SECTION 4 CHAPTER 26
TRUCKING SUPPORT

Purpose

To establish our expectations for a trucking support program.

Scope

Applies to all Gravity Oilfield Services, LLC equipment and operations.

In this chapter

General Driving Rules

Refer to Driving and Vehicle Policy for additional information applicable to operation of ALL vehicles.

All truck drivers for Gravity will have completed the DOT Pre-Access Testing, hold a valid CDL, and meet all other requirements for employment as a driver.

It is a government regulation as well as Gravity policy that vehicle inspections will be made by drivers on a regular basis. DOT and management require pre-trip and post-trip inspections for both tractor and trailer. There is also a required monthly inspection. Inspections will be made and turned in regularly. Inspection forms are available at the various dispatch facilities. No piece of equipment will be used before an inspection of that equipment is made.

No driver for Gravity will be allowed to operate a piece of equipment before he/she has been trained in the safe operating practices of the equipment and its related equipment.

No type of open flame or torch will be used to thaw brakes or valves on vehicles.

When stopped on a slight incline, use the hand valve to prevent rolling back.

Drivers will stay with trucks while loading and unloading.

All spills will be reported immediately to the supervisor.

Drivers will not go on top of tanks during lightning storms.

Drivers will not enter any storage tank (unless approved by Management).

Drivers will keep the inside of the truck free of trash and loose items. The exterior of trucks and trailers will be kept clean and free of oil contamination.

Drivers will report any hazards encountered or observed while on the job and all near misses.

When venting fluid back into a tank, all engines will be shut down to prevent explosions. The tank is to be parked with the cab upwind.

Only Gravity employees are allowed to ride in trucks.

Under no circumstances will a Gravity employee in control of a vehicle allow any other person or employee to ride in or on any place that is not specifically designed for passenger occupancy.

Drivers will shut off the engines and remain with their trucks while fueling.

Drivers will shut off the engine, set the brakes, and close the door anytime they leave the cab of their truck.

Some parking conditions require more than setting the brakes to ensure the vehicle does not move while unattended. Chock blocks or scotch blocks may be required.

At no time will anyone work under a truck with the PTO or pump in gear (use applicable lock-out/tag-out procedures). The pump will be out of gear when attempting to tighten packing and engine will be shut off with the ignition key removed.

Any time a unit is parked on/near a roadway, the hazard lights should be used and the warning triangles should be set out.

Only the employee operating the pump will open and close all valves.

A driver will not take a truck or trailer off the yard if any one of the following conditions exists:

- Any brake light, signal light, or headlight is not working at all times.
- More than one (1) lug nut per wheel is missing.
- It does not have an operative fire extinguisher and hazard warning triangles.
- A fuel tank is leaking.
- It does not have a current safety inspection sticker (e.g. DOT, state).
- It does not have a current license plate.

Backing Safety

- When possible, never back without a “spotter” or guide, especially in tight or crowded areas.
- When no “spotter” is available, never start a backing operation before walking around the truck to ensure nothing is behind the vehicle that cannot be seen in the mirrors.
- When backing long distances, stop and get out and check progress (applies also to backing in the dark, around curves, etc.).
- Never open the door and hang out the side of the truck in any way when backing. Always use the mirrors for backing and keep them properly adjusted.
- Never back a vehicle around a corner at an intersection to turn around.

Transport Trucks

In addition to those listed above, the following policies and procedures will be observed by personnel operating this equipment:

- The driver will ensure that the valves are open on any tank before pumping. The driver will also ensure that the valve on the trailer tank is also open. Never pump against a closed valve.
- When loading the trailer tank or other tank, the driver will remain alert and ensure that they do not overflow.
- After unloading, the driver will close the valve on the receiving tank and put the pump in reverse with the engine idling to clear the hose of excess fluid.
- During loading and unloading operations, drivers will operate the pump according to the manufacturer’s recommendation and his/her supervisor’s instructions.
- During cold weather, the PTO shaft will be turned by hand to ensure that it is not frozen prior to engaging the pump.
- The clutch will not be engaged by hand outside the truck. Never shift the PTO without disengaging the clutch. The driver will remain in the seat when operating the clutch to change gears.

