



2009 Education Centers Schedule

**“Specializing in Petroleum Industry Technical and
Safety Training”**



EDUCATION CENTER LOCATIONS:

**1010 Hwy 90 West
New Iberia, LA 70560
Phone (337) 365.9228
Fax (337) 365.8135**

**4200 N. CR 1788
Midland, TX 79705
Phone (432) 563.3287
Fax (432) 365.8135**

**11210 Equity Drive
Houston, TX 77041
Phone (713) 849.7500
Fax (713) 849.8973**

NATCO

Education Centers

Facility and Philosophy

The NATCO EDUCATION CENTERS are full service hands-on facilities, designed and built to provide the right equipment and learning environment so the student gets the most from the time spent.

Admissions:

The NATCO EDUCATION CENTERS welcome students of all races, creeds, color, nationality, religion, or political persuasion desiring to develop or improve their work skills and meet regulatory requirements. There may be specific preparatory course requirements for specialized or advanced programs, refreshers, etc. Prerequisites for courses are identified in the catalog. *Call for group pricing.*

Locations:

The NATCO EDUCATION CENTERS are located at 1010 Highway 90 West, in **New Iberia**, Louisiana, 4200 N. FM 1788, **Midland**, Texas, 1036 Destrehan Ave., **Harvey**, Louisiana (New Orleans), and 2950 N. Loop West, Suite 700 **Houston**, Texas.

Most of our programs are mobile and can be presented at your site or any other convenient location. Call to arrange alternate sites.

Residence

We have negotiated hotel rates that are substantially below market pricing. Most hotels are within a short distance of any NATCOGROUP EDUCATION CENTER. Specific hotel information is provided during registration.

Meals

Restaurants are conveniently located near all NATCO EDUCATION CENTERS. Catering arrangements can be made as necessary during the registration process as well.

Transportation

The Lafayette Regional Airport services the New Iberia NATCOGROUP EDUCATION CENTER; the Midland International Airport services the Midland NATCO EDUCATION CENTER with the Houston Inter-Continental and Greater New Orleans Airports servicing the Houston and Harvey NATCO EDUCATION CENTERS.

Grading System

Students are evaluated during classroom activities for demonstrated competency, and a written exam is administered. Successful laboratory competency and a 70% score on the examination are required for successful completion certification. A certificate of completion and a wallet size card are awarded to students whom meet course content requirements.



Job Placement

No commitment for full or part-time employment is implied with completion of any course, although the NATCO EDUCATION CENTERS will submit resumes' of successful students to selected prospective employers with whom NATCO does business, at the student's request.

Facilities and Equipment

We utilize technology and equipment to accomplish training goals. NATCO EDUCATION CENTERS provides any special safety equipment for the student's use, while attending courses. Maximum class sizes vary. Ideal size is from 12-25. See restrictions.

Tardiness, Absences, etc.

All students are expected to be on time and attend the complete course for which they are registered. Should an emergency arise during the course, the student will be required to complete the course program within the next 60 days (or at the next regularly scheduled course date.) Certain U.S. federally required programs do not allow for any tardiness or absences. Those federal regulations are strictly adhered to. Students who disrupt the learning of others during the course will be warned. If the warning is not heeded, and the disruption continues, the student will be escorted from the classroom.

Cancellation Policy

For all prepaid courses, all monies paid will be refunded if requested within three business days after the signing of an enrollment agreement and making the initial payment. Cancellation after the three-business day cancellation period but before commencement of classes by the student will be as follows: For tuition of fees collected in advance of entrance, and the student does not begin classes, NATCO EDUCATION CENTERS will retain \$150 of the advance entrance tuition or fees.

Holidays

NATCO EDUCATION CENTERS recognize 9 major U.S. holidays and do not schedule courses on these dates.

Records

The NATCO EDUCATION CENTERS have a database that maintains every course attended by each student. We are custodians of training records for a multitude of oil and gas companies to whom we have provided services. This service is provided at no extra charge when a course is scheduled with the NATCO EDUCATION CENTERS.

Instructor Network

We also offer additional unlisted courses. If a specific course is required, please inquire and formally provide us with the details. We have several partnerships with other training providers to accomplish your training needs.



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INTERNET-BASED TRAINING MODULES

Call Training Center for Further Information



PRODUCTION SAFETY SYSTEMS (T-2)

Production Safety Systems, for all levels of experience, is a three day program that qualifies the student to install, operate, inspect, test, and maintain anti-pollution & safety devices and systems used on offshore production platforms as required by 30 CFR 250.210. The student is introduced to API RP 14C and 30 CFR 250 (Subparts A, C, D, E, F, H, J, K, & O) during open class discussions. The student will work with an understand the operation of safety devices from all of the following categories during the hands-on session: Pressure sensors, Level sensors, Temperature sensors, Flow sensors, Relays, Pressure Relief devices, Shut Down Valves, Surface Safety Valves, Blow Down Valves, Flow Safety Valves, Subsurface Safety Valves, Control Panels for SCSSV's, Fire Detection Devices and Gas Detection Devices. Hands-on operational equipment testing is included.

