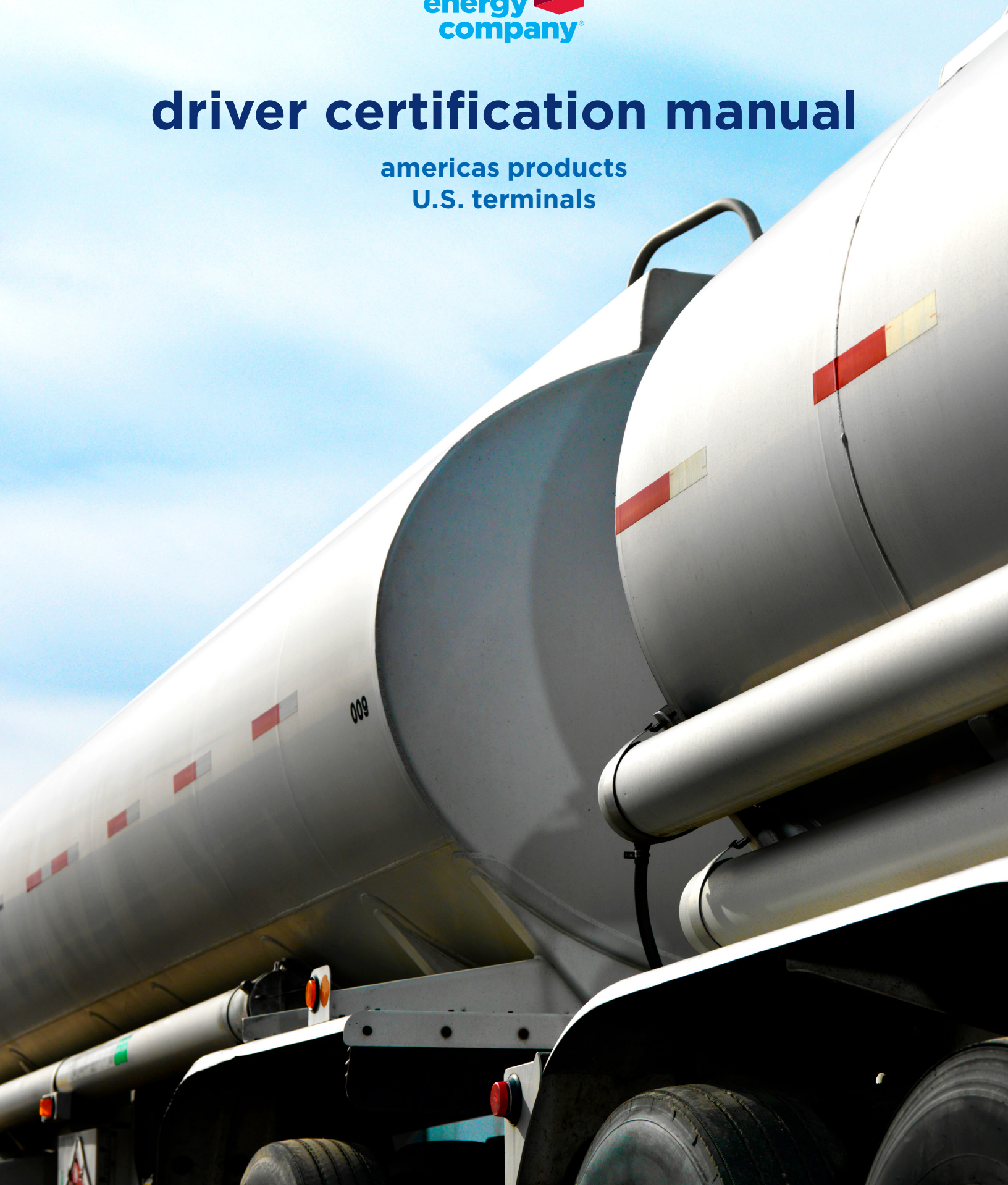
the human energy company® Chevron

driver certification manual

americas products
U.S. terminals



contents

purpose, scope and expectations

Chevron is committed to providing a safe work environment and while on our facilities, your safe, reliable, efficient and environmentally sound operations are critical to sustaining that commitment.

To address risks associated with loading petroleum products and outline our expectations while loading at our Chevron-operated terminals in the United States, Chevron has developed this Driver Certification Manual.

This manual is applicable to drivers loading petroleum products at U.S. bottom-loading, Chevron-controlled fuels terminals.

Per carrier agreements, prior to loading at a Chevron terminal, each carrier tank unit must have completed Chevron Truck Inspection Process (CTIP) Exhibit C for each tank truck and/or tank trailer. A copy of Exhibit C, Vapor Tightness Test Form, and strapping charts, unique to each unit, must be onboard and available for audit by Chevron personnel.

while loading at our facilities, drivers are expected to ...

- Fully comply with Chevron's policies and practices, including those outlined within this manual and site-specific training
- Perform product loading safely and efficiently, while effectively recognizing risks and potential consequences
- Understand and comply with federal, state, and local laws, ordinances and regulations affecting their business

Violation of, or failure to comply with, any rules and procedures outlined in this manual, posted at the terminal, or provided by terminal personnel, may constitute grounds for immediate withdrawal of loading privileges at any, or all, Chevron facilities.

Questions regarding this manual or the Chevron Driver Certification process should be directed to Chevron terminal personnel.

DISCLAIMER: This manual is not intended to provide legal or other professional advice. The content including procedures described below are provided "as is" and without any expressed or implied warranties. Chevron does not claim the information contained in this manual is complete or without error; and does not represent that following the recommended procedures will ensure compliance with governmental requirements regarding safe truck loading or that such procedures are appropriate for use in connection with facilities other than those operated by Chevron. It is recommended that you consult the actual laws and regulations, other sources of information and your own legal counsel.

driver certification process

the driver certification process is outlined below

Prerequisite

- Print and read Driver Certification Manual
- Complete Driver Quiz
- Schedule initial visit appointment at least 24 hours prior

Initial visit

- With terminal personnel, complete site-specific orientation

Signoff

- Schedule appointment at least 24 hours prior
- Successfully complete Driver Loading Checklist
- Demonstrate safe loading skills

Additional terminals

- Schedule appointment at least 24 hours prior
- Provide loading authorization from another Chevron terminal
- With terminal personnel, complete site-specific orientation

Carrier drivers shall:

- Complete prerequisite items prior to arrival
- Schedule terminal appointments at least 24 hours in advance
- Complete certification signoff within six (6) months of site-specific orientation
- Complete site-specific training at each Chevron terminal at which they load
- Be recertified following a six (6)-month lapse in loading at a Chevron terminal

terminal security and safety

While working at Chevron terminals you are required to comply with the terminal's safety and security rules, regulations, and procedures. Your compliance is critical to the safe operations of Chevron terminals.

The items noted below are common to Chevron terminals. Site-specific security and safety topics will be discussed during Terminal orientation.

stop-work authority

Stop-Work Authority (SWA) is a foundational tool that **establishes the authority and responsibility** of any individual to stop any work, behaviors, or conditions that **they believe** to be unsafe and could result in an undesirable event.

Should you see unsafe behaviors or conditions, engage Stop-Work by contacting terminal personnel or activating the Emergency Shutdown.

There will be **no repercussions** to an individual exercising Stop-Work Authority.

If you see something, say something

Chevron

stop-work authority

it is your responsibility and you have the authority

We **always** comply with the Tenets of Operation shown on the reverse of this card.

As an employee or contractor for Chevron, you are **responsible** and **authorized** to stop any work that does not comply with these tenets.

