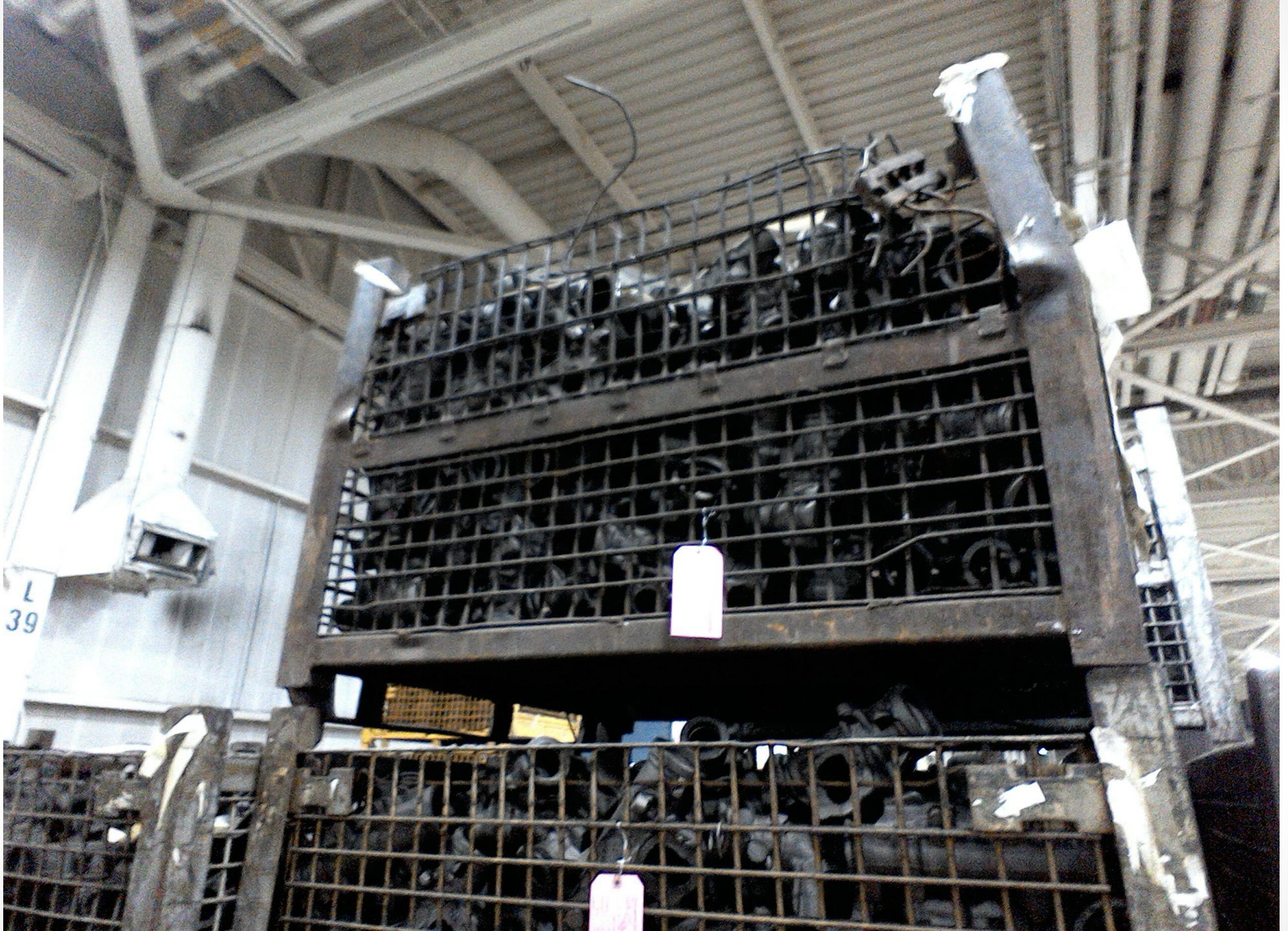
- **Discussions with employees -**
  - Safe Work Practices knowledge
  - Training requirements current
  - Emergency Response Knowledge
  - Issues of Concern
  - Mobile & Fixed Equipment Pre-Op inspections
  - Licensed to operate
  - Is PM performed – records – evidence
  - Hazards of operation not running as designed



- *Employees have information we need to assess hazards*
- *Non-threatening approach*


