## Bobtail Delivery Operations

# 2.2 Performance-Based Skills Assessment Evaluation Packet

| | |
|---|---|
| **Task 2.2-1** | **Loading a Bobtail Cargo Tank Using a Plant Pump, or** |
| **Task 2.2-2** | **Loading a Bobtail Cargo Tank Using a Plant Compressor, or** |
| **Task 2.2-3** | **Loading a Bobtail Cargo Tank Using the CTMV Pump** |
| **Task 2.2-4** | **Performing Monthly Inspections of Delivery Hose Assembly(s) and the Emergency Discharge System** |
| **Task 2.2-5** | **Applying Driving Techniques for Safe Operation of a Bobtail** |
| **Task 2.2-6** | **Examining Propane Container Installations Prior to Propane Transfer** |
| **Task 2.2-7** | **Unloading a Bobtail Cargo Tank in Metered Delivery Service** |
| **Task 2.2-8** | **Injecting Methanol into a Container** |
| **Task 2.2-9** | **Evacuating an ASME Tank** |

**NOTICE: THE SKILLS EVALUATOR MUST BE THE EMPLOYEE'S SUPERVISOR OR SOME OTHER QUALIFIED PERSON WHO HAS COMPLETED CETP "OPERATING A BOBTAIL TO DELIVER PROPANE" OR IS FAMILIAR WITH THE SUBJECT MATTER. CETP CERTIFICATION REQUIRES THAT THE EMPLOYEE SEEKING CERTIFICATION CANNOT ACT AS HIS/HER OWN EVALUATOR.**

## Table of Contents



# I. General Instructions

## Instructions for Use

This **Performance Based Skill Assessment Evaluation Packet** is designed to:

- provide structured on-the-job training for the LP-gas employee under the direction of an experienced and qualified skills evaluator, and
- standardize conditions under which the employee demonstrates his/her performance of tasks that meet the requirements of the NPGA Certified Employee Training Program.

Each task is divided into one or more operations on which the employee's performance is evaluated. Each operation is designated by the following symbol: ☐. Also, under each operation is a performance guide that establishes the standard used by the skills evaluator.

When an operation within a task is successfully performed by the employee according to the criteria listed in the performance guide, a check (✓) is placed in the ☐.

After completing the checklist for those operations required in the employee's job duties, the skills evaluator and employee must sign their respective affidavits. Section IV (page 15 and page 16) is photocopied for the company's personnel training record files. **The original of Section IV, pages 15 and 16, must be forwarded to the appropriate test processing facility to complete certification.**

***On-line Test Candidates:***
**CASTLE Worldwide**
**900 Perimeter Park Drive, Suite G**
**Morrisville, NC 27560**

***Paper test Candidates:***
**Industrial Training Services, Inc.**
**310 C.C. Lowry Drive**
**Murray, KY 42071**

## Instructions to the Employee

The Performance Based Skill Assessment Evaluation Packet is designed as a training guide to assist you and your evaluator in performing the tasks listed on the front cover. Practice the tasks as many times as needed to become confident and proficient with the documents or equipment. Your skills evaluator will check and observe your performance using the checklist included in each hands-on task assignment.

The employee must adhere to all safety precautions. If a safety precaution is violated, then the demonstration shall be stopped and the skills evaluator must instruct the employee on the proper safety procedures that apply before allowing the employee to continue.

The packet is designed to establish the basic conditions under which the employee demonstrated his/her level of knowledge and proficiency.

## Instructions to the Skills Evaluator

Review Section II, "**Task Information**."

Conduct the evaluation as follows:

- Give a copy of the Performance Based Skill Assessment Evaluation Packet to the employee.
- Review all of the instructions with the employee and answer any questions or concerns about how it will be used.
- Demonstrate and/or talk the employee through each of the steps required to do the task.
- Allow the employee time to ask questions and/or study the steps.
- Observe the employee performing the required steps; correct him/her as needed.
- Allow the employee to practice until he/she is confident.
- Evaluate the employee at his/her request.
- Complete Section III, "Employee Performance Checklist," beginning on page 4.
- Complete **both** pages of Section IV, "Employer Record," which **must be signed and dated by both the Skills Evaluator and employee** on page 15.
- Remove Section IV (pages 15 and 16) from the packet and photocopy. Retain photocopy for your files. **For employee certification this form must be received within 12 months of the Certifying Examination date**. Mail original to:

***On-line Test Candidates:***
**CASTLE Worldwide**
**900 Perimeter Park Drive, Suite G**
**Morrisville, NC 27560**

***Paper test Candidates:***
**Industrial Training Services, Inc.**
**310 C.C. Lowry Drive**
**Murray, KY 42071**

- This Evaluation Packet and the photocopy of Section IV (pages 15 and 16) should be retained in the Company's employee training files.