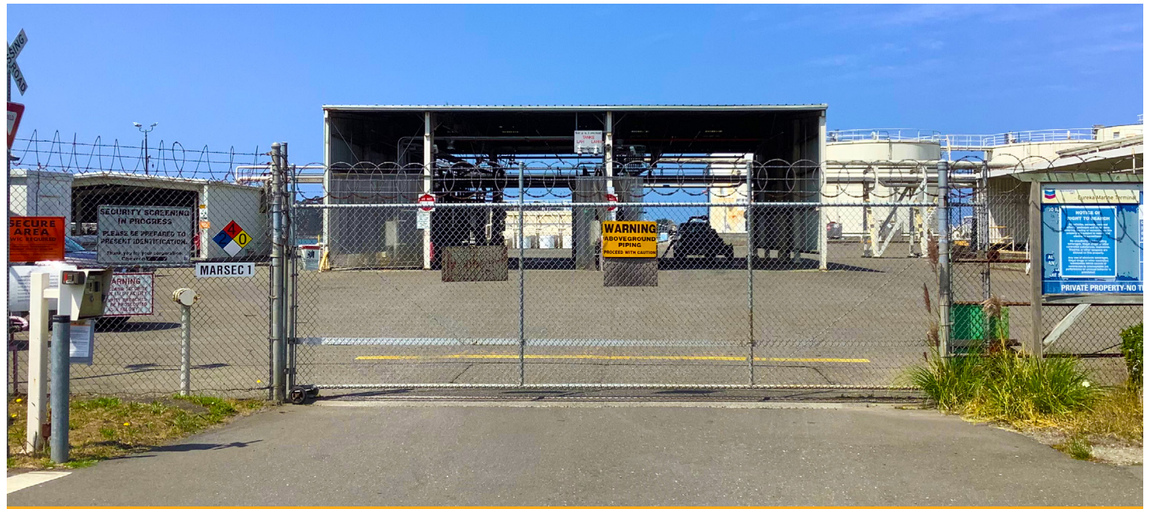
There will be no repercussions. This is our commitment to you.

terminal security

Physical and cybersecurity of Chevron is essential and cannot be compromised. It is critical you follow procedures and pay attention not only to the safe handling of our terminal products, but to the environment around you while accessing, working in and departing Chevron terminals.

Chevron terminals are surrounded by gated security fences. Under normal operations, gates (either automatic or manned) remain closed and are opened for approved personnel, visitors and vehicles. You are required to immediately report unusual or suspicious activities to Chevron terminal personnel or local law enforcement.

Chevron's goal is to ensure everyone returns home safely every day. Your commitment to safety is critical to achieving that goal.



terminal security rules include:

- Vehicles, persons, personal effects, packages and other items entering, leaving or remaining on Chevron's property are subject to search and electronic surveillance.
- Inside the terminals, the use of cameras is not allowed without written permission from terminal personnel.
- Explosives, firearms or other weapons are prohibited.
- Intoxicating beverages, illegal drugs, controlled substances, including prescription medication that could affect job performance, are prohibited. Anyone **appearing** to be under the influence of alcohol or drugs will NOT be allowed to load and may be asked to immediately cease activity on terminal property.
- Inappropriate pictures, images or other items that could be found offensive are prohibited.
- Your loading card is for your use only. Do not allow anyone to use your card and do not share your PIN.

immediately report:

- Vehicles or persons entering the terminal by following another vehicle or person through a gate or door (e.g., piggybacking or tailgating).
- Persons wandering unescorted around the terminal.
- Anyone taking pictures within or beyond the fence line.
- Anyone in or around the terminal behaving abnormally.
- Unknown or suspicious devices found in or around the terminal or on your vehicle while conducting inspections.
- Unfamiliar equipment on the tank truck loading rack (TTLR).
- Drivers loading that are not familiar with the terminal's loading procedures.
- Anyone, without your permission, attempting to operate or tamper with your vehicle.
- Gates, fences or lighting that appear damaged, unsecured or not operating.

terminal safety

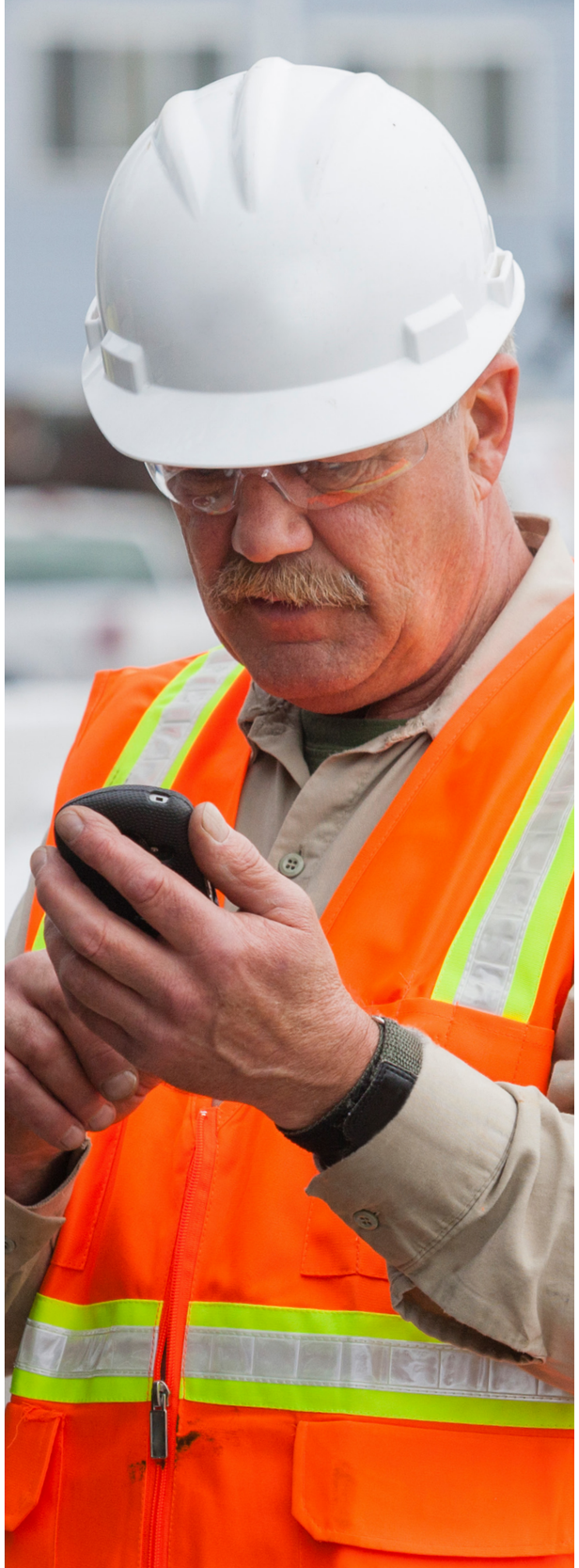
Personal safety is essential when working at Chevron terminals. Personnel are required to comply with all instructions, posted notices and terminal safety rules, including:

1. When working in operating areas, PPE is required. When worn properly, PPE is crucial in protecting you from workplace hazards and reducing the likelihood of injuries.

   Minimum requirements are:

   - **Hard hat**: Meets, or equivalent to, the requirements of ANSI Z.89.1. Note: Bump caps are allowed at airport facilities.
   - **Safety glasses with side shields**: Detachable side protectors, such as clip-on or slide-on side shields, are acceptable; safety glasses must meet, or be equivalent to, the requirements of ANSI Z87.1.
   - **Safety-toe boots**: Must have slip and oil-resistant soles, sturdy leather upper, high top (6-in.), and heel. Safety-toe shoes must meet, or be equivalent to, the requirements of ANSI Z.41, ASTM F 2412, 2413.
   - **Gloves**: Industrial grade, chemical resistant gloves, which provide enhanced grip and liquid repellency.
   - **Flame resistant clothing (FRC)**: long-sleeve shirts and pants or coveralls. FRCs shall be worn as the outermost layer, sleeves rolled down, with garments zipped and buttoned.
   - **Long pants**
2. Notify terminal personnel as soon as practically possible of any incident or injury (first aid, spill, MVC) occurring within the terminal boundaries.
3. Obey posted speed limits.
4. Smoke only in designated areas.
5. Shut off engines. **Note:** *During certain weather conditions, local terminal practice may allow idling while waiting to load.*
6. Vehicles shall park with both the parking and trailer brakes set. Vehicles with manual transmission must be parked in gear.
7. When a vehicle is parked outside the loading rack and when the driver is not in the cab, chock blocks must be used between the drive axles.

