



Lunch Box Safety Talks *Safety Over Sandwiches*

Harvest Safety Strategies

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Keep the
Focus!



Resources

Supervisor Talking Points

NGFA Harvest Safety Week

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Today's Focus

Accountability

Onboarding

Hazard Analysis

Worker Fatigue

Moving Vehicle Hazards

Truck Receiving Safety

Housekeeping/Preventive Maintenance

What is Accountability?

Definition: responsible to someone or for some actions.

Accountability during harvest is challenging.

What makes harvest different:

- Seasonal workers

- Pace of the day

- Customers

- Multiple activities going on at one time

- Long hours





Accountability

Establish a work environment in which people take responsibility for **their personal safety** and **team safety performance**.



Who is Accountable for Safety?

Senior Management

Managers/Supervisors

Operations/Front-Line Employees

Accountability

Accountability is a positive thing.

- Often associated with control and discipline.
- We must believe that our teams want to succeed and help them do so.

A strong culture of accountability around safety minimizes **exposure** and the risk of injuries.

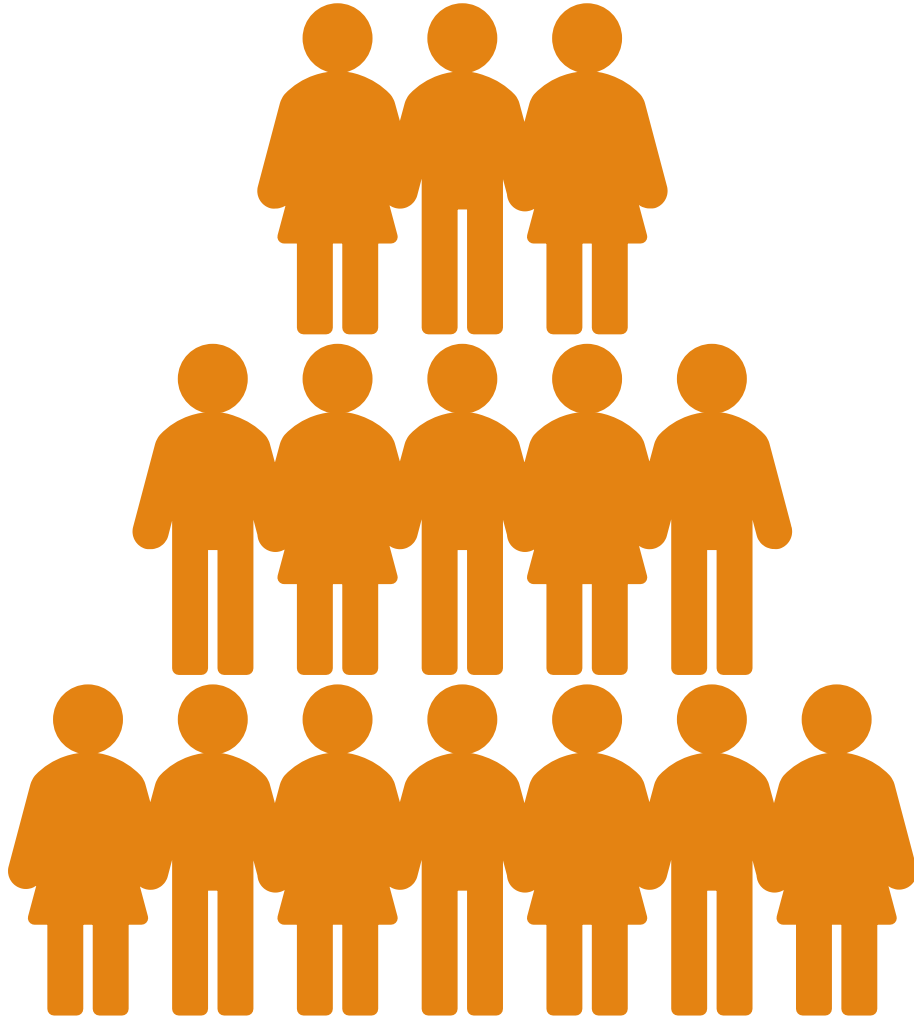
A strong culture of accountability is proactive rather than reactive.