# II. Task Information

**Certification Standard:** The employee's certification is based on satisfactory completion of the operations listed under each task in the Performance Based Skill Assessment Evaluation Packet and a Mastery Score on the Certification Area Examination.

**Prerequisites:** Successful completion of CETP Certification Area 2.2, "Bobtail Delivery Operations"; successful completion of CETP Certification Area 2.1, "Propane Delivery Operations"; AND an NPGA CETP Certification in CETP Certification Area 1.0, "Basic Principles and Practices."

**References:** Applicable LP-Gas Codes and company policies.

**Evaluation:** The skills evaluator must be the employee's supervisor or some other qualified person who has completed CETP "Bobtail Delivery Operations" or is familiar with the subject matter. CETP certification requires that the employee seeking certification cannot act as his/her own evaluator.

# III. Employee Performance Checklist

**Print or type all entries except signatures and initials.**

Employee Name _____

Social Security No. _____ Date _____

Skill Evaluator (Please Print) _____

I, _____, hereby attest the employee named on
(Skill Evaluator's Signature)
top line of this section has demonstrated the correct performance of the tasks listed below and on following pages.

[Tasks begin on next page.]

Employee Name: _____ Evaluator: _____ Date: _____

## Task 2.2-1, or 2.2-2, or 2.2-3
## Loading the Bobtail Cargo Tank

**The employee is qualified to perform at <u>least one</u> of Tasks 2.2-1, or 2.2-2, or 2.2-3 at the following level:**

| Satisfactory | Not Applicable* |
|---|---|
| ☐ | ☐ |

*Not applicable means that this person's job description does not require the person to perform this task or that the required equipment was not available.

### Loading a Bobtail Using a Plant Pump. (BDO Module 3)

*Performance Guide:* The person being evaluated for certification:

1. Properly located the vehicle at the loading bulkhead.
2. Secured the vehicle against movement by setting the parking brake and placing chock blocks in front and behind a wheel according to company procedures, and shut down the engine.
3. Wearing proper personal protective equipment, determined the proper setting for the cargo tank liquid level gauge for proper filling level based on the liquid temperature and specific gravity of the product.
4. Inspected the condition of the bulk plant piping and valves and determined the proper valve positions for loading the cargo tank.
5. Verified proper condition and locations of the ESVs and remote emergency shutdown controls.
6. Inspected the condition of the bulk plant transfer hoses.
7. After determining that the liquid and vapor cargo tank inlet valves were closed, removed the caps from the cargo tank loading connections, and inspected the condition of ACME threads and the o-ring or gasket.
8. Inspected the transfer hose connections, made the liquid and vapor connections hand-tight, then appropriately used a spanner wrench to complete the hose connections.
9. Slightly opened the hose-end valves and checked for leakage.
10. Completed preparation for transfer by:
    1. Placing the cargo tank emergency discharge system in the loading status if applicable;
    2. Opened the cargo tank filling valve, bulkhead ESVs, hose-end valves, and appropriate bulk tank and piping valves, and cargo tank fixed liquid level gauge.
    3. Operated the pump switch to start the loading of the cargo tank.
    4. Verified gas odorization according to company policies and procedures.
11. Remained in attendance throughout the transfer operation in a position to shutdown the pump, and activate emergency controls if required.
12. When liquid propane was detected at the fixed maximum liquid level gauge or at the set point for the liquid level gauge, shutdown the transfer pump, and closed the ESVs, the hose-end valves, cargo tank valves, bulk tank valves and piping valves.
13. Properly vented the gas trapped in the hose connections between the hose-end valves and the cargo tank valves.
14. Replaced the dust covers on the cargo tank inlets and the transfer hoses, and properly stowed the transfer hoses.
15. Performed a walk-around inspection of the vehicle, and prepared it for movement.
16. Secured any bulk plant access gates opened for the loading operation or valve locks and controls security measures.

