

DRIVER CHECKLIST FOR LOADING AND UNLOADING PROCEDURES

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. If you load on top of product, you will be charged with the incident.
 - _____ (a) K-1 Kerosene:
If loading K-1 Kerosene, step 2 is very important. You are NOT to load K-1 into a compartment that previously contained gasoline. Only load K-1 after a distillate. It is a required practice to drain the compartment of all residual product before loading K-1.

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.
- _____ (6) Shut off engine.
- _____ (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 Oil 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 which 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 leading 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 than 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

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) **NOTE:** These procedures may change a little from one loading facility to another. You must become familiar with each loading facilities rules and regulations in order to do a good job.

C. TROUBLESHOOTING HINTS

LOADING RACK PROBLEMS

- _____ (1) **NO GREEN LIGHT ON GROUND CIRCUIT/OVERFILL SENSOR CONTROL**
 - _____ (a) If green light is not illuminated....
Bulb could be burned out – Advise plant management
 - _____ (b) If red light does not go off.....
Plug contact points may be dirty.
Spring-loaded contact in rack plug may be stuck “in”.
Trailer wiring or sensor may be defective.
 - _____ (c) If light go to green and red each time connection is made....
Sensor is reading possible retain; confirm compartment is empty.
 - _____ (d) If light goes to red intermittently while loading....
Rack-to-trailer connection is not making good contact.
Compartment previously loaded is filled too close to sensor level and product is splashing against sensor.
 - _____ (e) If light goes to steady red while loading....
Compartment currently filling has reached high level sensor.
Red light at trailer control box will show what compartment has scullied out.
Trailer-to-rack connection has lost contact.
 - _____ (f) If light stays at a steady red and you can not get a green light, a sensor in one of the compartments may have gone bad.

- _____ (2) **NO POWER TO TRAILER CONTROL BOX**
 - _____ (a) If there is no power to trailer scully control box then the main fuse under the electrical pig-tail that hooks to the trailer may have blown. Fuse is under pig-tail and glad hand hook ups
 - _____ (b) At the main scully box on the side of the trailer you should have a green and yellow light on to let you know the scully system is operating.
 - _____ (c) Losing ground connection between trailer and fifth wheel will not let scully turn green.

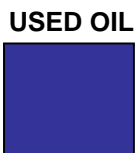
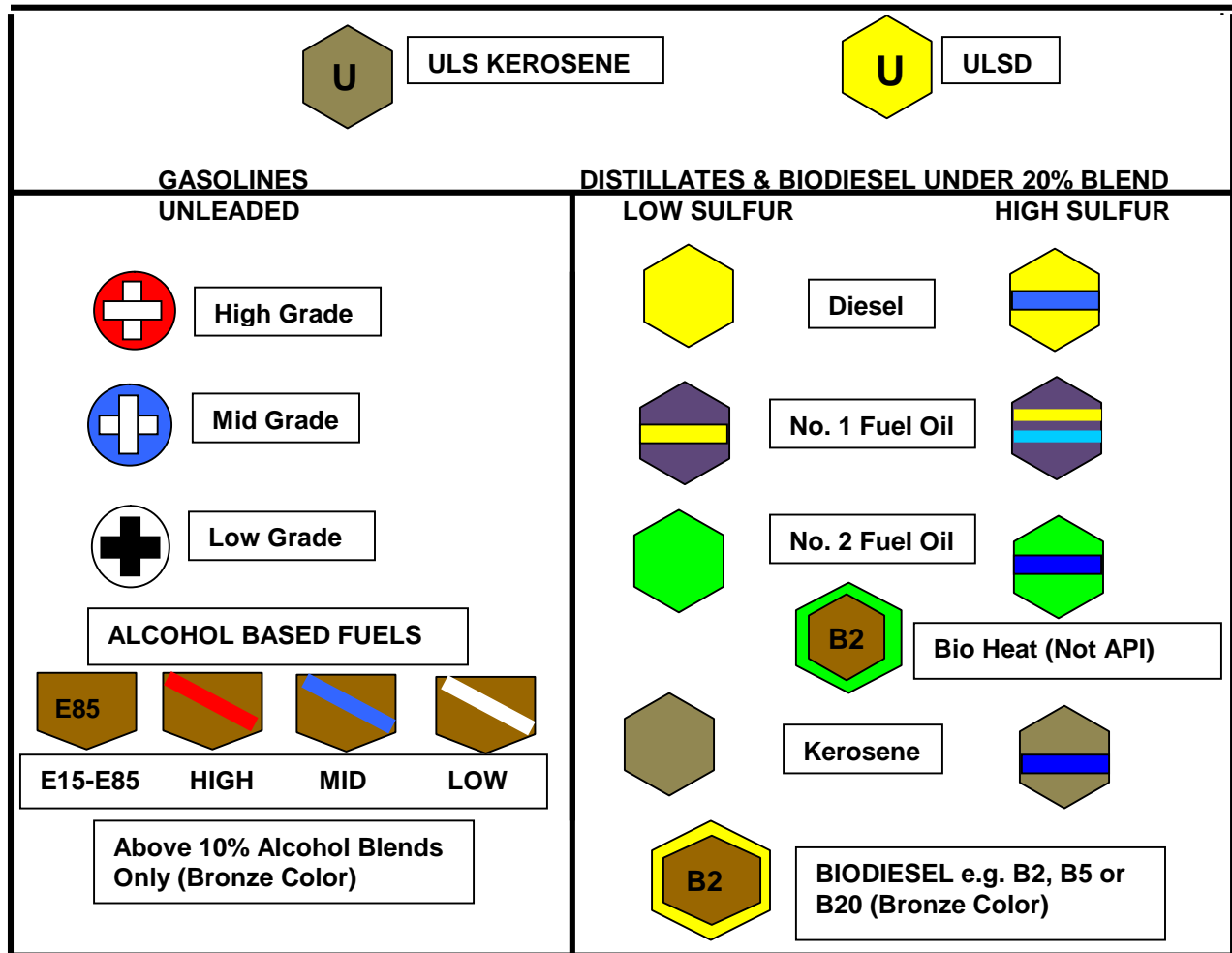
- _____ (3) **CONDENSATION**
 - _____ (a) In the winter months sometimes condensation will accumulate on sensors and keep the system from getting a green light. To correct this you will have to open the dome lid for that compartment and wipe.