   Do not use chock blocks on loading racks.
8. The use of electronic/mobile devices (phones, tablets, smartwatches, etc.) is allowed when positioned greater than 25 feet (8 meters) from the edge of a loading rack area or in terminal-designated areas and when the vehicle is not in motion.
9. Electronic devices are to be left in the truck cab.
10. While performing tank truck checks, driver's feet cannot be more than four feet off the ground.
11. Any truck maintenance must be approved by terminal personnel before work starts.



static electricity hazards

As diesel, jet fuel and gasoline pass through pipes, rubbing against the pipe walls creates an electric charge. Accumulation of these electric charges is called static electricity and a spark from a static electric discharge is enough to ignite flammable vapors.

Switch loading (loading diesel into a compartment previously containing gasoline) can increase the hazard potential because it can generate an explosive environment. A static discharge occurring inside the compartment could cause destructive results.

While our terminals are equipped to safeguard against static accumulation and discharge, driver awareness is also a critical safeguard. When performing loading activities, use the three S's to stay aware to potential hazardous conditions:

sight **smell** **sound**

Sight

- Watch for vapors out the top of the truck
- Watch for vapors or leaks at hose and riser connections

Smell

- Be alert to petroleum odors – don't "presume" it's the facility or rig that pulled up in the next lane

Sound

- Ensure Internal valves are open (abnormal whistling sound from top of trailer)
- Listen for product moving through hoses and/or into compartment
- Immediately shutdown loading when any abnormal sounds (i.e., pinging or rattling) occur inside the compartment

terminal emergency procedures

To ensure appropriate response, review posted terminal site-specific guidelines regularly.

Should you and/or your vehicle be involved in an accident, spill or other incident, you shall cooperate in the investigation. When your vehicle is involved, the vehicle shall not be moved, except in an emergency or at the direction of a Chevron terminal employee.

basic spill emergency response

1. Stop product flow. When necessary, activate Emergency Shut Down (ESD).
2. Prevent ignition sources.
3. Stop vehicles from entering or exiting the loading rack area.
4. When spill is greater than one quart (32 oz/946 ml), notify terminal personnel.
5. Do not walk on spilled products.
6. Use wash-down hoses to wash spilled product down loading rack drains.
7. Return wash-down equipment to its proper place.
8. Before resuming loading, get approval from terminal personnel.

basic fire emergency response

1. Activate Emergency Shut Down (ESD).
2. Where applicable, and not already active, activate fire deluge system.
3. Vacate the area and prevent other vehicles from entering terminal.
4. Call 911 for any life-threatening issues.
5. Do not move your truck.
6. Notify terminal personnel.
7. Do not walk on spilled product.

loading rack

Chevron terminals are equipped with overfill detection systems (often referred to as a “Scully”). The system is designed to shut down the lane(s) when:

- Product contacts the compartment probe located inside the compartment (known as a wet probe)
- During the loading process (initiated when the first quantity “preset” is entered, until load completion), the overfill detection system’s status changes from green to red

Note: *The overfill detection system will change to red when the overfill protection cord is disconnected or truck’s internals are closed (depending on truck configuration) prior to completing load activity in the computer system.*

Ensure you monitor the quantity you are loading. **If you think a loading problem or safety hazard exists, stop the loading process and notify terminal personnel to resolve your concerns.**

loading rack rules

The Loading Rack Rules outlined below are in place to provide a safe work environment, minimize distractions and optimize the loading process. Following these rules supports our commitment to safety and ensures YOU depart our facilities without incident.

1. Except trainers assigned to the truck being loaded, persons accompanying the driver(s) are not allowed in the loading rack area and must wait in designated areas or remain outside the terminal gate. **Note:** *When warranted, terminal personnel may grant exceptions (e.g., carrier’s maintenance, safety or supervisory staff). Speak to terminal personnel prior to accessing loading rack. Failure to seek an exception prior to loading may result in loss of loading privileges.*
2. When pulling up, line up and wait your turn.
3. Complete a walk-around vehicle inspection. **Note:** *Notify terminal personnel immediately should any security or safety issues be discovered.*
4. When necessary, use systems provided at the terminal for draining and disposing of products. Do not discharge product into the loading rack drains.
5. Stop at the “Stop” line. Ensure you have sufficient air pressure (build air prior to entering rack).
6. Wait for the previous truck to completely pull off and clear the rack. Observe the lane for spills or obstructions. **Do not** enter when spilled product is evident, equipment is not stored correctly or the lane is coned off.
7. Prior to entering the loading rack, switch off all lights (except ignition-controlled lighting), radios and electronic devices. Ensure all windows are rolled up.
8. Once on the rack, shut-off engine and set tractor and trailer parking brakes. Trucks with manual transmission must park with transmission in gear. **Note:** *Backing into, or out of, the loading rack is prohibited except when instructed by terminal personnel.*
9. No visiting or casual conversation is allowed while loading.
10. Ensure trailer or truck valves connecting adjacent compartments (manifold compartments) are closed. Tank vehicles equipped with crossover or manifold designed piping are required to equip such piping systems with a brake interlock system ensuring all crossover valves are closed while the vehicle is loading.
11. High and low flash products cannot be loaded nor discharged through a common manifold.
12. **Do not** load high and low flash products (e.g., diesel fuel and gasoline) into cargo tanks having single bulkheads.
13. Jet fuel or aviation gasoline cannot be loaded on a trailer that contains, or will contain, another product.
14. When required, use proper facility flushing procedures.
15. Do not load when an ignition source exists in the loading rack area.
16. Do not circumvent the overfill detection system (i.e., Scully).
17. Do not load without using the vapor recovery equipment.
18. Remain in the loading area until loading is complete. If you must leave your position, shut down product flow and push “Load Complete” on the touchscreen. **Do not print your bill of lading**. Disconnect all loading equipment before moving the vehicle off the loading rack.
19. When loading with three or more risers, and where applicable, two vapor connections to the unit are required.
20. One riser shall be connected and verified to be on the correct compartment with product flowing before connecting any additional risers. Verify each connection before adding additional risers.
21. While loading, should you observe product or vapor leaking from **any** piece of equipment (Chevron’s or yours) loss of air pressure or an equipment failure **stop loading immediately**. Report malfunction as appropriate to terminal personnel or the Terminal Call Center. Tag the equipment as “out of service.” Do not load until repairs are completed or the condition is corrected.
22. Do not start the truck’s engine while the vapor recovery hose, product hose and/or overfill protection cord (“Scully” cord) are still attached to the vehicle.
23. While on the loading rack, **no mechanical work of any type is allowed**, including the cleaning of windows, mirrors, lights, etc. If a truck stalls under the loading rack, it must be towed off the rack. Under no circumstances will a “booster battery” be used to start a truck under the loading rack.
24. Notify terminal personnel any time the load quantity exceeds the preset value. Follow local posted procedures for handling truck, loading rack malfunctions or other unusual circumstances.

Basic Loading Instructions are posted at each terminal. Step-by-step Bottom Loading Instructions are in Attachment C. Should you need assistance, contact terminal personnel or after-hours assistance.

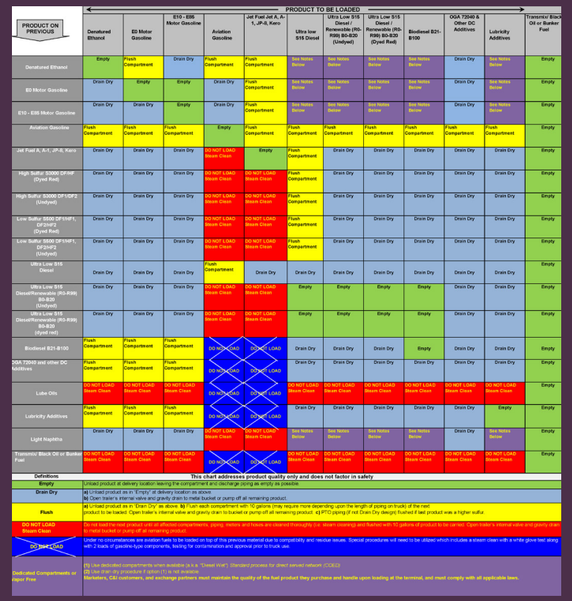
product integrity and product loading sequence chart

Product contamination can occur when a truck is loaded with a product different than the previous load. Draining dry at the delivery account is an important practice to help reduce waste at the terminal and reduce the chance of contamination of the next load:

- Two gallons of gasoline left in a 1,000-gallon compartment will lower flash below recommended diesel specifications
- Residual Avgas can add lead, contaminating unleaded gasoline stocks
- Residual petroleum products can contaminate jet or aviation fuel and can result in catastrophic events

To avoid contamination, Chevron requires drivers to use the Product Loading Sequence Chart (PLSC) [MS-3046], posted at each terminal.

