

**National Grain
and Feed Association**

Slips, Trips, and Falls; Hazards and Best Practices

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SIF = Severe Injury or Fatality

- Hazards identified as “**SIF**” have the potential to cause **fatalities** or **severe life changing injuries**



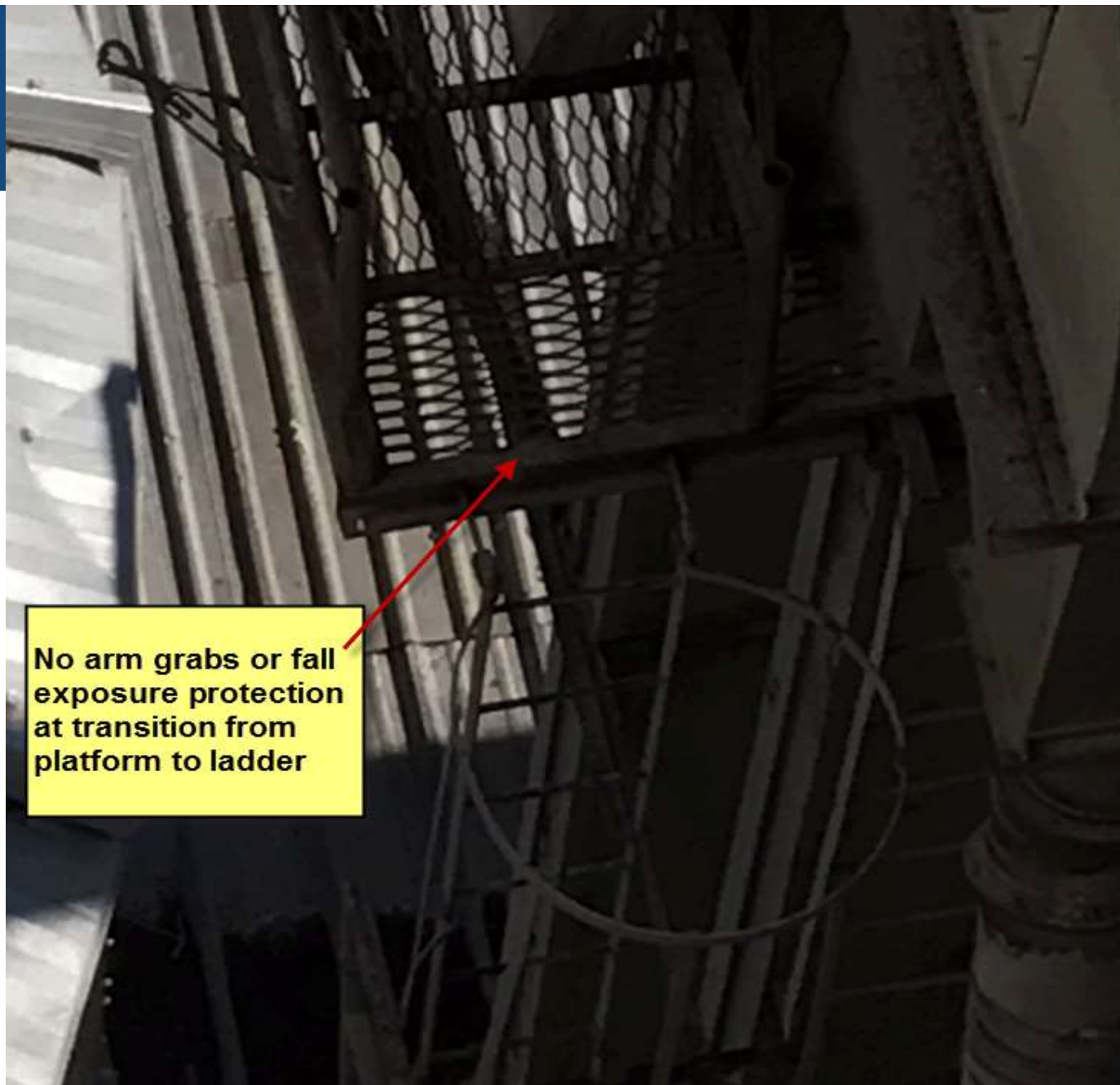
Frequency of Slips, Trips and Falls

- Overwhelming majority of general industry accidents stem from slips, trips and falls
- Statistics: Approx. 15% of accidental deaths are from slips, trips, and falls
- Approx. 20% of workplace fatalities disabling injuries and days away injuries in general industry result from slips, trips and falls
- Walking Working Surfaces Standard among most frequently cited standards every year



Unguarded Manlift Opening - open to fall down full height of manlift shaft





Ladder Transition - SIF



Fully exposed at transition from
ladder top to tank top

Tape measurer -- means that
people go up here!



