

Natural Gas Processing Courses, cont.

HELD AT PLAC IN ODESSA

Plant Processing of Natural Gas— Emphasis on Operations

3.8 CEUs

Covers natural gas process plant operations to achieve marketable products that meet desired product specifications. Emphasis is placed on offering plant operating personnel an improved understanding of the process techniques and equipment used. The plant systems covered include: gas feed receipt and condensate stabilization; dew-point control and refrigeration systems; treating, dehydration and mercury removal of hydrocarbons; NGL recovery and fractionation as well as nitrogen rejection units. This improved understanding of plant process operations and effective process plant surveillance techniques will lead to an increased ability to achieve optimum, economical operating performance. Provides classroom instruction, handouts, and the PETEX book—*Plant Processing of Natural Gas*.

Length: 4.5 days

Course Content

Participants receive instruction in

- Fundamentals (overview)
- Feed gas receiving and condensate stabilization
- Dew-point control and refrigeration systems
- Hydrocarbon treating
- Sulfur recovery and Claus off-gas treating
- Dehydration and mercury removal
- NGL recovery
- Fractionation and liquid treating
- Nitrogen rejection unit (NRU)

Recommended For

Maintenance and operations foremen and superintendents; plant engineering technicians; plant operators; process control technicians; and new plant engineers

FULL-COLOR MANUAL!

Plant Processing of Natural Gas, 2nd Ed.

Dr. Doug Elliot, J.C. Kuo, and Dr. Pervaiz Nasir

Written by industry experts, this unique training manual presents fundamental concepts and working practices in plant processing for employees who deal regularly with the problems of processing and treating gas.

OTHER PETEX COURSES

Advanced Petroleum Measurement (*third of three levels*)

Completion and Workover

Elementary Drilling

Fundamentals of Petroleum Measurement (*first of three levels*)

Gauging, Testing, and Running of Lease Tanks

Hydraulics for Pipeline Engineers

Hydraulics for Pipeline Operators

Intermediate Petroleum Measurement (*second of three levels*)

Introduction to Offshore Operations—*The Rig School*

LNG: Basics of Liquefied Natural Gas

Mass Measurement of Hydrocarbon Fluids

Natural Gas Measurement—*Fundamentals*

Natural Gas Measurement—*Design/Application/Inspection*

Natural Gas Measurement—*Electronic Flow Measurement*

Natural Gas Measurement—*Sampling and Analysis*

Petroleum Fundamentals

Pipeline Technology

Production Technology

Valves and Actuators—*Operation and Maintenance*

ValvePro® Certified Valve Maintenance Technician

Enrollment Information

Your company is invited to participate in these training programs. For additional information, contact—

PETEX Learning and Assessment Center

The University of Texas

4702 North Sam Houston Parkway West, Suite 800

Houston, TX 77086

Tel: 800.687.7052

or 281.397.2440

FAX: 281.397.2441

Email: plach@www.utexas.edu

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THE UNIVERSITY OF TEXAS



PETEX Natural Gas Processing Courses

- Field Handling of Natural Gas—
Emphasis on Engineering
- Field Handling of Natural Gas—
Emphasis on Operations
- Plant Processing of Natural
Gas—Emphasis on Engineering
- Plant Processing of Natural
Gas—Emphasis on Operations



www.utexas.edu/ce/petex

HELD AT PLAC IN HOUSTON

Field Handling of Natural Gas— Emphasis on Engineering

3.2 CEUs

This course covers the general design of systems for natural gas handling and treatment from the wellhead to the gas processing plant to achieve marketable products that meet desired product specifications. Emphasizes field handling equipment and separation systems, dehydration, fluid measurement, sampling and analysis, reciprocating compressors and prime movers, and instrument and controls to achieve optimum, economical operating performance. Provides classroom instruction and exercises, handouts, *NGPSA Engineering Data Book(s)*, and the PETEX book—*Field Handling of Natural Gas*.

Length: 4 days

Course Content

Participants receive instruction in

- Characteristics of natural gas
- Natural gas production
- Natural gas and liquid separation
- Hydrates
- Dehydration of natural gas
- Gas conditioning
- Compressors and prime movers
- Valve sizing and selection
- Pumps
- Instruments and controls
- Measurement of natural gas and gas liquids
- Facilities surveillance and optimization

Recommended For

Field and maintenance foremen and superintendents; facilities and production engineering technicians; and new facilities engineers.

HELD AT PLAC IN ODESSA

Field Handling of Natural Gas— Emphasis on Operations

3.3 CEUs

Covers the general operation and troubleshooting of systems for natural gas handling and treatment from the wellhead to the gas processing plant to achieve desired product specifications. Emphasis is placed on the field handling and field processing equipment and their safe operation. The operation and troubleshooting of separation systems, removal of impurities, dehydration, fluid measurement, reciprocating compressors and prime movers are discussed with a focus on the operational needs to achieve optimum, economical operating performance. The course provides classroom instruction and exercises, handouts, and field exercises on an operating lease facility and the PETEX book—*Field Handling of Natural Gas*.

Length: 4.5 days

Course Content

Participants receive instruction in

- Characteristics of natural gas
- NG production equipment (overview)
- NG and liquid separation operations and troubleshooting
- Hydrates, formation, and mitigation
- Dehydration of natural gas, operation, and surveillance
- Gas conditioning and BTU control
- Compressors and prime movers
- Valve maintenance
- Pumps and troubleshooting
- Instruments and controls
- Measurement of NG and gas liquids
- Facilities optimization

Recommended For

Field and maintenance foremen and superintendents; field technicians and operators; and field engineers desiring a knowledge of operational issues.

HELD AT PLAC IN HOUSTON

Plant Processing of Natural Gas— Emphasis on Engineering

3 CEUs

Covers the general design of systems associated with natural gas processing plants to achieve products that meet desired product specifications. A review of fluid properties and ideal gas laws, and their impact on plant design. Dew-point control and refrigeration systems are addressed using lecture and classroom exercises. Gas treating, sulfur recovery, dehydration, mercury removal, NGL recovery, fractionation and nitrogen rejection units are additional functional areas covered by this course. The course ties all the components together in a virtual plant field trip to achieve optimum, economical operating performance. The course provides classroom instruction and exercises, handouts, *NGPSA Engineering Data Book(s)*, and the PETEX book—*Plant Processing of Natural Gas*.

Length: 4 days

Course Content

Participants receive instruction in

- Fundamentals (review)
- Feed receiving and stabilization
- Dew-point control and refrigeration systems
- Hydrocarbon treating
- Sulfur recovery and Claus off-gas treating
- Dehydration and mercury removal
- NGL recovery
- Fractionation and liquid treating
- Nitrogen rejection unit (NRU)
- Virtual plant field trip

Recommended For

Maintenance supervisors and superintendents; plant engineering technicians; process control technicians; and new plant engineers. Experienced plant engineers may find the course beneficial as a review.

For information on the Houston and West Texas Learning and Assessment Centers, course schedules, or to enroll, visit our Web site at www.utexas.edu/celpetex