Accountability

Focus on commitment rather than compliance:

- Compliance climate is one in which people only do what is necessary.
- Commitment climate is one that encourages people to take ownership of issues and exceed that which is expected.



Accountability

Effective leaders help people take responsibility.

Ensure that they have resources to accomplish their task:

- Knowledge
- Tools
- Support
- Encouragement

Without resources employees often feel resentment or distrust.

Difficult to achieve success without the right resources.



Seasonal Employees

Employees in their first three months on the job are more than three times the risk for a lost time injury (Toronto Based Institute for Work and Health)

Reason?

- Unfamiliar tasks
- Unsure of Responsibilities
- Not comfortable speaking up about hazards

Large number of seasonal employees = large number of new employees



Onboarding

The process of providing necessary resources to employees so that they can become a successful member of an organization

- Knowledge
- Tools
- Resources
- Behaviors*

Powerful tool that allows employees to gain skills, knowledge and resources to ensure success

Does not only benefit employees but also the business:

- Higher productivity
- Satisfied customers
- Employee safety



Best Practices

Do not “frontload” learners with information:

- Bulky manual
- Time spent in front of a computer
- Too much reading

Learner considerations

- Reading and comprehension ability
- Language barriers
- Scope of Work

Allow learner a way to:

- Provide feedback
- Ask questions
- Interact with coworkers

Manage the hiring process to allow adequate time to onboard employees

Considered a phase onboarding approach

Start work with “low-exposure” activities first

Best Practice – Phased Approach

Best Practices - Mentoring

Pair new employee with an experience worker

Begin with observation and shadowing

Slowly introduce activities and hands-on training





Hazard Analysis

“BREAK IT DOWN!”

Risk in the Work Environment

Risk is inherent and many situations (routine or non-routine)

Recognize when risk exceeds what is planned for

Step back and re-evaluate our actions/behaviors

Risk increases with non-routine work

Maximum Exposure

Plan

Minimal Exposure



Non-Routine Work

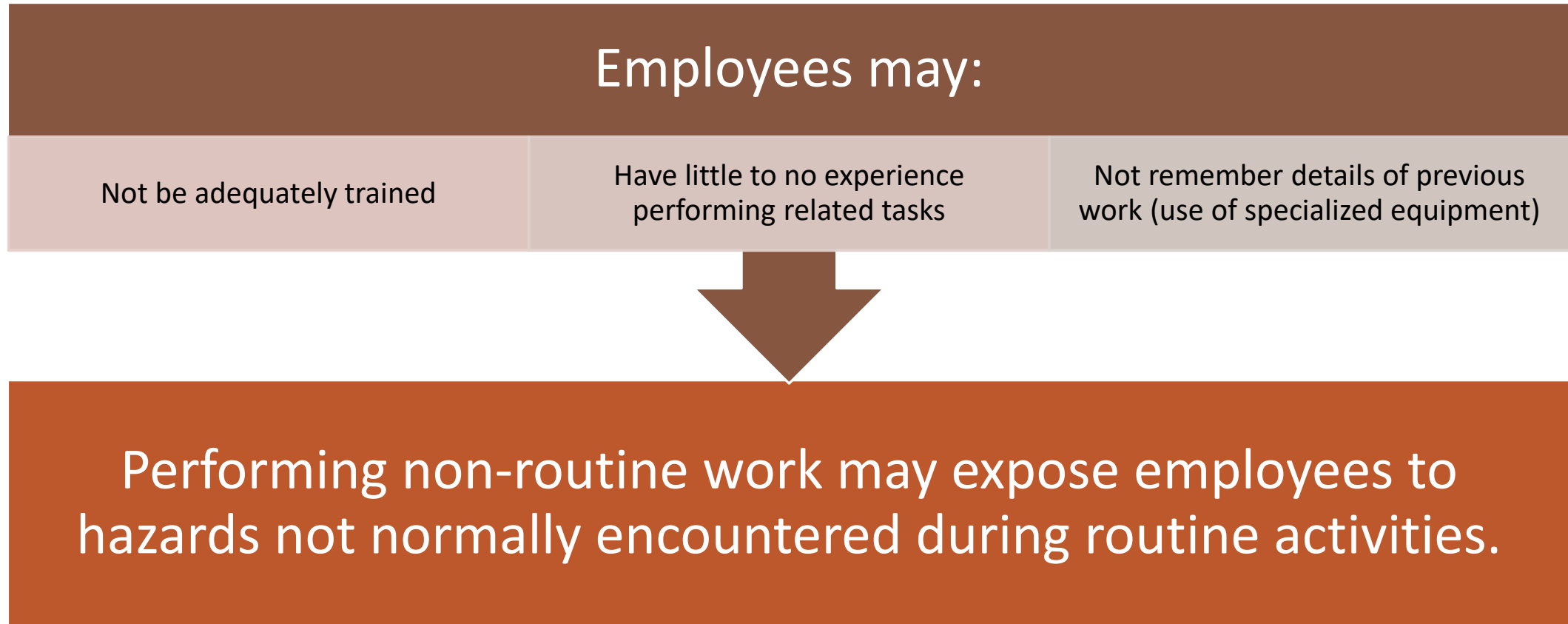
Merriam-Webster Definition: not of commonplace or repetitious character.