Course Outline:

Prerequisites: None

- I. API RP-14C
 - Definitions
 - Symbolism
 - Safety Analysis & Protection
 - Emergency Support System (ESS)
 - Undesirable Events
 - Process Components Analysis
 - Device Testing & Report

- II. 30 CFR 250
 - Subpart A – General
 - Subpart C – Pollution Prevention and Control
 - Subpart D – Drilling Operations
 - Subpart E – Well Completion
 - Subpart F – Well Workover
 - Subpart H – Production
 - Subpart J – Pipeline
 - Subpart K – Flaring
 - Subpart O – Training

- III. Anti-Pollution & Safety Devices
 - Theory of Operation
 - Equipment Operation (Hands-on)

Tentative Scheduled Dates:
New Iberia Harvey
At Client's Request

Time: 8:00AM – 5:00 PM

Tuition: \$495.00



PRODUCTION INSTRUMENTATION

Production Instrumentation is a two-day program for all levels of experience that provides a foundation of knowledge and hands-on experience upon which the student may build and develop their skills. The student is introduced to Schematic Symbolism, Device Logic, System Logic, Device Testing & Trouble Shooting, and Control Panel Testing & Trouble Shooting. The student will trouble shoot a Master Control Panel, A Hydraulic Control Panel, a Compressor Control Panel, and a Fired Vessel Control Panel.

Course Outline:

Prerequisites: None

- I. Definitions & Symbolism
- II. Pneumatic Devices Theory
 - The Force Formula
 - The “Block and Bleed” Design
 - The “Block” Design
 - The “Combination” Design
- III. Electrical Devices Theory
- IV. Instrumentation System Logic
 - The LOOP Logic
 - The First Out Indicating Logic
- V. Equipment Operations
 - End Device
 - Principles of Operation
 - Testing and Troubleshooting
 - Control Panel
 - Principles of Operation
 - Testing and Troubleshooting

Tentative Scheduled Dates:
New Iberia Harvey

At Client’s Request

Time: 8:00 AM – 5:00 PM

Tuition: \$330.00



PRODUCTION EQUIPMENT OPERATIONS

Production Equipment Operations is a three day program designed for all students to familiarize the student with an oil and gas production facility (offshore or onshore). The student is provided with a solid foundation of knowledge upon which he/she can develop an understanding of the construction and operation of process equipment through open class discussions and demonstrations. The successful student will be able to understand what happens to the oil, gas, and water from the time they leave the reservoir to the time they are sold and enter the pipeline.

Course Outline:

- I. Nature of Hydrocarbons
- II. The Well
- III. Well Fluid Recovery
- IV. Fired Vessel Operation
- V. Separation
- VI. Gas Processing
 - A. Gas Sweetening
 - B. Gas Dehydration
 - C. Gas Compressing
 - D. Gas Measurement
- VII. Oil Processing
 - A. Emulsions
 - B. Oil Processing Equipment
 - C. LACT Units
 - D. Vapor Recovery Units
- VIII. Pumps

Prerequisites: None

Tentative Schedule Dates:

New Iberia Midland/Odessa

At Client's Request	January 27-29 May 5-7 August 4-6 November 3-5
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Time: 8:00 AM – 5:00 PM

Tuition: \$495.00



PRODUCTION OPERATOR FIELD TRAINING

Production Operator Field Training is a five day program designed for all students to familiarize the student with an oil and gas production onshore facility. The student is provided with a knowledge upon which he/she can develop an understanding the fundamentals of operation, troubleshooting, and separation. The successful student will be able to understand what happens to the oil, gas, and water from the time they leave the reservoir to the time they are sold and enter the pipeline.

Course Outline:

Prerequisites: None

- I. General Lease Responsibilities
- II. Pumping Unit Operations
- III. Maintain Wellhead Systems for Pumping Wells
- IV. Sucker Rod Pump Systems
- V. Plunger Lift Systems
- VI. Separator Heater Treater Operations
- VII. Chemical Treatment Systems
- VIII. Oil and Produced Water Storage
- IX. Compressor Operations
- X. Gas Measurement Systems
- XI. Water Injection Systems
- XII. Community /Landowner Relations

Time: 8:00 AM – 5:00 PM

Tuition: Call for Quote



RECIPROCATING COMPRESSOR OPERATION

Reciprocating Compressor Operation is a three-day course designed to introduce the student to the operating principles of the double acting reciprocating compressor. Discussion will include design considerations, maintenance, operation, and repair. Operating systems will be examined one by one, with emphasis given to troubleshooting each system. Safety issues will be addressed throughout the course.

Course Outline:

- I. Introduction and Safety Issues
- II. Reciprocating Compressor Operating Principles
- III. Crankcase Assembly
 - Crankshaft and Bearings
 - Connecting Rods and Bearings
 - Crosshead Assembly
- IV. Compressor Cylinders
 - Pressure and Wiper Packing
 - Pistons, Riders, and Rings
- V. Lubrication
- VI. Crankcase Lubrication System
 - Force-Feed Lubricator System
- VII. Compressor Valves
- VIII. Prime Mover/Compressor Coupling Alignment
- IX. Jacket Water Cooling Systems
- X. Instrumentation: Controls and Shutdowns
- XI. Daily Operations, Record Keeping, Preventative Maintenance

Prerequisites: None

Scheduled Dates:

Houston/Harvey/New Iberia
Midland/Odessa

At Client's Request

Time: 8:00 AM – 5:00 PM

Tuition: \$495.00



PRINCIPLES OF GAS MEASUREMENT

Principles of Gas Measurement is a one-day program designed to improve the seasoned student's ability to provide accurate flow rate information and to provide proper maintenance of the gas meter station. The student is guided through the Gas Meter Station component by component. Each component is identified and its operation discussed. Procedures are reviewed and discussed for the proper operation of the station. Methods of calculating the gas flow rate are discussed and practiced.