Note: *To ensure you are performing the correct actions, review the PLSC each time you load.*



PRODUCT ON PREVIOUS ↓ / PRODUCT TO BE LOADED →	Denatured Ethanol	E0 Motor Gasoline	E10 - E85 Motor Gasoline	Aviation Gasoline	Jet Fuel Jet A, A-1, JP-8, Kero	Ultra low S15 Diesel	Ultra Low S15 Diesel / Renewable (R5- R99) B0-B20 (Undyed)	Ultra Low S15 Diesel / Renewable (R5- R99) B0-B20 (Dyed Red)	Biodiesel B21- B100	OGA 73040 & Other DC Additives	Lubricity Additives	Transmix/ Black Oil or Bunker Fuel
Denatured Ethanol	Empty	Flush Compartment	Drain Dry	Flush Compartment	Flush Compartment	See Notes Below	See Notes Below	See Notes Below	See Notes Below	Drain Dry	See Notes Below	Empty
E0 Motor Gasoline	Drain Dry	Empty	Empty	Drain Dry	Flush Compartment	See Notes Below	See Notes Below	See Notes Below	See Notes Below	Drain Dry	See Notes Below	Empty
E10 - E85 Motor Gasoline	Drain Dry	Drain Dry	Empty	Drain Dry	Flush Compartment	See Notes Below	See Notes Below	See Notes Below	See Notes Below	Drain Dry	See Notes Below	Empty
Aviation Gasoline	Flush Compartment	Flush Compartment	Flush Compartment	Empty	Flush Compartment	Flush Compartment	Flush Compartment	Flush Compartment	Flush Compartment	Flush Compartment	Flush Compartment	Empty
Jet Fuel A, A-1, JP-8, Kero	Drain Dry	Drain Dry	Drain Dry	DO NOT LOAD Steam Clean	Empty	Flush Compartment	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Empty
High Sulfur S5000 DF1/DF2 (Dyed Red)	Drain Dry	Drain Dry	Drain Dry	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Flush Compartment	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Empty
High Sulfur S5000 DF1/DF2 (Undyed)	Drain Dry	Drain Dry	Drain Dry	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Flush Compartment	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Empty
Low Sulfur S500 DF1/DF2, DF2/DF2 (Dyed Red)	Drain Dry	Drain Dry	Drain Dry	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Flush Compartment	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Empty
Low Sulfur S500 DF1/NF1, DF2/DF2 (Undyed)	Drain Dry	Drain Dry	Drain Dry	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Flush Compartment	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Empty
Ultra Low S15 Diesel	Drain Dry	Drain Dry	Drain Dry	Flush Compartment	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Empty
Ultra Low S15 Diesel/Renewable (R5-R99) B0-B20 (Undyed)	Drain Dry	Drain Dry	Drain Dry	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Empty	Empty	Empty	Empty	Drain Dry	Drain Dry	Empty
Ultra Low S15 Diesel/Renewable (R5-R99) B0-B20 (dyed red)	Drain Dry	Drain Dry	Drain Dry	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Empty	Empty	Empty	Empty	Drain Dry	Drain Dry	Empty
Biodiesel B21-B100	Flush Compartment	Flush Compartment	Flush Compartment	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Drain Dry	Drain Dry	Drain Dry	Empty	Drain Dry	Drain Dry	Empty
OGA 73040 and other DC Additives	Flush Compartment	Flush Compartment	Flush Compartment	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Empty
Lube Oils	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Empty
Lubricity Additives	Flush Compartment	Flush Compartment	Flush Compartment	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Empty	Empty
Light Naphtha	Drain Dry	Drain Dry	Drain Dry	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	See Notes Below	See Notes Below	See Notes Below	See Notes Below	Drain Dry	See Notes Below	Empty
Transmix/ Black Oil or Bunker Fuel	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Empty

Definitions

This chart addresses product quality only and does not factor in safety

Empty – Unload product at delivery location leaving the compartment and interior as empty as possible.

Drain Dry – a) Unload product as in "Empty" at delivery location as above. b) Open trailer's internal valve and gravity drain to mate bucket or pump off all remaining product.

Flush – a) Unload product as in "Drain Dry" as above. b) Flush each compartment with 10 gallons (may require more depending upon the length of piping on truck) of the next product to be loaded. Open trailer's internal valve and gravity drain to bucket or pump off all remaining product. c) If ITC piping of not Drain Dry design, flushed if last product was a higher sulfur.

DO NOT LOAD Steam Clean – Do not load the next product until all affected compartments, piping, meters and hoses are cleaned thoroughly (i.e. steam cleaning) and flushed with 10 gallons of product to be carried. Open trailer's internal valve and gravity drain to bucket or pump off all remaining product.

DO NOT LOAD – Under no circumstances are aviation fuels to be loaded on top of this previous material due to compatibility and, residue issues. Special procedures will need to be utilized which includes a steam clean with a white glove test along with 2 tracks of gasoline-type components, testing for contamination and approval prior to truck use.

Dedicated Compartments or Hard Piped – (1) Use dedicated compartments when available (a.k.a. "Diesel Vivet"). (Standard process for direct served network (CODO)) (2) Use drain dry procedure if option (1) is not available. Marketers, C&I customers, and exchange partners must maintain the quality of the fuel product they purchase and handle upon loading at the terminal, and must comply with all applicable laws.

Review the posted Product Loading Sequence Chart (PLSC).

1. In the left column, locate the last product loaded
2. At the top, locate the product to be loaded
3. Identify the box where the two products meet to determine action needed

Note: *Carriers with metered equipment and the ability to determine available compartment volume are authorized to load on retains.*

product-specific loading requirements

aviation fuels

Birmingham, El Segundo, Oakland Airport, Panama City, Pascagoula, Pt. Everglades, Pt. Tampa, Richmond, Salt Lake City, Willbridge terminals

Additional instructions for the loading of aviation fuels are included in Section E of the Bottom Loading Instructions (Attachment C).

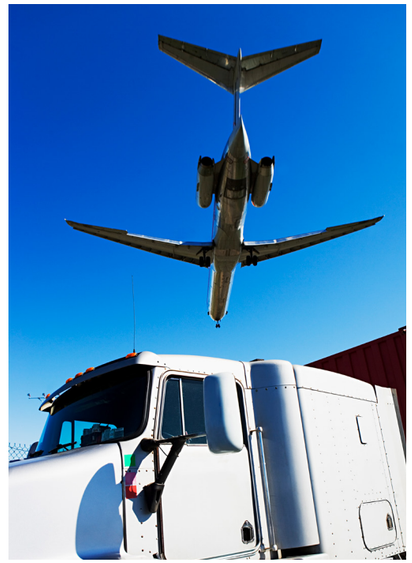
Drivers must successfully demonstrate the proper loading and testing of aviation products to be certified to load aviation products.

ultra-low sulfur diesel (ULSD)

El Segundo (Gate 3), Huntington Beach, Montebello and San Diego terminals

Additional instructions associated to ULSD loading are included in Section F of the Bottom Loading Instructions (Attachment C).

To ensure local regulatory compliance, drivers being certified to load at terminals within California's Riverside County (i.e., Montebello) must complete ULSD-specific training and sign the ULSD Driver Affidavit (Attachment F).



errors and violations occurring on terminal property

While loading fuels, simple mistakes can have significant consequences. Terminal personnel embrace and demonstrate the principles of Human and Organizational Performance (HOP) with the goal of minimizing the impacts of errors and violations. Errors and violations are defined as:

Error – An action or inaction that *unintentionally* results in an undesirable outcome or deviates from a set of rules or expectations.

Violation – Action or inaction that *intentionally deviates* from a set of rules.

