PETROLEUM LOADING AND UNLOADING PROCEDURES
Bottom Loading

The loading and unloading of petroleum is a complex and potentially dangerous operation. Following basic safety practices can help to reduce the risk of an incident. The guidelines below are not exhaustive, and a loader’s actions should always be informed by current safe practice and all of the conditions of present in the loading area.
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A. Before Loading Transport Vehicle
   1. Walk Around Inspections: A driver must conduct a walk around inspection. You must visually check for any unusual odors, noise, or physically defective equipment, such as broken springs, over heated tires, misalignment of axles, leaks, smoke, etc.

   2. Before loading each load, verify that every compartment is empty. This is crucial when loading K-1 Kerosene. Do not load K-1 into a compartment that previously contained gasoline. Load K-1 only after a distillate. Draining the compartment of all residual products before loading K-1 is mandatory safe practice.

B. Bottom Loading Procedures
   1. Stop delivery vehicle at the loading rack stop line.

   2. At stop line, turn off all lights, radio, and other electrical equipment (and follow any other posted local plant procedures).
      a. Check tires and suspension for broken springs.

   3. If rack is not clear, set parking brakes and shut off engine.

   4. When rack is clear, start engine, pull forward, and spot truck for loading.

   5. Re-set parking brake.


   7. Eye protection and bump hat must be worn at all times during the transfer of product.

   8. Under no circumstances should the driver leave the loading area unless due to an emergency.
      a. No one other than the driver is to be in the loading area except:
         i. An authorized instructor training that driver.
         ii. Persons authorized by the petroleum company who have a legitimate reason to be in that area during the loading process.

      b. No driver, while filling his trailer, will allow his attention to be diverted from the loading process.
         i. Examples of activities that unnecessarily divert attention from the proper focus of the loading process are:
            (a) Eating or drinking
            (b) Reading or writing
9. If trailer is equipped, check product retain lights.
   a. Connect high level fiber optic cable (ground line/scully cord) to the trailer
   b. Check for permissive green light
   c. If green light does not come on, stop loading process, see instructions, plant
      attendant or supervisor.

10. Connect vapor recovery hose and close both cam-lock (“ears”) levers completely
    on the hose.

11. Open fitting box and open internal valves as required.

12. Connect the appropriate loading arms. When connecting a loading arm coupler to the
    trailer pipe, slide the collar on the adapter before actuating the lever, which locks the
    collar and opens the valve. Do not force the collar on with the lever cam. This damages
    the lever arm and shear pin.

13. Open internal valves as required.

14. Clear registers and set pre-sets for the proper gallons for each compartment. Know
    the capacities of all compartments on the trailer. The pre-set counter must never be
    set to an amount greater that the legal/safe fill capacity of the compartment being filled.

15. Start the appropriate product pumps.

16. At each meter:

   a. Verify product, pre-set gallon amount and loading arm connection to the
      correct compartment.
   b. Actuate start mechanism.
   c. Verify that the pre-set meter countdown is working properly.
   d. Verify there are no leaks.

17. Observe slow-flow shutdown of all meters. If slow-flow does not engage at 50-30
    gallons, stop flow immediately by pressing stop button on pre-set. Do not bypass
    slow-flow. Report to management.

18. After each compartment is loaded, close the internal valve for that compartment.
    When a compartment is filled beyond safe-fill capacity, the loading rack high level
    control monitor will not permit further loading. If additional loading is necessary, the
    driver must follow local procedures for draining product (which will include notifying
    plant management) so that the loading rack high-level control monitor returns to a
    permissive state. On units equipped with an on-board overfill indicator, it may be
    necessary to press a reset button to get a green light on the rack monitor.

19. After loading is completed, disconnect and stow loading arms.

20. Make sure drop heads are hooked up and interlock bar is down and locked.
21. Close fitting box doors and secure.

22. Disconnect vapor recovery hose. Secure vapor hose to its holder on the rack and lock cam-lock ("ears").

23. Disconnect high level fiber optic cable and secure. Remember, this is the first thing connected and the last disconnected.

24. Immediately look down the right side of the trailer to ensure that all loading equipment has been disconnected and stowed in its proper position.

25. Move unit from the loading rack to designated parking area.
   a. Set parking brakes
   b. Shut off engine
   c. Do not leave unit under rack area after loading

26. Report any spills or loading rack equipment malfunctions to plant management.

27. Collect bill of lading/invoice and all other necessary documents. This procedure may vary for each loading terminal.

28. Ensure that the OSHA product identification labels and the emergency response guidebook are available in the truck cab

29. It is because procedures may change from one loading facility to another that you must become familiar with each loading facility’s rules and regulations.
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