Course Outline:

- I. The Theory of Gas Measurement
- II. Gas Measurement Equipment
 - The Primary Element
 - The Secondary Element
- III. Gas Measurement Calculations
 - Reading the Chart
 - The Formula
 - Checklist for Gas Measurement
- IV. The Gas Metering Station
- V. Troubleshooting
 - Typical Problems
 - The Cost of Errors
 - Preventative Measures
 - The Hock Report

Time: 8:00 A.M. – 5:00 P.M.

Tuition: \$175.00

Prerequisites: None

Scheduled Dates:

Houston/Harvey/New Iberia
At Client's Request

Midland/Odessa

February 10th
May 12th
August 11th
December 1st



PRINCIPLES OF OIL MEASUREMENT

Principles of Oil Measurement is a one-day program designed to improve the seasoned student's ability to provide accurate oil measurement information through the proper measurement techniques and Lease Automatic Custody Transfer (LACT) Unit and truck hauling. The student is guided through tank strapping, proper gauging techniques, sampling methods, and most of all the importance of how temperature effects BS&W, LACT Units are then discussed covering each component with emphasis on safety always being stressed.

Course Outline:

- I. The Theory of Oil Measurement
Truck Haul
- II. The LACT Unit
 - The Charger Pump
 - The Strainer
 - The Dearator
 - The BS&W Monitor
 - The Volume Meter Assembly
 - The Meter Prover System
 - The Back Pressure Valve
- III. The Meter Run Ticket
- IV. The Oil Metering System
- V. Troubleshooting
- VI. Meter Proving

Time: 8:00 AM – 5:00 PM
Tuition: \$175.00

Prerequisites: None

Scheduled Dates:

Houston/Harvey/New Iberia
At Client's Request

Midland/Odessa

February 11th
May 13th
August 12th
December 2nd



PRINCIPLES OF GLYCOL DEHYDRATION

Principles of Glycol Dehydration is a three-day program designed to equip the student with the ability to efficiently operate and maintain a glycol gas dehydration system. The student is guided through the glycol gas dehydration system, component by component. Each component is identified and its operation discussed. Monitoring of the gas dew point level and the glycol purity level is reviewed and discussed. The necessary calculations for determining the proper glycol flow rate are examined and practiced. The successful student should be able to efficiently operate and maintain a glycol gas dehydration system.

Course Outline:

- I. Theory of Glycol Dehydration
- II. The Gas Dehydration System
Inlet Scrubber Contactor
- III. The Glycol Dehydration System
Glycol Pump
Glycol/Condensate/Gas Separator
Glycol/Glycol Heat Exchanger
Glycol Regenerator
Fuel Gas System
Fire Tube Assembly
Strainer, Filters, and Meters
Gas/Glycol Heat Exchangers
Back Pressure Valve
- IV. The Control Systems
- V. Troubleshooting and Analysis Interpretation

Time: 8:00 AM – 5:00 PM

Tuition: \$495.00

Prerequisites: None

Scheduled Dates:

Houston/Harvey/New Iberia

At Client's Request

Midland/Odessa

January 19-21

April 20-22

July 20-22

November 9-11

**Price Adjustment of \$849.00, if you register for both the Glycol & Amine classes.*



PRINCIPLES OF AMINE PLANT OPERATION

Principles of Amine Plant Operation is a 2 day program that provides a foundation of knowledge and experience upon which the seasoned student may build, to develop into a safe and efficient Amine Plant Operator. The student will participate in presentations, lectures, discussions, and demonstrations which will increase their understanding of the properties and capabilities of different types of amine chemicals to remove H₂S and CO₂ from produced gas and increase their understanding of the operation of a typical amine gas sweetening plant. The successful student should be able to efficiently operate and maintain an amine gas sweetening plant. This is a condensed version of our 3 day school and is offered in conjunction with out Glycol Dehydration School because of process similarities.

Course Outline:

- I. Definitions
Gas Sweetening
Amine
- II. Equipment Description
- III. Plant Operation & Process Flow
- IV. Plant Startup
- V. Troubleshooting
- VI. Safety Precautions
- VII. Chemical Analysis
- VIII. Amine Reclaiming

Prerequisites: 1 year
Experience or Successful
Completion of the Glycol
Dehydration School

Tentative Schedule Dates:

Midland/Odessa
January 22-23
April 23-24
July 23-24
November 12-13

Time: 8:00 AM – 5:00 PM

Tuition: \$395.00

**Price Adjustment of \$849.00, if you register for both the Glycol & Amine classes.*



PRINCIPLES OF PUMP OPERATION

This course is a three-day program designed to introduce the student to the various types of pumps encountered in the oil and gas industry. With hands-on experience, the student will learn the operating principles of the different pump types, application of each, as well as operation, troubleshooting, and maintenance of all pumps. The successful student will be able to discern between mechanical and operational problems and optimize operational efficiency.