Grain Bin Top - SIF

Bin top unlocked, no guarding to prevent fall into bin



Service Platforms - SIF



Floor Hole - SIF

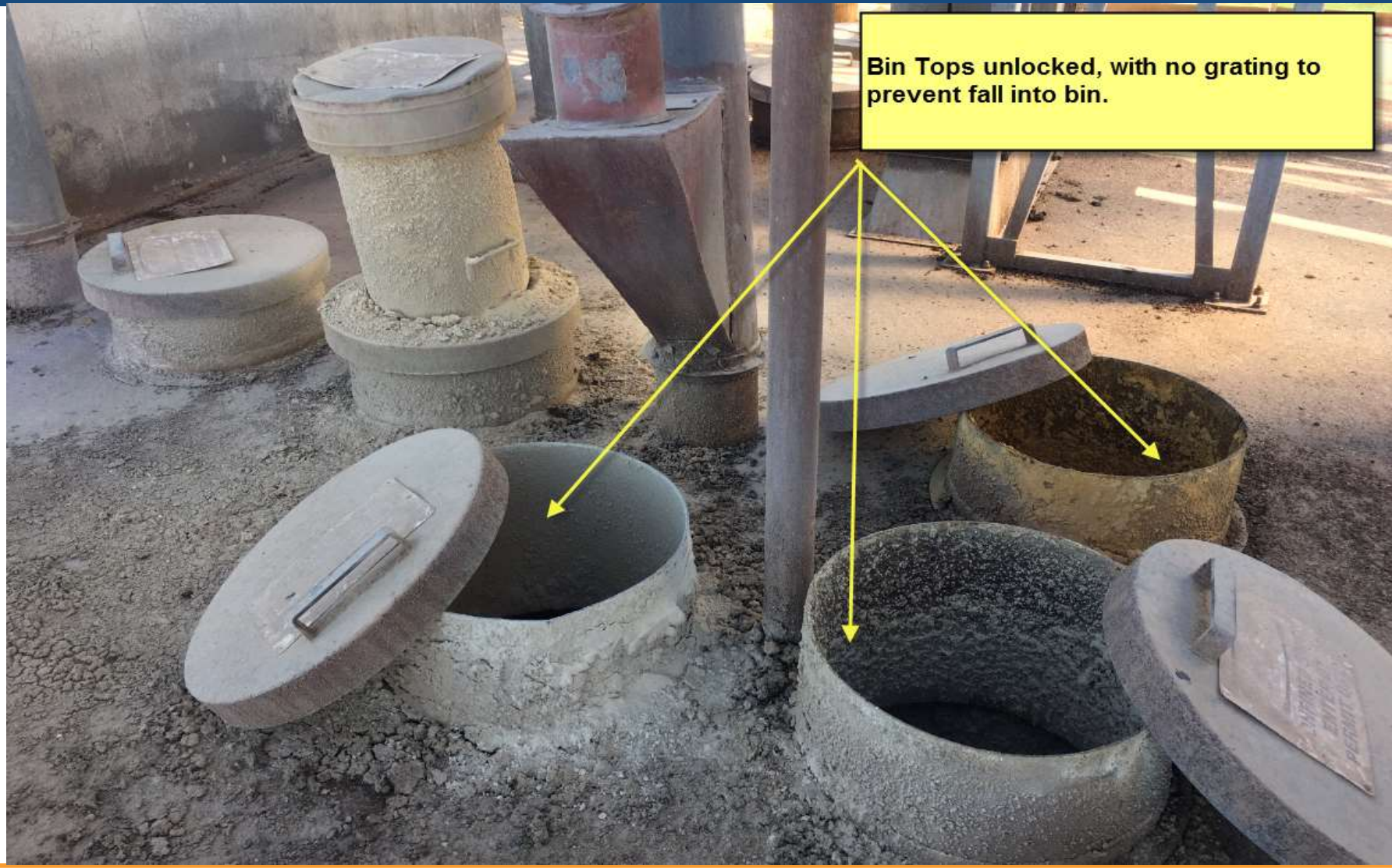
**This is a floor hole that is not guarded.
A person could accidentally step into
hole and fall.**

**Also an object can be kicked through the
hole and fall on someone at a lower
level.**

**A hole like this should be within an inch
of the spout and protected with a toe
board.**



Grain Bin Tops - SIF





Flat Rooftop – Fall To Ground - SIF



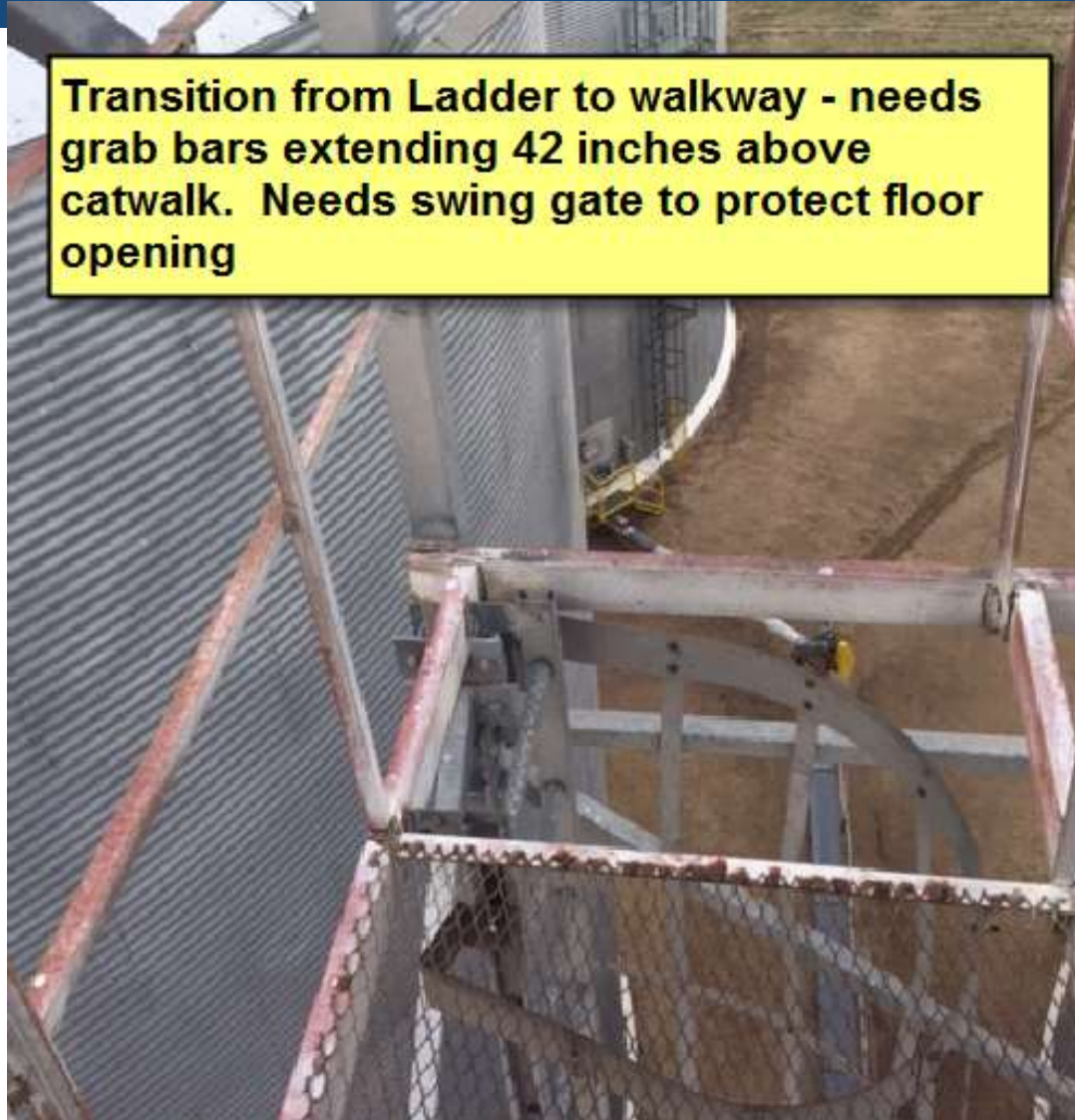
Fully exposed to fall to ground > 20 feet. Need guardrail.





