



LT-DT Manual for Training

Philadelphia, PA

HWY23FH014

(47 pages)



INTRODUCTION

This training program was designed to standardize our training process. While it affords latitude for a trainer and trainee's style, it requires a very specific order of sequenced training and must be adhered to by all parties. The general program includes four addendums each designed for function specific training. This training program meets governmental requirements but more importantly, it is the right thing to do. It was built to meet governmental regulations but is driven by Penn Tank Lines' core values.

SAFETY FIRST

QUALITY

INTEGRITY

TEAMWORK

EMOTIONAL FORTITUDE

RESILIENCY

We at Penn Tank Lines believe in these core values. They are the corner stone of our company, the positive reinforcement of our everyday life; **they are the right things to do.**

As training progresses the trainee will occasionally question why certain job functions must be performed. This is natural and to be expected. A trainer responding to a question or demonstrating a procedure must always place emphasis on the core values. By tying procedural explanation to the core values, you can help trainees identify with the training process. People perform better if they understand why they are doing a particular task rather than simply doing as they are told.

PENN TANK LINES, INC.....SAFETY FIRST!!!

PENN TANK LINES, INC LDT/DT MANUAL

Training Overview

Throughout the training process it is the responsibility of the LDT/DT to expose the trainee to job functions and responsibilities. This shall include HM 126 and HM 232 (Security) training, company and customer equipment, PPE, documentation, safety rules and the policies and procedures Penn Tank Lines has implemented. Even a veteran driver/product delivery specialist will have apprehensions and uncertainties the first day. It is part of your responsibility to make the trainee feel comfortable with the training process. Prior to the trainee's first day of training you should have reviewed his/her road test to determine the strengths and weaknesses of the driver to determine which areas of training will require more attention. Core values should be stressed at every opportunity.

Lesson Plan Day 1 – To be completed by Terminal Manager

1. Orientation of Penn Tank Lines
2. Issue PPE, log books, DVIR, load letters, paperwork, tank keys, Omnitracs Codes, FMCSA handbook, Hazardous Materials handbook, ERG handbook, Emergency contact numbers
3. Verify CDL, endorsements, medical card, uniform sizes, discuss EH&S, Cardinal Sins, policies and corrective action point system.
4. Company Driver
 - a. Employee Benefits
 - b. STD/LTD/Life
 - c. Vacations/personal days
 - d. DOT Book documents/GW Accident Packet
 - e. Trip reports
 - f. ComData cards
5. IC's
 - a. Sign Lease
 - b. DOT Book documents/GW Accident Packet
 - c. Trip reports
 - d. Claims - \$5k deducted
 - e. Insurance/Bobtail/OccAcc
 - f. ComData cards
6. Videos
 - a. Value Driven Driving DVD 1
 - b. Value Driven Driving DVD 2
 - c. Value Driven Driving DVD 3
 - d. Value Driven Driving DVD 4

Lesson Plan Day 1 – To be completed by LDT/DT

Greet trainee and introduce yourself. Spend a few minutes talking to the trainee to find out how much experience he/she has and create a comfortable atmosphere. Review trainee's CDL and physical card for validity.

1. Complete HM 126 and HM 232 (Security) training.
2. Review safety rules, Cardinal Sins, and the importance of PPE (personal protection equipment).
3. Familiarize the trainee with the equipment (Power unit and Trailer), terminal flow (entry and exit, pedestrian traffic areas), and DOT regulations. This should include on-board trailer spill kits (Location and proper use). At this time introduction to the current ELD/OBC should begin with follow up every time a duty status change is needed.
4. Trainee should be made aware that all spills are reportable regardless of size and every attempt must be made to contain spills and protect the environment. It should be explained that contamination liability gets progressively worse as product travels from concrete to blacktop to dirt and finally to water.
5. Explain job functions and emergency response procedures.
6. Perform a complete pre-trip. Starting with a disconnected unit, position tractor and trailer to be connected. Couple unit to trailer, connect air and electric lines, and proceed with pre-trip inspection (including explanation of Scully grounding system and indicator lights). Trainee will observe with the understanding that he/she will perform future inspections in accordance with FMCSR regulations, including coupling and uncoupling on a daily basis during training. If needed the LDT/DT and trainee should reference the FMCSR guidebook for guidance and reinforcement.
7. Demonstrate safe driving techniques (**Value Driven Driving Essential 7**). LDT/DT will do **ALL** driving on day 1. The formal safe driving techniques program is supported by the Value Driven Driving videos.
8. After arriving at the loading rack all aspects of the loading process should be explained and demonstrated as detailed below. Addendum 2 "Bottom Load & Gravity Unload Procedures" covers all loading/unloading functions. Stress the importance of following its outlined procedures. Encourage the trainee to use them as a visual aid for the duration of training. (Give trainee copy of Addendum 2).
 - a. Review rules and procedures for each loading facility visited.
 - b. Identify all loading rack hoses, fittings, controls and emergency equipment.
 - i. Include hands on explanation of Scully system indicators on both the trailer and the loading rack.
 - ii. Demonstrate brake interlock system and explain function.

- c. Explain trailer compartment configurations and review assigned gallons. The practice of level loading should be detailed at this time as well as the use of compartment markers and yellow tags (used to identify diesel fuel).
 - d. Explain attendance regulations and requirements (49 CFR 177.834 (i) Attendance requirements – (1) Loading. A cargo tank must be attended by a qualified person at all times when it is being loaded. The person who is responsible for loading the cargo tank is also responsible for ensuring that it is so attended).
 - e. Prior to departing, LDT/DT and trainee must review the BOL for accuracy and perform another pre-trip inspection. Lights and equipment should again be inspected.
9. Upon arrival to the delivery site LDT/DT will give an introductory explanation on all aspects of the delivery process, including:
- a. Station identification and verification of proper location including checking in with site personnel to obtain Veeder-Root readings and permission to proceed.
 - b. Safety requirements including safety cone placement including tractor/trailer (minimum of 4 cones required) and reflective clothing (uniform and/or vest).
 - c. Locating storm drains to prevent contamination in the event of a spill.
 - d. Mandatory use of vapor recovery
 - i. Company and customer specific requirements
 - e. Identification of underground storage tanks (USTs) according to product using the API color code.
 - f. Obtaining stick readings using water detecting paste, both before and after delivery. Explain in detail the 90% rule and use of tank charts.
 - g. Explain that we do not split compartments between multiple USTs.
 - h. Trailer compartment markers and yellow tags should correspond with product loaded and API color code standards on USTs.
 - i. Explain attendance regulations and requirements (49 CFR 177.834 (i) Attendance requirements – (2) Unloading. A motor carrier who transports hazardous materials by a cargo tank must ensure that the cargo tank is attended by a qualified person at all times during unloading.
 - j. Refer the trainee to Addendum 2, Unloading Procedures for reference.
10. After returning to the terminal, explain all documentation and supporting paperwork
- a. The trainee shall log every training day and the LDT/DT must review the trainee's daily log in accordance with FMCSR regulations
 - b. Document all loads and support comments on the appropriate forms
 - c. Take a few minutes to review the day and reinforce core values, answer any questions and discuss training issues.

By day's end the trainee shall have:

- An understanding of the core values and the connection they have to job performance.
- HM 126 and HM 232 training.
- A general idea of what the job entails and attendance requirements.
- Been introduced to the key terminal people and understand their job functions.
- Possession of personal safety equipment (hard hat, safety goggles, safety vest and work gloves suitable for handling the product for which you are training).
- A working copy of Addendum 2 "Bottom Load and Gravity Unload Procedures".
- A basic understanding of the equipment: Scully operation and indicators; Brake interlock system and its purpose; trailer internal valve operation; current ELD/OBC.

WEEK #1 – DAY #2

Training Overview:

Today you will introduce the trainee to the Safe Driving Techniques. The corresponding work books and video shall be covered prior to today's tour of duty.

- Have the trainee view location specific videos if required.
- Present the classroom portion of the training.
- Have the trainee couple the power unit and trailer, then perform a full pre-trip inspection while being closely observed by the LDT/DT.
- At all times while driving, the LDT/DT shall demonstrate Safe Driving Techniques.

With positive reinforcement, discuss strong and weak points of the trainee's habits.

- Day two will best be served if the LDT/DT allows the trainee to participate in assisted job functions. He/she should be encouraged to execute simple tasks while receiving continued theory. The LDT/DT must take the lead with the trainee assisting. Additionally, the trainee should be allowed to drive the empty vehicle. It is not to be assumed that the trainee is accomplished in this area and the LDT/DT must keep vigil while reviewing the Safe Driving Techniques theory with the trainee. Your preferred job assignments must take a back seat. In many cases the LDT/DT, because of years of service, may enjoy the luxury of optimum miles with minimal deliveries. You're reminded that if maximum training impact is to be obtained, the trainee must be exposed to as many loading facilities and customer locations as possible.
- **A short haul, multiple delivery schedule is strongly suggested.**
- **Remember all product handling must be in accordance with Addendum 2 "Bottom Load and Gravity Unload Procedures".**

