



Level One

MODULE 66101-02 – INTRODUCTION TO THE PIPELINE INDUSTRY

1. Explain the basic functions and purposes of pipelines and facilities and identify the characteristics and hazards of common pipeline products.
2. Identify maps and drawings used to depict pipelines and facilities.
3. Explain the roles of control personnel and equipment in the overall operation of a pipeline.
4. Explain liquid pipeline hydraulics and gas pipeline pneumatics.
5. Explain the types and purposes of pipeline equipment.
6. Explain pipeline electrical power systems and corrosion control.
7. Review operations, maintenance, and emergency procedures and perform documentation required for pipeline operations.

MODULE 67102-02 – BASIC PIPELINE PNEUMATICS AND EQUIPMENT

1. Explain pneumatic safety.
2. Explain the physical characteristics of gas.
3. Explain compressing gases.
4. Explain the pneumatic transmission of energy.
5. Explain the principles of compressor operation.
6. Identify and explain types of gas pipeline equipment.
7. Identify and explain pneumatic system components and symbols.
8. Demonstrate an understanding of the design limits of pipelines.

MODULE 67103-02 – PIPELINE COMMUNICATIONS

1. Communicate critical operations information to the next shift.
2. Communicate with the control center, scheduling department, and maintenance technicians.
3. Initiate call-outs.
4. Generate work orders.
5. Effectively communicate with pipeline personnel.
6. Notify customers of operations changes.
7. Effectively communicate with the public regarding pipeline issues.

MODULE 67104-02 – ROUTINE FIELD AND FACILITY OPERATIONS (CT 50, 51, 54, 56, 57, 58, AND 65)

1. Perform routine facility inspections and monitor pipeline parameters (CT 65.3) to ensure normal facility operations.
2. Describe the general procedures for performing system startup (CT 65.1) and system shut in/ shutdown (CT 65.2).
3. Operate valves (CT 65.4) and compressor units and monitor engines.
4. Test remotely controlled shutdown devices (RCSDs) (CT 54).
5. Monitor alarms and safety devices.
6. Identify, select, launch, track, and receive pigging devices.
7. Purge gas from pipelines (CT 50), purge air from pipelines (CT 51), and monitor purging during maintenance.
8. Monitor weather conditions.
9. Locate a buried pipeline.
10. Describe the general procedures involved in uprating the pipeline's maximum allowable operating pressure (MAOP) (CT 56).
11. Operate odorant equipment (CT 57) and monitor odorant level if applicable (CT 58).
12. Perform right-of-way (ROW) inspections, linewalking, and surveillance.

MODULE 67105-02 – ROUTINE CONTROL CENTER OPERATIONS (CT 50, 51, 54, 56, 57, 58, AND 65)

1. Perform SCADA operations and explain the concepts and applications of the SCADA system.
2. Perform pipeline system monitoring and pipeline station monitoring with the SCADA system (CT 65.3).
3. Document pipeline activities with the SCADA system.
4. Explain manifold operations (CT 65.4) and compressor operations.
5. Monitor and respond to alarms and test remotely controlled shutdown devices (RCSDs) (CT 54).
6. Describe the general procedures for performing system startup (CT 65.1) and system shut in/ shutdown (CT 65.2).
7. Describe the general procedures for purging gas from pipelines (CT 50), purging air from pipelines (CT 51), and monitoring purging during maintenance.
8. Perform pigging operations.
9. Describe the general procedures involved in uprating the pipeline's maximum allowable operating pressure (MAOP) (CT 56).
10. Operate odorant equipment (CT 57) and monitor odorant level if applicable (CT 58).

MODULE 67106-02 – QUALITY CONTROL/MEASUREMENT

1. Take product samples.
2. Perform product testing.
3. Identify types of meters.
4. Define measurement and understand how and why gas is measured and how to interpret measurements.
5. Verify the accuracy of meters and test gauges.
6. Explain the reasons for injecting and monitoring odorant.

MODULE 67107-02 – ABNORMAL OPERATING CONDITIONS

1. Recognize and react to abnormal facility conditions.
2. Recognize and react to the activation of a safety device.
3. Recognize and react to communications failures.
4. Recognize and react to control system failures.
5. Recognize and react to power interruptions.
6. Recognize and react to fire, explosions, or natural disaster.
7. Recognize and react to pipeline system damage.
8. Recognize and react to unexpected release of a hazardous gas.
9. Recognize and react to unexplained pressure changes.