



# 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: \_\_\_\_\_

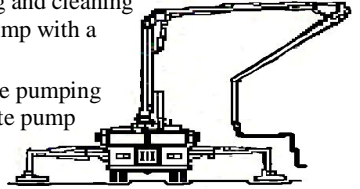
Date: \_\_\_\_\_ Start Time: \_\_\_\_\_ Finish Time: \_\_\_\_\_ Foreman/Supervisor: \_\_\_\_\_

## Topic 286: Concrete Pumping Safety

**Introduction:** There are numerous hazards associated with concrete pumping operations; therefore, safety is always a major concern of every person in the concrete pumping industry. It is vital to everyone involved, including the concrete pump operator, the ready mix driver, the man on the end of the hose, and even the construction contractor. By working together and following rules for safe concrete pumping, accidents can be substantially reduced.

**Concrete pump operators** should be safety conscious and adhere to safety procedures. However, safety rules will not help unless they are known and used. Remember that safety is not just an idea on paper; safety is the most important part of the job. Concrete pump operators should be on time and be prepared for work. This is important because being late may cause an operator to hurry or take short-cuts in normal safety procedures. Safe practices are then extended to the pre-job inspection of the concrete pump and vehicle before leaving the yard, driving to the job safely, setting up and safely operating the concrete pump on the job site, clean-up, and driving back to the yard. The last part of a safe operation is checking and cleaning the pump to prepare for the next pour. Whether operating a grout pump, a multi-sectional boom pump, or a trailer pump with a placing boom, the safety of all personnel involved with the concrete pumping operation should be the main concern.

**It is not possible to specify** all the safeguards that should be incorporated in the construction and operation of concrete pumping equipment, due to the many design variations. Familiarization and safe operating procedures of the particular concrete pump and boom to be used is crucial before any person may operate pumping equipment without supervision.



**Before entering any work area, an operator should have the following personal protective equipment:**

- Hard Hat
- Safety goggles or safety glasses
- Heavy duty work shoes or boots
- Rubber boots (for clean-out)
- Work gloves

**Check for other** special personal protective equipment which may be required, such as long-sleeved shirt, hearing protection, steel-toe boots, and rubber gloves. It is important that an operator have all necessary work tools relating to the job and pump being worked on.



- **Before leaving the yard**, check engine oil, hydraulic oil, and radiator water before starting engine. Inspect all safety covers, instruments, gauges, grates, tires, outriggers, etc. for safety and proper operation. If required, a D.O.T. pre-trip inspection should be performed.
- **Concrete pump operators** must be properly licensed good drivers, mechanically inclined, and understand the operations of the pumping equipment being used. Before operating any piece of equipment, the operator should read and understand the manufacturer's operating manual.
- **When doing initial placing and set-up** of the pump, consideration should be given for repeated delivery by redi-mix trucks. Repeated deliveries by the redi-mix trucks to an off-street construction area have a tendency to tear up the terrain. Clear potential set-up area of all debris and position pump so that any obstructions (power lines, ditches, walls, columns, etc.) do not interfere with safe set-up and operation.
- **Extend all outriggers** and fully lock into place. Keep away from any open cut ditches, box culverts, curbs, unsupported sidewalks, and electrical lines. Check local, state, or national law requirements in your area.
- **It is important** for a pump operator to know who will be giving the directions for the movement of the boom. Only one person should be authorized to give directions to the pump operator. There are 13 hand signals every pump operator should know. There must be a good reliable method of communication between the pump operator and the crew at the end of the pipeline.
- **Make sure all clamps** are complete with clean gaskets; gaskets must be used in all clamps. All clamps, if so designed, should be pinned at all times, including the boom system. The anchor point for a safety sling should be the boom itself, not the pipeline.
- **Never reach into** the concrete pump valve or the water box. The water box covers must be secured when the machine is in operation.
- **Never operate the pump** without a grate on the hopper. Never reach into the hopper when the pump engine is running or the agitator is turning.
- **If plugging conditions** in the pump or hose occur for any reason, **DO NOT** attempt to use more power to correct the condition. Reverse the pump or release the line pressure, determine the cause of the plug, correct it, and resume pumping. Trying to force material through the hose under jammed conditions may result in serious injury or damage to the pump or line. Never open a coupling when the placing line is pressurized.



**Conclusion:** When pumping and clean-out operations are completed, make sure the unit is safe and ready for travel back to the yard. Before leaving the job, make certain all hoses, clamps, and tools are replaced and properly stowed on the equipment. Check to make sure that the safety chains are properly fastened and the tongue jack and outriggers are raised and locked into position. Do a final walk around the truck and pump to be certain there are no loose objects that may fall off during travel (If required, do a pre-trip inspection). Follow these guidelines for safe concrete pumping operations.

### Work Site Review

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

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

**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.*