Employees can be seriously injured or killed performing non-routine work.

Can place employees in hazardous situations that are not expected or understood.

Non-routine work will occur during harvest (i.e. equipment breakdowns, etc.)

Why is Non-Routine Work Hazardous?



Hazard Analysis



Steps



Hazards



Actions



Hazard Analysis Best Practices

Pre-Shift

Tasks for the day (routine and non-routine)

Steps – Hazards – Actions

Repetition

Worker Fatigue

THE BUCKET MODEL



Worker Fatigue Statistics

Increases risk of injuries

18% greater during evening shifts

30% greater during night shifts as compared to days

37% greater when working 12 hours or more



Symptoms of Fatigue

Forgetfulness

Apathy

Reduced Vigilance

Poor Communication

Poor Decision-Making

Slower Reaction Time

Irritability



The Bucket Model

What drains the bucket (us)?

- Excessive intensity and duration of physical/mental effort
- Hazardous environments/climates
- Worries, conflicts, responsibilities
- Long hours, shift work
- Sleep loss
- Poor nutrition
- Inadequate exercise



The Bucket Model

What fills the bucket (us)?

Recuperation – Rest and Adequate Sleep

Nutrition

Hydration

Time away from work

Friends and Family

Exercise



Reducing Fatigue

Schedule resources accordingly

Plan for ample breaks, lunches, time away from the facility

Communicate issues and concerns

Eat regularly throughout the day

Stay hydrated

Dress appropriately for the environment

Maintain a safe work area

CREATING A BARRIER

Personal Protective Equipment



Personal Protective Equipment (PPE)

PPE can help protect workers from hazards in truck receiving areas, work zones, and near vehicle traffic:

Head Protection

- Workers may strike close clearances (i.e. opening hopper bottom gates)
- Falling objects – Work performed above truck receiving area



Personal Protective Equipment

Eye Protection – Can protect against flying objects and dust in the work area:

- Safety glasses (dust tight)
- Dust Goggles

Hand Protection – Can help protect hands from sharp edges or burrs on gate hopper handles:

- Leather work gloves

Hearing Protection – Can help protect employees from noise exposure:

- Monitor the area for noise levels/exposure
- Require or recommend based on results



Respiratory Protection

Grain dust can pose a health hazard to workers

Monitor exposure levels

- OSHA PEL for grain dust is 10 mg/m³ TWA
- OSHA PEL – Particulates Not Otherwise Regulated: 15 g/m³ TWA

Require or recommend use of particulate filtering facepiece respirators based on results

Voluntary-Use – information in Appendix D of OSHA's Respiratory Protection Standard 1910.134

HAZARDS

Moving Vehicles

Struck-By Hazards

According to OSHA, Struck By is defined as an injury produced by forcible contact or impact between the person, object or piece of equipment.

According to National Safety Council: Struck-By is defined as anything that can move and strike a worker forcefully or abruptly.





Back-Over Hazards

A back-over incident occurs when a backing vehicle strikes a worker who is standing, walking, or kneeling beside or under a vehicle.