Errors and violations that may occur on terminal property, either observed by terminal personnel or another driver and reported to terminal personnel, will be evaluated to identify cause(s) and determine required actions.

overview of error/violation process

1. Error/Violation is observed/reported.
2. Terminal personnel discuss error/violation with driver(s) to understand the circumstances leading up to the event as well as what happened.
3. Based on training, experience and situation, terminal personnel will determine required actions. In some cases, driver's access may be suspended pending investigation results.
4. Terminal personnel may issue a Notice of Discrepancy documenting the discussion.
5. In the event discipline is warranted, the Notice of Discrepancy will be completed, a copy given to the driver and a copy kept by the terminal. The notice will include the following:
   a. Date/Time
   b. Location
   c. The deviation from procedure/practice
   d. Actions taken (i.e., discussion, retraining, access suspension, etc.)
   e. Actions driver must complete (when appropriate) to correct

Note: *Blatant disregard of procedures or criminal acts, such as sabotage, may result in loss of loading privileges and other consequences.*

attachment A

driver quiz

Name: _____ Company: _____ Date: _____

Place an X in the box next to the best answer or answers (some questions have more than one).

1. **In the event of a spill, what action should be taken?**
   - ☐ Wash the spilled product into the rack drains.
   - ☐ Continue loading and leave for the next driver to notify the terminal operator.
   - ☐ If a small spill such as a tipped bucket or a dripping fitting, stop loading and notify the terminal operator. For a large spill or one that has the potential to continue or worsen to the point of becoming a large spill, activate the nearest ESD switch, then contact the terminal operator.
   - ☐ Activate the nearest ESD switch for any spill, then contact the terminal operator.
2. **Why should you stop at the Stop Line before entering the loading rack?**
   - ☐ Build up air pressure.
   - ☐ Provide time to properly turn off and stow electronic and mobile equipment, roll-up windows and shutdown lights and radios.
   - ☐ Ensure the lane is free of pedestrians, spills and to verify equipment and loading arms are correctly stowed and not obstructing the lane.
   - ☐ No reason to stop. When it's your turn, its ok to idle onto the rack without stopping.
3. **When is it ok to load on top of a retain?**
   - ☐ Always.
   - ☐ Never.
   - ☐ When the truck/trailer has metering equipment with the ability to determine available compartment volume and the same product as the retain is being loaded.
   - ☐ When the driver has determined there is sufficient space.
4. **Which statement best describes the loading arm rules?**
   - ☐ Only one load header (riser) may be loading at a time.
   - ☐ More than one riser can be connected **only after** the driver has confirmed the previous riser is loading the correct product, through the correct meter, and into the correct compartment. When connecting 3 or more risers, 2 vapor hoses are required. [Requirements must be confirmed with terminal personnel]
   - ☐ Three or more load headers (risers) may be loading at a time while using only a single vapor hose.
5. **During loading, what should you do if product continues flowing after the total quantity preset is exceeded?**
   - ☐ Contact the terminal operator any time the amount loaded exceeds the preset.
   - ☐ If the amount loaded exceeds the preset by more than 5 gallons, stop the product flow using the Stop button on the AccuLoad®* and contact the terminal operator.
   - ☐ If the amount loaded exceeds the preset by greater than 10 gallons, activate the ESD and contact the terminal operator.
6. **What should you do if you detect a vapor leak from a vapor recovery hose or anywhere else?**
   - ☐ Notify the terminal operator after loading.
   - ☐ Stop loading (lane stop button and/or activate ESD) and notify the terminal operator immediately.
   - ☐ Leave for the next driver to report.
7. **What's the purpose of Sight, Smell, Sound?**
   - ☐ Reduce build-up of static electricity
   - ☐ Minimize theft
   - ☐ Help drivers stay aware to potential hazards
   - ☐ Minimize loading times

*Accuload is a federally registered trademark of FMC Technologies, Inc.

PRODUCT ON PREVIOUS ↓ / PRODUCT TO BE LOADED →	Denatured Ethanol	E0 Motor Gasoline	E10 - E85 Motor Gasoline	Aviation Gasoline	Jet Fuel Jet A, A-1, JP-8, Kero	Ultra low S15 Diesel	Ultra Low S15 Diesel / Renewable (R0-R99) B0-B20 (Undyed)	Ultra Low S15 Diesel / Renewable (R0-R99) B0-B20 (Dyed Red)	Biodiesel B21-B100	OGA 72040 & Other DC Additives	Lubricity Additives	Transmix/ Black Oil or Bunker Fuel
Denatured Ethanol	Empty	Flush Compartment	Drain Dry	Flush Compartment	Flush Compartment	See Notes Below	See Notes Below	See Notes Below	See Notes Below	Drain Dry	See Notes Below	Empty
E0 Motor Gasoline	Drain Dry	Empty	Empty	Drain Dry	Flush Compartment	See Notes Below	See Notes Below	See Notes Below	See Notes Below	Drain Dry	See Notes Below	Empty
E10 - E85 Motor Gasoline	Drain Dry	Drain Dry	Empty	Drain Dry	Flush Compartment	See Notes Below	See Notes Below	See Notes Below	See Notes Below	Drain Dry	See Notes Below	Empty
Aviation Gasoline	Flush Compartment	Flush Compartment	Flush Compartment	Empty	Flush Compartment	Flush Compartment	Flush Compartment	Flush Compartment	Flush Compartment	Flush Compartment	Flush Compartment	Empty
Jet Fuel A, A-1, JP-8, Kero	Drain Dry	Drain Dry	Drain Dry	DO NOT LOAD Steam Clean	Empty	Flush Compartment	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Empty
High Sulfur S3000 DF/HF (Dyed Red)	Drain Dry	Drain Dry	Drain Dry	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Flush Compartment	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Empty
High Sulfur S3000 DF1/DF2 (Undyed)	Drain Dry	Drain Dry	Drain Dry	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Flush Compartment	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Empty
Low Sulfur S500 DF1/HF1, DF2/HF2 (Dyed Red)	Drain Dry	Drain Dry	Drain Dry	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Flush Compartment	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Empty
Low Sulfur S500 DF1/HF1, DF2/HF2 (Undyed)	Drain Dry	Drain Dry	Drain Dry	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Flush Compartment	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Empty
Ultra Low S15 Diesel	Drain Dry	Drain Dry	Drain Dry	Flush Compartment	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Empty
Ultra Low S15 Diesel/Renewable (R0-R99) B0-B20 (Undyed)	Drain Dry	Drain Dry	Drain Dry	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Empty	Empty	Empty	Empty	Drain Dry	Drain Dry	Empty
Ultra Low S15 Diesel/Renewable (R0-R99) B0-B20 (dyed red)	Drain Dry	Drain Dry	Drain Dry	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Empty	Empty	Empty	Empty	Drain Dry	Drain Dry	Empty
Biodiesel B21-B100	Flush Compartment	Flush Compartment	Flush Compartment	DO NOT LOAD	DO NOT LOAD	Drain Dry	Drain Dry	Drain Dry	Empty	Drain Dry	Drain Dry	Empty
OGA 72040 and other DC Additives	Flush Compartment	Flush Compartment	Flush Compartment	DO NOT LOAD	DO NOT LOAD	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Empty
Lube Oils	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD	DO NOT LOAD	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Empty
Lubricity Additives	Flush Compartment	Flush Compartment	Flush Compartment	DO NOT LOAD	DO NOT LOAD	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Empty	Empty
Light Naphtha	Drain Dry	Drain Dry	Drain Dry	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	See Notes Below	See Notes Below	See Notes Below	See Notes Below	Drain Dry	See Notes Below	Empty
Transmix/ Black Oil or Bunker Fuel	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD	DO NOT LOAD	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	DO NOT LOAD Steam Clean	Empty

8. Using the EXAMPLE product loading sequence chart above, what must be completed before loading ULSD (S15) into a compartment that previously contained Aviation Gasoline?

- ☐ Empty compartment (green cell)
- ☐ Flush compartment (yellow cell)
- ☐ Drain dry compartment (blue cell)
- ☐ See notes below (purple cell)
- ☐ Do not load Steam Clean (red cell)
- ☐ Do not load (X'd blue cell)

9. Using the EXAMPLE product loading sequence chart above, what must be completed before loading Biodiesel into a compartment that previously contained Lube Oils?

