DUMP TRUCK SAFETY

This easy-to-use Leader’s Guide is provided to assist in conducting a successful presentation. Featured are:

**INTRODUCTION:** A brief description of the program and the subject that it addresses.

**PROGRAM OUTLINE:** Summarizes the program content. If the program outline is discussed before the video is presented, the entire program will be more meaningful and successful.

**PREPARING FOR AND CONDUCTING THE PRESENTATION:** These sections will help you set up the training environment, help you relate the program to site-specific incidents, and provide program objectives for focusing your presentation.

**REVIEW QUESTIONS AND ANSWERS:** Questions may be copied and given to participants to document how well they understood the information that was presented. Answers to the review questions are provided separately.

**INTRODUCTION**

In addition to the all familiar carrying, dumping, and spreading of loads, dump trucks can be outfitted with a wide array of attachments to make it, without question, the workhorse of the job site. Because they are so common, they have far too often been the source of serious injuries and fatalities. This program reviews the safe work practices dump truck drivers must follow to prevent these tragedies. Topics include pre-start up checks, refueling, driving preparations, inside the cab, operational hazards, dumping loads safely and safe driving hazards.

**PROGRAM OUTLINE**

**VERSATILITY OF DUMP TRUCKS**

- In addition to hauling material, dump trucks can perform the following tasks: in cold areas, they are pressed into service to spread, salt, sand, and cinders on icy roads.

- Speaking of snow, it’s hard to envision seeing a dump truck in snow country without a snow plow attachment.

- Dump trucks can also be equipped with attachments designed to accurately apply asphalt.

- Some have front scoops to pick up material and deposit in their beds.

- Dump trucks also have great capability to tow heavy loads such as backhoes and other trailer mounted equipment.

- If a dump truck was so easy to operate, everyone could do it, but thankfully, the operation of dump trucks has been left up to professionals: professional drivers.

- Because dump trucks are so common, they have far too often been the source of serious injuries and fatalities.

**PRE-START UP CHECKS**

- Due to the wide variety of makes, models and accessories associated with dump trucks, you must take the time to thoroughly read and follow the truck and accessories operator and safety manual. This is the key to understanding the proper safe operation of all the equipment.

- When it comes to equipment safety, maintenance of your dump truck is extremely important. Prior to driving your truck, you must conduct the following checks.

- Check all vital fluids such as engine oil, hydraulic fluids, transmission, water and power steering. Do so while keeping care to prevent dirt from entering any openings.
• Remember, if your truck has an automatic transmission, it must be warmed up to the proper operating temperature to get an accurate reading. Report any unusual colors or odors from any of the fluids.

• Check the condition of all tires looking for cuts, bulges or other damage. Be sure that the mud flaps are also in good condition.

• Check headlights, brake, and running lights as well as overhead strobes if so equipped.

• Check and clean the windshield, mirrors and any glass, and don’t forget about the wipers.

• If you hear any unusual noise from the truck, stop and check it out. You may be preventing a highly expensive repair if left unattended.

• Immediately report any damage noted to the vehicle or that may have been caused by another driver; and, of course, report any damage to your supervisor whether it was your fault or not.

• Ensure that the entry steps are free of grease or mud that could cause a fall. The cab must be free of debris such as soda cans, fast food bags, rolling flashlights and the like. Any of these can create a hazard should they get under your feet during a panic stop.

• Certainly don’t forget about your fire extinguisher and first aid kit. Be sure that the extinguisher is fully charged and the first aid kit properly supplied.

• Before starting the truck, check that the air brake valves are in the closed position.

CHECKING GAUGES & REFUELING
• Now that you have completed your pre-start up checks, go ahead and start up the engine.

• Are all the gauges functioning properly and are they within normal operating ranges? If any are not working properly, immediately shut down the truck and report the issue to your supervisor.

• If unsure, ask. When it comes to risking damage to an expensive engine, there are no dumb questions.