Generally Caused by:

- Driver not being able to see a worker in their blind spot
- Workers not hearing back-up alarms
- Employee retrieving equipment or tools under vehicles

Reflective/High Visibility Clothing

Reflective/High Visibility Clothing

- Intended to clearly distinguish the worker from the environment
- Consists of background material, retro-reflective bands, and combined performance material
- Combined performance material is a combination of retro-reflective material and performance material that separates the two



High-Visibility Clothing



Retro-reflective material reflects light back to the source when it shines on it. Appropriate during night and twilight periods.

High visibility clothing/hardhats appropriate during daylight hours, but not at night or twilight periods when reflectivity is needed

Usually fluorescent yellow or fluorescent orange-red

Synthetic materials – assess work areas and activities

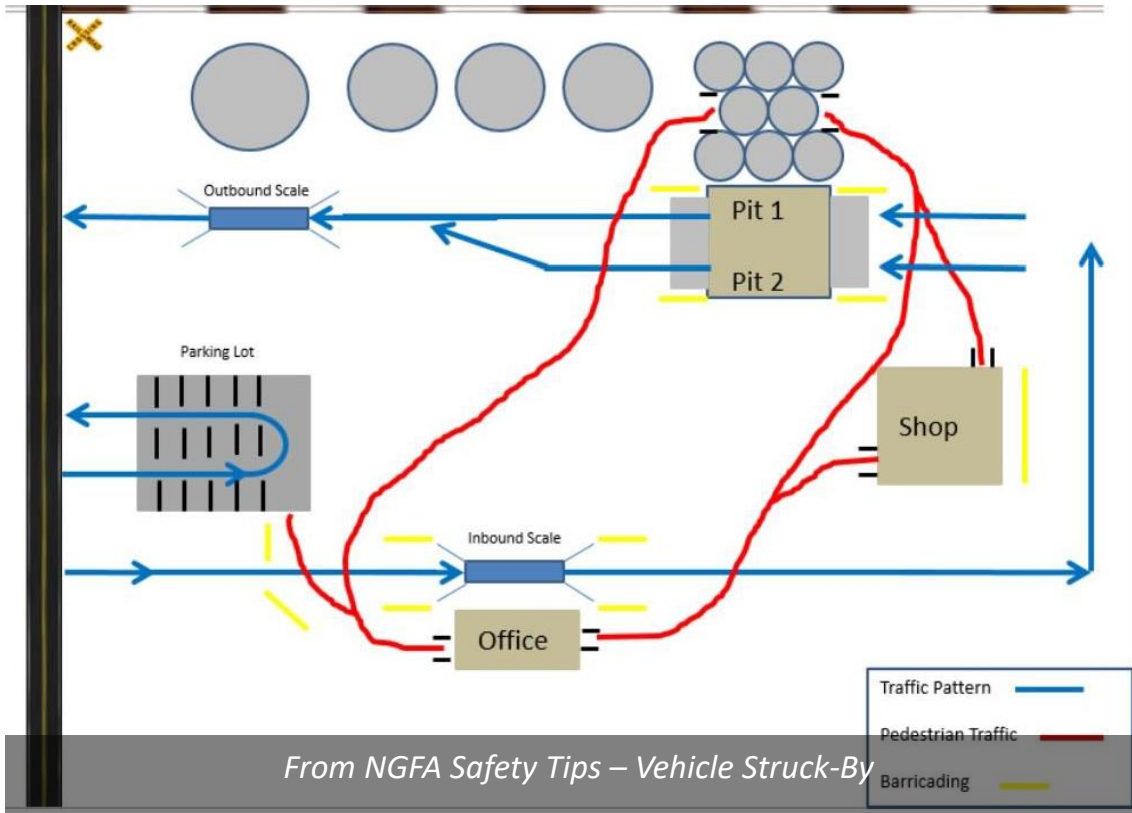
FR safety vests available

Preventing Back-Over/Struck-By Incidents

Develop internal traffic control Plans

Plans should coordinate the flow of moving equipment, worker, and vehicles to eliminate vehicles and employees from crossing paths

Establish work zones (storage piles, bunkers, storage structures, etc.)