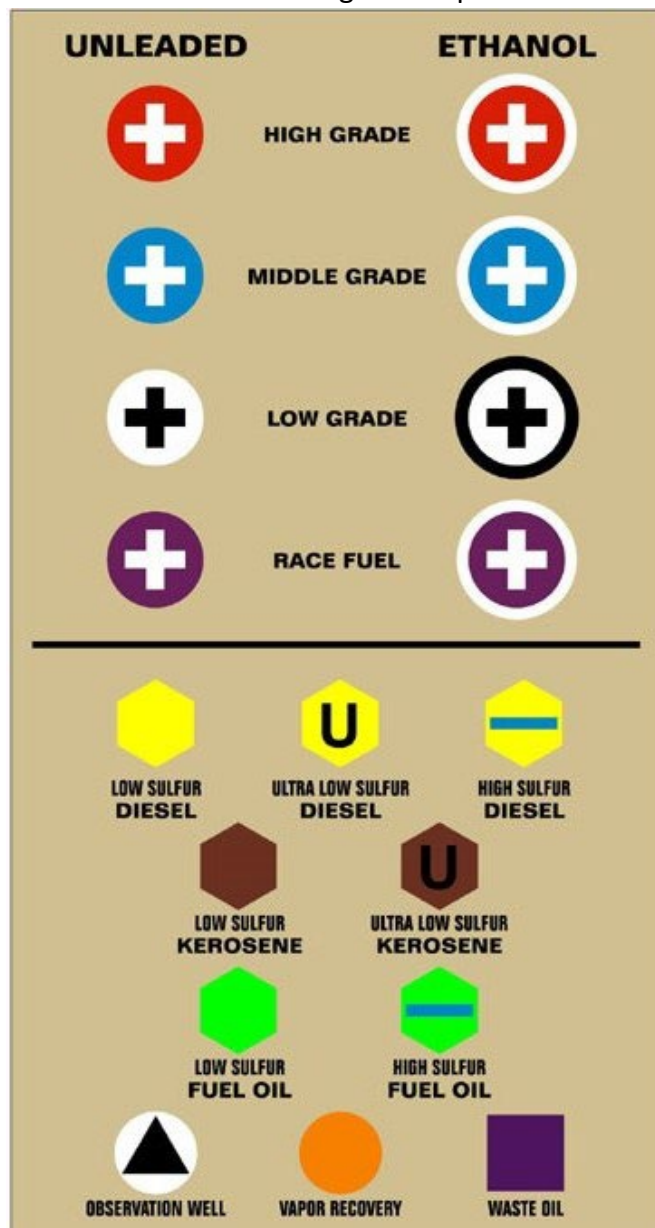
Lesson Plan

1. Review Week 1 Day 1 Training and the Safe Driving Techniques.
2. Advise the trainee that he/she will be quizzed during the training process in preparation for a final exam. The trainee must be encouraged to take notes and ask questions at every stage of the training process.
3. Have the trainee perform a complete pre-trip equipment inspection, starting with an uncoupled unit. Coupling of the equipment and all inspections will be under the direct supervision of the LDT/DT.
4. Under your supervision, have the trainee gather paperwork for the day, review the pre-trip inspection and sign off on the same.
5. At the loading rack, explain the carding in process to the trainee.
6. Assign simple tasks such as connecting vapor recovery hoses and rotating compartment identification markers to match products loaded. As the trainee gains confidence he/she may be assigned additional tasks.
 - a. Let the trainee make a first attempt at compartment configuration. This should be done PRIOR to pulling into the loading lane to reduce delay.
 - b. Let the trainee make some entries on the freight bills and shipping papers.
 - c. All documentation made by the LDT/DT should be accompanied by explanation.
7. Encourage and enforce safety in every job function.
 - a. Reinforce three-point contact during cab mount and dismount.
 - b. Continue to reinforce core values.
8. At your delivery location, station verification and delivery tank identification procedures will be reinforced with the trainee. Have Trainee identify location of storm drains.
 - a. Observe proper OSHA lifting techniques. Hoses should not be lifted more than waist high when draining.
9. Let the trainee drive the empty truck to get familiar with its parameters.
 - a. Even though the trainee has taken a prior road test, and completed Safe Driving Techniques training, it is advisable to work into driving functions from the ground floor.
 - b. Reinforce the Safe Driving Techniques keys for safe driving.
 - c. Explain the use of the company onboard accident packet and reporting requirements.
10. Complete the highway portion of the Safe Driving Techniques in accordance with the week 1, day 2 lesson plan and Addendum 2.
11. The trainee should perform the LDT/DT assisted post trip equipment inspection including uncoupling the power unit from the trailer.
12. The trainee should participate in the end of day paperwork process-
13. Discuss any questions the trainee may have. Listen closely, the trainee's questions are your cue for tomorrow's training.
14. Document all loads and support comments on the appropriate form.

Lessons Learned

By day's end the trainee should have:

- An understanding of the Safe Driving Techniques theory
- Successfully completed the vehicle pre and post trip inspections including coupling and uncoupling the power unit from the trailer.
- Reasonable understanding of Loading Facility operations
- An understanding of the Site Delivery Cards. (Site Surveys & Tank Charts)
- Reasonable understanding of **API Color Codes (Below)** and delivery site markings.
- Driven the empty transport vehicle and feel comfortable with it.
- Exposed to behind the wheel Safe Driving Techniques and understand the program.



- API CODES

Week 1 – Day 3

Training Overview

Day 3 should expose the trainee to some unassisted functions. A pre-trip equipment inspection is a good place to start as indicated below. Additionally, the trainee should be encouraged to execute independent product handling functions to the level of his confidence.

Lesson Plan

- Trainee will couple the power unit to the assigned trailer and perform a complete pre-trip equipment inspection with LDT/DT closely observing.
 - This is the LDT/DT's opportunity to witness the trainee's understanding of proper procedure and documentation.
 - Any faulty items discovered during pre-trip inspection must be reported and repaired prior to departure.
 - Out of service vehicles may not be put into service – FMCSR regulation 396.9. This applies to company local, state or federally designated out of service vehicles.
- The trainee will gather all support documents for the day and under the LDT/DT's supervision, prepare the paperwork before departure.
- At the loading facility, the trainee will card in and, under **direct** LDT/DT supervision, will perform all phases of the loading process. The LDT/DT will guide the trainee step by step through this process, stressing the importance of level loading in compartmented trailers in reference to overload and possible rollover. Reference Addendum 2 for proper compartment configuration.
- At the delivery location, under **direct** LDT/DT supervision, trainee will perform all aspects of the delivery process. They should include but not be limited to:
 - Station location identification (**Use your delivery site cards for instruction**)
 - Communication with site personnel
 - Designating a Safe delivery area using Safety Cones (minimum of 4)
 - Storage tank API color code identification and tank gauging (stick readings)
 - Location of emergency equipment
 - Location of storm drains
 - Cover all aspects of actual product off-loading
- Delivery instruction should also cover related issues, including
 - Explanation of what constitutes a spill and how to handle it
 - Emphasize professionalism and respect for the customer.
 - Instruct the trainee how to handle unsafe third party acts related to the delivery
 - Smoking, unauthorized spectators in delivery area, etc.

- Discuss and illustrate site surveys as a tool for identifying the correct station and station layout, reporting unsafe delivery conditions, and requesting timely site maintenance. Explain where to file the reports for timely action.
- On day three the trainee should be allowed to drive the loaded vehicle at least part of the day.
- The trainee should perform an unassisted but observed post trip equipment inspection and properly uncouple the trailer from the power unit.
- Discuss any questions the trainee may have. Listen closely, the trainee's questions are your cue for tomorrow's training.
- Document all loads and support comments on the appropriate forms
- At the third day's end it is time for the LDT/DT and Terminal Manager to discuss the trainee's progress.
 - Is the trainee progressing according to schedule?
 - Would a change in delivery menu be beneficial to his/her training?
 - Does he/she have what it takes to be a Penn Tank Lines Delivery Specialist?
- After the Terminal Manager and LDT/DT meet, bring the trainee into the room and ask him the same questions.

Lessons Learned

By day's end the trainee should have:

- Sufficient knowledge to gather and complete documentation surrounding the work day.
- Demonstrated the ability to couple the unit, perform complete and thorough pre- and post-trip inspections at the start of the day and at each stop and uncouple the unit at the end of the day.
- Demonstrated a reasonable understanding of loading and unloading procedures.
- The ability to identify petroleum product storage tanks by API color code.
- **Appear comfortable while driving the loaded transport vehicle.**

WEEK 1 – DAY 4

Training Overview

Vehicle operation should be a shared responsibility. The LDT/DT and trainee may act as a team when loading and unloading, meaning the LDT/DT and trainee can perform separate job functions working towards a common goal. Although they function separately, the LDT/DT must oversee all of the trainee's actions. As the trainee builds confidence, he must be encouraged to act on his own. As he takes on a greater percentage of the work the LDT/DT must reduce his physical participation. As the trainee assumes more job function responsibility the LDT/DT must reinforce the Safe Driving Techniques, habits and core values.

Lesson Plan

- The trainee should be capable of all start-up functions.
 - Have the trainee prepare all departure paperwork.
 - **Let the trainee identify today's delivery locations and find the appropriate card for each location.**
 - Before departure, have the trainee configure the first load by compartment.
 - Have the trainee independently couple and pre-trip the vehicle and make appropriate entries of defects on VIR.
- Have the trainee card in and take the lead in the loading process.
 - You may see a display of uncertainties. Give the trainee time to think things through before you make any corrections. Encourage double-and triple-checking to avoid loading mistakes. Once you push start, you are committed to loading the product you selected, right or wrong!
 - Give the trainee some latitude to work. Step in only when you see a mistake or if there is an immediate danger of personal injury or loss.
 - All entries on the freight bills should be made by the trainee with you performing the review.
- The trainee should also take the lead in the delivery process.
 - At this point the trainee should be settling into a routine.
 - If he hurries, slow him/her down. The trainee must understand that he is not expected to be as fast as you are.
 - **Unnatural speed courts disaster – Efficiency creates natural speed.**
- Company policy forbids anyone to climb onto equipment or go inside a trailer and applies equally to customers. They must be advised accordingly.
- As you are into day four, the trainee should have absorbed the fundamentals of the work process and you will be working towards refining the trainee's technique.
 - If you see an unsafe act, stop the work and, with the core values as a guide, explain the error.