Course Outline:

- I. Introduction
 - Theory
 - Design
- II. Safety Concern
- III. Pump Types
 - Rotary
 - Centrifugal
 - Gear (Internal & External)
 - Lobe
 - Screw
 - Vane
 - Reciprocating
 - Piston
 - Plunger
 - Diaphragm
- IV. Packing, Seals, and Gaskets
- V. Couplings & Alignment
- VI. Maintenance
- VII. Glossary

Prerequisites: None

Scheduled Dates:

Houston/Harvey/New Iberia
Midland/Odessa

At Client's Request

Time: 8:00 AM – 5:00 PM

Tuition: \$495.00



FIRED VESSEL OPERATION AND SAFETY

Fired Vessel Operation and Safety is a one-day program designed to improve the seasoned student's ability to operate a fired vessel efficiently and safely. The student is provided with a solid foundation of knowledge upon which he/she may develop an understanding of the construction and operation of fired process vessels through open class discussions and demonstrations. The student will practice the proper inspection, cleaning, maintenance, start-up shutdown, and operating procedures by working on a functioning fired vessel. This discussion and hands-on approach is designed to provide the student with the necessary information to safely operate a fired vessel in the field.

Course Outline:

- I. Principles of Fired Vessel Operations
 - Theory of Combustion
 - Controlled Combustion
- II. Fired Vessel Operations
 - Types of Fired Vessels
 - Types of Burner Assemblies
 - Burner Operation
 - Burner Startup & Shutdown Procedures
- III. Inspection Procedures
 - Visual Inspections
 - Operational Inspections
- IV. Maintenance
 - Daily
 - Monthly
 - Semi-Annual and Annual
 - Flame Arrestor Test Procedures
 - Flame Arrestor Cleaning Procedures
- V. Troubleshooting
 - Ignition Failure
 - Heat Loss/Gain
 - Spark Emissions

Prerequisites: None

Scheduled Dates:

Houston/Harvey/New Iberia
Midland/Odessa

At Client's Request

Time: 8:00 AM – 5:00 PM

Tuition: \$175.00



PRINCIPLES OF SURFACE AND INJECTION WATER PROCESSING

Principles of Water Processing is a one day onshore, two day offshore program designed for the seasoned production and operations personnel as well as reassigned employees. The student will be able to explain the methods used to clarify overboard water, options used for water clarification efficiency, explain the operation of equipment used for water clarification, explain testing procedures used to adhere to federal regulations, understand the importance of preventative maintenance, and troubleshooting.

Course Outline:

- I. Principles of Separation
- II. Water Processing System
- III. Water Processing Equipment
Separators:
 - Horizontal
 - Vertical
 - PerformaxFree Water Knockouts
Coalescers
Precipitators
Corrugated Plate Inceptors
Floatation Separators
Sump Systems:
 - Tanks
 - Piles
- IV. Definitions & Applications

Prerequisites: None

Scheduled Dates:

Houston/Harvey/New Iberia
Midland/Odessa

At Client's Request

Time: 8:00 AM – 5:00 PM

Tuition: \$175.00



PRINCIPLES OF GAS PLANT OPERATION

This course is a five day program designed to provide the student who is unfamiliar with gas plants with a thorough understanding of each of the systems in a gas plant and how they work as a system. The successful student will be able to explain the operation of each of the plant systems and their component parts. The student will be able to identify operational and mechanical problems and will be equipped to work safely and efficiently in a gas plant environment.

Course Outline:

- I. Introduction-Purpose of the Gas Plant
- II. Safety Systems & Emergency Response
- III. Controls and Instrumentation
- IV. Gas Sweetening
 - Amine Sweetening Plants
 - Sulfa-Treat
- V. Gas Dehydration
 - Glycol Dehydration
 - Dry Absorption
 - Deliquescing Desiccants
- VI. Compression
 - Prime Movers
 - Reciprocating Engines
 - Gas Turbines
 - Compressors
 - Reciprocating
 - Screw
 - Axial
 - Centrifugal
- VII. Heat Exchangers
- VIII. Mechanical Refrigeration
- IX. Cryogenic NGL Extraction
- X. Gas Measurement
- XI. Liquid Product Measurement
- XII. Sulfur Recovery Plants
- XIII. Auxiliary Systems
 - Boilers
 - Pumps
 - Compressed Air Systems
 - Fired Heaters

Prerequisites: None

Tentative Schedule Dates:
Houston/Harvey/New Iberia
At Client's Request

Midland/Odessa
June 15-19
December 7-11

Time: 8:00 AM – 5:00 PM

Tuition: \$995.00



HAZARDOUS MATERIALS EMERGENCY RESPONSE 8-HOUR AWARENESS

This Hazwoper Awareness course fulfills the requirements of the OSHA standard (1910.120 (q)(6)(i)) relating to hazardous waste operation and emergency response. This level of training is required for all individuals who are likely to witness or discover a hazardous substance release and need to be trained to safely respond to it. This level of training prepares the student to perform his or her role of notifying the proper authorities and responding in a defensive fashion while protecting himself and others. Safely addressing risks associated with an unexpected release are covered. This course meets the initial and ongoing training requirements for awareness level responders.

