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 65102-02 – CONTROL CENTER ABNORMAL OPERATING CONDITIONS

1. Recognize and react to abnormal facility conditions.
2. Recognize and react to 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. Respond appropriately to fire, explosions, and natural disasters.
7. Recognize and react to pipeline damage.
8. Recognize and react to unexpected hazardous liquid or carbon dioxide encountered.
9. Recognize and react to unexplained flow rate deviation.
10. Recognize and react to unexplained pressure deviations.

MODULE 65103-02 – BASIC PIPELINE HYDRAULICS AND EQUIPMENT

1. Explain basic hydraulic systems.
2. Describe hydraulics as applied to pipeline operations.
3. Identify and explain basic types of hydraulic pumps and valves.
4. Describe the operation of pumps used in pipelines.
5. Identify and explain basic types of valves used in pipelines.

MODULE 65104-02 – PIPELINE COMMUNICATIONS

1. Identify and explain the internal communications requirements that are necessary to operate the pipeline and the pipeline facility.
2. Explain the communications responsibilities of the pipeline facility scheduling department.
3. Identify and explain the external communications procedures that must be followed to inform and educate the general public of pipeline issues.
MODULE 65105-02 – MONITORING PIPELINE OPERATIONS – CONTROL CENTER (CT 64.3)

1. Understand the concepts, theories, and applications of the SCADA computer system.
2. Monitor and prioritize the various alarms and functionalities of the SCADA system (CT 64.3).
3. Perform pipeline system monitoring with the SCADA system (CT 64.3).
4. Perform pipeline station monitoring with the SCADA system (CT 64.3).
5. Document pipeline activities with the SCADA system.

MODULE 65106-02 – ROUTINE CONTROL CENTER OPERATIONS (CT 64.1, 64.2, AND 64.4)

1. Understand the theories, concepts, and operation of tanks.
2. Explain and perform manifold operations (CT 64.4).
3. Explain and perform pump operations (CT 64.4).
4. Start up a pipeline system (CT 64.1).
5. Shut down a pipeline system (CT 64.2).

MODULE 65107-02 – LIQUID PIPELINE MEASUREMENT AND QUALITY CONTROL

1. Activate tank mixing devices.
2. Perform product testing.
3. Perform pipeline grade changes and tank capacity operations.
4. Explain the use of and inject appropriate additives.
5. Identify types of meters.
6. Maintain accurate measurement on all custody receipts.
7. Explain the meter proving process.