- Advise the trainee on efficient and time saving methods keeping Safety as the primary focus!!
- The end of the day responsibilities should fall heavily on the trainee. The trainee will take the lead in fueling, post-trip equipment inspection, uncoupling and close-out paperwork.
- Discuss any questions the trainee may have. Listen closely, the trainee's questions are your cues for tomorrow's training.
- Document all loads and support comments on the appropriate form.
- If you have not discussed the required HM126F training class with the trainee, today is a good time.

Lessons Learned

By day's end the trainee should have:

- Sufficient knowledge to identify the varied delivery, vapor recovery and overfill protection systems.
- The ability to take the lead in most functions. This means the trainee can card in at the rack, configure the compartments for gallons to be loaded, and execute the loading process. At the customer, the trainee can identify the proper storage tank for the product tendered, determine if the product will fit into the storage tank not exceeding 90%, and generally execute the unload process.
- Been instructed and understand that no one is allowed on top or inside of the cargo tank.
- Settled in to a steady work routine to safely execute the varied job functions.

Week 1 – Day 5

Training Overview

Today is a milestone. You have spent four days on theory and hands on training. Today you want to capitalize on review. You will be asking relevant questions throughout the day. Have the trainee identify and discuss hoses, drop fittings, customer tanks by API color code, 90% rule, tank charts, rack loading arms, tank configuration, overfill protection, spill kits and spill reporting. Verbally give the trainee problem scenarios to solve throughout the day. **Week 1 – Day 5 is an excellent time to consider placing your trainee in an HM126 class. Attending this class around midstream of field training gives the trainee a better understanding of regulations and product handling.**

Lesson Plan

- The trainee is doing most of the driving with the LDT/DT recapping Federal and company regulations. The LDT/DT will give positive reinforcement in the following areas:
 - The Safe Driving Techniques and pro-active driving
 - The core values (Safety, Quality, Integrity, Teamwork, Emotional Fortitude, Resiliency)
 - **All incidents/accidents no matter how minor-must be reported**
 - Attendance – FMCSR 397.5 and 49 CFR 177.834 (i),(1)Loading;(2)Unloading
 - Parking rules – FMCSR 397.7
 - Smoking rules – FMCSR 397.13 and PTL Tobacco use policy
 - Cell Phone Policy for Penn Tank Lines and FMCSR 392.82A1
 - Following distance – (minimum 6 seconds)
 - Company speed limit policy of 65 mph or as posted if less than 65 mph.
 - Seat belts mandatory – FMCSR 392.16
 - Unauthorized riders – 392.60
 - Radar detectors forbidden – FMCSR 392.71
 - Hours of Service – FMCSR 395.2-8
 - Violence/Weapons Policy
- The trainee will perform most of the load/unload functions with the LDT/DT working as back-up.
 - Let the trainee work unassisted as much as possible.
 - The LDT/DT will constantly observe. This will set the stage for the days end evaluation and the second week of training.
- Discuss any questions the trainee may have. Listen closely, the trainee's questions are your cue for tomorrow's training.
- Document all loads and support comments on the appropriate form.

- **The LDT/DT and Terminal Manager meet for a five-day trainee evaluation.**
 - Again discuss the trainee's progress and any special attention needed.
 - On this day the LDT/DT and Terminal Manager must collectively decide if training is to continue! Meetings of this nature must always be documented for the file.
 - After the Terminal Manager and LDT/DT meet, bring the trainee into the room for review.
 - If training is to continue, review the trainee's progress with him. Give him/her the opportunity to ask questions.
 - **If it is decided that further training is fruitless, the trainee must be told at this time.**

Lessons Learned

By day's end the trainee should have:

- A working knowledge of the FMCSR references listed in week 1 – day 5 of the training program.
- An understanding of Penn Tank Lines policies and procedures.
- Loaded and unloaded product unassisted by the LDT/DT.
- A clear understanding of the AUL and 90% rule. The trainee should know when they apply.
- The ability to locate customer and trailer based spill kits and know how to use them.
- An understanding from the Terminal Manager and LDT/DT testifying to the trainee's progress to date. The meeting should address the trainee's strong points and areas where he/she needs improvement.

Week 2 – Day 1

Training Overview

With a week of instruction behind you, it is time to fine tune the trainee's knowledge. This week the trainee will practice, under supervision, what was instructed last week. This week the trainee will do most of the work with the LDT/DT backing out of the hands on picture. The conference at the end of last week's training sets the stage for this week's training. Don't hesitate to discuss the trainee's accomplishments as well as his shortcomings. Give the trainee the opportunity to ask questions even if it attacks your training method, style or length of training. It is important that the trainee embraces the core values. Take this opportunity to revisit Penn Tank Lines Core Values.

Safety First...Quality...Integrity...Teamwork...Emotional Fortitude...Resiliency

Lesson Plan

- Training at this point may appear repetitious, but the more exposure the trainee receives the higher the level of knowledge retention. "Practice makes Perfect."
- Take time to review products, policies and safety procedures at various locations.
 - Does the trainee know the API color codes for various products?
 - Does the trainee understand the different product codes?
 - Does the trainee understand and practice the attendance rules?
 - Does the trainee know the location and proper use of loading rack emergency shut-off switches?
 - Does the trainee know the location and proper use of the trailer emergency shut-off switches? Please advise the trainee on MC-306/DOT 406.
 - Have the trainee review the trailer spill kit and its proper use.
 - Does the trainee properly couple and uncouple the power unit and trailer?
 - Does the trainee perform thorough pre- and post-trip inspections and understand how to report defects and have repairs completed?
 - Does the trainee make proper use of the site surveys and tank charts?
- The trainee should be given as much responsibility as you are comfortable with.
 - **It must be noted that as the comfort level rises, the LDT/DT may be tempted to let the trainee work in an unsupervised capacity for brief periods. This is forbidden and often times sets the stage for a cross drop or overflow. Never leave the trainee unattended while working.**
- Discuss any questions the trainee may have.
- Document all loads and support comments on the appropriate form.

Lessons Learned

By day's end the trainee should have:

- Received review of any questions arising from the progress meeting of Week 1 – Day 5. It is important that all LDT/DT concerns and trainee questions are addressed promptly.
- The ability to work independently of the LDT/DT.
- A clear picture of his/her responsibilities to safety and the concept of-

IF IT ISN'T SAFE, DON'T DO IT!!!

Week 2 – Day 2

Training Overview:

You are into the second week of training. You advised the trainee on every aspect of the work process. You stopped him short of doing damage or receiving bodily harm. Today you will address problem solving and hazard identification. It is time to introduce a working problem for the trainee to solve.

Lesson Plan

- Introduce several of the following problems for the trainee to solve. The trainee must be taught to identify and deal with the less than perfect days.
 - Tag predetermined defects or missing items for the trainee to find. The tag will instruct the trainee to return it to the LDT/DT and should initiate discussion.
 - Remove the fire extinguisher prior to the trainee's pre-trip equipment inspection. Did he report it missing? Don't forget to replace it prior to departing!
 - Take a product delivery fitting out of the trailer prior to the trainee's arrival at the terminal. Did the trainee inventory the trailer? Don't forget to replace all the missing items before departing!
 - Offer the trainee an improper loading configuration and note if the trainee recognizes the error.
 - At the delivery, give the trainee an artificially high start stick reading. Let the trainee determine the product won't fit.
 - It must be noted that the scenarios listed above are suggested for testing purposes. They are not to be used unless the LDT/DT has direct access and control over the situation. They are intended for training purposes only and not to be considered policy.
- The LDT/DT must discuss all problem solving scenarios he may have created for the trainee. Additionally, all created problems must be reversed before continuing.
 - It is not enough to create problems and watch the trainee solve them.
 - The trainee must understand the reasoning behind the problem and the consequences of an unsolved problem.
- Personal safety must be cultivated throughout the training process. Because this is a given it is not referenced daily but understood to be considered criteria.
- Discuss any questions the trainee may have. Listen closely, the trainee's questions are your cue for tomorrow's training.
- Document all loads and support comments on the appropriate form.

Lessons Learned

By day's end the trainee should have:

- The capability to inventory all equipment prior to departing the terminal.
- The ability to identify hazards and solve problems as they arise.
- A fluent working knowledge of tank charts, where to find them, and what to do if they are not present at the delivery station. This applies to the cargo tank as well.
- The ability to explain the Safe Driving Techniques
- Be able to recite the core values and apply their theory to job functions.

Week 2 – Day 3

Training Overview

The trainee will perform all aspects of the workday. Remember that your goal is to instruct the trainee to be self-reliant while developing acceptable loading and unloading techniques at a functional level. Today the LDT/DT will observe and mentally grade the trainee. In addition to assessment of product handling abilities, the LDT/DT will grade the trainee's adoption of Safe Driving methods. Use the Penn Tank Lines Road Test form to evaluate the trainee's road skills and measure the effectiveness of the Safe Driving Techniques.

Lesson Plan

- Today is to be used for pre-qualification testing.
 - Let the trainee work independently and give him/her a mental grade.
 - Pre-qualification testing will give the opportunity to evaluate the trainee's progress.
- At day's end, retest the trainee with the Certification of Understanding (from Week 1-Day 1). The results of your pre-qualification road test and Certification of Understanding will enable you to tailor tomorrow's training session into a day of review.
- Discuss any questions the trainee may have. Listen closely, the trainee's questions are your cue for tomorrow's training.
- Make the trainee aware that today was a pre-qualification test and how well he/she scored.
 - Make it known that tomorrow is a day of final review and the following day is the actual test day.
 - This insight will prompt the trainee to ask additional questions in preparation for test day.
- Document all loads and support comments on the appropriate form.