Vacuum Trucks

In addition to those listed above, the following policies and procedures will be observed by personnel operating this equipment:

- Employees must be properly trained and authorized before operating a vacuum truck.
- All training will be documented.
- Vacuum truck drivers and/or operators must be trained on the hazards and safe operations of a vacuum truck as stated in this policy.
- The training for vacuum truck drivers and/or operators will include but not limited to:
    - All basic safety programs
    - Basic functions, operations and controls
    - Ignition sources
    - Flammable atmospheres
    - Toxic vapors and their PEL and STEL
    - Applicable waste management regulations
- The operator must inspect the truck and equipment before beginning operations.
- The operator must ensure that all required documentation is in the truck (e.g., DOT requirements, insurance card, disposal site permits etc.).
- When operating the pump, vacuum truck drivers will remain by the controls.
- The areas where vacuum trucks will operate must be free of hydrocarbon vapors in the flammable range. These areas must also be at or below air- contaminate PEL and/or STEL if working without respirators. If there is any question whether the area is vapor and toxic free, atmosphere testing must be performed by a qualified person using properly calibrated and adjusted detectors.
- Vacuum hose constructed of conductive material or thick walled hose with imbedded conductive wiring must be used when transferring flammable or combustible liquid. Thin walled metallic spiral-wound hoses must not be used because of the potential for electric discharge through the thin plastic that covers the metal spiral.

- The complete vacuum transfer system must be bonded so that there is a continuous conductive path from the vacuum truck through the hose and nozzle to the source container and grounded to dissipate stray currents to earth (ground).

- Operating vacuum pumps at high speeds creates high air movement and high vacuum levels, resulting in high discharge temperatures and high discharge vapor concentrations. This condition can present a potentially ignitable atmosphere, therefore all safety precautions of this policy must be enforced.

- The vacuum truck should always be parked in a safe area upwind from a vapor source.

- The vacuum pump discharge should be extended to a safe area and away from the engine air intake.

- When pumping through any open-ended hose, the driver must anchor the hose at the open end.

- The scrubber pot, for collecting fluids, located on the side of the tank must be drained each time after loading.

- When there is pressure in the tank, no attempt will be made to open any hatch or valve until the pressure is relieved.

- Due to the frequency of backing maneuvers, vacuum truck drivers must know and obey all backing procedures (refer to Spotter Policy).

- All valves and hatches must be closed during transporting operations.

- All connections will be removed from the back valves of trailers before roading, including spray attachments after watering roads.

- Trailers with carrying racks will have everything in the rack secured.

- When bleeding pressure off a line (into a vacuum truck), pressure over 100 psi will require the use of a hose rated for 2500 psi or greater. For pressures over 1000 psi, a flow back truck will be used.

- After unloading, the driver will open the two-inch pressure release valve on the tank and bleed off the air. Close the valve after releasing the pressure.

Kill Trucks

Drivers will remain in their trucks at all times during pumping operations and be prepared to disengage the clutch in the event of an emergency.

Drivers will inspect all hoses and steel lines and their connections prior to each use.

When the pumping operation is completed, the driver will close the valve at the wellhead and at the pump to prevent additional fluid from being siphoned from the trailer tank.

IT IS THE DRIVER'S RESPONSIBILITY TO ENSURE THAT A SAFETY LINE, TIE-OFF CHAIN OR SOME OTHER FORM OF SECURING LINE WILL BE ATTACHED TO ALL EQUIPMENT TEMPORARILY USED ABOVE THE HEAD OF PERSONS WORKING AT THE WELLHEAD. THIS PARTICULARLY APPLIES TO KELLY HOSES, CHICKSON JOINTS AND OTHER EQUIPMENT CAPABLE OF BECOMING UNSCREWED, BURSTING, OR, BY SOME OTHER MEANS, FALLING TO THE FLOOR.

Pressure pop valves on kill truck pumps will be set at a maximum of 5000 pounds and checked monthly. Nails and hardened materials such as Allen wrenches will not be used as shear pins.