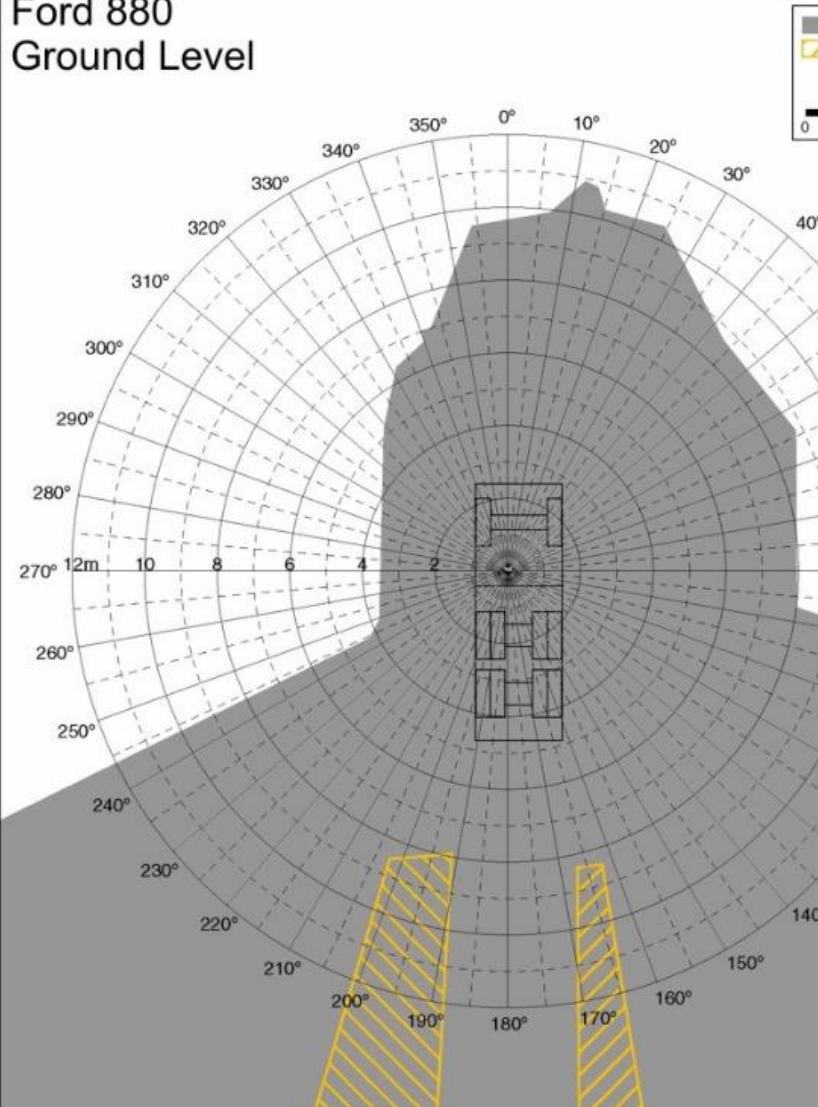




Preventing Back-Over/Struck-By Incidents

Eliminate cell-phone usage in traffic areas, work zones, and receiving areas

Ford 880
Ground Level