Lessons Learned

By day's end the trainee should have:

- A rounded knowledge of all aspects of petroleum product loading, transportation, and delivery.
- An understanding that today was one of pre-qualification testing. Review any problem areas with the trainee.
- An understanding of the Safe Driving Techniques and how it contributes to accident prevention.

Week 2 – Day 4

Training Overview

Having the trainee's retest in hand you are armed with your training criteria for today. The trainee must be aware that today is for recapping and that tomorrow will be a day of final testing.

Lesson Plan

- Today's training will focus on missed test questions. Although overall training continues, you must dwell on identified weak spots.
- Be prepared to address theory and hands on training.
- The trainee will continue to handle all job functions. The LDT/DT will apply verbal assistance only.
- The LDT/DT must review the progress of his training program to date.
 - Have you covered all areas of the approved loading/unloading process?(Addendum 2)
 - Do you feel comfortable with the trainee's understanding of the Safe Driving Techniques
 - Are the core values displayed in the trainee's work day?
- Discuss any questions the trainee may have.
 - Listen closely, the trainee's questions are your cue for today's review.
 - Advise the trainee of tomorrow's testing and the potential of training closure based upon test results.
- Document all loads and support comments on the appropriate form.

Lessons Learned

By day's end the trainee should have:

- The ability to work through the day totally unassisted by the LDT/DT.
- The ability to react to and report accidents, incidents, spills, releases, etc. if they should arise. More importantly, the ability to recognize and address hazards before they elevate to environmental emergencies. The recognition should be driven by the core values.
- The ability to demonstrate Safe Driving Techniques.

Week 2 – Day 5

Training Overview

Today will bring the training process full circle. You started with a pre-qualification test. With the test results and your training format in hand, you taught your trainee in every aspect of the job function. You have given him/her hands on test and a second written test. You spent another day recapping areas of confusion and/or missed test questions. The trainee will perform all functions of today's work assignment. The LDT/DT will observe and make mental notes. **Today is a test and must be treated as such.** Your final assessment should relate to safety, product knowledge, job compatibility, defensive driving and overall professionalism.

Lesson Plan

- On the highway:
 - Does the trainee operate within the law?
 - Does the trainee operate within the Safe Driving Techniques guidelines?
 - Does the trainee demonstrate responsible ownership of the vehicle being driven?
 - Does the trainee apply the core values to the work process?
 - Would you want the trainee to operate your equipment?
 - Would you feel safe if the trainee followed your family on the road?
- Product knowledge:
 - Does he/she possess sufficient knowledge to make an accurate and safe delivery?
 - Does he/she have enough experience to handle unforeseen emergencies?
- Compatibility:
 - Have we groomed a professional driver?
 - Is he/she truly courteous to the shippers and customers?
 - Does the trainee understand when, where and how to ask for help?
- In finalizing the training you must accomplish the following:
 - Have the trainee complete another test of understanding.
 - This time he/she **must** achieve a passing grade of 90% or higher (no more than 5 incorrect answers)
- Meet with your Terminal Manager and advise him/her of your findings. If it is determined that the trainee is proficient in safe bulk petroleum transport and delivery, that he/she practices the Safe Driving Techniques of defensive driving, and is determined by you to be a true professional, you will sign off on all of the appropriate forms.

- The Terminal Manager and LDT/DT should collectively meet with the Trainee Graduate.
 - Ask the trainee if he/she is comfortable going forward on his/her own.
 - Address any additional questions that may arise
 - Advise the Trainee Graduate that he/she will be on probation for 90 days.
- It is company policy that the LDT/DT again ride with the trainee after he has acquired approximately 60 days of solo experience.
 - This will afford both parties the opportunity to address any questions that may have arisen.
 - This is also an appropriate time for the LDT/DT to correct any bad habits acquired by the Trainee Graduate.
- Be advised that although the training format ends with the completion of the tenth day, the Terminal Manager, Lead Driver Trainer and trainee must be satisfied with the results. If any of the involved parties considers additional training appropriate, training shall continue.

No one shall be put into service until all parties are satisfied!

Addendum 1

PENN TANK LINES, INC.

(DRIVER'S CERTIFICATION OF UNDERSTANDING)

Print Name: _____

This test is designed to better understand and evaluate your knowledge of bulk petroleum deliveries. Please take your time and answer the following questions to the best of your ability. Please circle the correct answer.

SECTION 1

- T F 1. In accordance with the American Petroleum Institute (API) Product Color Code, regular unleaded gasoline is identified by a white plus on a blue background.
- T F 2. Delivery tank charts should be available at each delivery location for the underground storage tanks at that location.
- T F 3. By sticking the storage tank and verifying gallons on the appropriate tank chart you can determine if the delivery gallons will fit in the customer's tank.
- T F 4. There are three types of overfill protection on a service station delivery tank. A high product level warning horn or buzzer, a fill line shut off valve, and a vent line shut off valve. Their purpose is to prevent the customer's storage tank from overflowing.
- T F 5. Coaxial, two point and manifold vapor recovery systems are designed to reduce the amount of vapors escaping into the air while unloading gasoline.
- T F 6. When making a gasoline delivery, federal regulations requires the driver to be within 50 feet of the truck while unloading.
- T F 7. When making a delivery that requires you to pump the load off, you must strap all of your hose end connections.
- T F 8. You should never fill a customer's storage tank beyond 90% of its total capacity. (A 10,000 tank will hold a total of 9,000 gallons)
- T F 9. Product spills while unloading are common and you don't have to report them unless you spill more than 5 gallons.
- T F 10. The term outage refers to the vapor space in a bulk storage tank.
- T F 11. When delivering a split load containing diesel fuel and gasoline, the gasoline must always be unloaded first.

- T F 12. The Veeder-Root System refers to a computerized routing system that gives detailed directions to a customer's location.
- T F 13. Water paste is a generic name for a product used as a glue in very wet areas.
- T F 14. When you arrive at a customer you should show him your freight bills to verify that you are at the correct location.
- T F 15. A four inch product delivery hose contains a ground wire to arrest static electricity while unloading.
- T F 16. In a service station delivery, a coaxial fitting is used to combine product delivery and vapor recovery through one access pipe.
- T F 17. Two point vapor recovery refers to a manifolded vapor recovery system with all tank vapor recovery lines tied into one.
- T F 18. Under no circumstance may conventional gas (**CVG**) be delivered to a Reformulated Regulated station requiring Reformulated gas (**RFG**).
- T F 19. It is permissible to use plastic buckets to catch drips that may occur while loading/unloading flammable liquids.
- T F 20. If you spill any product while unloading you must report it to your supervisor prior to your next trip.

SECTION 2

- T F 21. Federal Regulations require all commercial vehicles transporting Hazardous Materials to stop no closer than 15 ft. and no further than 50 ft. from a railroad track crossing.
- T F 22. If your trailer is empty but last contained a placarded load, you don't have to stop at a railroad track.
- T F 23. Diesel fuel and gasoline may be transported on a multi-compartment trailer if it is equipped with double bulkheads or the gasoline is separated from the diesel fuel by an empty compartment.
- T F 24. A load of Hazardous Materials may not be parked within 300 feet of an open fire.
- T F 25. Gasoline is placarded (1993) and diesel fuel is placarded (1203).
- T F 26. Excessive speed and improper following distance are the two major causes of traffic accidents involving commercial vehicles.

T F 27. If you are transporting class 3 flammable liquids, you may smoke in your truck if you keep the windows closed.

T F 28. To transport an empty clean and purged trailer you must remove all placards.

T F 29. You may not park a placarded vehicle within five feet of the traveled portion of any highway.

T F 30. The Safe Driving presentation is a driver-training program that teaches and reviews defensive driving techniques.

T F 31. The term (MC-306) references a Military Collection process 306.

T F 32. Driving with your empty trailer dome lids open to air dry a last contained flammable liquid is a legal practice.

T F 33. A pre-trip inspection of your truck is necessary only if someone else drove that vehicle since you did.

T F 34. Tire checks must be performed every 2 hours or 100 miles, whichever comes first, when a commercial vehicle is used to transport hazardous materials.

T F 35. A completed Vehicle Inspection Report (VIR) must be carried on the vehicle while in transport.

T F 36. A 10-BC rated fire extinguisher is the minimum allowable rating for Hazardous Materials service.

T F 37. The Emergency Response Guidebook is a quick reference to product identification, associated dangers and lifesaving first response action.

T F 38. You are hauling gasoline and you detect product leaking from your trailer. You must stop to assess the situation. If you determine that the leaking gasoline may harm life, property, or enter nearby waterway, you may move your vehicle a short distance to a safer location.

T F 39. You are driving on a snow covered or wet slippery road and apply your brakes. The engine tachometer drops suddenly. This is an indication that one of your drive axle brakes is locking and skidding.

T F 40. Minimum following distance in a tractor trailer is 6 seconds.

T F 41. Tank trailers have a higher center of gravity than other trailers.

T F 42. Trucks equipped with antilock brakes require slightly longer stopping distances than trucks without antilock brakes.

T F 43. Fifth wheel placement and load distribution have a direct effect on how the truck will respond when you are making a turn.

T F 44. At highway speeds, the distance you should look ahead is one-quarter mile or approximately fifteen (15) seconds.

SECTION 3

T F 45. A Hazardous Substance and Hazardous Material is the same thing.

T F 46. It is the driver's responsibility to review the shipping papers for proper product identification and properly placard the trailer before transport.

T F 47. Hazardous Materials must be identified in proper sequence on the shipping paper as follows: Placard Number; Proper shipping name; Hazard class; Packing group. Example – (UN1203; Gasoline; 3; PG II)

T F 48. A person shipping Hazardous Materials must provide a telephone number that can be used to obtain Emergency Response Information.

T F 49. By placing an X on your freight bill in the column marked HM, you are indicating that the product listed is a Hazardous Substance.