Steel lines laid on the ground between the wellhead will be chained to prevent swiveling in the event the connections come loose.

During cold weather, PTO shafts will be turned by hand prior to engaging the PTO to determine if it is frozen.

Drivers and other persons will not hammer on steel lines under pressure. In the event a leak develops, shut down the pump, relieve the pressure from the line and tighten all connections.

Drivers will pressure test the line between the pump and the wellhead prior to opening the wellhead valve. The test will be done in first gear and to the expected maximum pressure needed to complete the job. The driver will tell all persons present to stand clear during this operation.

Drivers will lay steel lines for all jobs that exceed a thousand (1000) psi pumping pressure. Steel lines are recommended for all jobs as conditions may change, requiring increases in pressure.

All personnel must stay at least 10 feet from all piping and valves while pumping. The driver must shut down the pumping operation if anyone is inside the 10-feet radius.

Hot Oil Trucks

In addition to those listed above, the following policies and procedures will be observed by personnel operating this equipment:

- All units will be located a minimum of 100 feet upwind from the wellhead or equivalent safety measures will be taken where terrain, location or other conditions do not permit.
- Flagging material will be used to detect wind movement.
- A "No Smoking" policy will be adhered to at all times during operations.
- Fire protection equipment will be inspected and properly placed on the ground before beginning the operation.
- All equipment not necessary for the operation will be shut down.
- Lines controlling flammable fluids will not be laid under any vehicle, equipment or in traffic ways.
- Heating coils on the truck will be pressure tested to manufacturer's specifications.

Winch Trucks – Frac Tank Trucks

In addition to those in the "general" section, the following policies and procedures will be observed by personnel operating this equipment:

- When the winch line is not in use, the hook on the end of the line will be securely fastened to the bed of the truck and the line pulled snug with the winch brake set.
- Before operating the winch, the driver will visually check all the components of the winch and cable to assure they are in safe operating condition.
- When working with a swamped/helper/other personnel, the helper will not enter behind the winch truck until the winch is engaged. Once the winch is engaged, the operator of the truck will signal for the helper to enter to the back. The helper can then handle the winch line.
- When picking up a frac tank or trailer, the winch line will be placed underneath the loading hitch and the hook will be anchored back into the loading hitch. If no place on the tank or trailer is available to anchor the hook, then it will be attached to the line.
- While raising or lowering loads, winches will be operated slowly.
- Drivers will ensure that the kingpin is locked in the fifth wheel before transporting. The winch line will remain attached to the trailer with enough slack for turning with the winch locking dogs set.
- Frac tanks are top heavy. CAUTION will be used when hauling these tanks on windy days or over rough terrain.
- Always check locations prior to spotting tanks and never allow persons to stand between tanks when spotting them.
- Drivers will ensure that all frac tanks are empty prior to transporting them.
- Prohibit anyone from entering a frac tank. If a frac tank must be entered, comply with confined space safety procedures and practices.

Winch Line

All employees will stand clear when a winch line is being used. It may become taut or slack without warning. Employees will never step over or under winch lines.

Winch lines will be regularly inspected and removed from service when marked corrosion appears and/or there is evidence of kinking or crushing.

Tail chains on winch lines will be attached in an approved manner. Wire rope clamps, swaged socket, spliced eye and thimble, or combination clamp and thimbles are approved types. Knots in winch lines are not approved attachments.

When cutting wire rope, the ends to be cut will always be seized with wire or similar material and a guillotine-type wire rope cutter used to make the cut. Eye protection will be worn when cutting wire rope.

Drop Decks and Floats

The following are the minimum safety procedures to be observed by personnel working with this equipment:

- The drop deck or float will be thoroughly inspected each day before transporting. The driver will check all loads for loose objects, rocks, and dried mud and remove or secure these objects before transporting.
- Loads extending over the rear or sides of the trailer will be marked with red flags.
- If the load on the trailer starts to roll, employees will not try to stop it.
- Employees will not go between any object and a trailer during loading, unloading or transfer operations.
- Pipe will be loaded and unloaded layer by layer, with the bottom layer pinned or blocked securely on all four corners.
- When handling pipe, employees will not place their hands in the ends of the pipe.
- Chains that secure heavy loads will be attached to the eye beam and passed through the eyes on the side of the trailer when practical.