**Note to Skills Evaluator:** During the process of loading the cargo tank, ask the person being evaluated to detail what actions are required in the event of:

1. A transfer hose break or major leak.
2. A malfunction of the transfer pump or compressor.
3. An interruption of the loading operation that requires the person being evaluated to leave the transfer area.
4. A fire or other emergency in or near the transfer area
5. Entrance of unauthorized persons into the transfer area
6. Gas odorant not detected at the start of the loading operation

Employee Name: _____ Evaluator: _____ Date: _____

# Task 2.2-1, or 2.2-2, or 2.2-3
# Loading the Bobtail Cargo Tank

| Satisfactory | Not Applicable* |
|---|---|
| ☐ | ☐ |

*Not applicable means that this person's job description does not require the person to perform this task or that the required equipment was not available.

## Loading a Bobtail Using a Plant Compressor (BDO Module 3)

*Performance Guide:* The person being evaluated for certification:

1. Properly located the vehicle at the loading bulkhead.
2. Secured the vehicle against movement by setting the parking brake and placing chock blocks in front and behind a wheel according to company procedures, and shut down the engine.
3. Wearing proper personal protective equipment, determined the proper setting for the cargo tank liquid level gauge for proper filling level based on the liquid temperature and specific gravity of the product.
4. Inspected the condition of the bulk plant piping and valves and determined the proper valve positions for loading the cargo tank.
5. Verified proper condition and locations of the ESVs and remote emergency shutdown controls.
6. Inspected the condition of the bulk plant transfer hoses.
7. After determining that the liquid and vapor cargo tank inlet valves were closed, removed the caps from the cargo tank loading connections, and inspected the condition of ACME threads and the o-ring or gasket.
8. Inspected the transfer hose connections, made the liquid and vapor connections hand-tight, then appropriately used a spanner wrench to complete the hose connections.
9. Slightly opened the hose-end valves and checked for leakage.
10. Completed preparation for transfer by.
    1. Placing the cargo tank emergency discharge system in the loading status if applicable;
    2. Opened the cargo tank filling valve, bulkhead ESVs, hose-end valves, and appropriated bulk tank and piping valves.
    3. Inspected the compressor verifying the proper crankcase oil level, and that only vapor was present in the liquid trap.
    4. Verified the proper position of the 4-way valve, and piping valves for cargo tank loading, and opened the cargo tank fixed liquid level gauge.
    5. Operated the compressor switch to start the loading of the cargo tank.
    6. Verified gas odorization according to company policies and procedures.
11. Remained in attendance throughout the transfer operation in a position to shutdown the compressor, and activate emergency controls if required.
12. When liquid propane was detected at the fixed maximum liquid level gauge or at the set point for the liquid level gauge, shutdown the compressor, and closed the ESVs, the hose-end valves, cargo tank valves, bulk tank valves and piping valves, and cargo tank fixed liquid level gauge.
13. Properly vented the gas trapped in the hose connections between the hose-end valves and the cargo tank valves.
14. Replaced the dust covers on the cargo tank inlets and the transfer hoses, and properly stowed the transfer hoses.
15. Performed a walk-around inspection of the vehicle, and prepared it for movement.
16. Secured any bulk plant access gates opened for the loading operation or valve locks and controls security measures.

**Note to Skills Evaluator:** During the process of loading the cargo tank, ask the person being evaluated to detail what actions are required in the event of:

1. A transfer hose break or major leak.
2. A malfunction of the transfer pump or compressor.
3. An interruption of the loading operation that requires the person being evaluated to leave the transfer area.
4. A fire or other emergency in or near the transfer area
5. Entrance of unauthorized persons into the transfer area
6. Gas odorant not detected at the start of the loading operation

Employee Name: _____ Evaluator: _____ Date: _____

## Task 2.2-1, or 2.2-2, or 2.2-3
## Loading the Bobtail Cargo Tank

| Satisfactory | Not Applicable* |
|---|---|
| ☐ | ☐ |

*Not applicable means that this person's job description does not require the person to perform this task or that the required equipment was not available.