T F 50. HM183 regulations cover cargo tank inspections and actual proof of that inspection is displayed on the front bulkhead of the trailer. Only trailers displaying valid inspections may transport hazardous materials.

POSSIBLE SCORE 100

Subtract two (2) points for each incorrect answer _____

Individual Score _____

Driver Signature _____

Date _____

Driver Instructor _____

Date _____

PENN TANK LINES, INC

DRIVER'S CERTIFICATION OF UNDERSTANDING – ANSWERS

- | | | |
|-----------|-----------|-----------|
| 1. FALSE | 18. TRUE | 35. TRUE |
| 2. TRUE | 19. FALSE | 36. TRUE |
| 3. TRUE | 20. FALSE | 37. TRUE |
| 4. TRUE | 21. TRUE | 38. TRUE |
| 5. TRUE | 22. FALSE | 39. TRUE |
| 6. FALSE | 23. TRUE | 40. TRUE |
| 7. TRUE | 24. TRUE | 41. TRUE |
| 8. TRUE | 25. FALSE | 42. TRUE |
| 9. FALSE | 26. TRUE | 43. TRUE |
| 10. TRUE | 27. FALSE | 44. TRUE |
| 11. FALSE | 28. TRUE | 45. FALSE |
| 12. FALSE | 29. TRUE | 46. TRUE |
| 13. FALSE | 30. TRUE | 47. FALSE |
| 14. TRUE | 31. FALSE | 48. TRUE |
| 15. TRUE | 32. FALSE | 49. FALSE |
| 16. TRUE | 33. FALSE | 50. TRUE |
| 17. FALSE | 34. FALSE | |

DRIVER'S CERTIFICATION OF UNDERSTANDING

Instructor's Guide

- Correct answers to questions 1 through 20 indicate strong petroleum handling skills.
- Correct answers to questions 21 through 44 indicate strong transport or driving skills.
- Correct answers to questions 45 through 50 indicate strong Hazardous Materials knowledge and documentation skills.

While high scores in all three categories are very desirable, we must consider transportation skills as the number one factor when choosing a candidate. High scores in the remaining two categories are also desirable but they can be taught as training progresses. The top candidate is the person that scores high across the board. An undesirable candidate is one who scores low in transport skills and/or has an overall score of less than 70% before training. A trained driver about to be placed into service should achieve a score of 90% or higher.

PENN TANK LINES, INC.....SAFETY FIRST!!!

ADDENDUM 2

PENN TANK LINES, INC

BOTTOM LOAD & GRAVITY UNLOAD PROCEDURES

I. Terminal Trip Preparation:

1. Gather all relevant materials, freight bills, delivery site cards, trailer tank charts, and customer tank charts.
2. **Take notice of product specifics (RFG, CVG, ULSD Grade, etc.)**
3. Inventory your trailer checking that all necessary fittings and hoses are present, tank inspections are up to date and a spill kit is on board.
4. Pre-determine your trailer compartment loading configuration and make appropriate entries on your freight bill.
5. **It is very important to level load whenever possible. This will reduce the risk of rollovers and enhance the handling of your vehicle.**

II. Bottom Loading with Vapor Recovery:

1. At the entry gate – use your key card to gain access to the loading rack facility if required.
2. Observe all traffic control signs pertaining to speed, direction of travel, etc.
3. Select the correct loading rack-island for loading and stop behind the yellow limit line.
4. Turn off all electrical equipment; lights, AM and FM radio, CB radio, and cell phone. Turn your engine off and set the parking brake.
5. Personal Protective Equipment (PPE); hard hat, safety shoes, compatible gloves, eye protection, and long sleeve shirts, as per shipper requirements, must be worn from this point forward.
6. With your freight bills in hand, exit your truck using the three point stance and perform a walk-around inspection of your equipment. The walk around inspection should always be completed in the same manner. Walk down the driver's side of the vehicle, around the rear of the vehicle and proceed to the front passenger side of the vehicle. Inspect for hot brakes, flat or hot tires, broken springs, ignition sources, etc. Using your freight bill as a visual aid, set your compartment markers for the products to be loaded and wipe your placards clean if they are dirty.
7. Enter the loading rack and position your trailer loading heads in easy reach of the loading rack arms. Turn off the tractor engine and set your parking brake.

NEVER MOVE YOUR VEHICLE WITH LOADING ARMS, ELECTRICAL CORDS OR GROUNDING CABLE ATTACHED.

8. Identify the locations of emergency response equipment and emergency shut off valves and switches before proceeding.
9. Pay attention and follow any special loading rack instructions.
10. Connect the Scully cord to the trailer – scully system must show green light.
11. Connect the ground cable to the grounding prong on the trailer, if provided.
12. Connect the loading rack vapor recovery hose to the trailer.
13. Set your compartment ID markers for the products you are loading according to your dispatch.
14. Check that all trailer external valves are closed and open all of the trailer internal valves.
15. In some southern areas bucket draining is considered terminal and loading rack policy. ONLY IF REQUIRED, bucket drain all trailer compartments prior to continuing.
16. Attach the loading arms to the trailer loading heads and check that the dry-break couplers are in the locked position.
17. Following the loading rack directions, card in using the correct driver card, trailer id and pin number as required.
18. **CAUTION:** Reformulated (RFG/RBOB) regulated stores **CANNOT** receive Conventional (CVG/CBOB) gasoline
19. Check that you are loading the correct product into the correct trailer compartment. It is suggested that you always load the high volume compartments first.
20. According to your dispatch, program the loading rack computer for the desired gallons to be loaded. Be careful to reference the trailer compartment sizes verses products to be tendered. The posted trailer compartment sizes are working capacities.
21. Do not load more than two product grades at a time until your experience level lets you do so comfortably.
22. Never load gasoline and diesel fuel at the same time.
23. Remember, if you have a combination load of combustibles and flammables, the trailer must display placards representing the highest danger level, 1203 – flammable.
24. Always stay at the loading controls while loading product.
25. Keep conversation with your neighboring loading racks to a minimum and NO HORSE PLAY!
26. If the loading rack is equipped with a dead man's switch, you are forbidden to disable it.
27. If you must manually blend product to load, reference the loading rack blending chart. If you have any questions about blending, stop and ask loading rack facility personnel for help!

- 28.** Never rely on other drivers for correct answers to your questions, contact dispatch for guidance.
- 29.** With loading completed, close all internal valves, disconnect and position loading arms away from trailer, disconnect vapor recovery last.
- 30.** Replace all caps on the trailer loading heads.
- 31.** Disconnect the Scully cord and the ground cable from the trailer.
- 32.** Card out of the loading system following the loading rack instructions.
- 33.** DON'T FORGET TO REMOVE YOUR LOADING CARDS!!!
- 34.** Treat them like credit cards – They are!!!
- 35.** Before departing the loading rack area check that all valves are closed, all pipes are capped, and any miscellaneous equipment is properly stowed. Turn your placards, if necessary, to represent the product with the highest danger level.
- 36.** Walk to the front of your truck on your passenger side then reverse your route so that you will walk behind the vehicle and along the driver's side to the cab. Look for items you may have missed disconnecting or mechanical issues? Enter your vehicle using the three point stance. Note: Some loading racks such as BP have a different walk-around inspection/routine – please check with rack personnel for their procedure.
- 37.** After entering your vehicle, look in the right side, rear view mirror to make sure the loading heads, vapor recovery hose and scully cord are disconnected and properly stowed. Did you replace all pipe caps?
- 38.** Pull your truck out from under the loading rack and park in the designated area. Shut off the truck engine and set the parking brake.
- 39.** Exit the cab using the three-point stance and proceed to the departure office to obtain your shipper's bill of lading (BOL).
- 40.** After receiving the BOL, review for required emergency contact information, correct customer, product and delivery information.
- 41.** Review BOL to verify that products and gallons loaded match the dispatched product and gallons. Complete any additional required forms.
- 42.** Enter your unit with the three-point stance. Make appropriate entries on your paperwork (log entries, departure time, loading configuration of the trailer, etc.) Safely depart the loading rack terminal.

III. Transport

1. BOL should be placed in the door pouch on the driver's door during transport.
2. Using your delivery site directional card, make sure you are going to the correct location, paying attention to the suggested approach to the station parking lot.
3. Refrain from using secondary roads unless unavoidable. Never forget you are hauling a liquid. Because liquids are subject to centrifugal force, it is important to make turns as gently as possible.
4. Observe all posted speed limits and pay special attention to any posted Haz-Mat restrictions.

IV. Gravity Unloading with Vapor Recovery

1. Upon arrival at the delivery site, position your trailer to afford safe, easy access to the underground storage tanks (UST).
2. Shut off your engine and all electrical equipment. Apply the parking brake.
3. Taking your paperwork with you, exit your unit using the three-point stance. Using the same technique you used at the loading rack for your walk around inspection, walk from the front of the truck down the driver's side of the vehicle, around the rear and walk to the front of the vehicle on the passenger's side looking for vehicle defects (hot brakes, air leaks, etc.).
4. Show your freight bills to the station manager, or attendant in charge, to verify the correct delivery location and product(s) ordered.
5. If the station is closed, verify you're at the correct location by contacting dispatch.
6. Ask the station manager or attendant in charge for the UST charts.
7. Ask for Veeder-Root readings if relevant but do not substitute Veeder-Root readings for actual tank stick readings!
8. If UST charts are unavailable, the station manager isn't sure of the tank sizes, or if there is any doubt that the product will fit, you must get permission from Dispatch prior to delivering.
9. If the station personnel refuses to permit delivery, call your dispatcher!!! **DO NOT DELIVER WITHOUT PERMISSION!!!**
10. Safety vest or high visibility uniform, safety shoes and gloves must be worn.
11. Place a minimum of four safety cones in a position that will define your unloading area and block public access.
12. Locate any on site emergency response equipment and storm drains.
13. Smoking is not allowed within 25 feet of the unloading area. Constant awareness is required throughout the unloading process.
14. Identify the correct UST by API color code and product tags using your delivery site card as a visual aid. Inspect each UST for proper registration. It is illegal to

dispense product into an unregistered tank. (Registration document will be found in store office).