Course Outline:

- I. Hazardous Material Recognition and Risk Evaluation
- II. Hazard Material Communication
 - A. The HAZCOM Program (1910.1200)
 - B. MSDS, HMIS III, NFPA 704M, DOT Placarding, Labels
 - C. Emergency Response Guidebook
- III. Fire Safety
- IV. Access to Medical Records (1910.1020)
- V. Direct Reading Detection Equipment
- VI. Personal Protective Equipment/Respiratory Protection (1910.138)
- VII. Emergency Response Organization

Prerequisites: None

Scheduled Dates:

Houston/Harvey/New Iberia
Midland/Odessa

At Client's Request

Time: 8:00 AM – 5:00 PM

Tuition: \$175.00



HAZARDOUS MATERIALS EMERGENCY RESPONSE

24-HOUR TECHNICIAN LEVEL

Responding to Hazardous Materials Emergencies demands knowledge of the situation's potential hazards and how to safely implement response actions. The requirements of OSHA's 29 CFR 1910.120 provides the course fundamentals for EMERGENCY RESPONSE. Our instructors provide the experience and working environment, which make this course memorable and effective long after the student has left the classroom.

Course Outline:

- I. Hazardous Material Identification System
- II. Material Safety Data Sheets
- III. Basic Chemistry/Properties
- IV. Sources of Information & Assistance
- V. Hazard Recognition & Risk Evaluation
- VI. Levels of Protection & PPE
- VII. Standard Operating Safety Guidelines
- VIII. Response Organization
- IX. Direct Reading Instruments
- X. Decontamination Procedures
- XI. Hazardous Spill Exercises

Time: 8:00 AM – 5:00 PM

Tuition: Call for Quote

Prerequisites: None

Scheduled Dates:

Houston/Harvey/New Iberia

Midland/Odessa

At Client's Request



HAZARDOUS MATERIALS EMERGENCY RESPONSE

40-HOUR SPECIALIST LEVEL

Responding to Hazardous Materials Emergencies demands knowledge of the situation's potential hazards and how to safely implement response actions. The requirements of OSHA's 29 CFR 1910.120 provides the course fundamentals for EMERGENCY RESPONSE. Our instructors provide the experience and real environment, which make this course memorable and effective long after the student has left the classroom.

Course Outline:

- I. Hazardous Material Identification System
- II. Material Safety Data Sheets
- III. Basic Chemistry/Properties
- IV. Sources of Information & Assistance
- V. Hazard Recognition & Risk Evaluation
- VI. Levels of Protection & PPE
- VII. Standard Operating Safety Guidelines
- VIII. Response Organization
- IX. Direct Reading Instruments
- X. Hazardous Material Exercises
- XI. Decontamination Procedures
- XII. Hazardous Spill Exercises

Prerequisites: None

Scheduled Dates:

Houston/Harvey/New Iberia

Midland/Odessa

At Client's Request

Time: 8:00 AM – 5:00 PM

Tuition: Call for Quote



HAZARDOUS MATERIALS EMERGENCY RESPONSE INCIDENT COMMANDER

A prerequisite for this course is the completion of the 24-hour Technician Level Haz Mat Emergency Response. This course provides the instructional and practical application information required by 29 CFR 1910.120 for Incident Commander certification by the employee.

Course Outline:

- I. Exposure Guidelines & Practical Usage
- II. Medical Monitoring & Heat Stress Problems
- III. PPE Limitations & Applications
- IV. Incident Command System & Decision Logic
- V. Media Management
- VI. Site Decontamination Strategies
- VII. Practical Exercises

Prerequisites: 24-HR HAZWOPER

Scheduled Dates:

Houston/Harvey/New Iberia

Midland/Odessa

At Client's Request

Time: 8:00 AM – 5:00 PM

Tuition: Call for Quote



HAZARDOUS MATERIALS EMERGENCY RESPONSE REFRESHER

The requirements of OSHA's 29 CFR 1910.120 Refresher Course Program are presented in this NATCO one-day, 8-hour presentation. This one 8-hour day will allow those trained from the "First Responder Awareness Level" to "Incident Commander Level" to retain their certification.

Course Outline:

- I. Hazardous Materials Identification Systems
- II. Hazard Recognition & Risk Evaluation
- III. Sources of Information
- IV. Direct Reading Instruments
- V. Decontamination Procedures
- VI. Response Organization

Time: 8:00 AM – 5:00 PM

Tuition: Call for Quote

Prerequisites: 24-HR HAZWOPER

Scheduled Dates:

Houston/Harvey/New Iberia

Midland/Odessa

At Client's Request



N.O.R.M.

Naturally Occurring Radioactive Material

N.O.R.M. is a one-day program that is designed to improve the new and seasoned student's ability to work efficiently and safely while operating, maintaining, or entering oil and gas production equipment that may contain Naturally Occurring Radioactive Material. The student is introduced to the subject through a discussion of the nature and effects of N.O.R.M. The monitoring of oil and gas production equipment for the presence of N.O.R.M. and the N.O.R.M. quantitative measurement methods are discussed. Control and management techniques are reviewed and practiced. The successful student will be better prepared to safely work with potential N.O.R.M. containing equipment.