### Loading a Bobtail Using a CTMV Pump Through an Auxiliary Inlet (BDO Module 3)

*Performance Guide:* The person being evaluated for certification:

1. Properly located the vehicle at the loading bulkhead.
2. Secured the vehicle against movement by setting the parking brake and placing chock blocks in front and behind a wheel according to company procedures, and shut down the engine.
3. Wearing proper personal protective equipment, determined the proper setting for the cargo tank liquid level gauge for proper filling level based on the liquid temperature and specific gravity of the product.
4. Inspected the condition of the bulk plant piping and valves and determined the proper valve positions for loading the cargo tank.
5. Verified proper condition and locations of the ESVs and remote emergency shutdown controls.
6. Inspected the condition of the bulk plant transfer hoses.
7. After determining that the liquid and vapor cargo tank inlet valves were closed, removed the caps from the cargo tank loading connections, and inspected the condition of ACME threads and the o-ring or gasket.
8. Installed female ACME to male ACME adapter on the cargo tank filler connection and auxiliary inlet as appropriate.
9. Connected the cargo tank delivery hose assembly to the fill connection.
10. Inspected the transfer hose connections, made the liquid and vapor connections hand-tight, then appropriately used a spanner wrench to complete the hose connections.
11. Slightly opened the hose-end valves and checked for leakage.
12. Completed preparation for transfer by.
    1. Placing the cargo tank emergency discharge system in the (un)loading status if applicable;
    2. Opened the cargo tank filling valve, bulkhead ESVs, hose-end valves, and appropriated bulk tank and piping valves.
    3. Started the vehicle engine at idle speed and engaged the power take-off (PTO) to start pumping.
    4. Verified gas odorization according to company policies and procedures
13. Remained in attendance throughout the transfer operation in a position to shutdown the PTO, and activate emergency controls if required.
14. When liquid propane was detected at the fixed maximum liquid level gauge or at the set point for the liquid level gauge, shutdown the PTO and vehicle engine, and closed the ESVs, the hose-end valves, cargo tank valves, bulk tank valves, piping valves, and cargo tank fixed liquid level gauge.
15. Properly vented the gas trapped in the hose connections between the hose-end valves and the cargo tank valves.
16. Replaced the dust covers on the cargo tank inlets and the transfer hoses, and properly stowed the transfer hoses.
17. Performed a walk-around inspection of the vehicle, and prepared it for movement.
18. Secured any bulk plant access gates opened for the loading operation or valve locks and controls security measures.

**Note to Skills Evaluator:** During the process of loading the cargo tank, ask the person being evaluated to detail what actions are required in the event of:

1. A transfer hose break or major leak.
2. A malfunction of the transfer pump or compressor.
3. An interruption of the loading operation that requires the person being evaluated to leave the transfer area.
4. A fire or other emergency in or near the transfer area
5. Entrance of unauthorized persons into the transfer area
6. Gas odorant not detected at the start of the loading operation

Employee Name: _____ Evaluator: _____ Date: _____

## Task 2.2-4 Performing Monthly Inspections & Tests of the Emergency Discharge System & Delivery Hose Assembly(s)

### The employee is qualified to perform Task 2.2-4A at the following level:

**Satisfactory** ☐

**Performing Monthly Inspections of the Bobtail Delivery Hose Assembly(s). (BDO Module 4)**

*Performance Guide:* Using company prescribed monthly inspection report forms, the person being evaluated for certification:

1. Recorded the identification number of the delivery hose assembly.
2. Laid out the full length of the delivery hose assembly, then inspected for the presence of any of the following rejection criteria:
   - Damage to the hose cover that exposes the reinforcement;
   - Wire braid reinforcement that has been kinked or flattened so as to permanently deform the wire braid;
   - Bulging under pressure, or loose outer covering;
   - Damaged, slipping, or excessively worn hose couplings;
   - Loose or missing bolts or fastenings on bolted hose coupling assemblies;

   If the company's inspection procedures call for de-pressurizing the hose:
   - Soft spots when not under pressure.
3. Recorded the results of the inspection on the report form, completing all required parts of the form.
4. Retrieved the delivery hose assembly and secured it on the vehicle, tagging it if it met rejection criteria.
5. If the delivery hose assembly required repairs and testing, or replacement, immediately reported that fact to the supervisor or manager.