15. Using your tank stick and water paste, stick each UST for product and water levels. Record product inventory level and water level readings on your Bill of Lading. **Report any finding of water before proceeding.**
16. Using the UST charts, convert the inches to gallons to verify that the product will fit.
17. You may never fill any tank beyond 90% of capacity! Example – A 10,000 gallon tank may not be filled to more than a total of 9,000 gallons!
18. You never split a compartment. If the compartment's product won't fit in the UST, you don't open the trailer delivery valve. Call your dispatcher for instructions!
19. Replace the covers on the UST you are not going to use immediately.
20. Identify the type of vapor recovery system (coaxial, 2 point or manifold). This can be accomplished by viewing the vapor pipes on the customer's lot. One pipe for each tank indicates individual vapor recovery for each tank (two-point or coaxial). A lesser amount means the system is equipped with manifolded vapor recovery.
21. Check the gaskets and brass ever-tight ears on all hose and fitting couplers prior to making connections. Never shim gaskets in worn fitting couplers.
22. Connect your vapor recovery fitting to the customer's vapor recovery pipe.
23. Connect your vapor recovery hose to the vapor recovery fitting.
24. Connect the remaining end of the vapor recovery hose to the trailer vapor recovery pipe. Some model trailers have the vapor recovery hose permanently attached to the trailer.
25. Determine if the station UST's are equipped with overfill protection and what type (fill line shut off, vent line shut off, or high warning indicator)
26. Connect your drop fitting to the UST.
27. Connect your delivery hose to the drop fitting.
28. Connect the other end of the delivery hose to the trailer compartment of corresponding product. Use your compartment markers and freight bills as visual aids. **Always start your connections at the UST and work towards the trailer.**
29. If you are unloading several compartments at the same time or moving to the next compartment, repeat steps 21 through 28.
 - a. **DO NOT UNLOAD MORE THAN TWO COMPARTMENTS AT A TIME.**
30. Use your grounded metal bucket under each connection to catch any leakage when connecting to or changing trailer compartments. If you are changing product grades, it will be necessary to move your fitting and hose to the next trailer compartment and UST. Before moving your hoses and fittings, make sure they are completely empty.

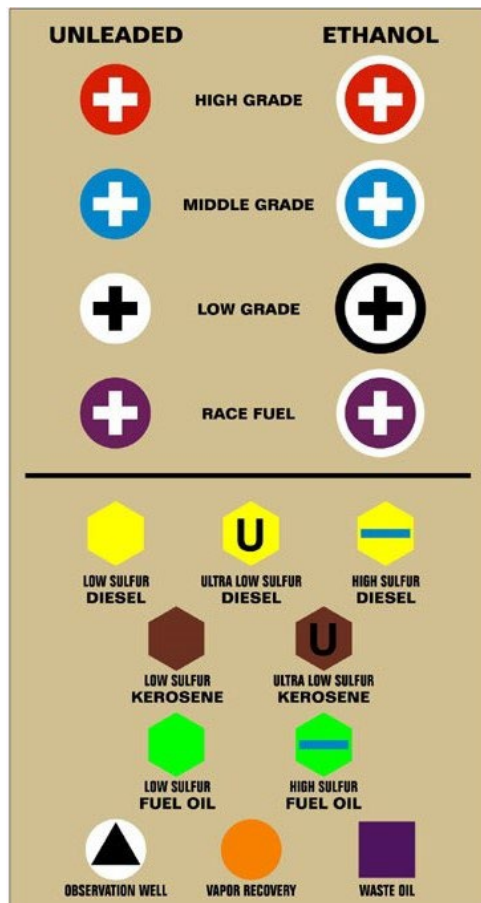
- a. It is important that you always move your delivery hose and fitting to the next UST while connected to an empty trailer compartment. This will reduce the danger of a product release or cross drop.
- 31.** If you have a mixed load of flammables and combustibles, always unload the combustibles first (unload diesel before gasoline).
- 32.** Before you open any product valves, double check that you are connected to the correct trailer compartment, correct customer UST, and that the product will fit.
 - a. Like birds of a feather – same colors go together.
- 33.** Open the external valve only for the compartment to be dispensed.
- 34.** Wait a few seconds before opening the internal valve. The product flow should stop after the trailer compartment manifold empties.
 - a. By opening the external valve first, you have the opportunity to determine if the internal valve is fully operational.
- 35.** Never leave the unloading controls while unloading. Sitting in your vehicle or walking away for any reason is forbidden.
 - a. If you must leave the area for any reason, close all valves, drain the hoses, remove, cap and stow all hoses.
- 36.** When the trailer compartment is empty (and with the hose remaining connected) walk your delivery hose towards the delivery tank twice. It isn't necessary to lift the delivery hose more than waist high.
- 37.** Repeat procedure 36 for each empty trailer compartment.
- 38.** Close your external valve after the compartment is empty and drained. By leaving the internal valve in the open position you know which compartments you unloaded.
- 39.** When all compartments are empty and drained, close all external and internal valves. Disconnect and plug the trailer hose end and walk it towards the delivery tank.
- 40.** Remove the delivery hose from the drop fitting, plug and replace your product hoses on the trailer hose tray. Replace all retaining straps.
- 41.** Remove the drop fitting and place it in the fitting box on the trailer.
- 42.** Disconnect your vapor recovery hose from the trailer.
- 43.** Walk the vapor recovery hose towards the vapor recovery fitting. Disconnect the recovery hose from the customer's tank and stow your vapor recovery hose on the trailer rack.
- 44.** Many trailers are designed with the vapor recovery hose permanently connected to the trailer. In this case you will skip step 44 but remember to walk the hose towards the customer vapor recovery connection prior to disconnecting it.
 - a. The vapor recovery hose is always connected before the product hoses and removed after the product hoses. This procedure complies with the stage one vapor recovery guidelines. (reference NESHAP 6C)

45. Take your end stick readings and enter them on your BOL. Convert the inches dispensed to gallons and verify that you delivered your entire product into the correct UST(s).
46. Replace all fill caps and covers on the UST(s) and vapor recovery system.
47. Have the customer sign your Bill of Lading and give him the designated copies. Place a copy of the BOL in the door pouch of the driver's door for transport.
48. Return all protective safety cones to your trailer, and do a walk around inspection of the unit and customer's lot. Is everything in its proper place?
49. Using the same technique you used at the loading rack for your walk around inspection, work from the front of the truck down the driver's side of the vehicle, around the rear and walk to the front of the vehicle on the passenger side looking for vehicle defects (hot brakes, air leaks, inoperable lights, faded placards etc.) and other vehicles that may block your exit.
50. Enter the tractor using the three-point stance. Depart the customer's site with the same care as when you arrived.
51. Use the safest route possible when returning from your delivery point.

V. Summary Reminders

1. **All spills are reportable, no matter how small.**
2. **Reformulated Regulated stores CANNOT receive Conventional Gasoline! Verify that the product is acceptable to the delivery site.**
3. It is illegal to load any product without vapor recovery if your trailer last contained gasoline.
4. You always use vapor recovery when bottom loading class 3 Flammable materials.
5. You always use vapor recovery when provided, no matter what the product.
6. If there is a grounding cable available, USE IT.
7. It is illegal to dispense flammables or combustibles into unregistered tanks.
8. Smoking is not permitted when handling and/or transporting class 3 Flammable products.
9. All buckets used to catch drips must be metal with an attached ground cable.
10. You never unload unless the UST has a regulation Ever-tight fitting.
11. Never load or unload with your hoses crossing beneath your vehicles.
12. Never move your vehicle with hoses or electrical cables attached – (loading or unloading).
13. Never push disabled vehicles from the loading rack area. This could produce friction sparks and result in fire.
14. If you can't accurately determine that the product will fit into the UST, or if it is the correct tank, you must receive authorization from Dispatch prior to unloading!
15. You never ignore the 90% rule when determining tank capacities.

16. If the spill kit is missing from your trailer, have it replaced and tell your Terminal Manager before leaving the terminal.
17. Delivery site directional cards are a valuable tool, USE THEM.
18. If the loading rack computer doesn't recognize your trailer numbers or driver cards to obtain access to product CALL YOUR DISPATCHER FOR INSTRUCTIONS!
DO NOT USE A DIFFERENT TRAILER NUMBER!
19. Obey all posted procedural and safety rules when visiting our shipper and customer facilities.
20. If you find any unsafe conditions at the loading rack or delivery site, complete a "Site Maintenance Request Report" and forward it to your Terminal Manager.
21. If you find a delivery site to be the location of a previous spill, report it to the customer and your Terminal Manager prior to unloading.
22. You are a Professional Driver, look and act the part.
23. Always wear the appropriate PPE for the job function you are performing.
24. If you have any questions or experience any conditions out of the ordinary, STOP and call your dispatcher before proceeding.



PENN TANK LINES, INC.....SAFETY FIRST!!!

ADDENDUM 3

KEROSENE POLICY AND PROCEDURE

Kerosene is produced in several grades depending on the intended application. Unless dyed, Kerosene will vary only slightly in color from water - white to a straw color.

You are liable to see Kerosene offered as follows:

1-K or K-1 (Kerosene) – contains less sulfur and can be used for portable space heaters. This may also be known as non-vented.

2-K or K-2 (Kerosene) – contains more sulfur and can only be used in heaters with vents connected.