Course Outline:

- I. Introduction to N.O.R.M.
- II. Radiation Basics
- III. Radiation Units of Measurements
- IV. Control/Management Techniques
- V. Hazard Communication
- VI. Field Surveys

Time: 8:00 AM – 5:00 PM

Tuition: \$175.00

Prerequisites: None

Scheduled Dates:

Houston/Harvey/New Iberia

Midland/Odessa

At Client's Request



HAZARDOUS MATERIALS TRANSPORTATION

D.O.T. HM-126

Materials Transportation is a one-day course dealing with all aspects of the United States Transportation Department (D.O.T.) regulation HM-126 and other applicable regulations. These regulations require specific actions be taken for the packaging, labeling, marking, and shipping of hazardous products. The D.O.T. regulations also prescribe the acceptable amount of product which may be shipped by which means. Proper education in HM-126, etc., is a must for any of your personnel involved with shipping or receiving hazardous materials, and to avoid delays of shipments.

Course Outline:

- I. Regulations Overview
- II. Regulation Application
 - Packaging
 - Marking
- III. Specific Product Application
- IV. MSDS
 - Application for Transportation
 - Shippers Obligations
 - Receivers Obligations
- V. Documentation of Actions

Prerequisites: None

Scheduled Dates:

Houston/Harvey New Iberia

At Client's Request

Midland/Odessa

Bi-Weekly

Call for Dates

Time: 8:00 AM – 5:00 PM

Tuition: \$175.00



FIRST AID/CPR/BLOODBORNE PATHOGENS

First Aid/CPR is a one-day program designed to improve the student's First Aid and CPR skills. This course introduces the student to the seven basic skills of patient care: Primary Assessment, One Rescuer CPR, Obstructed Airway Techniques, Control of Bleeding, Shock Management, Illness Assessment, and Injury Assessment. These skills can help the student restore, support, maintain, and protect the ill or injured patient. Primary and Secondary Assessment and Care are emphasized throughout the program. In addition to the seven basic skills, this program covers specific injuries and illnesses with suggested procedures of care. Program includes Bloodborne Pathogen discussion. AED qualification may be included at client request.

Course Outline:

- I. Medical Statement
 - General Patient
 - Primary Assessment
 - CPR
 - Chocking Conscious
 - Obstructed Airway Unconscious
- II. Control of Bleeding
 - Shock Management
 - Illness Assessment
- III. Heart Problems
 - Stroke
 - Allergic Reactions
- IV. Poisoning
 - Diabetic Emergencies
 - Epileptic Seizures
 - Hyperventilation
- V. Injury Assessment
 - Head and Chest Injuries
- VI. Neck and Back Injuries
 - Wounds and Bandaging
- VII. Exposure to Cold/Heat
- VIII. Bloodborne Pathogens

Prerequisites: None

Scheduled Dates:

Houston/Harvey
Call for Scheduling
Call for Price Quote

New Iberia
Every Tuesday & Thursday

Midland/Odessa

Bi-Weekly
Call for Dates

Time: 8:00 AM – 5:00 PM; Tuition: Call for Quote



HYDROGEN SULFIDE SAFETY

Hydrogen Sulfide Safety is a one-day program designed to improve the student's ability to safely work in a Hydrogen Sulfide environment. The student will learn through hands on experience. During the classroom section of these programs, the student will participate in active discussions and demonstrations on the chemistry, the nature, and the effects of H₂S. Also covers the operations and maintenance of Personal Protective Equipment (PPE) and H₂S detection equipment. Preplanning and on site safety procedures will be stressed. NATCO H₂S programs meet all federal and state requirements and are conducted in accordance with API RP 55, & ANSI Z390.1 1995.

Course Outline:

- I. Introduction to H₂S
Properties
Safe Levels of Exposure
- II. Respiratory Protection & PPE
- III. H₂S Contingency Planning
- IV. Safety Equipment

Prerequisites: None

Scheduled Dates:

Houston/Harvey/New Iberia
Call for Scheduling

Midland/Odessa

Bi-Weekly

Call for Dates

Time: 8:00 AM – 5:00 PM

Tuition: \$175.00



CONFINED SPACE ENTRANT/ATTENDANT/SUPERVISOR

Confined Space Entry regulations are changing the way people approach entering confined and hazardous spaces. This one-day program is designed to help new and seasoned employees safely enter any area determined to be a confined space. The student will learn by practicing. They will participate in active discussions and demonstrations on the equipment used for safe entry, operations and rescue. The student will perform tabletop exercises. If required, shipyard competency is included at New Iberia.

Course Outline:

- I. 29 CFR 1910.146 Overview
USCG M5100.48 Overview (N.I. only)
- II. Hazards of Confined Spaces
- III. Signs and Symptoms of Hazard Exposure
Behavioral Effects of Hazard Exposure
- IV. Equipment & Instrumentation Operation
Atmospheric Testing Procedures
- V. PPE & Respiratory Protection
- VI. Lockout/Tagout System/Isolation
- VII. Ventilation
- VIII. Entry Planning
- IX. Permit System
- X. Rescue Planning

Time: 8:00 AM – 5:00 PM

Tuition: \$175.00

Prerequisites: None

Scheduled Dates:

Houston/Harvey/New Iberia

Midland/Odessa

At Client's Request

Call for Scheduling



CONFINED SPACE RESCUE

This one-day course is designed to give the students practical information on the rescue requirements for confined spaces. The students will cover equipment and planning in detail. Finally, the students participate in several hands-on exercises demonstrating their ability to perform well as a team under pressure. If required, shipyard competent certification is also offered at New Iberia.