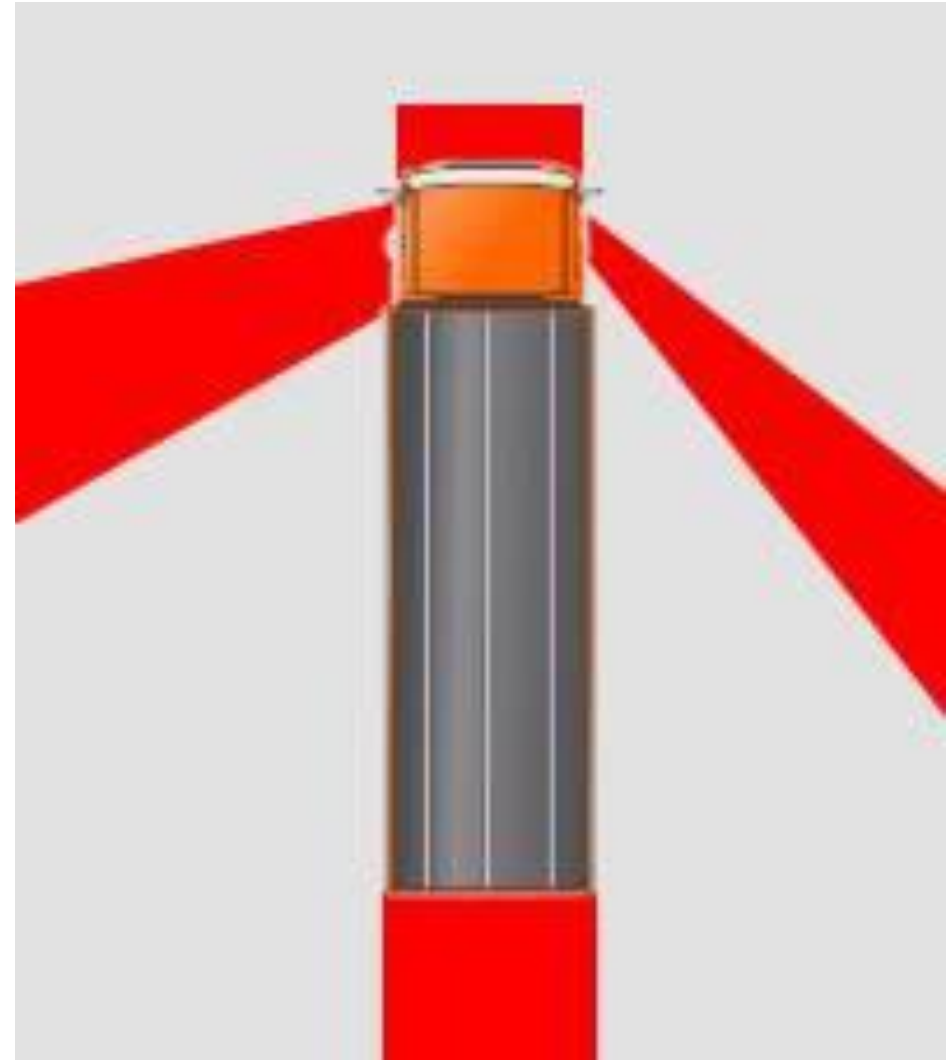
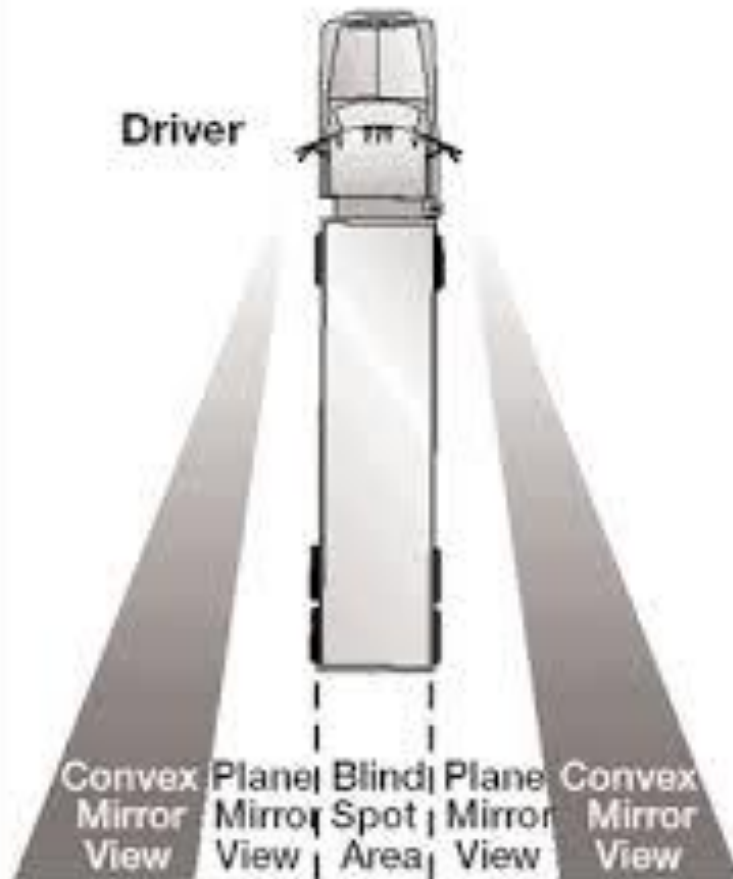


Preventing Back-Over Incidents

Train Employees on the blind spots behind and around vehicles.