### The employee is qualified to perform Task 2.2-4B at the following level:

**Satisfactory** ☐

**Performing Monthly Test of the Emergency Discharge System. (BDO Module 4)**

*Performance Guide:* Using company prescribed monthly inspection report forms, the person being evaluated for certification:

1. Checked those components of the discharge system that are readily observed during the normal course of unloading to assure that they are of sound quality, without obvious defects detectable through visual observation and listening, and that connections are secure, and specifically inspected for the presence of any of the following rejection criteria:
   (a) Any external leak identifiable without the use of instruments.
   (b) Bolts that are loose, missing, or severely corroded.
   (c) Manual stop valves that will not actuate.
   (d) Rubber hose flexible connectors with any condition listed in the hose rejection criteria (see criteria in Task 2.2.23a on the previous page).
   (e) Stainless steel flexible connectors with damaged reinforcement braid.
   (f) Internal self-closing stop valves that fail to close or that permit leakage through the valve detectable without the use of instruments.
   (g) Pipes or joints that are severely corroded.
2. Recorded on the report form any deficiency found.
3. Performed a test of the internal self-closing stop valve using the meter creep test method in which the person being evaluated:
   - Connected the delivery hose end valve adapter to the cargo tank filler valve using a male to female ACME adapter, or to the vapor equalizing valve opening;
   - Inserted a delivery ticket into the meter register and reset the meter to zero;
   - Opened the hose end valve and all valves in the cargo tank discharge system, and started the product flow by engaging the PTO with the engine at idle;
   - After the flow was established, closed the internal self-closing stop valve and monitored the meter flow;
   - Determined that the meter flow stopped within 30 seconds with no meter creep within 5 seconds after the meter stopped, indicating proper closure of the internal self-closing stop valve; or
   - Determined that the meter flow did not stop as required or "creeped" after slowing, indicating the internal self-closing stop valve did not properly close.
4. Inspected, operated and tested each emergency shutdown control.
5. Recorded the results of the inspections and tests on the company designated monthly inspection form and properly completed all required items of the form.

Employee Name: _____ Evaluator: _____ Date: _____

## Task 2.2-5 Applying Driving Techniques for Safe Operation of a Bobtail.

**The employee is qualified to perform Task 2.2-5 at the following level:**

**Satisfactory** ☐

**Applying Driving Techniques for Safe Operation of a Bobtail. (BDO Module 4)**

*Performance Guide:* En route to a customer location, the person being evaluated for certification:

1. Made continuous reference to rearview mirrors and scanned the roadway to determine traffic and road surface conditions.
2. Properly controlled the speed of the vehicle, making smooth turns and changes of direction, using direction signals, and proper preparation for direction changes.
3. Adjusted driving techniques as appropriate for weather and traffic conditions.
4. Demonstrated or explained techniques for controlling skids or recovering from a tire blowout or pavement drop off.
5. Explained how to avoid vehicle roll over in the event of a blowout or pavement drop off.
6. Maneuvered the vehicle onto customer property to avoid damage to property and having to re-enter the roadway by backing into traffic.

Employee Name: _____ Evaluator: _____ Date: _____

## Task 2.2-6
## Examining Propane Containers and Installations Prior to Transferring Propane

**The employee is qualified to perform Task 2.2-6 at the following level:**

**Satisfactory**

☐

**Examining Propane Containers and Installations Prior to Transferring Propane. (BDO Module 5)**

*Performance Guide:* At a customer location, the person being evaluated for certification: (Evaluator: check all items that apply to the installation.)

1. Verified that the aboveground propane storage container(s) was level and adequately supported on firm masonry foundations, or
2. Verified that the buried or mounded underground storage container(s) was properly covered and protected, and that the covering sloped downward from the top of the tank dome.
3. Verified that the aboveground container(s) was adequately protected by a light reflective coating.
4. Verified that the storage container(s) was properly marked or fitted with an ASME data plate, that the working pressure was adequate for the LP-gas product, and that the container was apparently safe for continued service.
5. Verified that the propane container(s) was located in conformance to the minimum separation distance requirements of NFPA 58 with regard to:
   - Important Buildings
   - Ignition Sources
   - Combustible Materials
   - Property lines that can be built upon
   - Building openings
   - Direct vents and ventilation openings
6. Verified that container valves and fittings were in good operating condition and leak-free.
7. Verified that the pressure regulator and its vent were protected.
8. To the extent possible, verified that visible and buried distribution piping was adequately protected.