Course Outline:

- I. What OSHA Says: 29 CFR 1910.146 and related material
- II. Rescue Planning
- III. Hazard Assessment and Elimination
- IV. Space Isolation
- V. Atmospheric Monitoring Equipment
- VI. Rescue Exercises, Table-Top and Hands-On

Prerequisites: None

Scheduled Dates:
Houston/Harvey/New Iberia
Midland/Odessa
At Client's Request

Time: 8:00 AM – 5:00 PM

Tuition: Call for Quote – Minimum of 10 Students – Midland Location



FIRE PREVENTION AND CONTROL

Fire Prevention and Control is a one-day program designed to improve the student's ability to safely handle a fire emergency. The student will learn through hands on experience. During the classroom section, the student will participate in active discussions and demonstrations on the chemistry of fire. The nature of fuels and fires, the classes of fire, the types of extinguishing agents, the construction, operation, maintenance of fire extinguishers, and the techniques used to control fires.

Course Outline:

- I. Introduction
- II. Fire Prevention
 - Definitions
 - Components of Combustion
 - Phases of Burning
 - Method of Fire Travel
 - Classifications of Fire
 - Fire Extinguishing Agents
- III. Dry Chemical Extinguishers
 - Maintenance & Inspection
 - Operation
 - Recharging
- IV. Fire Control Evolutions
 - Fuel in Depth Fire
 - Fuel in Depth Obstacle Fire
 - Multi-Level Fire
 - Reduced Capacity Fire Tactics
 - Team Fire Fighting

Time: 8:00 AM – 5:00 PM

Tuition: Call for Quote

Prerequisites: None

Scheduled Dates:

Houston/Harvey/New Iberia

Midland/Odessa

At Client's Request



GENERAL SAFETY & HAZARD COMMUNICATION

This one-day course is for all personnel who will work in or around petroleum industry equipment. This course satisfied OSHA's 29CFR1910 requirements for the 8-hour General Safety/Hazwoper initial and refresher training.

Course Outline:

- I. Why Be Safe
- II. General Duty Clause
- III. Attitude Counts
- IV. Drug and Alcohol Policies
- V. Housekeeping
- VI. Access to Medical Records
- VII. Bloodborne Pathogens
- VIII. Job Safety Analysis
- IX. N.O.R.M.
- X. Electrical Safety
- XI. LOTO
- XII. Confined Space Operations
- XIII. Fire Safety
- XIV. Slips, Trips, and Falls
- XV. Fall Protection
- XVI. Ergonomics/Back Injury Prevention
- XVII. P.P.E. – Eye and Face, Respiratory, Head, Foot, Hand, Hearing
- XVIII. Heat Related Illnesses
- XIX. Hazard Communication – MSDS, Labels, Placards
- XX. Chemical Health Hazards
- XXI. Hazardous Materials First Responder – Awareness Level
- XXII. Hydrogen Sulfide Safety

Prerequisites: None

Scheduled Dates:

Houston/Harvey/New Iberia

Midland/Odessa

At Client's Request

Time: 8:00 AM – 5:00 PM

Tuition: \$175.00



NEW HIRE ORIENTATION

The New Hire Orientation class is a comprehensive 8 day course of study designed to equip the worker with the necessary skills to work safely and efficiently in the oil and gas industry while being environmentally responsible. The successful student will demonstrate proficiency in knowledge of regulatory standards, identification of potential safety hazards, and capability in taking steps to mitigate the effects of those hazards. Students will learn by classroom discussion and instructor demonstration. This course was designed to be completed in eight classroom days, but may be modified to meet the specific needs of the customer.

Course Outline:

Prerequisites: None

WEEK ONE

- I. Company Documentation
- II. Medic First Aid/CPR
- III. Personal Protective Equipment
- IV. Lockout/Tagout
- V. Safe Lifting Basics
- VI. Electrical Safety
- VII. NORM Awareness & Safety
- VIII. Prevention of Slips, Trips, & Falls
- IX. Pinch Points
- X. Avoiding Sexual Harassment
- XI. H2S & Respiratory Protection
- XII. 3D Vehicle Safety
- XIII. Forklift / Manlift Certification
- XIV. Fire Prevention & Control

Scheduled Dates:

Houston/Harvey/New Iberia

Midland/Odessa

At Client's Request

WEEK TWO

- I. HAZMAT/HAZCOMM Emergency Response
- II. State Certified Defensive Driving
- III. Confined Space/Hot Work Permit
- IV. HM-126

Times: 8:00 AM – 5:00 PM (8 days)

Tuition: Call for Quote



OSHA 10 HOUR GENERAL INDUSTRY SAFETY AND HEALTH

The OSHA 10-Hour course meets the requirements of the Department of Labor for Safety Training and Education of employees in the recognition and avoidance of unsafe conditions in the workplace. This course serves as an initial indoctrination course or as a refresher for those who have previously completed the course.

Course Topics Outline:

- I. Introduction to OSHA, OSHA Act
- II. Walking and Working Surfaces
29 CFR 1910.21 thru 1910.30
- III. Means of Egress
29 CFR 1910.35 thru 1910.38
Fire Protection
29 CFR 1910.155 thru 165
- IV. Hazard Communication
29 CFR 1910.1200
- V. Electrical Safety
29 CFR 1910.301 thru 399
- VI. Flammable and Combustible Liquids
29 CFR 1910.106
- VII. Personal Protective Equipment
29 CFR 1910.132 thru 138
- VIII. Machine Guarding
29 CFR 1910.211 thru 219
- IX. Bloodborne Pathogens
29 CFR 1910.1030
- X. Safety and Health Programs

Prerequisites: None

Scheduled Dates:
Midland/Odessa
At Client's Request

Each student will receive a copy of the standards discussed in class.