Forklifts

The following policies and procedures will be observed by personnel operating this equipment:

- Only authorized, trained and qualified personnel will operate forklifts.
- Never change the forward or reverse travel without first coming to a complete stop.
- Never leave a forklift with its motor running. Always lower the forks to the floor, shift into neutral, set the parking block and turn the ignition off.
- Avoid sudden starts and stops.
- Only the operator will ride the forklift. Absolutely no passengers.
- If a forklift is used to elevate workers, a safety pallet with a solid floor and handrails must be used and employees must be tied off.
- Never carry personnel on loads or allow bystanders around loads being stacked.
- Always drive slowly over rough surfaces and slippery floors.
- Always keep body parts inside the framework of the forklift.
- Before entering a truck, the forklift operator will chock the truck wheels nearest the dock.
- The operator will make sure a load does not exceed the capacity of the forklift.
- Additional weight will not be added to the counterweight.

Transportation of Hazardous Material

The first person at the scene of a hazardous material spill in excess of prescribed quantities or concentration (or if this type of spill is likely to occur) must report the spill to the proper authorities. On a public road, railroad, or government-owned property, the first call should be 911. On Gravity property, employees will follow the emergency response plan for reporting a hazardous material spill.

The person who has possession of the hazardous material at the time of the release has the primary responsibility of reporting the release to the proper authorities.

Only properly trained personnel should attempt to stop, control, or clean up a hazardous material spill.

First responders should never attempt tasks that exceed their level of training. The primary duties of a first responder are to notify the proper authorities, stay in a safe area from the spill, and advise others not to enter the spill area.

The main objectives of properly handling a spill of hazardous material are:

- Protection of life
- Protection of the environment
- Compliance with the law
- Safeguarding property
- Maintaining accurate communication with emergency responders, governmental agencies, and Gravity personnel.

The consignor must:

- Determine the classification of the hazardous material before allowing a carrier to take possession of the hazardous material.

- Prepare and give to the carrier a shipping document or (if the carrier agrees) an electronic copy of the shipping document before allowing the carrier to take possession of the hazardous material.

- Be able to produce a copy (or an electronic copy) of any shipping document for two years after the date the shipping document was prepared. This applies whether the hazardous material was imported into the U.S. or shipped within the U.S. A copy of the shipping document must be produced within fifteen days after the consignor receives a request from an inspector.

Transportation of Hazardous Material (cont.)

- All containers of hazardous material must have the proper placard displayed on it.
- All containers must be properly designed, constructed, sealed, and secured. These containers must be maintained so that under normal conditions of transporting and handling there will be no accidental release of hazardous material that could endanger public safety.
- The vehicle used for transporting hazardous material must be designed and constructed for properly loading, unloading, and securing the containers.
- Persons who handle, offers for transport, or transports hazardous material must be adequately trained and possess a certificate of training. Persons without adequate training must work under the direct supervision of a person who is adequately trained and possesses a certificate of training.

Spotter / Flagger

- Spotters/Flaggers must be trained to understand and utilize the proper signs, symbols, and hand signals used to directly communicate with a vehicle or equipment operator.
- When backing or navigating tight locations a trained spotter may be required to monitor and direct traffic around or under power lines, electrical pad-mounted equipment, well-heads, and/or other stationary objects.
- The need for a Spotter/Flagger should be determined when completing the JSA.
- Spotter/Flagger must be equipped with the necessary safety apparel and equipment (e.g., high visibility safety vest, air horn) necessary to guide the vehicle operator and/or equipment operator safely around or under power lines, electrical pad-mounted equipment, well-heads, and/or other stationary objects.
- Spotter/Flagger, vehicle and/or equipment operators must adhere to the minimum clearance distances recommended by customers when maneuvering around/under powerlines or stationary equipment on location.

Standard Backing Ground Guide Signals for Trucking Operations