D. API Color Symbols System for Proper ID of Fuel Storage Tanks, Fills & Piping

The industry standard via the American Petroleum Institute for color codes. API Standard 1637- USING THE API COLOR-SYMBOL SYSTEM TO MARK EQUIPMENT AND VEHICLES FOR PRODUCT IDENTIFICATION AT GASOLINE DISPENSING FACILITIES AND DISTRIBUTION TERMINALS. (3rd Edition July 2006)

NC Fire Code requires each fill pipe for motor fuel at a service station must have a label or must be painted a particular color to represent the product in the tank. Furthermore, there must be a key or code chart for such color painting available inside the station office and every employee should be aware of the location of the color code at the station. NCDA-CS Handbook 44 also requires an ID system in place. If color code is used, a color chart is required at the place of business where it can be easily seen, preferably where it can be seen from the tanks. If a Standards Division Inspector (NCDA-CS) visits the station they must be able to determine what fill pipe represents what product and there must be a (color code) chart available to spell it out. Just using "memory" will not suffice.

As to what colors are best for the various fuels sold - each company can use their own scheme but the recommendations of the American Petroleum Institute (API) are shown on this page. **Anytime there is the slightest doubt as to color codes or what products that customer has "stop and call dispatch". SEE CHART BELOW**



E. BEFORE UNLOADING TRANSPORT VEHICLE

- _____ (1) Verify products at location
- _____ (2) Verify color codes
- _____ (3) Call dispatch if any doubt
- _____ (4) Steps to take when you cannot identify color code
 - _____ (a) Stick product and smell stick
 - _____ (b) Stick product – How it feels
 - _____ (c) Stick product – How it looks
 - _____ (d) Products sold at pump island
 - _____ (e) Look at drop holes for identification bands of products around filler neck or on ground around fill hole.
 - _____ (f) Check with store manager for proper product drops
 - _____ (g) Check with dispatch

• IF ALL THESE ITEMS ARE CHECKED AND YOU STILL HAVE DOUBTS, STOP AND CALL DISPATCH •

- * If a defect in color code or no color code is found, complete and turn in a defect report with your paperwork.
- ** It is imperative that we take every precaution against cross dropping of products, especially gasoline and distillates. In the event that there is a cross drop involving gasoline and a distillate, it will be viewed as a preventable incident in all cases. If you follow unloading procedures, there will never be an excusable reason for cross dropping gas and distillates. These mistakes are very costly and dangerous to you, the company and the customer.

