



P·T·I 300-03

Butane Rail Car Unloading



Course Overview

This course has been designed for bulk plant employees who transfer butane from rail cars to the bulk plant storage tank(s). The student may attend an instructor-led training course or, upon the direction of a P·T·I certified Trainer, study the course manual and attend a specialized review session and demonstration of correct procedures by a P·T·I certified Trainer. In either case, the certification requirements listed below must be achieved in order to successfully complete the course.

Key Learning Objectives

The student will gain knowledge in the following key areas:

- **Product Knowledge**
Includes instruction on the properties and characteristics of butane; preventative measures and first aid tips specific to butane; sources of ignition and testing for leaks; emergency preparedness.
- **The Bulk Plant**
Includes instruction on the major components of the bulk plant; the storage tank and its valves and gauges; the compressor system and the storage tank loading system.
- **Butane Rail Car Components**
Students will be able to identify the basic components of butane rail cars including the location of rail car fittings, liquid and vapour connections, thermometer wells, sampling valves, slip tube gauges, the use of outage tables, pressure relief valves and unloading risers. In addition, the students will gain an understanding of safety equipment and procedures related to the transfer of butane from the rail car.
- **Butane Testing**
Includes instruction on how to complete various tests of the butane including odourant testing, dew point testing, hydrogen sulphide corrosion testing, weathering testing and simple anhydrous ammonia field testing.



- **Unloading a Butane Rail Car**

Students will learn the correct procedures for unloading a rail car including securing the rail car, inspecting the rail car, gauging and testing the contents of the rail car, determining the maximum amount of butane to be transferred, connecting liquid and vapour hoses between the rail car and the unloading riser, unloading the rail car and preparing the rail car for departure.

Regulatory References

This course has been designed to satisfy regulatory requirements of the most current CAN/CSA-B149.2 Propane Storage and Handling Code. While this course has been written to satisfy national requirements, the P·T·I certified Trainer or Examiner will also ensure that the student is aware of any additional requirements as outlined by the authorities in their jurisdiction.

This course satisfies national and provincial regulatory requirements including partial *PPO-1* ROT requirements in Ontario; partial *PPO-1* ROT requirements in New Brunswick; partial *Bulk Plant Operator 2* ROT requirements in Prince Edward Island.

Certification Requirements

The student must successfully complete both a written and practical hands-on exam provided by a P·T·I certified Trainer. A temporary Record of Training will be issued to the student by the P·T·I certified Trainer valid for ninety days. The Propane Training Institute will issue the student a paper wall certificate and a plastic wallet card certifying successful completion of the course. P·T·I certification is valid for three years from the date of training.

Course Duration

The course can be completed in approximately six hours including classroom instruction, demonstration of correct procedures, written exam and practical hands-on exam. Overall duration of an individual course will vary depending on the number of students in the class and their individual skill level.

The cost of classroom instruction is determined by the Trainer and is dependent on where the training will be held and for how many students.