Catwalk – Ladder Transition

Transition from Ladder to walkway - needs grab bars extending 42 inches above catwalk. Needs swing gate to protect floor opening



Floor Hole - SIF

Unguarded floor hole - a person could accidentally step into hole and fall.



Bin Top - SIF



Anyone servicing the motor on this platform needs to step over a floor opening with a fall to the bin top below



Work Platform - SIF



Ladder Transition



Guardrail



Service Platform has no guardrail. Fully exposed to fall to next level. This also a hazard to person walking below



Fall Exposure



Container tops used as storage mezzanine with no guardrails. LADDER indicates that people climb on top.



Ladders and Walkways

Ladder access is blocked by conduit and extra rungs. A ladder swing gate is proper to protect the opening and should be added. The obstructions should be rerouted or removed.



Ladder Top Transition





Portable Ladders

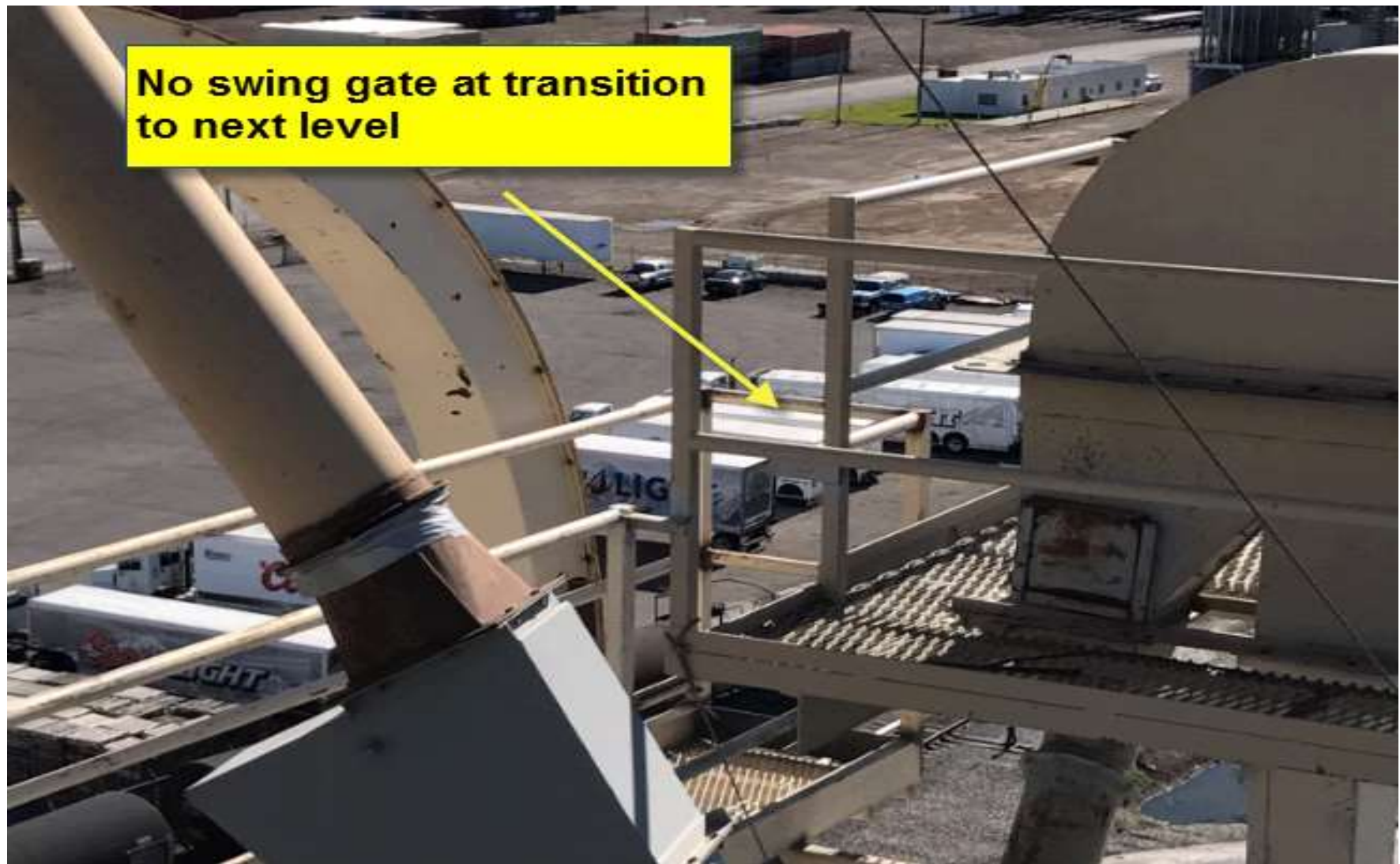


Service Platforms

This service platform does not have guardrails - workers climbing ladder, stepping on to platform, and working on platform are fully exposed to fall



Elevated Work Platforms



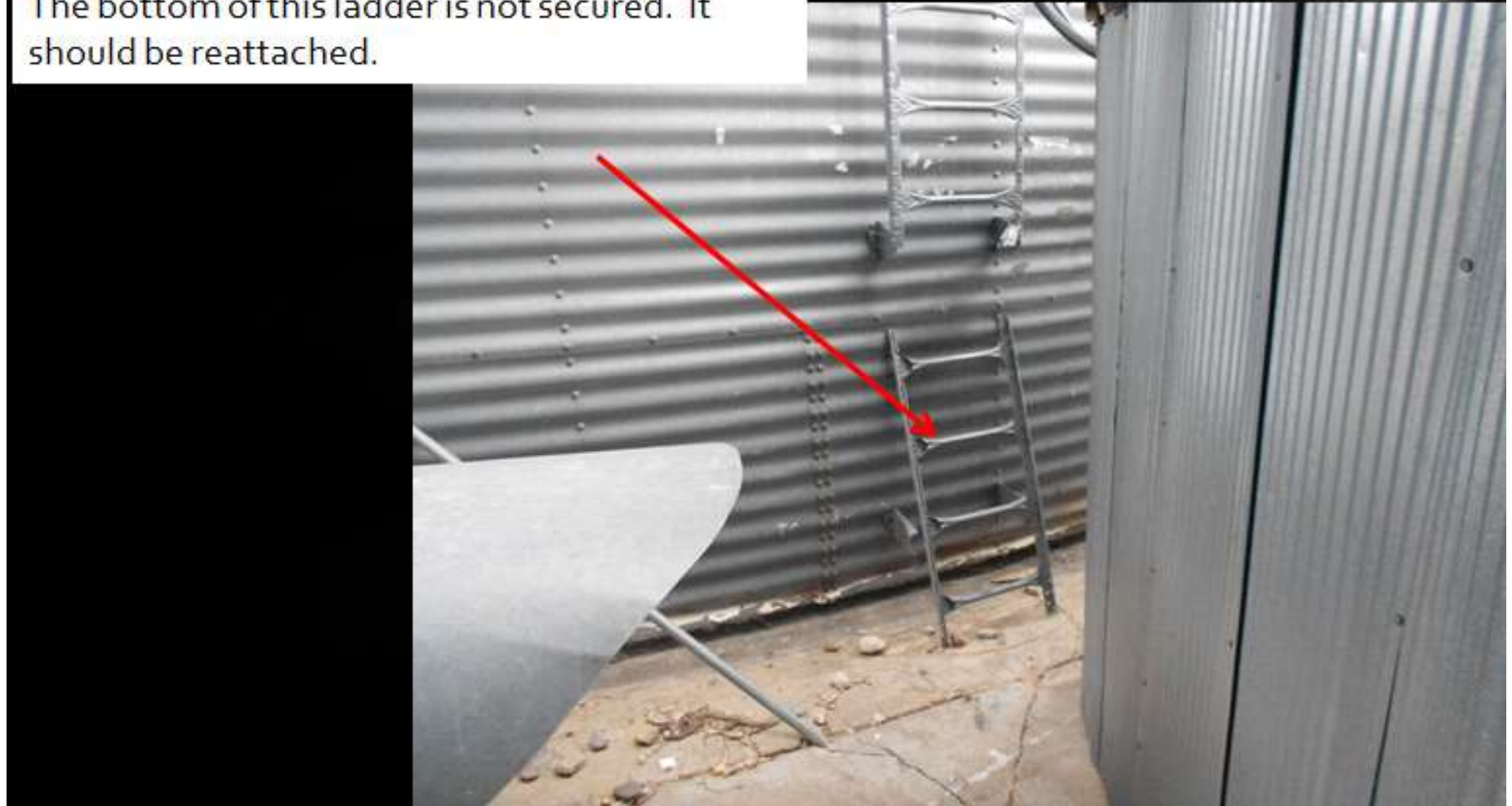
Walking and Working Surfaces

Floor hole shall be covered and leave no opening more than 1" wide.



Fixed Ladders

The bottom of this ladder is not secured. It should be reattached.