- Put Workers in the driver seat to experience what they can see and what they can't
- Review blind spot diagrams provided by NIOSH

FIELD OF VISION USING A CONVEX MIRROR





Preventing Struck-By Incidents

Define pedestrian walkways and vehicle traffic areas

- Barriers
- Signage
- Striping

Post signs at doorways that enter into traffic/vehicle areas



TRUCK RECEIVING

SAFE PRACTICES



Safe Practices

Ensure driver places the vehicle in neutral and sets the parking brake

Follow the company's policy on driver positioning

- In-vehicle/cab
- In designated area or control room



Safe Practices

Establish the “red zone.” The red zone is any area within arm’s length of the vehicle.

Communicate with the driver prior to stepping into the red zone (neutral/Parking Brake, etc.).

Communicate with the driver prior to crossing in front-of behind vehicles (physical confirmation).

Remember: if you cannot see the driver in the mirror, he or she cannot see you. Maintain constant communication with the driver

Never cross under trailer

Avoid crossing in between vehicles



Safe Practices

Inspect hopper gate handles prior to use looking for sharp edges, burrs, etc.

Maintain proper body mechanics when operating gate openers

- Keep feet shoulder width apart, maintain back's natural S-curve (straight) and bend knees
- Grasp handle firmly and operate handle slowly



Safe Practices

When directing vehicle movement stay in a position visible to the driver

Ensure that a designated person directs movement

Avoid walking on surfaces covered with grain

Clean spilled grain frequently

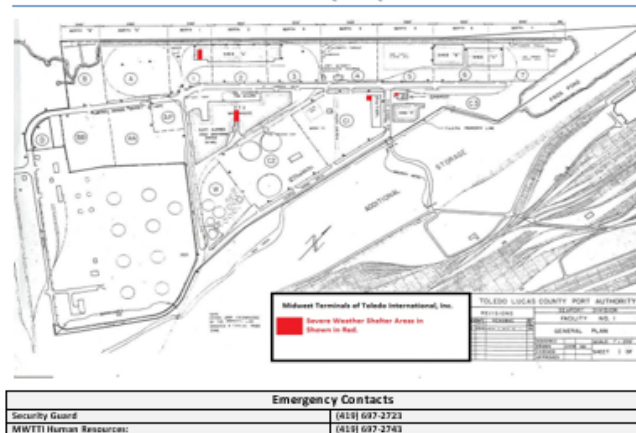
Keep persons not involved in the receiving process out of the area

Safe Practices

Driver Safety Requirements

- Check in and out at the guard shack at the facility entrance.
- Driver must have a TWIC card or be escorted by a MWTTI employee while on company property.
- Drivers should remain in their trucks at all times except when performing work related activities.
- Wear the following required personal protective equipment when outside of the cab:
 - Hardhat
 - Safety Glasses
 - Reflective/High Visibility Clothing
- Forklifts, loaders and pedestrians have the right of way.
- Obey all traffic signs and posted speed limits.
- Report all vehicle accidents, spills, injuries and property damage to MWTTI management.
- Do not park within 8 feet of any railroad tracks.
- Smoking is not allowed on MWTTI property.
- Chock wheels prior to loading/unloading activities at loading docks.

Facility Map



Utilize driver handout with vehicle route, PPE requirements, safety rules, EAP, No Smoking policy, etc.

Use the JSA process for receiving areas and work zones

Housekeeping & Maintenance





Housekeeping/Maintenance

Effective housekeeping not only eliminates fugitive dust, but also can eliminate the potential for falls on the same level caused by worker slips or trips.

