North Dakota Asphalt Conference

Worker Safety In Construction Zones

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What Are The Hazards in Traffic Construction Zones

- 1. Speeding
- 2. Following Too Close
- 3. Merging
- 4. Distractions
 - A. Manual
 - B. Physical
 - C. Cognitive

What Can These Hazards Lead To?

Struck By Hazards

-More than 1 in 3 incidents for Construction Workers involve "Struck By Vehicle" deaths

How Do We Keep Our Workforce Safe?

Personal Protective Equipment











Hierarchy of Controls Most effective Physically remove Elimination the hazard Replace Substitution the hazard Engineering Isolate people from the hazard Controls **Administrative** Change the way people work **Controls PPE** Protect the worker with Personal Protective Equipment Least effective

1. Internal Traffic Control Plan

- Plan entry and exit to and from the worksite to reduce exposure to traffic
- > Legible traffic signage at point(s) of hazard
- Barricades?

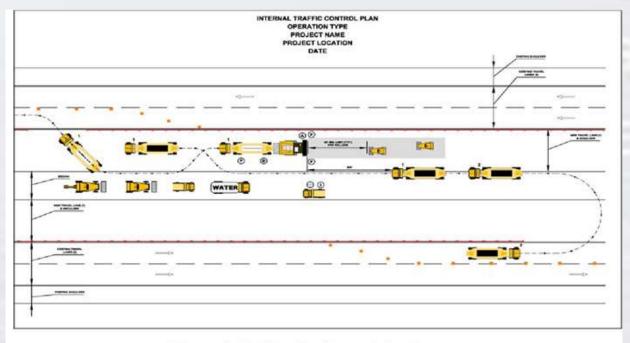
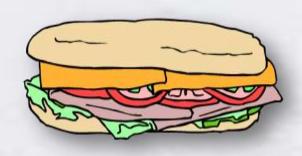


Figure 5. ITCP with all remaining features

1. Internal Traffic Control Plan

- Consider Worker Behavior When Developing the ITCP
 - ✓ Determine locations where workers are likely to go and ensure safe routes to get there









2. Conduct a hazard assessment of the worksite

- Thorough assessment of potential worksite safety hazards
- Plan for work conducted in close proximity of a public road or highway (Traffic Stoppages?? Trucks entering a Roadway??

Get the Full Picture

Vith a Hazard Assessment

3. Communicate Safety Plan with Workers

- Beginning of the work
- Daily/Bi-Weekly
- Tool Box Safety Talks
- Discussion of "Near-Miss Incidents



- Visibility with regards to location around equipment
- Visibility with regards to wearing High Visibility Clothing
- Blind Spots of Vehicles/Heavy Equipment





- Poor Worker Position
 - ✓ Impression is that the equipment operator always knows where the ground personnel are located
 - ✓ Never place yourself in an unsafe, compromised position

- On-Scene Site Rules and Regulations
- Dangers to Look For/Be Aware of
 - ✓ "See and Be Seen"
 - ✓ Stay Within The Work Zone
- PPE Used and ProperUse LIMITATIONS TOO



- Communications
 - ✓ Hand Signals
 - ✓ Two Way Radios
 - ✓ Make others aware of unsafe work practices





- Worker Habits and Behavior
 - ✓ Cell Phone Use
 - ✓ Aware of Machine Back-Up Alarms



- High Risk Operations When the "ordinary" changes, incidents are more likely to occur
 - ✓ Backing Equipment/Vehicles
 - ✓ Weather/Environmental Conditions
 - ✓ More Equipment/Vehicles onsite and moving
 - ✓ Repair Vehicles on Site





5. Driver's and Operators -

- Safe Backing Practices Key Principles
 - ✓ Should be controlled and used only when necessary and under specified conditions
 - ✓ Clear communication between operator and workers on foot before backing begins
 - Everyone understands blind areas around equipment

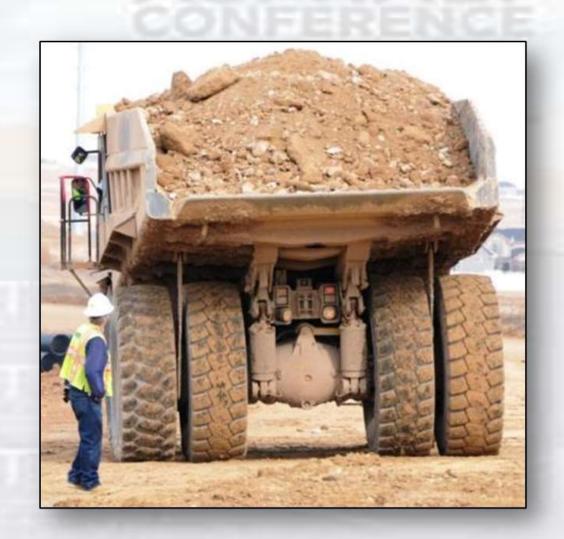


5. Driver's and Operators -

Safe Backing Practices – Key Principles

-"GOAL" – "Get Out and Look" - Walk around vehicle to check for hazards –

-Use a spotter whenever possible



Worker Safety Know Your Surroundings!!



Thank you!!

Questions?

Safety is The Most Important Project Tool Ever!!

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