Kerosene may also be used to blend with diesel fuel but if used for “on road use” it must meet low sulfur requirements as mandated by the US EPA!

We are most concerned with maintaining the integrity of the product by eliminating exposure to contamination from products moved previously on our trailers. Note that the following steps are to be followed without deviation!

Your responsibilities as a Driver are:

- **When unsure about any part of your delivery or instructions – STOP – and call your dispatcher!**
- **The trailer you are loading must have contained Kerosene or clear ULSD in all four compartments on the previous load.**
- **Never load kerosene in a trailer compartment that last contained gasoline, high sulfur diesel or dyed fuel!**
- **Unless loading like product – Any residual Kerosene from last load must also be drained from trailer! (The trailer must be flushed with ULSD or Heating Oil before loading Gasoline)**
- **When you are done loading at the rack, read the shipping manifest and verify you have loaded the correct product.**
- **Never place Kerosene and Gasoline on the same load!**
- **Never deliver into a storage tank that is not clearly marked for the product; without a tank chart; or you suspect may be used for some other purpose!**
- **Always get permission from your dispatcher prior to unloading if you are uncertain about the product ordered, correct receiving tank, or correct location!**
- **Never dispatch a load without double checking the gallons and product ordered!**
- **Deliver the entire product into the proper tank!**
- **When you are unloaded verify that your trailer is completely empty!**
- **Finally – after you have verified all the above steps verify that the next product you are going to load is compatible with any Kerosene residue!**

Addendum 4

Transportation & handling of

Ethanol or Ethanol Blended Gasoline Transport Trucks

The most common method of ethanol delivery for a number of terminals is by transport truck (typically 7800-8200 gallons). While equipment suitable for transportation of gasoline is acceptable for handling ethanol, a few extra precautionary steps should be taken. Truck compartment(s) should be clean and dry before loading. Avoid contamination from water, leaded fuels such as racing gasoline/AV gas or diesel, etc. Always ground the truck during loading and unloading operations. Hoses must be purged. It is best to have pumped ethanol or unleaded gasoline prior to pumping ethanol to avoid contamination. Before the first delivery to the ethanol storage system, make certain that the lines and pump are clean. Some acrylic sight glasses in tanker trucks may not be compatible with denatured ethanol. It may be necessary to switch to an acrylic sight glass with greater chemical resistance.

Guidelines for Safe Handling

- Ethanol is a flammable liquid.
- Handle with the same safety precautions as gasoline.
- Avoid sparks and flames.
- It is advisable to wear safety goggles when handling ethanol. If ethanol contacts the body or face, flush with water.
- Use good ventilation.
- Avoid breathing vapors, because they can cause headaches, dizziness and nausea.

If you are delivering to a terminal not within your own control, you should contact your terminal manager to verify their unloading hours and procedures.

Acceptable Commodities for Products Prior to Handling Ethanol

All Equipment: Prior commodities that are acceptable in tank trucks include:

- **Ethanol**
- **Fuel Grade Denatured Ethanol**
- **Unleaded Gasoline**
- **Unleaded RBOB (Reformulated Blendstock for Oxygenated Blending (automotive gasoline))**
- **Unleaded CARBOB (California Reformulated Blendstock for Oxygenated Blending (automotive gasoline))**
- **Natural Gasoline**

Equipment used to haul other commodities should not be used unless the equipment has been properly cleaned. The extent of cleaning necessary depends on the prior commodity. In general, prior commodities such as vegetable oil, linseed oil, lube oils, or distillates as well as all grades of glycol require a Group 1 wash. Toluene, acetone, heavier alcohols, hexane, kerosene, and diesel fuel require a Group III Strip. Caustic soda and caustic potash, as well as sulfuric acid and calcium chloride, require a Group IV Rinse. A wash using detergent is not recommended as it is possible that not all the detergent residue can be removed. A solvent wash is recommended.

It is recommended that all trailers be inspected regardless of prior commodities!

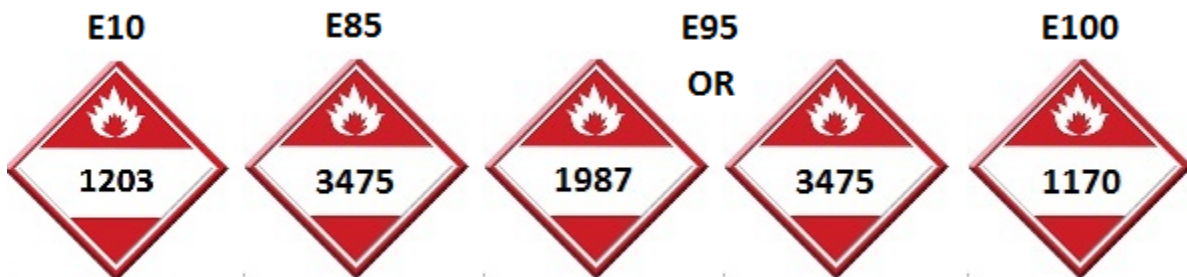
Transportation & Handling of Ethanol or Ethanol Blended Gasoline

Ethanol Identification and Placards

Fuel Grade Ethanol (E95-E99) should be placarded as NA 1987/UN 1987 with the preferred proper shipping name of either: Denatured Alcohol, NA 1987 or Alcohol N.O.S., UN 1987.

Low level ethanol/gasoline blends (i.e. E1 to E10) should be placarded as UN 1203 with the preferred proper shipping name of Gasohol, UN 1203 or Gasoline, UN 1203.

The RFA Plant and Employee Safety Committee suggest the following as guidelines for manufacturers identifying ethanol blended fuels for shipment.



Phase Separation in Gasoline Blended with Ethanol

The introduction of water in gasoline blended with Ethanol presents a particular problem for our industry. Phase separation occurs when enough water contaminates an ethanol-blended gasoline, causing the ethanol to attach itself to the water molecules, dropping to the bottom, leaving two distinct layers in the storage tank; a gasoline-only layer at the top and an ethanol-water “cocktail” on the bottom.

As the temperature of ethanol-blended gasoline drops from 60 degrees Fahrenheit or the alcohol percentage goes down the chances of phase separation are greater. One half inch of water in a 10,000 gallon tank can equal 50 gallons of water and cause phase separation. It is imperative that gasoline stations that may be receiving ethanol for the first time have pumped the water and fuel out of their tanks. As a driver you are required to check for water in the tank before unloading.

If the lower phase of water and ethanol is large enough to reach the fuel inlet, it could be pumped directly to the engine and cause significant problems. Even if the ethanol water phase at the bottom of the tank is not drawn into the fuel inlet, the reduced ethanol level of the fuel reduces the octane rating by as much as 3 octane numbers, which could result in engine problems.

The level at which phase separation can occur is determined by a number of variables, including the amount of ethanol, the composition of the fuel, the temperature of the environment and the presence of contaminants. It is very important (A) that the system is inspected for significant quantities of water in the tank before using gasoline with ethanol and (B) to limit exposure of the fuel tank to excess water. If phase separation has occurred, it is necessary to completely remove all free water from the system and replace the fuel before continuing operation. Otherwise, engine problems could occur.

Penn Tank Lines Requirements at Delivery Locations

- 1. When delivering Gasoline blended with Ethanol it is required that the driver check for water before/after the delivery by gauging the tank using a water paste approved for ethanol blended gasolines.**
- 2. If any water is found “STOP”, do not deliver the load and call your dispatcher!**
- 3. The driver must also mark the BOL as to the amount of water, if any. Again if you find any water “STOP”, do not proceed and call your terminal!**

Recommended Video: Phase Separation in Gasoline with Ethanol

<https://www.youtube.com/watch?v=v1DPsNOCwaU>

Fire Related Emergencies: Ethanol blended fuels present the same type of flammability hazard as other transportation fuels, however the nature of ethanol may be a new consideration in firefighting response.

If an ethanol fire occurs make sure the responding fire fighters know that they are dealing with ethanol along with the blend of ethanol. Depending on the type of ethanol blend, it may require firefighters to fight the fires with other methods!

(Ethanol blended fuels with greater than 10% ethanol require the use of a Polar solvent or Alcohol Resistant (AR) type of foam, commonly known as an AR-AFFF. Traditional AFFF foams have limited to no ability to extinguish fire emergencies when the ethanol content is above 10% by volume. AR type foams work on all alcohol variations of ethanol and gasoline blended fuels and would be the best use of fire response equipment.

It should be mentioned that dry chemical fire extinguishing agents may also work on ethanol blended fuels, however the dry chemical manufacturer must be consulted for the application intended.

Recommended Video: Emergency Response Consideration

<https://www.youtube.com/watch?v=9yurF-7522I>

Recommended Video: Responding to Ethanol Incidents

<https://www.youtube.com/watch?v=4ntV0tDALuc>

Lesson Learned

At the end of this discussion the trainee should have:

- An understanding of the issue(s) related to Phase Separation in Ethanol Blended Gasoline
- Proper handling of Ethanol & related gasoline blends.
- Hazard classifications and placarding of various Ethanol concentrations. (E1 through E10)
- Prior products allowed to be transported on trailer before loading Ethanol.
- The driver's responsibility to check for water in every delivery whether Ethanol related products or other petroleum products.
- The knowledge to correctly use water paste when gauging for water and recording the readings on the Bill of Lading (BOL).
- Exposure to physically applying water paste in all deliveries.
- Possession of the tube of water paste.

