



# Tailgate/Toolbox Safety Training

Safety Services Company-Safety Meeting Division, PO Box 6408 Yuma, AZ 85366-6408 Toll Free (866) 204-4786



Company Name: \_\_\_\_\_ Job Site Location: \_\_\_\_\_

Date: \_\_\_\_\_ Start Time: \_\_\_\_\_ Finish Time: \_\_\_\_\_ Foreman/Supervisor: \_\_\_\_\_

## Topic 495: Concrete Batch Plant (Part B - Equipment)

**Introduction:** Concrete batch plants are often located near sand and gravel pits. Locating the batch plant near a sand and gravel pit is a more efficient way of making concrete. Some concrete batch plants must be located where there are no sand and gravel pits and the ingredients must be transported to the plant where they are then mixed. Mixing the sand, gravel, cement, and water that is used to make concrete, requires a wide variety of different equipment. Following are safety guidelines for maintaining, repairing, and operating concrete batch plant equipment:



- **Conveyers require constant maintenance** and repair to keep them operating safely and properly. Conveyers have many moving parts and can easily cause injury to employees who are performing the maintenance and repair work. A thorough inspection of the entire material conveying systems at the batch plant must be performed on a regular basis. A concrete batch plant may have a dozen conveyers delivering material to different areas and components at the plant.
- **Employees must be trained** in the proper function and use of all safety equipment prior to working on or near conveyers. This will include how to properly lockout and tag a conveyer before performing repair or maintenance operations. Always use a lock that can only be unlocked by the employee that is performing the maintenance work. Emergency shut-off devices must be easily accessible and operating properly. Emergency lights and alarms must be functioning properly and located in areas where they can be seen or heard by any employee working in a critical location.
- **Before attempting to perform** any maintenance or repairs on electrical equipment, or equipment that is powered by electricity, the equipment must be deenergized. Switches and connectors used to deenergize equipment must be locked and tagged to prevent accidental reenergizing by other personnel, and to indicate that the equipment is being serviced. High energy electrocution is a serious hazard that must be avoided.
- **All safety equipment** at the batch plant must be in place, in good condition, and functioning properly. This will include railings and toeboards on catwalks, guards on electrical components, guards on conveyer pinch points, and guards on electrical and mechanical power transmission apparatus.
- **All catwalks** and accesses that cross over, under, or adjacent to conveyers must have hand rails and adequate clearance so that employees and other personnel may safely pass through those areas. Employees must identify and repair all hazards such as slippery surfaces, damaged ladders, or walkways. Loose, improperly attached, or damaged hand and foot holds, used to climb up and down on trucks and other equipment, are hazards that must be repaired as soon as they are identified.
- **Delivery systems** for sand, gravel, cement, and water must be in good condition and working properly. This will include hydraulic or electric powered doors, rams, mixers, chutes, belts, hoses, and air compressors. Any part of the delivery system that is malfunctioning and is causing a potential hazard must be repaired immediately. Devices used to measure material that is being delivered to mixing trucks must be checked and calibrated to ensure proper proportioning of the mix.
- **Vehicles entering and leaving** the batch plant must be able to pass through freely and safely without being obstructed by stationary batch plant equipment. Piles of material, conveyers, drums, silos, control operating rooms, and all other equipment used to operate the batch plant must be placed in positions where they will not be in danger of being hit by cement trucks, and other vehicles moving in and out of the plant.
- **All drums**, mixing barrels, or silos must be deenergized or otherwise disconnected from any hydraulic, mechanical, or electrical power sources before an employee attempts to enter them. This will also include locking and tagging them to prevent them from accidentally being turned on while an employee is in them. An employee that is entering a drum, barrel, or silo for the purpose of cleaning it, must wear the proper personal protective equipment. Ear plugs or muffs, a respirator, and safety glasses must be worn when chipping away dried concrete.
- **Concrete delivery trucks must** be properly maintained and serviced. Concrete delivery trucks carry tons of wet concrete on public roadways, and can create a serious hazard when they are not properly maintained. Tires are one of the most critical parts of the delivery truck, requiring constant maintenance. The air pressure and tread depth of all of the tires must be maintained to the correct specifications at all times. Tires that are low on air will quickly over-heat when loaded with thousands of pounds of weight, causing them to blow-out. All mechanical equipment on the delivery truck must be serviced and maintained on a regular basis to ensure safe operation. Proper servicing and maintenance of the delivery truck will include, checking engine and drive train lubricants, adjusting brakes, and adding grease to suspension and power take-off (PTO) components.
- **Material safety data sheets (MSDS)** must be readily available to all employees at the batch plant. Employees must be aware of any hazardous materials that are located at the batch plant. MSDS will alert employees on how to avoid or treat over exposure to hazardous materials.
- **Personal protective equipment (PPE)** must be worn by all employees working at the batch plant. Proper PPE will include a hard hat, safety glasses, hearing protection, respirator, protective clothing, safety boots, and personal fall protection equipment.
- **Conclusion:** Concrete batch plants are dangerous places which require employees and other personnel to remain alert at all times. Always utilize these safety guidelines when maintaining, repairing, or operating equipment at the concrete batch plant.



### Work Site Review

Work-Site Hazards and Safety Suggestions: \_\_\_\_\_

Personnel Safety Violations: \_\_\_\_\_

Material Safety Data Sheets Reviewed: \_\_\_\_\_ (Name of Chemical)

### Employee Signatures:

(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Foreman/Supervisor's Signature: \_\_\_\_\_

These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.