• Refueling requires special care. First of all, no smoking is allowed.

• Be sure to ground the nozzle to the filler neck to avoid a buildup of static electricity, which can cause fuel to ignite.

• If you spill fuel, clean it up. You’ll be preventing both fire and slip and fall hazards.

DRIVING PREPARATIONS INSIDE THE CAB
• Modern dump trucks have cabs that can approach the complexity of a jet plane so prior to driving be sure you are very familiar with the location and function of the various controls, such as the air brake gauge, ignition switch and gears. Again, be sure to refer to the operator’s manual for specific instructions.

• On the dash, along with fuel level, oil pressure and voltage gauges, you will probably find one or two air pressure gauges. There may also be an indicator light on the dash that will stay lit until there is enough pressure to release the parking brake.

• Some trucks have an audible alarm that will indicate when there is sufficient pressure. Most trucks require about 60 pounds of air pressure in order to release the brake.
• While waiting for the pressure to build, go ahead and put your seatbelt on and recheck the gauges and mirrors. This might be a good time to check that the backup alarm is working properly.

• When you have sufficient air pressure, go ahead and release the air brakes. If you need to apply the parking brake again, simply pull the knob to set the braking system.

• Be sure that you’ve been trained and are familiar with the two-speed axle switch. Generally, the axle switch should be kept in the high position for normal street driving and in the low for steep inclines and poor road conditions.

OPERATIONAL HAZARDS
• All dump trucks have a maximum gross vehicle weight rating and that must never be exceeded. If you drive overloaded, you risk reduced vehicle control and increased potential for an accident.

• Remember, a loaded vehicle handles very differently than an empty one. Be prepared for longer stopping distances, slower accelerations, an increased lean on curves and turns and a very different steering response.

• Dump trucks and their operators are at particular risk during dumping operations as when the bed is raised, there is increase risk of the truck tipping over while driving over uneven or soft ground. Be sure to lower your bed as soon as possible after dropping your load.

• Another very real concern is coming into contact with overhead lines. More than one driver and bystanders have been electrocuted while making contact when power lines contacted a raised bed.

• While waiting for a load, never sit in the cab, as falling rocks and debris can injure you if one should crash through the windshield.

• Never allow the operator to swing loads over the front of the truck. Remember, you’re the one who will have to explain the big dent right in the middle of the hood.

• When preparing to leave with a load, be sure to clean off loose dirt or gravel from the sides and back of the bed. Failure to do so can lead to windshield damage claim or worse.

• Be sure to cover your load to prevent material from blowing off in transit.

• When climbing into the cab, always use the handrail, if provided, to prevent a fall.

DUMPING LOADS SAFELY
• The dump bed is a valuable specialized tool, but it can also be a hazard to you and those around you. Be sure to always get someone to guide you when dumping.

• Nobody should be allowed in the path of the material to be dumped. This is very important for people working in the near vicinity as more than one person has been buried alive during the back fill process.

• Always use pre-arranged hand signals so there are no mix ups and be sure that there are no overhead lines that could get caught in the raised dump.

• To dump your load, push the pin latch release or electronic button down, which will in turn release the pin latch on the tailgate. The rate of flow can be regulated by the limiting chains and the angle of the raised bed.

• The rear of the truck can be a hazard; there are pinch points that can take off a finger as well as a risk of a serious head injury from a swinging tailgate.
• To actually raise the bed, engage the power take off or PTO lever. Engage the PTO lever and push the dump control in the neutral or middle position.

• This will cause the bed to stop at any level you wish. Be sure to check your operator’s manual for specific instruction.

• Return the bed to its original or lowered position by putting the lever or switch in the normal or original position. Be sure to push the pin latch lever back up to secure the tailgate.

RAISED BED & TAILGATE HAZARDS
• There are some very important safety considerations you should be aware of while working around your dump truck.

• Never get under a raised dump bed without safety devices to prevent an accident. The reason is obvious.