F. DELIVERY PROCEDURES

The driver's main responsibility is to always conduct him/herself in a safe, professional manner at times when making a delivery. Staying alert to any possible dangers and always practicing spill prevention techniques is a part of your everyday responsibility.

You will be delivering product to many different locations, each having its own unique characteristics. The following is a general guideline that will assist you in making a delivery.

PRIOR TO UNLOADING

- _____ (1) Verify address of location.
- _____ (2) Correctly position the truck for delivery.
- _____ (3) Set breaks, place unnecessary lights in off position.
- _____ (4) Shut down engine.

NOTE: Drivers are to wear protective eye (goggles) and headgear (hard hat) whenever fuel is transferred.

- _____ (5) Conduct a safety walk-around inspection. Check for any unsafe mechanical condition – such as hot brakes, flat tire, etc.
- _____ (6) Position safety cones around unloading area. Always have spill kit available.
- _____ (7) Identify correct storage tank using color code system.
- _____ (8) Gauge (stick) tank that will be receiving the product and consult tank charts making sure it will hold all of the fuel.
- _____ (9) Complete any required paper work (Company and or customer).

If receiving tanks are not clearly identified – STOP – CALL DISPATCH – Do not proceed with the delivery process.

IN ADDITION – YOU MUST NOT:

- _____ (1) Cross-drop product.
- _____ (2) Split compartments, consult with dispatch then only drop by compartment the amount of product that will safely fit – dispatch will inform you as to what to do with the balance.
- _____ (3) Over-fill any tank.

NOTE: Delivering product into a tank that cannot be gauged is strongly discouraged. You should call the dispatch office for instructions before proceeding with the delivery.

If there is not enough space in the storage tank for the product on your truck, stop, call your dispatch office for instructions.

G. DELIVERY

- _____ (1) Make sure that all tanks are securely capped except for the tank receiving product. This particularly applies to multiple tanks for the same product, which commonly are hooked/manifolded together. Remote fills, stick holes must be securely capped when dropping product. If caps are broken, call dispatch. If a tank prematurely fills, product can escape through these openings.
- _____ (2) Hook up the vapor recovery. (This is the law!)
- _____ (3) Select the proper fitting and hose to make the delivery. Gas applications must have a vapor recovery hook-up in addition to the product. Make the proper connections between the trailer and receiving tank.
- _____ (4) Verify that you are hooked to the correct tank and compartment before starting the flow of product. Never move the unit while hoses are connected. A maximum of 2 compartments are to be dropped at a time.
- _____ (5) Prepare to drop fuel into storage tank.
- _____ (6) Open internal safety valves (belly valves) for the compartments which are connected by hose to the under ground tanks. All other valves shall remain in the closed position.
- _____ (7) Carefully open the discharge valve, always checking for leaks.
- _____ (8) Driver must always remain attentive to the unloading process within twenty-five (25) feet of the discharge valves and have an unobstructed view of the unit vents overfills, lids etc. No paper

work should be filled out while dropping product. Do paper work prior to dropping or after dropping product. Unit must not be left unattended while any hose is connected.

H. DELIVERY COMPLETED – PREPARING FOR DEPARTURE

- _____ (1) Verify that the trailer compartments are empty by using a bucket or cupping the hose under the discharge valve and slightly opening the valve. In the event that one leaves product on a trailer, that the person along with the one person loading on top of the product will be charged.
- _____ (2) Close all safety and discharge valves verifying the valves that were opened to drop product, remained in the open position throughout the delivery. These valves can shut prematurely before the compartment is empty.
- _____ (3) Drain any residual product from hoses and fittings into customer's tanks.
- _____ (4) Return all hoses and fittings to unit.
- _____ (5) Gauge (stick) tank for an ending reading and record on freight bill, verifying customer received all of the product through stick reading conversion.
- _____ (6) Replace all storage tank caps and manhole covers.
- _____ (7) Return all safety cones and other items used to the unit.
- _____ (8) Complete freight bill – noting any incorrect markings on tanks, broken caps or vapor recovery problems. Verify that all products and gallons were properly delivered and accounted for.

WHEN DEPARTING FROM CUSTOMER LOCATION – YOU SHOULD NEVER BACK THE VEHICLE AT A CUSTOMER LOCATION, UNLESS THERE IS NO OTHER WAY OUT OF THE AREA. YOU MUST PLACE SAFETY CONES BEHIND UNIT AND PROGRESSIVELY BACK UP TO THEM TO VACATE THE AREA.