Working and Walking Surfaces

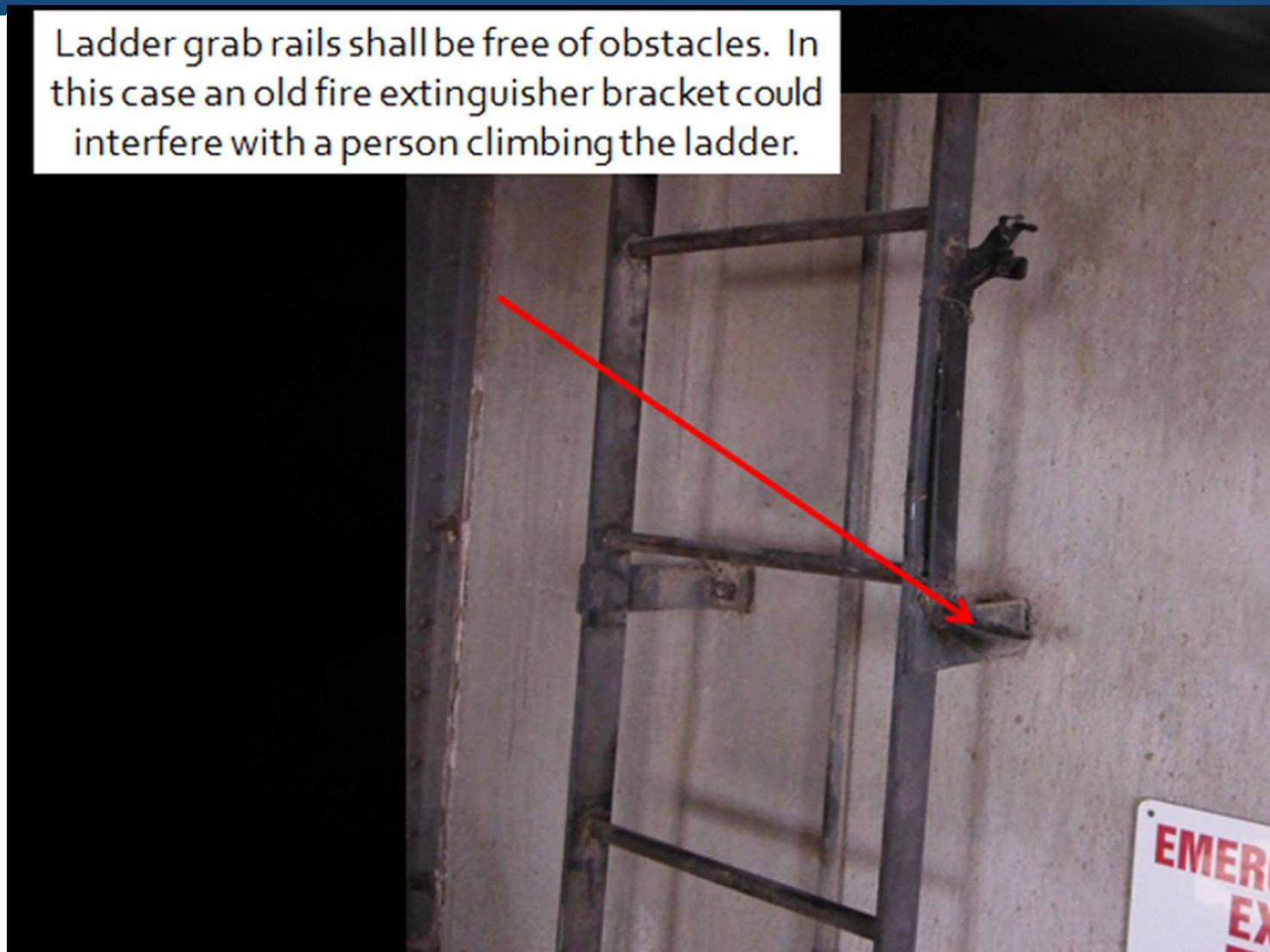
Floors holes need to be limited to 1" or less. If less than 12" exists between a bin or equipment and the opening, a toe board often may be all that is needed. If a person can walk into the space, then it needs to be totally covered.



Flat Rooftop – Elevation Change



Ladder grab rails shall be free of obstacles. In this case an old fire extinguisher bracket could interfere with a person climbing the ladder.



Working and Walking Surfaces

Platforms need a swing gate or equivalent on the open side. In this case it is over 4' and requires the fall protection gate.



Portable Ladders

A piece of old fixed ladder is being utilized as a portable ladder. A proper portable ladder with slip resistant feet, proper labeling, etc. should be utilized. This piece of ladder should be disposed of.



Walking Surfaces

Ladderways, stairways, walkways, etc. need to be kept free of trip hazards. In this case an air hose creates a trip hazard.



Working and Walking Surfaces

Ladder rung has rusted off causing a fall hazard. The ladder should be removed from service and repaired or replaced.