Eliminate grain on walking surfaces

Store equipment such as brooms and shovels on designated areas

Five S Approach - shadow board

Ensure that truck dump grating is properly maintained (2.5 inch spacing) to eliminate trip hazards



Pre-Planning - Housekeeping

Need for consistent attention to housekeeping:

- Increased grain volumes

- Increased dust generation

Housekeeping

Housekeeping program must address priority areas (1/8 inch):

- Areas within 35 feet of inside bucket elevators

- Floors of enclosed areas containing grinding equipment

- Floors of enclosed areas having grain dryers

Housekeeping/Maintenance

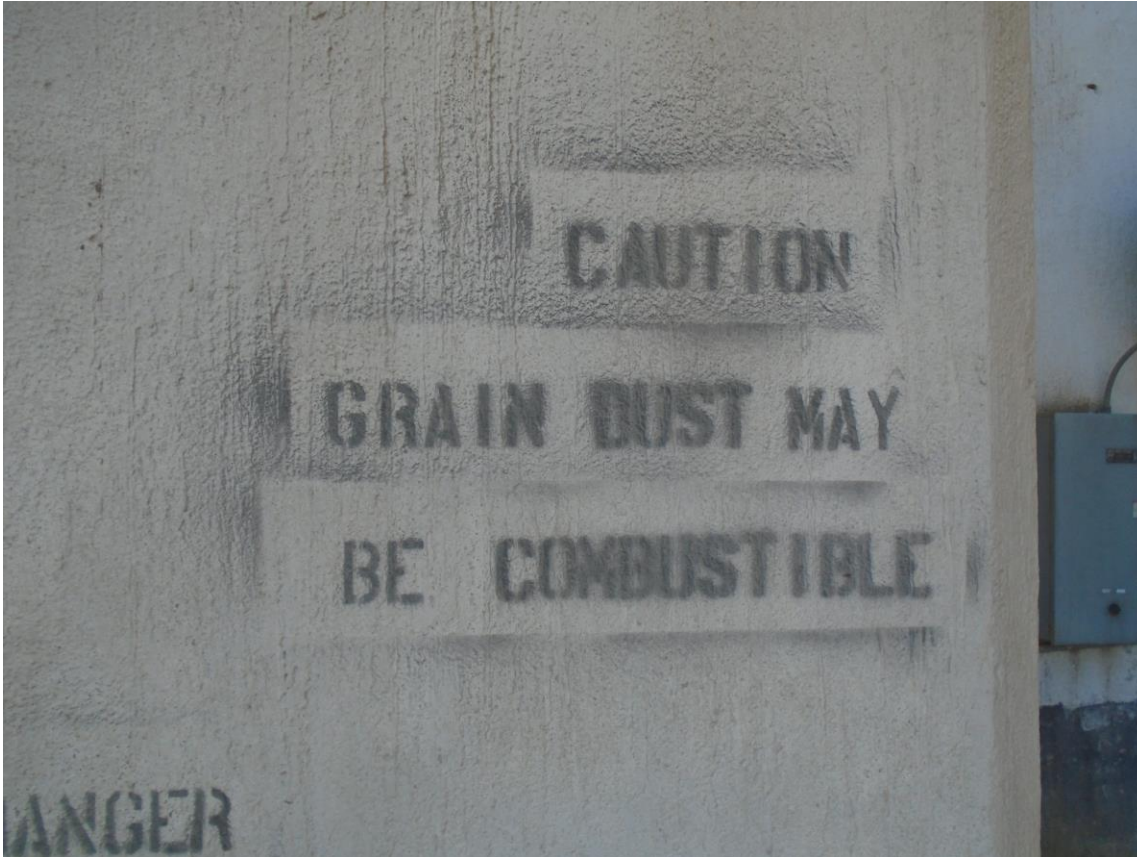
Grain dust is combustible

Difficult to eliminate

Dust can contribute to an explosion or flash fire

Can be controlled:

- Ensure dust collection systems are working correctly
- Ensure hazard monitoring systems are working correctly
- Focus on ignition sources – faulty electrical equipment, bearings, belt tracking, smoking, etc.
- Ensure drivers are aware of company's "No Smoking Policy" and WHY!





Housekeeping

Use of Compress Air

- All machinery presenting an ignition source is shut down
- All other known potential ignition sources are removed or controlled
- Recommend using a compressed air cleaning permit



Please Have a Safe and Prosperous Harvest

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