ADDENDUM 5

Pump/Drum Unloading Procedure

12.3 Tractor Pump Unloading Procedure

1. Position trailer so that you have an unobstructed view of the receiving pipe and tank from the tractor pump and trailer valve area. Turn the engine off.
2. With the manual bypass closed, remove the caps and plugs from the pump discharge and delivery hose ends. Connect the delivery hoses to the delivery tank and the tractor pump outlet. As pump designs vary, it is imperative that you identify the pump inlet/outlet and connect the hoses insuring the proper direction of flow. All pumps should have identifying arrows to assist you.
3. Remove the caps and plugs from the pump intake; connect the suction hose to the pump inlet and to the first trailer compartment to be unloaded. Open the manual bypass.
4. Secure all hose connections with the recommended Velcro straps. Verify that you have connected to the correct receiving line via receiving agent. All pump deliveries mandate receiving customer approval prior to dispensing product.
5. When the receiving agent is ready, vent the trailer appropriately and open the cargo tank compartment and internal safety valve to flood the pump. Check all connections for leaks and again check that the manual bypass is in the open position. If you have received customer approval to unload, proceed to the next step.
6. After the customer opens the receiving valve and give the "OK" to unload, start the engine, engage the pump "PTO" and set the engine to the specified rpm's.
7. Slowly close the manual bypass. If the pump appears to be working under strain, immediately open the manual bypass, stop the pump and check for closed line valves. Do not continue pumping if the pump indicates unusual back pressure, determined by labor or abnormal pump noise. As product begins to flow, recheck all hoses and connections for leaks. When unloading a multi-product load, unload the product imposing the least danger first. Example: Always unload number 2 fuel before gasoline.
8. When changing compartments be certain the suction line is purged. Open the manual bypass, close the delivery tanker external valve and remove the suction hose, keeping the end elevated. Cap the empty compartment, uncap the next compartment and attach the suction hose. Open the delivery tanker external and internal valves and close the manual bypass. Check all connections for leaks. Repeat step eight (8) for each remaining compartment.
9. When all trailer compartments are empty, with the manual bypass closed, walk the suction hose towards the pump two (2) times to purge the line. When purging is complete, turn the engine off with the pump "PTO" engaged to act as a line check valve.

Close all trailer valves including the trailer vent. Uncouple, drain and cap or plug all hoses and stow all equipment appropriately. Disengage the "PTO" pump.

10. Any spill or mixture of product must be reported to your Terminal Manager immediately. Upon returning to your terminal, complete a written report of the spill or mixture on the "Report of Misdelivery" form.

Unloading product into drums requires special care as it presents obvious dangers beyond normal pumping. When "drumming" follow the procedures outlined in steps 1 through 5 of part 12.3 of this chapter. The customer must supply personnel to operate the drum nozzle as this is a two (2) man procedure.

1. Connect the delivery hose to the drum nozzle instead of the delivery tank. Establish a signal system with the drum nozzle operator to determine when he is going to open or close the drum nozzle.
2. With the drum nozzle operator in position check that the manual bypass and drum nozzle are closed. Open the delivery tanker external and internal valve to food the pump. If no leaks are detected, open the manual bypass, again checking for leaks.
3. Start the engine; engage the "PTO" to the proper rpm's, immediately inspect all hoses and connections for leaks.
4. Signal the nozzle operator to open the drum nozzle, close the manual bypass to prime the pump. When pump prime is achieved and product begins to flow, return the manual bypass to the full open position. The manual bypass must stay in full open position after achieving prime.
5. The nozzle operator must signal each time he is ready to close the drum nozzle. The drum nozzle operator can switch from drum to drum without any pump valve changes.
6. When a trailer compartment is near empty, signal the nozzle operator in preparation of possible air bubbles and hose whip.
7. When the trailer compartment is empty, close the delivery valve, remove and elevate the suction hose. Uncap and connect the hose to the next compartment, secure the hose end with a Velcro strap and open the delivery tank external and internal valves respectfully. With the drum nozzle open, close the manual bypass. After achieving prime return the bypass valve to the full open position. Repeat this procedure for all remaining compartments.
8. As the last compartment empties, have the drum nozzle operator place the nozzle in an empty drum. Walk the suction hose towards the pump at least two (2) times. Close the manual bypass and, with the drum nozzle open and in a drum, purge your pump hoses.
9. When purging is completed refer to step 10 through 11 of 12.3.



PENN TANK LINES PUMP CERTIFICATION

This certifies that _____ has been trained in pumping procedures and that he/she has demonstrated the ability and working knowledge to successfully operate tractor mounted PTO pumps to load and off-load petroleum products.

LDT/DT Signature

Date

Trainee Signature

Date

ACKNOWLEDGEMENT

By my signature below, I acknowledge that I have been informed of and received a copy of and have read and understand the Penn Tank Lines, Inc. Policies of:

- Traffic Violation Policy effective February 15, 2016.
- The Safe Driving Techniques and pro-active driving.
- The core values (Safety, Quality, Integrity, Teamwork, Emotional Fortitude, Resiliency)
- All incidents/accidents no matter how minor-must be reported.
- Attendance – FMCSR 397.5 and 49 CFR 177.834 (i) (1) Loading (2) Unloading.
- Parking rules – FMCSR 397.7
- Smoking rules – FMCSR 397.13 and PTL Tobacco use policy.
- Cell Phone Policy for Penn Tank Lines and FMCSR 392.82A1
- Following distance – (minimum 6 seconds).
- Company speed limit policy of 65 mph or as posted if less than 65 mph.
- Seat belts mandatory – FMCSR 392.16
- Unauthorized riders – 392.60
- Radar detectors forbidden – FMCSR 392.71
- Hours of Service – FMCSR 395.2-8
- ADDENDUMS 1,2,3,4,5
- Cardinal Sins
- RMS Corrective Action Point System
- Violence/Weapons Policy

Date _____

Signature _____


Printed Name _____

Terminal Number _____

Terminal Location _____

Company Supervisors Signature _____

Penn Tank Lines Training Manual Tank 2023

				Date:	Day:		
Daily Driver Training Checklist				Trainee:			
Pre-trip Inspection				Yes	No	N/A	
Did the driver complete a pre & post trip							
Loading: Did the driver -							
Verify products dispatched (CVG, RFG, ULSD)							
Do a proper walk around inspection prior to entering the loading rack							
Properly connect the Scully cord							
Connect the Vapor Recovery hose							
Remove the loading head cover							
Bucket drain trailer (if permitted)							
Open internal valves							
Preset product identification markers							
Connect riser to loading head							
Card in using correct customer PIN							
Enter correct gallons and product as dispatched							
Visually double check connections before starting pump							
Close internal valve at completion of loading each compartment							
Apply Yellow tag to diesel compartment (if necessary)							
Properly disconnect and stow each riser after completion							
Properly disconnect and stow vapor recovery hose							
Properly disconnect and stow Scully cord							
Visually confirm all caps, covers and doors are secured							
Visually confirm all equipment disconnected and stowed prior to exiting loading lane							
Properly review BOL for customer, product and destination information							
OBC (Onboard Computer): Does driver-							
Understand product identification in dispatch(CVG, RFG, ULSD)							
Understand how to enter gallons							
Understand how to enter fuel purchases							
Understand Fuel reporting system							
Unloading: Does the driver-							
Properly approach location surveying for hazards							
Exit cab using 3 points of contact, wearing required safety clothing							
Remove keys and secure cab							
Chack in with customer for verification of location and authorization to unload							
Obtain ATG tapes							
Secure Unloading area with 4 cones (min)							
Identify tanks using API Color code or ID marker							
Gauge tanks using water finding paste							
Record product and water levels on BOL							
Reference tank charts and ATG tapes to verify load will fit within 90% rule							
Unload ULSD first (if applicable)							
Connect vapor recovery hoses first							
Connect product delivery hoses							
Place metal bucket under trailer connection							
Verify proper connections for product and tank							
Open discharge valve, then belly valve							
Verify no leaks at hose connections							
Remain in attendance with unobstructed view of delivery area							
Drain hose between compts and upon delivery completion, not lifting hose above waist							
Close internal valves for empty compartments and replace dust covers							
Disconnect and stow all hoses and fittings at completion of delivery							
Verify compartments are empty using sight glass							
Properly gauge tanks with stick and water paste							
Record ending stick readings on BOL, convert inches to gallons using tank chart							
Verify gallons delivered to each tank							
Visually inspect delivery area is clear							
Have BOL signed and deliver copy to store							
Return to unit and perform walk around inspection of transport and delivery area							
Enter required information to OBC							
Depart location safely							
Driver's Instruction Sheet (Trip Sheet) Does driver-							
Enter required information							
Verify understanding of dispatch							
Verify products dispatched (CVG, RFG, ULSD)							
Document trip times, load information, mileage, fuel purchases, issues incurred							
Trainee:				Date:			
LDT/DT:				Date:			
TM:				Date:			

**PENN TANK LINES, INC.
ACKNOWLEDGEMENT OF TRAINING COMPLETION**

SECTION A

TRAINER:

To finalize formal training and bring the program full circle, the LDT/DT will please acknowledge the trainee program completion by signing as indicated below.

I, _____ (LDT/DT Signature) have completed the training of this applicant and agree that he/she is now qualified to handle the loading, unloading, and transport of building materials unassisted.

Date: _____ Terminal No. _____

SECTION B

TRAINEE GRADUATE:

To finalize formal training and bring the program full circle, the Trainee Graduate must acknowledge his/her understanding of the program as presented. Please declare your understanding with your signature where indicated below.

I, _____ (Trainee Graduate signature) have completed my company training and am confident that I can successfully load and deliver building materials unassisted.

Date: _____ Terminal No. _____

SECTION C

TERMINAL MANAGER:

I, _____ (Terminal Manager's signature) have reviewed the training process for this Trainee and acknowledge his/her readiness to haul and deliver building materials unassisted. Follow up review to measure comprehension and abilities will be performed within 60 days of hire/lease. If any problems are detected at this time, additional training may be provided.

Date: _____ Terminal No. _____