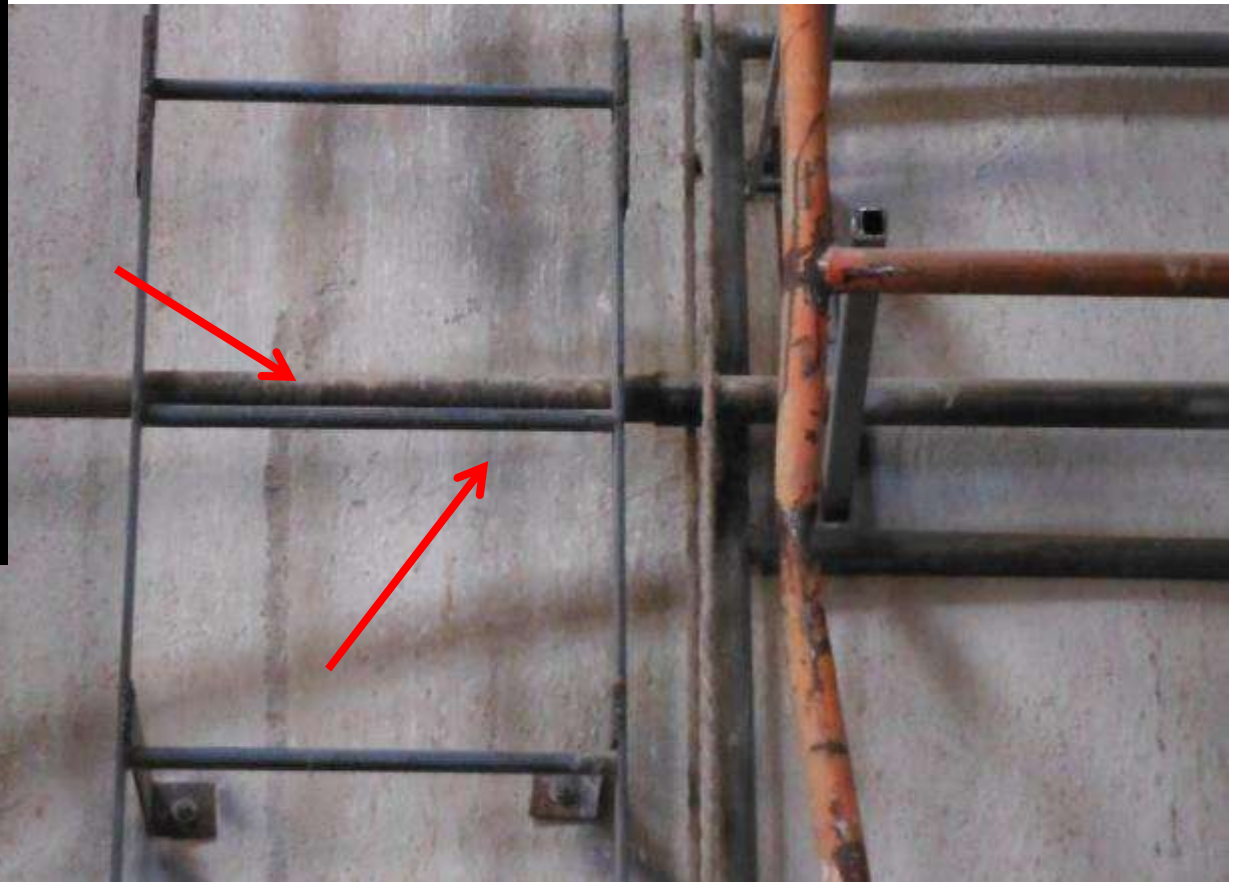


Working and Walking Surfaces

Ladder rung has been fouled.
User would now be using a
conduit as a ladder rung.

7" clearance is the typical toe
clearance to be maintained on
ladders. If unpreventable, there
are a few special circumstances
outlined in standards.

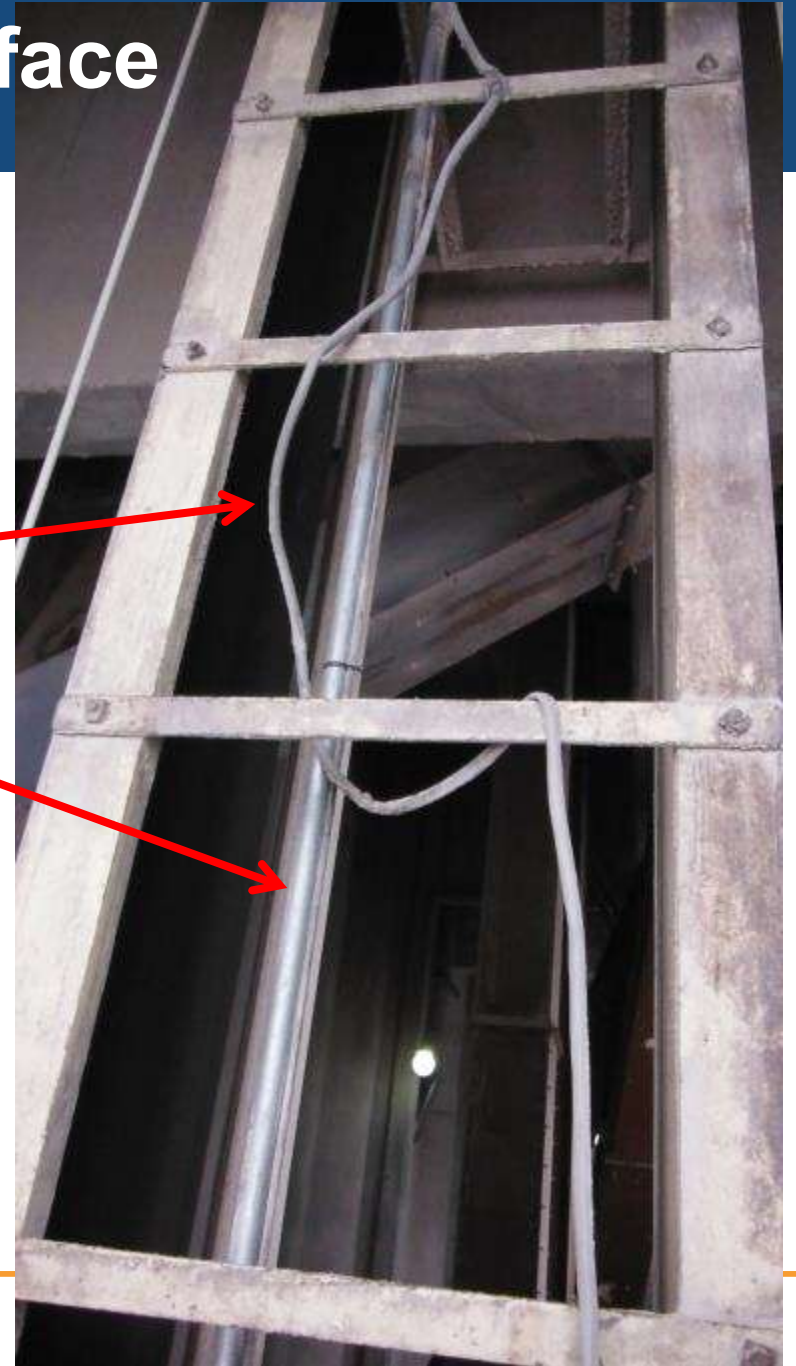
Emergency use only ladders also
have exceptions if labeled
properly.