YOKOHAMA

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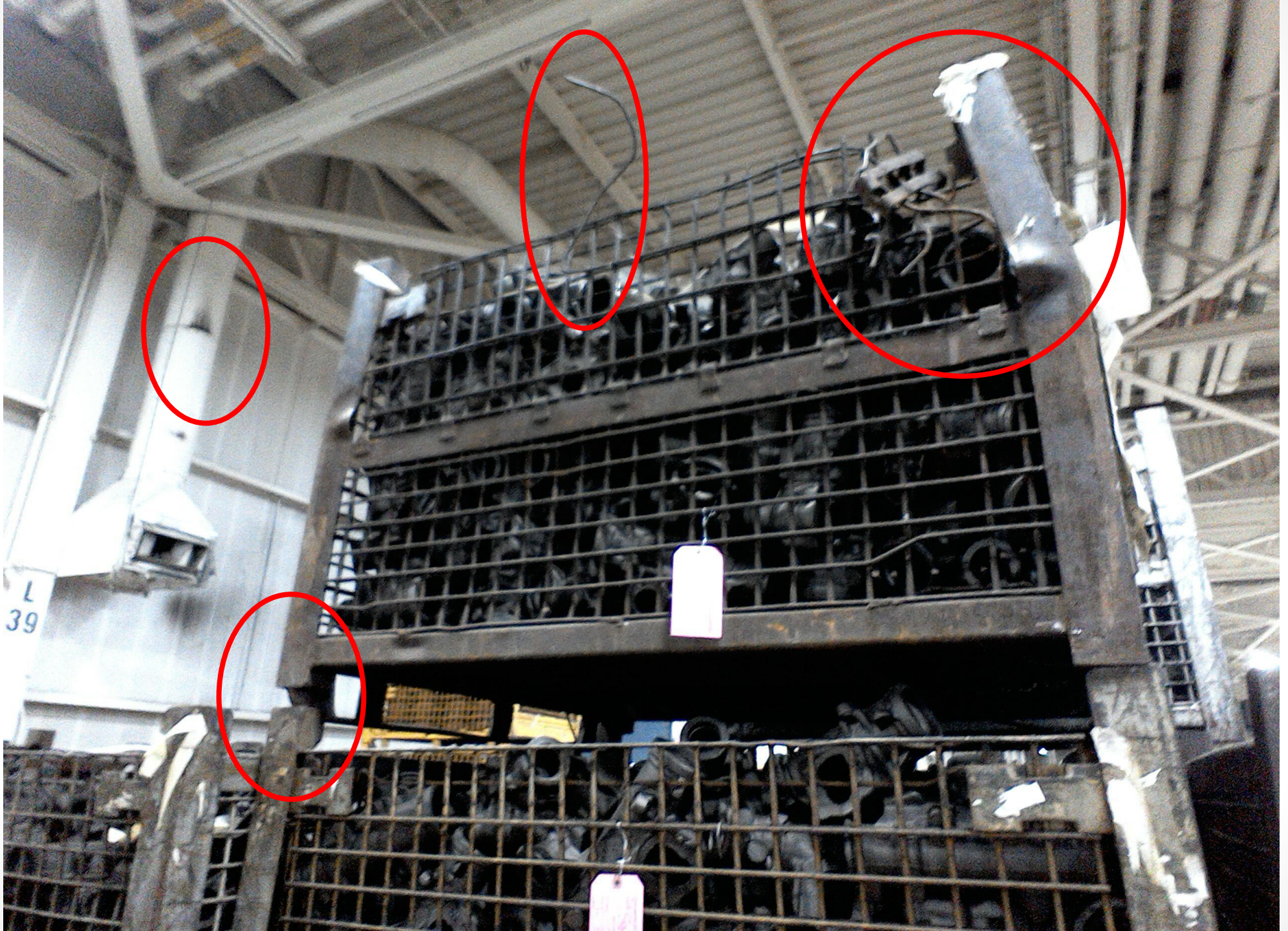
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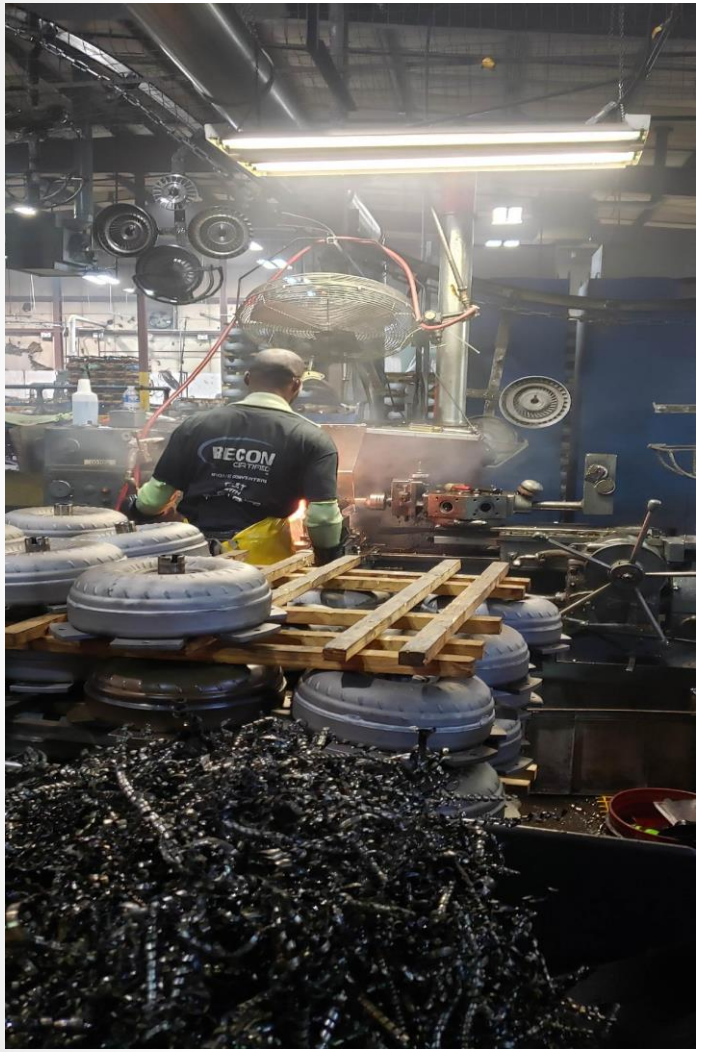
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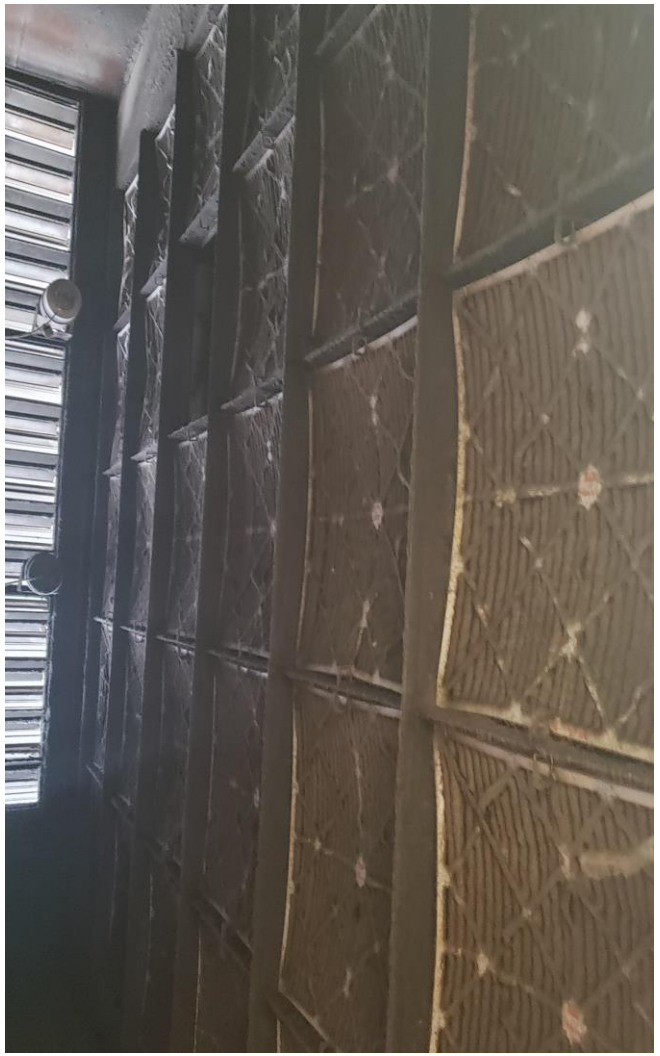


MEGAbeat

CLOSING CONFERENCE

PREPARATION

- Joint Audit Team meets to discuss findings – concur
- Present findings to Local Joint Safety Team
- Present findings to Local Joint Leadership
- Prepare Closing Conference Documents/Pictures/Materials

CLOSING CONFERENCE

- **Formal closing**
  - Should be attended by all who were present at Opening Conference
  - Review audit findings
  - Strengths and deficiencies discussed
  - Pictures reviewed
  - Scorecard presented
  - Comments/corrective actions/follow-up

QUESTIONS???