• If you must work under a raised bed, be sure the bed is supported by an arm bar strong enough to support the load.

• The same goes for allowing yourself to get under an opened tailgate. A tailgate can weigh nearly a half of a ton. One slip and a very serious injury can result.

SAFE DRIVING PRACTICES
• Driving a dump truck is an important and sometimes difficult job. Safe driving becomes even more difficult on construction sites.

• Wet, muddy and slippery conditions require your concentration to be at a high level. When driving on these surfaces, avoid the tendency to over-steer.

• Also, avoid quick movements of the steering wheel. Be sure to decrease your speed and allow for extra stopping distance as required by these conditions.

• Apply your brakes carefully by pumping steadily and evenly to avoid brake lockup and loss of control.

• Avoid driving through flooded areas unless you are sure the water level is no higher than the bottom of the wheel rims to avoid dangerous wet brake linings.

• If you become stuck in the mud, sand or snow, apply light pressure to the accelerator while the transmission is in gear. Don’t race the engine; you’ll just make things worse.

• If you're to be towed out, do so according to the operator’s manual.

CONCLUSION
• Top-notched dump truck drivers are not a dime a dozen. It takes someone dedicated to the job and their equipment to operate safely and efficiently.

• You're the person responsible for the safe operation of your unit. A professional follows the rules and regulations, and elevates their safety awareness on a daily basis.

• Your career should be a safe and rewarding one.
PREPARE FOR THE SAFETY MEETING
Review each section of this Leader's Guide as well as the program. Here are a few suggestions for using the program:

Make everyone aware of the importance the company places on health and safety and how each person must be an active member of the safety team.

Introduce the program. Play it without interruption. Review the program content by presenting the information in the program outline.

Copy the review questions included in this Leader's Guide and ask each participant to complete them.

Make an attendance record and have each participant sign the form. Maintain the attendance record and each participant's test paper as written documentation of the training performed.

Here are some suggestions for preparing your video equipment and the room or area you use:

Check the room or area for quietness, adequate ventilation and temperature, lighting and unobstructed access.

Check the seating arrangement and the audiovisual equipment to ensure that all participants will be able to see and hear the program.

CONDUCTING THE PRESENTATION
Begin the meeting by welcoming the participants. Introduce yourself and give each person the opportunity to become acquainted if there are new people joining the training session.

Explain that the primary purpose of the program is to review basic safe work practices dump truck drivers should follow to prevent injuries and property damage.

Introduce the program. Play it without interruption. Review the program content by presenting the information in the program outline.

Lead discussions about specific models of dump trucks your organization uses and any unique hazards they may present to drivers.

After watching the program, the viewer will be able to explain the following:

• What items to check during the pre-start up check;

• How to prepare for operating the vehicle after entering the cab;

• What hazards drivers should be aware of during operation;

• How to safely dump a truck’s load;

• What precautions to take while driving the truck.
DUMP TRUCK SAFETY

REVIEW QUIZ

Name___________________________________Date_________________________________

The following questions are provided to check how well you understand the information presented during this program.

1. If your dump truck has an automatic transmission, it must be warmed up to operating temperature to get an accurate transmission fluid reading.
   a. true
   b. false

2. You don’t need to report any damage you find during a pre-start up inspection if it was caused by another driver.
   a. true
   b. false

3. Most trucks require ___________ pounds of air pressure in order to release the parking brake.
   a. 30
   b. 60
   c. 100

4. The axle switch should be kept in the __________ position for normal street driving.
   a. high
   b. low

5. You should never sit in the cab of a truck while waiting for the bed to be loaded.
   a. true
   b. false

6. No one is ever allowed to work under a raised load.
   a. true
   b. false

7. You should only drive through flooded areas when you are sure the water is no higher than _______.
   a. the top of the tires
   b. the top of the wheel rims
   c. the bottom of the wheel rims
ANSWERS TO THE REVIEW QUESTIONS

1. a
2. b
3. b
4. a
5. a
6. b
7. c