Working and Walking Surface

This electric cord is a trip hazard, and electrical conduit is within 7 inches of ladder.

OSHA requires a minimum of 7 inches clearance behind ladder rungs so feet can be firmly placed while climbing.



Fixed Ladders



This ladder has bent rungs. Rungs need to be repaired or ladder replaced..

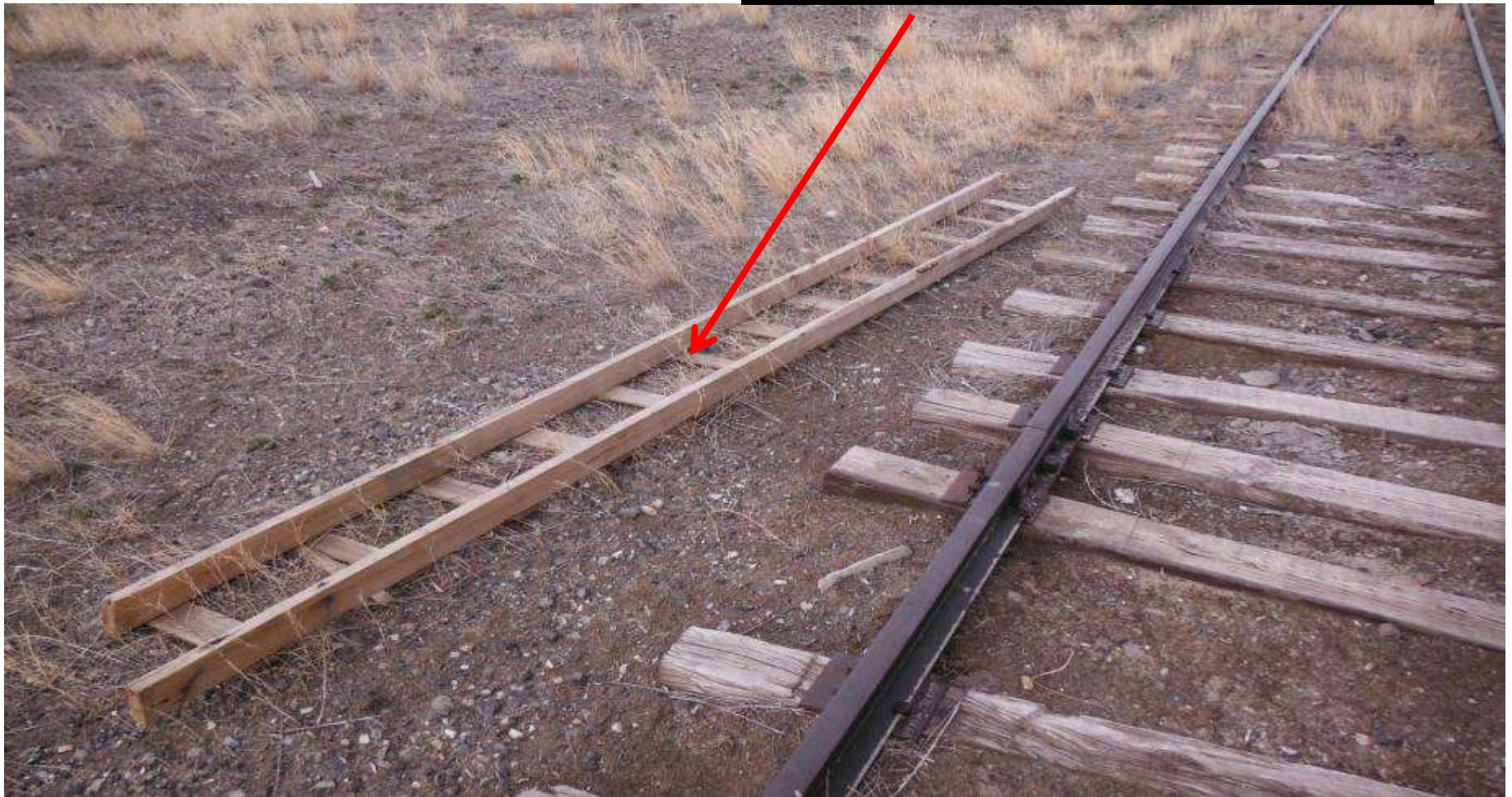
Forklift Baskets



Forklift baskets are considered mobile scaffolding. This would be considered damaged scaffolding and should not be used in this condition.

Portable Ladders

Wooden ladder is defective and does not meet any of the wood ladder specs for rung type, width, spacing, etc. It shall be disposed of.



Stairs

Open sides stairs require a mid-rail.
This has a missing mid-rail.



Stairs

Closed stairs still require a handrail. Usually it is on the right-hand side in the down direction.



Slip - Loose Material

Loose material on smooth surface.