- ☐ Empty compartment (green cell)
- ☐ Flush compartment (yellow cell)
- ☐ Drain dry compartment (blue cell)
- ☐ See notes below (purple cell)
- ☐ Do not load (red cell)
- ☐ Do not load (X'd blue cell)

10. When is it appropriate to leave your truck unattended on the loading rack?

- ☐ To retrieve BOL paperwork, **only after** completely disconnecting all loading arms, Scully and vapor hose(s).
- ☐ It is mandatory to completely disconnect the truck, including all loading arms, Scully and vapor hose(s), pull your truck off the load rack and park in a designated parking area to make a phone call or speak to terminal operator.
- ☐ During an emergency evacuation it is acceptable to leave the direct loading area with a loading arm, vapor hose or Scully cord connected. In this scenario, loading shall be stopped, then immediately leave the loading area and muster at the evacuation point.

11. When is it acceptable to idle your truck under the loading rack?

- ☐ When air pressure is insufficient to release the truck or trailer brakes.
- ☐ After getting permission from a terminal operator.
- ☐ Never.

12. Where can you use your mobile devices (i.e., cell phone)?

- ☐ When positioned greater than 25 feet from the edge of the loading rack area or designated area and the vehicle is not in motion.
- ☐ Anywhere on the terminal.
- ☐ Whenever you are in your truck's cab.

13. As you are leaving the terminal, you observe someone quickly walk through the gate just as it closes. What should you do?

- ☐ Nothing. It's likely the operators already know.
- ☐ Immediately notify terminal personnel or after-hours call center.
- ☐ Notify your dispatch.

additional questions applicable **only to drivers loading **aviation fuels**.**

14. When a flush is required prior to loading aviation fuel, what should the minimum flush volume be for a 900-gallon compartment?

- ☐ 25 gallons
- ☐ 10 gallons
- ☐ 5 gallons
- ☐ No set amount, flush volume determined by the driver

15. Using the example PLSC on page A-2 to answer the following question: What must be completed before loading Aviation Gasoline into a compartment that previously contained Motor Gasoline?

- ☐ Empty compartment (green cell)
- ☐ Flush compartment (yellow cell)
- ☐ Drain dry compartment (blue cell)
- ☐ See notes below (purple cell)
- ☐ Do not load (red cell)
- ☐ Do not load (X'd blue cell)

16. After loading aviation fuels, how much settling time is required prior to pulling quality assurance samples?

- ☐ None. Samples can be pulled immediately after loading
- ☐ 5 minutes
- ☐ 10 minutes
- ☐ 15 minutes
- ☐ 30 minutes

17. How much fuel should be in the bucket when performing the White Bucket test?

- ☐ 1 inch
- ☐ 2 inches
- ☐ 4 inches
- ☐ 6 inches
- ☐ As full as bucket will allow

attachment B

driver certificate of understanding

To: **Chevron Products Company**
Americas Products

Date _____ /_____ / _____

Terminal _____

I,_____ a driver for _____,

do here by certify:

- ☐ I have watched the Driver Training Certification video.
- ☐ I have received and read the Driver Certification Manual. I understand and will comply with its provisions.
- ☐ I have reviewed the Product Loading Sequence Chart (PLSC) and agree to use it each time I load.
- ☐ I have been shown the location of the terminal's safety equipment, including emergency shutdown (ESD) switches, and have been fully instructed in their use.
- ☐ I will follow terminal emergency procedures and will immediately report any incident/accident that occurs on Chevron terminal property.
- ☐ I understand Chevron's safety and security expectations and know that all weapons, drugs and alcohol are prohibited. Additionally, I am aware that the use of cameras is forbidden without permission from terminal personnel.
- ☐ I understand the terminal access and loading cards assigned are for my individual use only. I will not loan them to anyone nor allow them to be duplicated. If I lose either card, I will immediately report the loss to Chevron terminal personnel.
- ☐ I understand that violations or failure to comply with any of the rules and procedures outlined in the training materials provided/given can constitute grounds for the immediate withdrawal of my loading privileges at all Chevron facilities.

ultra-low sulfur diesel (Montebello) only

- ☐ Ultra-Low Sulfur Diesel (ULSD) Driver Affidavit provided

aviation fuels

- ☐ I understand the additional testing requirements when loading aviation fuels and agree to follow them each time I load aviation fuels.

I declare the above certifications made by me are true and correct.

Signed: _____ Loading Card No.: _____

Checked by: _____ Date: _____

attachment C

bottom loading truck instructions

A. purpose

1. Outline safe petroleum fuel handling and loading steps at Chevron terminals.
2. To comply with local regulations and requirements, local terminals may have stricter procedures.

Note

Additional steps and cautions for the loading of Aviation fuels are provided within Section E.

B. stop line

1. **Stop** vehicle at the stop line.
2. **Turn off** lights, radios, cell phones and any other hands-free/electronic devices.
3. Perform vehicle **walk around** inspection.
4. **Verify** loading **rack is clear** of vehicles and pedestrians.
5. **Verify** windows are closed and electronics are off.
6. **Idle onto** loading rack.
7. Engage **truck** and **trailer brakes**. Manual transmissions must be parked with truck in gear.

C. product loading sequence chart

1. Confirm product(s) to be loaded. Prior to loading, use posted Product Loading Sequence Chart (PLSC) to determine actions necessary.

Warning

Not following procedures for drain dry and/or flushing may result in a wet probe.

2. Follow site-specific procedures to drain dry or flush compartments.
3. Change compartment product ID tags as necessary.

D. standard product loading steps

Warning

- Manifold (crossover) valves must be closed throughout loading process.
- Do not use vehicle manifold systems (crossover valves) to load multiple compartments.

1. Activate loading card and build product load using terminal loading system (touchscreen).
2. Validate product ID tag for each compartment to be loaded.

Caution

Scully cords must remain connected until loading is completed.

3. Connect the Scully to the truck receptacle/socket and verify Scully light is green.
   - 3.1 If light remains red, contact terminal personnel or call center.
4. Remove dust caps from compartment loading headers.
5. Connect vapor recovery hose(s) to the truck/trailer connector.
6. Open internal valves.
   - 6.1 Close all valves connecting adjacent compartments on the trailer or truck (manifold compartments).

Warning

If it is not possible to verify whether retains are present, do not load.

7. Check for retains.

Caution

- Company policy prohibits carriers WITHOUT metering equipment from loading on partial or full retains.
- Carriers *with* metering equipment, and the ability to determine available compartment volume (i.e., retained product volume to compartment NFL), are authorized to load on top of retains of the same product.

8. When retains are present, follow the site-specific procedures for draining/pumping off.

Warning

Connections between risers and compartments must match the built load (e.g., regular riser to regular compartment). Incorrect connections may result in POD or product contamination.

9. Connect riser to the appropriate compartment.

Warning

Failing to double-check correct riser to correct compartments may result in a wet probe POD and/or product contamination.

10. Verify product riser is connected to the right compartment to be loaded. This may include using “point and confirm” technique.
11. Select compartment from terminal loading system (touchscreen).
12. Verify amount programmed in terminal loading system (touchscreen) matches the capacity of the compartment.
13. Verify riser number is connected to the compartment to be loaded.

Warning

Do not start loading if product or vapor is leaking.

14. Start product flow and verify:
    - 14.1 Product flow on the terminal loading system display.
    - 14.2 The correct riser has started.
    - 14.3 No product/vapor leaks at the header nor any other parts of the truck.
15. Repeat steps 9 through 14 to connect additional compartments.
    - 15.1 When connecting 3 or more risers, 2 vapor hoses are required.

Warning

If meter does not go into low-flow or goes over preset amount, activate the Stop Lane button. If lane does not stop within 10 gallons, activate the Emergency Shutdown (ESD).