Employee Name: _____ Evaluator: _____ Date: _____

## Task 2.2-7
## Unloading a Bobtail Cargo Tank in Metered Delivery Service (Filling a Stationary Container at a Customer Location)

**The employee is qualified to perform Task 2.2-7 at the following level:**

**Satisfactory**

☐

### Unloading a Bobtail Cargo Tank in Metered Delivery Service (BDO Module 5)

*Performance Guide:* The person being evaluated for certification:

1. Positioned the bobtail on an all weather surface which could adequately support the vehicle at a location 10 feet or more removed from the transfer point, set the parking brake and chock blocks.
2. Inspected the storage container(s) to verify that the container(s) was in good condition for continued service and designed for the LP-gas to be transferred and stored, that the pressure regulator was properly protected, and that valves, gauges and fittings were leak-free and in proper operating order.
3. Verified that the container was pressurized with propane and not out of gas.
4. If a test of the remote emergency shutdown device was not performed within 18 hours prior to the unloading operation, tested the remote device for proper operation at a distance of 150 feet from the cargo tank.
5. Inspected those portions of the cargo tank discharge system readily visible during unloading, and the condition of the delivery hose assembly to assure none of the DOT hose rejection criteria were present.
6. Wearing suitable eye and hand PPE, pulled the delivery hose to the container, removed the filler valve cap, inspected the ACME threads and gasket, installed a leave-behind adapter (if required), and connected the hose-end valve adapter to the filler valve or adapter connection.
7. Prepared the liquid meter register or the electronic meter to record the delivery.
8. Set the emergency discharge system for unloading, engaged the PTO to begin pumping.
9. Remained in attendance with the remote emergency shut down control throughout the transfer, checking the container fixed maximum liquid level gauge and liquid gauge frequently, and stopped the pump when liquid (a steady white mist) was observed at the fixed maximum liquid level gauge outage (or when the liquid level gauge indicated the maximum permitted filling level was reached). Closed the hose-end valve and cargo tank valves.
10. Properly vented the liquid propane trapped between the filler and transfer adapter—then disconnected the hose, inspecting the full length of the deployed hose during its retrieval, and secured the hose for travel.
11. Completed all company designated forms or applicable delivery records.
12. Completed a walk-around inspection of the storage container and the vehicle to assure all appropriate valves were closed, dust caps were in place, the container dome was closed, and the vehicle's path was clear for exiting the customer location. Checked for proper condition of vehicle tires and wheels.
13. Properly retrieved and stowed the chock blocks.

Employee Name: _____ Evaluator: _____ Date: _____

## Task 2.2-8
## Injecting Methanol into a Container

| Satisfactory | Not Applicable* |
|---|---|
| ☐ | ☐ |

*Not applicable means that this person's job description does not require the person to perform this task nor operate a cargo tank motor vehicle.

### Injecting Methanol into a container at the bulk plant or customer location (BDO Module 6)

*Performance Guide:* Using company procedure for performing and documenting the task, the person being valuated for certification:

- Demonstrated how to inject methanol into a propane container under:
  - Negative pressure (new containers)
  - Container pressure (pressurized propane container in service).

Employee Name: _____ Evaluator: _____ Date: _____

## Task 2.2-9
## Evacuating an ASME Tank at the Bulk Plant or at a Customer Location

**The employee is qualified to perform Task 2.2-9A at the following level:**

| Satisfactory | Not Applicable* | |
|---|---|---|
| ☐ | ☐ | **Evacuating an ASME Tank at the Bulk Plant or at a Customer Location Using a Portable Compressor. (BDO Module 6)** |

*Performance Guide:* The person being evaluated for certification:

1. Positioned the bobtail on an all weather surface which could adequately support the vehicle at a location 10 feet or more removed from the transfer point, set the parking brake and chock blocks.
2. Shut down the vehicle engine and located the portable compressor between the bobtail and the ASME tank.
3. Noted the percentage of liquid in the ASME tank and verified sufficient cargo tank capacity to receive the recovered liquid without overfilling.
4. Following manufacturer's instructions, and wearing suitable personal protective equipment, loosed the sealing cap on the ASME tank's actuated liquid withdrawal excess-flow valve, without removing it**.** Allowed sufficient time to assure that the valve checked, and pressurized liquid and vapor vented through the valve's vent before removing the cap, or determining that the cap should not be removed.
5. If the liquid withdrawal valve properly checked and the cap was removed, installed a fully opened transfer valve equipped with a specially machined adapter in the liquid withdrawal valve, following manufacturer instructions—then closed the transfer valve after the liquid withdrawal valve checked.
6. If the ASME tank was not equipped with an actuated liquid withdrawal excess-flow valve (tank designed to fill to liquid space through a dip tube), installed a suitable transfer valve designed to open the filler valve and back check.
7. Connected a liquid propane transfer hose between the transfer valve and the liquid fill valve of the cargo tank, opened the hose-end valves and the cargo tank valve and the ASME tank-installed transfer valve and checked for leakage.
8. Connected high-pressure propane hose to the vapor-equalizing valve of the ASME tank and to the discharge connection to the compressor. Connected another high-pressure hose to the vapor-equalizing connection of the cargo tank and the suction connection to the compressor. Opened the cargo tank vapor valve and the hose-end valves, verified only propane vapor was in the hose, and checked for leakage after connections were made tight.
9. Started the compressor, alert for any abnormal operating condition.
10. Monitored the transfer of liquid until the liquid level in the ASME tank reached 5% or less, then shut down the compressor and closed all valves.
11. Disconnected the hoses—after venting trapped gas by controlled release in a safe location away from people, structures, ignition sources, etc. Capped the hose ends and secured them for travel.
12. Fully opened the transfer valve to check the ASME tank's actuated liquid withdrawal excess-flow valve, according to manufacturer instructions.
13. After the liquid withdrawal valve checked, removed the transfer valve and adapter from the liquid withdrawal valve—then installed the sealing gasket and cap.
14. If the ASME tank was evacuated through the filler valve, closed the transfer valve, vented any trapped liquid—then removed the transfer valve and replaced the filler valve cap.
15. If the liquid withdrawal valve or filler valve would not check and seal, tightened the transfer valve and plugged it for later removal at the bulk plant.

*Not applicable means that this person's job description does not require the person to perform this task or that the required equipment was not available.

Employee Name: _____ Evaluator: _____ Date: _____

**The employee is qualified to perform Task 2.2.9b at the following level:**

| Satisfactory | Not Applicable* |
|---|---|
| ☐ | ☐ |

*Not applicable means that this person's job description does not require the person to perform this task or that the required equipment was not available.

**Evacuating an ASME Tank at the Bulk Plant or at a Customer Location Using the Cargo Tank Pump. (BDO Module 6)**

*Performance Guide:* The person being evaluated for certification:

1. Positioned the bobtail on an all weather surface which could adequately support the vehicle at a location 10 feet or more removed from the transfer point, set the parking brake and chock blocks.
2. Shut down the vehicle engine.
3. Noted the percentage of liquid in the ASME tank and verified sufficient cargo tank capacity to receive the recovered liquid without overfilling.
4. Following manufacture's instructions, and wearing suitable personal protective equipment, loosed the sealing cap on the ASME tank's actuated liquid withdrawal excess-flow valve, without removing it**.** Allowed sufficient time to assure that the valve checked, and pressurized liquid and vapor vented through the valve's vent before removing the cap, or to determine that the cap should not be removed.
5. If the liquid withdrawal valve properly checked and the cap was removed, installed a fully opened transfer valve equipped with a specially machined adapter in the liquid withdrawal valve, following manufacturer instructions—then closed the transfer valve after the liquid withdrawal valve checked.
6. If the ASME tank was not equipped with an actuated liquid withdrawal excess-flow valve (tank designed to fill to liquid space through a dip tube), installed a suitable transfer valve designed to open the filler valve and back check.
7. Connected a liquid propane transfer hose between the transfer valve and the auxiliary pump inlet of the cargo tank, opened the hose-end valves and the cargo tank valve and ASME tank-installed transfer valve and checked for leakage.
8. Connected high-pressure propane hose to the vapor-equalizing valve of the ASME tank and to the vapor-equalizing connection of the cargo tank. Opened the cargo tank vapor valve and the hose-end valves, and checked for leakage after connections were made tight.
9. Started the vehicle engine and engaged the PTO to operate the pump at low idle speed, alert for any abnormal operating condition.
10. Monitored the transfer of liquid until the liquid level in the ASME tank reached 5% or less, then shut down the pump, PTO, and engine, and closed all valves.
11. Disconnected the hoses—after venting trapped gas by controlled release in a safe location away from people, structures, ignition sources, etc. Capped the hose ends and secured them for travel.
12. Fully opened the transfer valve to check the ASME tank's actuated liquid withdrawal excess-flow valve, according to manufacturer instructions.
13. After the liquid withdrawal valve checked, removed the transfer valve and adapter from the liquid withdrawal valve—then installed the sealing gasket and cap.
14. If the ASME tank was evacuated through the filler valve, closed the transfer valve, vented any trapped liquid—then removed the transfer valve and replaced the filler valve cap.
15. If the liquid withdrawal valve or filler valve would not check and seal, tightened the transfer valve and plugged it for later removal at the bulk plant.

