

The "C-Change" Initiative:

1. Change behaviors.
2. Challenge ourselves to re-think how we work.
3. Certify the results on a daily basis.



# ***Tool Box Talk***

*Week of December 27, 2010*

## *Project Setup, Material Staging & Public Exposure – Part 4*

This month safety topic is Project Setup, Material Staging & Public Exposure. Previously we reviewed the severe 2005 BP Texas City Refinery explosion, how to eliminate or reduce the severity of physical hazards via guarding by distance and the use of “Controlled Access Zones.” We’ll now conclude this topic by examining construction project exposures to the Public.

First, let’s consider some of the hazards causing risk to the public and how to mitigate those risks.

**Falling objects** - Ensure objects cannot fall outside the site boundary. On scaffolds this can be accomplished by using toe-boards, brick guards and netting. Also walkways may need to be covered.

**Delivery and other site vehicles** – Make sure pedestrians cannot be struck by vehicles entering or leaving the site. Obstructing the pavement during deliveries may force pedestrians into the road, where they can be struck by other vehicles. Use a spotter to aid the driver and control pedestrian traffic.

**Scaffolding**- Prevent people outside the boundary from being struck during erection and dismantling of scaffolding. Remove ladders at the end of the work day and post Caution tape.

**Vehicles, construction equipment and machinery**- At the end of the work day store them inside the locked site perimeter and remove vehicle and equipment keys.

**Storing and stacking materials** - Reduce the risks associated with the storage of materials by storing materials within the site perimeter, away from the perimeter fencing.

**Openings and excavations** - People can be injured if they fall into excavations, manholes, stairwells or from open floor edges. Put up barriers or covers the opening in a secure manner.

Every year children die after gaining access to construction sites, and many more are injured. Children are attracted to construction sites as an exciting place to play. We must do everything you can to keep them out of the site and away from danger.

The requirements for protection of the public in every city or town will vary. Here are some examples of the requirements in some jurisdictions:

**Lighting**-Any structure or material temporarily occupying public property, including fences and walkways, shall be adequately lighted between sunset and sunrise.

**Walkways & Canopies**- A walkway not less than 4 feet wide shall be maintained on the sidewalk in front of the building during construction, unless the public agency having jurisdiction authorizes the sidewalk to be fenced and closed. Adequate signs and railings shall be provided to direct pedestrian traffic. The walkway shall be capable of supporting a load of 150 pounds per square foot. Pedestrian traffic shall be protected by a railing on the street side when the walkway extends into the roadway. Railings are required adjacent to excavations. Protective canopies shall have a clear height of 8 feet above the walkway. The roof shall be tightly sheathed. The sheathing shall be 2-inch nominal wood planking or equal.

**Fences**- Fences shall be solid and substantially built, be not less than 8 feet in height above grade and be placed on the side of the walkway nearest to the building site.

When assessing the possible risks to public safety consider the following situations: building façade work, erection of signage, crane lifts, i.e. HVAC units to a roof top, excavations adjoining a road or mass excavation, retaining walls, tilt panel construction, front fence construction, and multi-story construction near a boundary.

Where the building is occupied, more frequent reviews of the site will be necessary. A risk based approach will identify changing circumstances that will require alterations to the precautions in the initial plan. Are the locations known and the protection safe of above and underground of utilities? Are hazardous energy sources locked out to prevent exposure? Are precautions adequate for fire extinguishing systems, alarms, occupant egress, and signage posted to prevent confusion during an emergency? Are all the occupants aware of these changes?

There are several hazards and concerns for pedestrians. When you approach and leave the site daily, take a moment to see if there is a hazard to the public. Your effort is what makes the difference in keeping our JJ White sites injury free.