16. Remain in the area of the loading controls until each riser has loaded to preset amount.
17. When loading of each riser is complete:
    - 17.1 Close internal valve for each completed compartment if applicable (i.e., dependent on internal mechanism of the trailer).
    - 17.2 Hold coupler with one hand and disengage the handle.
    - 17.3 Replace dust cap on loaded compartment.
18. If switching compartments is necessary, repeat steps 9 through 18.
19. When product order is complete, press the following on the terminal loading system (touchscreen):
    - 19.1 “Finish” to end loading process.
    - 19.2 “OK” to print BOL.
    - 19.3 If load results in a bad blend, contact the terminal operator, or call center.
    - 19.4 When “Welcome” message appears on terminal loading system (touch screen), then proceed to the next step.
20. Close vehicle internal valves. **In the order noted below**, *disconnect*, and return the equipment to the proper positions:
    - 20.1 Loading arms.
    - 20.2 Vapor recovery hose(s).
    - 20.3 Scully cord(s).
21. Verify all dust caps have been replaced.
22. Conduct rear of trailer to front of cab verification that all equipment is disconnected.
23. Follow site-specific procedures for obtaining BOL and filing paperwork.

Warning

Follow site-specific procedures for accessing truck to correct off-spec compartments or any other truck issues.

Caution

Leaving the terminal with off spec or bad blends may result in regulatory agency fines.

- 23.1 If BOL shows the load is out of tolerance (bad blend, additive over/under), do not leave the terminal. Contact terminal operator or call center.

24. Check right mirror to verify equipment is disconnected.
25. Start engine after final check is complete.
26. Exit rack in lowest gear.

E. aviation-specific loading items

1. Complete first six (6) steps of standard loading instructions.
2. Begin completing Aviation Quality Control Log (MS-5198), declaring previous load information.
3. Determine actions required from Product Loading Sequence Chart (PLSC).
   - 3.1. When PLSC shows “Do Not Load,” do not load and contact terminal personnel.
4. When flush is *not required*:
   - 4.1 Perform a pre-inspection White Bucket visual test (Attachment E) on each compartment.
   - 4.2 When sample contains water droplets or excessive particulates, drain dry compartment(s) and proceed to Step 5 for flushing.
   - 4.3 When sample contains red dye or a lot of water, *do not load*. Document results on the Aviation Quality Control Log (MS-5198) and contact terminal personnel.
   - 4.4 When sample passes White Bucket test, proceed to **step 9**.

Note

- Some terminals do not allow flushing of compartments. **Do not** load aviation products when flushing is required but flush equipment is not available.
- No flush card will be provided. Driver must use customer’s account to flush compartment(s).
- Flush volume and load volume must be on two separate BOLs. Follow terminal procedures to generate flush BOL.

5. When a flush is required, each compartment must be flushed with at least 10 gallons, or, when compartments are larger than 1,000-gallons, 1% of compartment capacity.
   - 5.1 Build flush load of two (2) compartments, 300 gallons each. This is necessary to satisfy minimum load sized and will allow the usage of front and back risers.
   - 5.2 Connect load arm to first compartment.
   - 5.3 At the touchscreen, select compartment and riser.
   - 5.4 Standing by meter, begin loading.
   - 5.5 Observe amount loaded on counter and press **STOP** when the meter indicates the appropriate flush volume.
   - 5.6 After flow stops, disconnect load arm and move to next compartment.
   - 5.7 At touchscreen, select Resume Load to begin flushing second compartment.
   - 5.8 Repeat Steps 5.5–5.7 for each compartment needing to be flushed.
   - 5.9 Perform White Bucket test on each flushed compartment.
   - 5.10 If any compartment fails:
     - Confirm bucket and inside of discharge outlet are clean.
     - Pull a second sample and re-test.
     - If test fails again, flush the compartment again.
     - If the second White Bucket test fails, do not load. Notify terminal personnel immediately.
6. Document compartment flush volumes on the Aviation Quality Control Log (MS5198).
7. Drain the product flushes from each compartment and offside delivery outlets.
8. Print BOL.
9. Confirm tanks compartments and vapor lines are empty and clean.
10. Proceed with loading as outlined in **Steps 9–20** in the Standard Loading Instructions.
11. When complete, allow compartments to settle for at least 5 minutes.
12. Perform White Bucket test (Attachment E).
13. When complete pour sample into a beaker and perform API Gravity test (Attachment D).
14. Record data and observations on the “Aviation Quality Control Log” (MS-5198) or Company Loading Checklist.
15. When any compartment fails White Bucket and/or Gravity test:
    - 15.1 Confirm discharge, bucket and/or gravity equipment are clean.
    - 15.2 Obtain another sample and retest.
    - 15.3 Should test(s) fail a second time, notify terminal personnel immediately. **Do not leave terminal**.
16. When the API gravity and White Bucket tests are both satisfactory, complete and sign the Aviation Quality Control Log (MS-5198) or Company Loading Checklist.
    - 16.1. Attach first copy of Aviation Quality Control Log to the customer’s BOL.
    - 16.2 Attach second copy of Aviation Quality Control Log to the terminal’s BOL.
17. Follow Standard Loading Instructions **Steps 21–26** prior to departure.

F. ultra-low sulfur diesel (ULSD)-specific items

- While not required, trucks dedicated to ULSD service are highly recommended.
- To avoid lowering flashpoint or other contamination, it is **critical** the Product Loading Sequence Chart be reviewed, and the actions required executed.
- To reduce the chances of contaminating the next load and reduce the amount of waste generated at terminals, drain **dry at the delivery account.** Ensure to drain not only the compartments, but also the Power Take Off (PTO), which can hold up to 30 gallons.
  - **Gasoline**: 1 gallon of gasoline in 500 gallons of diesel can drop the flashpoint 10 degrees.
  - **Avgas**: Contaminates ULSD with lead and can lower the flashpoint. EPA regulations are designed to prevent the introduction of lead into the on-highway fuel market and why the Product Loading Sequence Chart (PLSC) requires a flush when ULSD follows Avgas, but not gasoline.
- Prior to loading ULSD, drivers must complete the **Terminal Diesel Loading and Drain Dry Certification** (Attachment F). Once loading is completed, the certification is attached to the BOL left at the terminal.

attachment D

API gravity test

purpose

Detail steps necessary for performing aviation fuels API gravity quality control check.

Equipment (in addition to standard PPE)

Automated method

- Digital densitometer (e.g., Anton Paar DMA 35 EX Petrol or equivalent)

procedure

1. Start the instrument by pushing the <On/Off> key for at least 2 seconds. The instrument performs a short self-test procedure, then all segments of the display will light up.
2. Wait for the degree °F (Fahrenheit) to start flashing, indicating the instrument is ready.
3. Verify the instrument settings display API B and °F. If they do not, contact terminal personnel.

Caution

Air bubbles will cause errors in the measurement. If air bubbles are in the oscillating tube, refill the instrument.

4. Remove any residue by flushing the instrument three to four times with the sample to be tested.
5. Fill the instrument with the sample ensuring no air bubbles are in the oscillating tube.
6. Wait at least 30 seconds before recording the displayed result. If the sample was abnormally warm or cold, it may take a few seconds longer.
7. Record the displayed API gravity to the nearest 0.1 API on the Aviation Quality Control Log (MS-5198) or Customer Control Log. The instrument corrects the displayed result to 60° F.
8. Compare API Gravity to BOL. If result is not ± 0.7 of result on BOL, clean equipment and repeat test. If the result does not match a second time, contact terminal personnel or call center.
9. After the measurement is finished, drain the sample out of the instrument by pushing a few times with the hand pump.

Warning

Dispose any wastes generated as directed by local terminal procedures.

10. Flush the digital densitometer per local terminal guidelines.
11. Turn off the instrument by pressing the <On/Off> for at least 2 seconds.

attachment E

white bucket test

purpose

Detail the steps necessary for performing aviation fuels White Bucket quality control checks and identify the presence of suspended water, solid particulate and other contaminates.

Equipment (in addition to standard PPE)

White Bucket

- Circular bucket with straight but nonparallel sides, a flat bottom, minimum capacity of 7.5 L (2.0 U.S. gal), approximately 20 cm (8 in.) high and equipped with a bonding cable and clip.
- Made of either:
  - White, porcelain enamel, free of dark spots, chips or other surface damage, especially on the bottom of the bucket. *Preferred for optimum detection of red-dye contamination.*
  - Stainless steel, made of a rust-resistant steel, with a white epoxy coating and a polished internal surface.

requirements

The worker shall have normal, color vision and shall not wear tinted glasses.

reference

ASTM D6986-03(2020): Standard Test Method for Free Water, Particulate and Other Contamination in Aviation Fuels (Visual Inspection Procedures) *Procedure B*

procedure

Warning

When using a white porcelain bucket, the porcelain coating should not be thought of as an insulating layer or electrical bonding.