# IV. CETP Performance Evaluation / Employer Record

**THIS SECTION MUST BE RETURNED AS SOON AS POSSIBLE, BUT NO LATER THAN 12 MONTHS AFTER TAKING THE CERTIFICATION TEST, TO THE FOLLOWING ADDRESS:**

***On-line Test Candidates:***
**CASTLE Worldwide**
**900 Perimeter Park Drive, Suite G**
**Morrisville, NC 27560**

***Paper test Candidates:***
**Industrial Training Services, Inc.**
**310 C.C. Lowry Drive**
**Murray, KY 42071**

**Employee Information:** (print or type) Test Group Number (if known): _____

Name _____ Social Security Number _____

Employer _____

Address _____

City, State: _____ Zip Code _____

## *Affidavit*

I affirm that I am the person who has performed those items checked on this checklist. I acknowledge that the performance checklists used are solely for the purpose of skills assessment for the CETP certification requirements, and are not intended to replace or modify company operating or safety procedures, and may not be appropriate for use in all circumstances. I acknowledge that I am responsible for recognizing hazards and abnormal conditions in my workplace and must exercise care and good judgment, always using appropriate equipment, procedures and tools for the tasks I perform. The Propane Education and Research Council, the National Propane Gas Association, CASTLE Worldwide and Industrial Training Services, Inc. assume no liability for my actions, or for my application of the skills assessment performance guides used in this evaluation checklist.

Employee's Signature_____ Date_____

**Skills Evaluator Information:** (print or type)

Name _____

Organization/Employer_____

Telephone Number_____

## *Affidavit*

I affirm that I am the person who has administered this checklist, and that I have conducted this employee skills assessment with integrity. I also affirm that the above named employee is the person whose performance I evaluated, and that the above named person performed the checked tasks at the indicated level without assistance from me or any other person.

Skill Evaluator's Signature_____ Date_____

**The employee is qualified to perform the listed operations at the following level:**

| Without Direct Supervision | Not Applicable | |
|---|---|---|
| ☐ | ☐ | **Loading a Bobtail Cargo Tank Using a Plant Pump.** |
| ☐ | ☐ | **Loading a Bobtail Cargo Tank Using a Plant Compressor.** |
| ☐ | ☐ | **Loading a Bobtail Cargo Tank Using the CTMV Pump.** |
| ☐ | | **Performing a Monthly Inspection of the Delivery Hose Assembly.** |
| ☐ | | **Performing a Monthly Inspection of the Emergency Discharge System.** |
| ☐ | | **Applying Driving Techniques for Safe Operation of a Bobtail.** |
| ☐ | | **Examining Propane Container Installations Prior to Transferring Propane.** |
| ☐ | | **Unloading a Bobtail Cargo Tank in Metered Delivery Service.** |
| ☐ | ☐ | **Injecting Methanol into a Container** |
| ☐ | ☐ | **Evacuating an ASME Tank Using a Portable Compressor.** |
| ☐ | ☐ | **Evacuating an ASME Tank Using the CTMV Pump.** |

---

After completion of Section IV, "Employer Record," remove pages 15 and 16 from the packet and photocopy. Retain photocopy for your files. Mail original to:

*On-line Test Candidates:*
CASTLE Worldwide
900 Perimeter Park Drive, Suite G
Morrisville, NC 27560

*Paper test Candidates:*
Industrial Training Services, Inc.
310 C.C. Lowry Drive
Murray, KY 42071