Course Length: 10 Hours – May also be presented in two 5-hour days, or in five 2-hour classes, as long as all 10 hours are completed within six months. May be used in conjunction with monthly safety meetings.

Course Location: NATCO Midland Training Center or client location. Call Midland Training Center at (432) 563-3287 for information.

Tuition: 10-Hour, \$330.00



OSHA CLASSES FOR 2009

The Midland NATCO Training Center will be hosting seven OSHA training classes in 2009. The following classes will be taught by OSHA/TEEX instructors, and successful students will receive certificates of completion from OSHA/TEEX. Please contact OSHA Training Institute at (800) 733-3811 for course registration and information.

OSHA PRT 106

February 12-14

Hydrogen Sulfide (H₂S) Instructor Development Course

This course is intended to provide technical skills-level training to the petroleum industry, municipalities, utilities, research and development through intensive training to develop knowledgeable and competent instructors in Hydrogen Sulfide (H₂S) safety. The H₂S Instructor Development Program follows the ANSI Z-390.1-1995 H₂S training standard, as well as the current American Petroleum Institute recommended practices as the primary training criteria.

OSHA PRT 145

February 23-26

Environmental Regulation for Oil & Gas Exploration & Production

This course is designed to guide field personnel and small oil and gas operators through the United States, Texas and Louisiana state environmental regulations as they apply to onshore oil and gas exploration and production. Participants who successfully complete this course will have the knowledge to avoid, minimize, or control regulation whenever possible, increase company profitability, conserve resources, and comply with Federal, Texas, and Louisiana state environmental laws. Designed for field personnel, safety professionals, or management associated with oil and gas exploration and production efforts who need to comply with environmental laws.

Prerequisite: (Recommended)PRT 300 or knowledge of oil field operations.

OSHA 145

February 25-28

Environmental Law

This course is designed to guide field personnel and small oil and gas operators through the US, Texas, and Louisiana state environmental regulations as they apply to onshore oil and gas exploration and production. Participants who successfully complete this course will have the knowledge to avoid, minimize, or control regulation whenever possible, increase company profitability, conserve resources, and comply with Federal, Texas and Louisiana state environmental laws. Designed for field personnel, safety professionals, or management associated with oil and gas exploration and production efforts who need to comply with environmental laws.

Prerequisite: (Recommended)PRT 300 or knowledge of oil field operations.



This course presents occupational safety and health standards that apply to the oil and gas industry, with an emphasis on drilling and well servicing activities. Standards addressed in this class come primarily from general industry regulations 29 CFR 1910, along with selected construction regulations from 29 CFR 1926. The course is based heavily on the OSHA 511 general industry standards course and is designed to fulfill the training prerequisite for the OSHA 501 general industry trainer course. Upon successful completion of this course, participants will be able to identify the most common hazards associated with oil and gas exploration and production activities, locate applicable OSHA standards and requirements, and recommend abatement methods for these hazards and violations of these standards.

Course Topics Outlined:

- | | |
|--|-----------------------------|
| I. OSHA Standards, History, and Organization | XVI. Excavation |
| II. Inspections, Citations, and Penalties | XVII. Construction Hazards |
| III. Multi-Employer Workplaces | XVIII. OSHA Standards |
| IV. Safety and Health Programs | XIX. Oil and Gas Guidelines |
| V. Recordkeeping | |
| VI. Walking and Working Surfaces and Fall Protection | |
| VII. Electrical Standards | |
| VIII. Chemical Hazards and Standards | |
| IX. Personal Protective Equipment | |
| X. Hazardous Materials | |
| XI. Permit-Required Confined Space Entry | |
| XII. Welding | |
| XIII. Egress and Fire Protection | |
| XIV. Materials Handling | |
| XV. Lockout/Tagout | |



OSHA 3010**May 18-20**

Excavation, Trenching, & Soil Mechanics

This course focuses on OSHA standards and the safety aspects of excavation and trenching. Students are introduced to practical soil mechanics and its relationship to the stability of shored and unshored slopes and excavations.

Course Topics Outline:

- I. Types of Shoring
- II. OSHA Standards on Excavation and Trenching
- III. Soil Mechanics
- IV. Testing Methods

OSHA 3095**August 17-21**

Electrical Standards

This course emphasizes the study of electricity and the associated phenomena of resistance, capacitance, and inductance in both AC and DC circuits. The course introduces principles of residential electrical wiring, usage of test equipment, and electrical hazards relating to industrial settings. (A basic understanding of electrical standards is helpful.)

Course Topics Outlined:

- I. Electrical Fundamentals
- II. Current, Voltage, and Resistance
- III. Ampacity Overcurrent
- IV. Electrical Standards Workshop
- V. Standards Relating to General Industry 1910.301-303
- VI. Standards Relating to Construction 1926.401-403
- VII. Polarity 1910.302
- VIII. Dielectric Personal Protective Equipment
- IX. Static Electricity
- X. Ohm's Law