1. Bond the bucket electrically to the fuel system or to the ground by using the bonding wire.
2. If necessary, wipe external contamination from the fill valve.

Caution

Water can form a meniscus around the drain port and draining at lower velocities can leave water and other contaminants in place. Higher velocities break the meniscus allowing water and contaminates to be removed.

3. Flush the sampling tap of loose contaminants at maximum flow rate prior to drawing the sample.
4. Open the fill valve as wide as possible to avoid the collection of contaminants behind a partially closed valve. Fill the bucket to a depth of about 150 mm (6 inches).
5. Allow the sample to stand for 1 minute or more, if necessary, to remove air bubbles.
6. To concentrate any solids or water droplets, or both, in the center of the bottom, the contents can be swirled carefully by using a clean implement.
7. Inspect the bottom of the bucket for evidence of solids. Using **Table 1**, assign a letter rating which matches the appearance of the solids on the bottom of the bucket.
8. Inspect for haze or water droplets. Haze can also be detected by dropping a shiny coin into the bucket. If the characteristics of the coin can easily be distinguished, the product is considered clear. Using **Table 2**, assign a rating for water contamination appearance.

Caution

If there is doubt about whether unusual coloration is present, contact terminal personnel.

9. Inspect for fuel color and other unusual appearance such as brown slime or scum.
10. Record the ambient temperature.
11. Record the appearance of the sample on the Aviation Quality Control Log (MS-5198) or Customer Loading Checklist.

table 1: solids ratings

Rating	Rating guide	Description
Clear	C	No particles, silt, sediment, dye, rust or solids
Slight particulate matter	SP	Several fine to small size particles
Particulate matter	P	Many small particles floating or settled on bottom of container
Dirty	D	Discoloration or many particles dispersed in fuel or settled on bottom of container

table 2: water contaminant appearance ratings

Rating	Description
Bright	No suspended or visible free water, sample is bright (slight sparkle). Air bubbles may cause hazy appearance immediately after the sample is drawn, but haze clears from the bottom up.
Hazy	Fine droplets dispersed through sample, may be temporary due to sample cooling.
Cloudy	Fine droplets dispersed through sample, giving it milky appearance.
Wet	Droplets or water layer on bottom of container or clinging to sides.

attachment F

ULSD delivery driver training and affidavit

objectives

- Provide an understanding of potential costs associated to contamination events
- Provide information to prevent ULSD contamination

diesel emission regulations

Why does the EPA regulate diesel fuel?

Diesel is the predominant fuel used for shipping goods and moving freight across the country and around the world. Diesel engines and vehicles make up about a third of the entire transportation fleet in the U.S.

The amount of sulfur in diesel fuel is directly linked to the amount of pollution produced when the fuel is burned. Simply put, higher levels of sulfur increase pollutants. The emissions that result from burning diesel contributes to air pollution that has serious human health (heart and lung disease and a range of other health effects) and environmental effects (damages plants, animals, crops and water resources).

Pollution from diesel exhaust includes:

- Soot or particulate matter (PM)
- Oxides of nitrogen (NOx), which contributes to the production of ground-level ozone (smog) and acid rain
- Hydrocarbons (HC)
- Carbon monoxide (CO)
- Other hazardous air pollutants (HAPs) and air toxics

the cost of contamination events

Simply put, contamination events are expensive.

Local and federal agencies regularly check and test fuel products against government-mandated fuel specifications and standards. Should a station's ULSD fail to meet a specification, **all** parties in the distribution system are presumed liable for the violation. This is known as presumptive liability.

- The EPA has the power to impose significant fines on those found liable for contaminating ULSD. Per 2020 data, violators of Title II of the Clean Air Act could be subject to a potential civil penalty of up to $47,357 per day of violation.
- Local governments can serve a Notice of Violation (NOV) that could include fines, impose actions the business must do to comply and/or suspend the business's license to operate.
- Contamination events can cause customers to lose trust and take their business elsewhere.

Contracts with our carriers stipulate that, when found liable, the carrier be held responsible for costs associated to product contamination event. This includes disposal, site cleanup and customer claims associated to a contamination event.

When a contamination event occurs, each party within the distribution chain has an opportunity to establish a defense to the presumptive liability.

- Terminals have multiple records that can stand as defense to presumptive liability (oil companies are required to maintain ULSD test results records). Additionally, ULSD is tested throughout the supply chain, including final tankage, before being released.
- Carrier drivers, except for the Bill of Lading (BOL), may have few records to demonstrate their actions did not contaminate the fuel. A driver's best defense is adherence to procedures preventing contamination.

what you can do to avoid ULSD contamination

While not required, it is recommended that trucks be dedicated to ULSD service.

- Use the **Product Loading Sequence Chart,** following the actions required.
- **Drain dry at the delivery account.** This reduces the chance of contamination of the next load and reduces the amount of waste generated at terminals. Ensure to not only drain the compartments, but also the PTO, which can hold up to 30 gallons and cause significant contamination.
  - **Gasoline**: 1 gallon of gasoline in 500 gallons of diesel can drop the flashpoint 10 degrees.
  - **Avgas**: Contaminates ULSD with lead and can lower the flashpoint. EPA regulations are designed to prevent the introduction of lead into the on-highway fuel market. That's the reason why the Product Loading Sequence Chart requires a flush when ULSD follows Avgas and not gasoline.
- **Make notes on the BOL.** Note the last product carried and that each compartment was drained-dry and any actions you took to ensure the compartment was clean. Complete note with the date, time and your initials.
- Complete the **Terminal Diesel Loading and Drain Dry Certification**

the human Chevron energy company®

Ultra-low sulfur diesel (ULSD) driver affidavit

Individual driver affidavit

☐ I have read and understand the Chevron Ultra-Low Sulfur Diesel (ULSD) training.

☐ I understand the ULSD loading procedures and understand my role in the loading process.

☐ I understand that drain dry procedures, performed by drivers at delivery accounts, help prevent subsequent ULSD contamination.

☐ I understand the importance of, and how to use, the Product Loading Sequence Chart (PLSC). For each ULSD load I perform, I will use and adhere to the information in the PLSC.

☐ I understand that Chevron facilities may or may not provide drain and flush facilities. Where those facilities are available, I will ensure that each compartment is drained dry utilizing those facilities.

☐ I agree to comply with Chevron's procedures and understand that failure to comply can constitute grounds for immediate withdrawal of my loading privileges at all Chevron facilities.

_____ Date _____
Print Driver Name

_____
Driver signature

_____
Chevron access card number

Carrier/marketer affidavit

_____ (Company Name) has provided the above-named driver with adequate quality, safety and emergency training for the safe loading, handling and transporting of petroleum products and will provide the necessary transport equipment to enable the above-named driver to safely load and maintain the quality of Ultra-Low Sulfur Diesel (ULSD).

_____ Date _____
Print Carrier/Marketer Management Contact Name

_____ Phone Number _____
Signature of Carrier/Marketer Management Contact

Terminal diesel loading and drain dry certification

Terminal name	Date

Print driver name	Bill of lading #

Product last hauled	Product to be hauled
☐ Motor Gasoline ☐ Ethanol ☐ ULSD ☐ Other _____	☐ ULSD ☐ Biodiesel ☐ Red Dye Diesel

Compartment(s) has/have retain(s)

☐ Yes ☐ No

I certify I have drained dry each compartment and Power Take Off prior to loading diesel as specified per my Ultra-Low Sulfur Diesel training. I also certify I have followed the Product Loading Sequence Chart provided by Terminal.

Driver's signature

Terminal diesel loading and drain dry certification

Terminal name	Date

Print driver name	Bill of lading #

Product last hauled	Product to be hauled
☐ Motor Gasoline ☐ Ethanol ☐ ULSD ☐ Other _____	☐ ULSD ☐ Biodiesel ☐ Red Dye Diesel

Compartment(s) has/have retain(s)

☐ Yes ☐ No

I certify I have drained dry each compartment and Power Take Off prior to loading diesel as specified per my Ultra-Low Sulfur Diesel training. I also certify I have followed the Product Loading Sequence Chart provided by Terminal.

Driver's signature