Action:

Sweep up loose material



Trip – Hoses and Cords



Hoses and cords are loose in walkway

Action:

Manage so not in walkway OR put in access barrier



Slip – product on floor



Ingredient accumulation on floor is a slip hazard

Action:

Sweep up spills immediately as they occur



Slip and Trip



Can trip on metal bar or slip on wet/rotting grain

Chances of injury INCREASE when we “stack up risks”

Clutter



Look at what you have to trip over if you need the shovel in the back!

Action: install hand tool rack on wall and hang tools on the rack



Obstruction In Walkway



Obstruction just in front of
a storage cabinet

Someone tripped on this
seconds before the
picture was taken!!



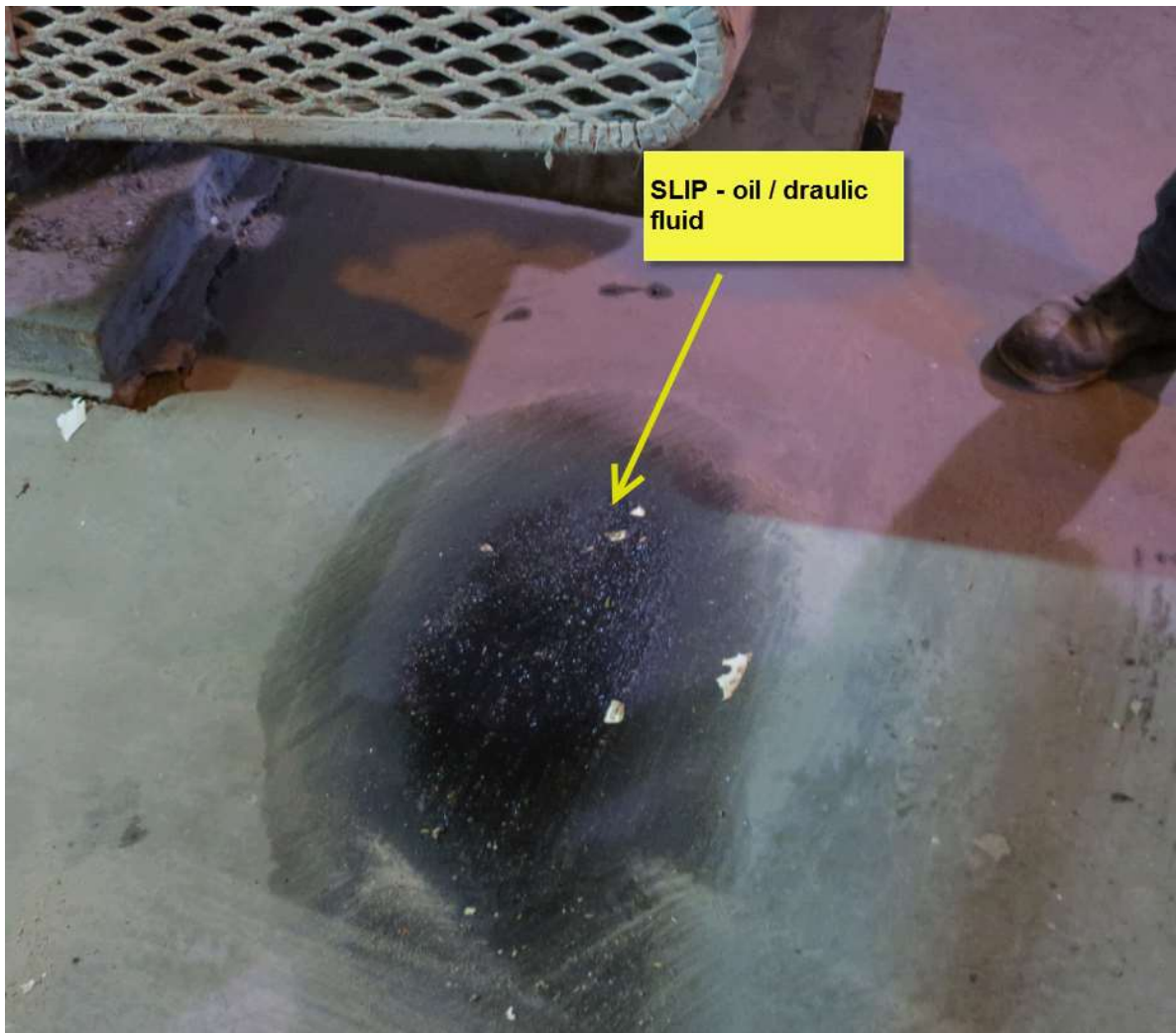
Trip – Elevation Change



Elevation change as you walk into / out of a shed

Action: Paint yellow for visibility at minimum. Consider ramp or stairs if feasible

Oil leaks



Oil is leaking onto walking pathway

Action: REPAIR LEAK - - otherwise you have to clean this up over and over



“Stacking Risk” – slip + trip



Chance of injury INCREASES
when there are multiple
S/T/F hazards at play

Stairs are uneven, and
there is water on the
smooth floor surface



Walkway Obstructions



Bolt ends stick out into walkway – trip and laceration hazard

Action: SHORTEN BOLTS so that they are out of the walkway. They don't need to be this long



“Stacking Risk” - Transition + Floor Hole



Action: Install threshold to connect the transition between the walking surfaces

Transition between walking surfaces with a floor hole in between – trip hazards coming and going!



Tools/Clutter On Catwalk



This catwalk is 40 feet above the ground

What is the SEVERITY of this trip hazard?

Tools on catwalk



Tools/Clutter On Catwalk



Clutter on elevated walking surface is a severe hazard

Think about a person stumbling after tripping over these things



Thank You

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