



NPMC CERTIFICATION HANDBOOK

This certification is open to all personnel with a minimum six months of experience in the petroleum field. The five certification levels will accommodate people with experience ranging from six months to 30+ years in the petroleum business.

To become NPMC Certified, an individual must first pass the NPMC Petroleum 101 Certification Exam. The proctored exam consists of one hundred multiple-choice and true/false questions covering the following petroleum subject areas.

- **Safety**

- Fire Triangle
- Fire Extinguishers
- Classes of Fires
- Fire Hazards
- Volatility
- Boiling Point
- Vapor Pressure
- Flash Point
- Fire Point
- Flammability
- Auto Ignition
- Flame Spread
- Fuel Handling
- Static Electricity
- Fuel Spills
- Confined Spaces
- Toxicity
- Personal Protective Equipment
- Head Protection
- Eye Protection
- Hearing Protection
- PPE Maintenance
- Federal Hazardous Communication

- **Environmental**

- Spill Prevention
- Emergency and Hazardous Material Response Plans
- Combining Several Plans into One Plan
- Does Your Facility Need an EPA SPCC Plan?
- Requirements of EPA Spill Prevention, Control and Countermeasure Plan
- Does Your Facility Need an EPA Facility Response Plan?
- Substantial Harm Facility Determination
- Significant and Substantial Harm Facilities
- Requirements of EPA Facility Response Plan
- Onshore Pipelines
- When do Facilities Need a PHMSA Pipeline Response Plan?
- Corrosion Protection
- UST Leak Detection
- Requirements of a Storm Water Pollution Prevention Plan

- Storm Water Pollution Prevention Plans
- Fuel on Roadways and Railroads
- Immediate Response to a Spill-Safety First
- Spill Reporting Requirements
- Agency Notification
- Storage Tanks Regulatory Background
- Requirements for Underground storage Tanks (USTs)
- Spill and Overflow Prevention Equipment
- Leaking USTs - Spills, Overfills, and Confirmed Releases
- Exempt Underground Storage Tanks
- Deferral from Some of the Regulations
- Secondary Containment Requirements
- Above Ground Bulk Storage Tanks
- Mobile Refuelers
- Facility Drainage and Security
- Managing Storm Water
- Storm Water Permits

- **Various Fuels**

- Specification Standards
- Commercial Jet A and Jet A-1
- Russia and Commonwealth of Independent States Jet Fuels
- Peoples' Republic of China
- South Africa Synthetic Jet Fuels
- Fuel Produced to Other Specifications
- US Military Jet Fuels
- JP-4 and Jet B (Wide Cut Fuels)
- Alternative Fuel Sources
- Synthetic Fuels
- Biofuels
- Biodiesel
 - Biodiesel Blends
 - E85 Ethanol
 - Fuel Additives
 - Additive Types

- **Fuel Properties**

- | | | |
|------------------|--------------|--------------------------|
| ○ Energy Content | ○ Fluidity | ○ Contaminants |
| ○ Composition | ○ Combustion | ○ Other Misc. Properties |
| ○ Volatility | ○ Corrosion | |
| | ○ Stability | |

- **Quality**

- Personnel Qualifications
- Safety Precautions
- Types of Samples
- Sample Precautions
- Testing Frequencies
- Field Sampling and Test Equipment
- Recoverable and Waste Product Sampling
- Reclaimable Product
- Recyclable Product
- Waste Product
- Off-Specification Product
- Reclamation
- Determining Factors
- Reclamation Techniques
- Quality Assurance
- Fuel Handling
- Strainers
- Filter Separators
- Tank Inspections/Cleaning
- Water Removal
- Quality Surveillance
- Joint Inspection Group

- **Pipeline Systems**

- Types of Pipeline Systems
- Characteristics of Petroleum Fuels
- Moving the Product
- Pipeline and Pumping-Station Data
- Head Capacities of Pumping Units
- Multi-Product Pipelines
- Scheduling Product Flow
- Pipelines Summary

- **Hardware**

- Valves
- Butterfly Valves
- Gate Valve
- Ball Valves
- Plug Valves
- Check Valves
- Automatic Valves
- Motor Operated Valves
- Pumps
- Meters
- Nozzles
- Strainers

The candidate must achieve a passing score of at least 75 percent on the exam. There are over 370 learning screens available to candidates for self-study. The self-study materials are available free-of-charge. There is no requirement to use the study materials, which are structured in an online course format, but they will help prepare an individual for the exam and therefore going through the materials is highly recommended.

Following successful completion of the exam, the certification candidate must submit a detailed worksheet containing a history of their training, education, and experience.

NOTE: A data capture sheet is provided to the candidate when they get to this step in the certification process.

From this worksheet, a committee will look at the following factors:

- **Training**

- Petroleum

- Petroleum Operations
 - Quality
 - Systems
 - Hardware
 - Vehicle
 - Safety
 - Maintenance
 - Environmental

- Electives

- Leadership Development
 - General Safety

- **Education**

- Leadership
 - General Safety
 - Petroleum-related college courses

- **Experience**

- Petroleum operations (e.g., quality, accounting, maintenance, etc.)
 - Leadership

The result of the committee review process will be a conversion of a person's training, education, and experience into Continuing Education Units (CEU). Accepted types of education and training include, but are not limited to, military training and technical schools, accredited colleges/universities, and trade/tech schools. CEUS are put into categories of experience, petroleum-related, and electives. Experience and petroleum CEUs are required for each level, while elective CEUs are not. The combined total CEU value, coupled with breadth of experience determines the individual's certification level.

NOTE: An individual is not required to start at the lowest certification level and work their way up. An individual's initial certification is based upon their qualifications at the time of their review. Therefore, it is entirely possible for an individual to be initially certified at any of the five certification levels.

An explanation of the requirements for each of the five certification levels are below:

Requirements for Each Level:

Level 1 – Certified Petroleum Apprentice

- Pass the certification test
- Be fully qualified in your current job
- Have a minimum 6 months of petroleum experience

Level 2 – Certified Petroleum Journeyman

- Meet the requirements for Level 1
- Have a minimum 2 years of petroleum experience
- Have a minimum 42 total CEUs
 - Maximum 10 CEUs for 2 years of petroleum experience
 - Minimum 24 CEUs for Petroleum-related training/education
 - Maximum 8 CEUs for electives

Level 3 – Certified Petroleum Specialist

- Meet the requirements for Level 2
- Have a minimum 5 years of petroleum experience
- Have a minimum 84 total CEUs
 - Maximum 20 CEUs for 5 years of petroleum experience
 - Minimum 48 CEUs for Petroleum-related training/education
 - Maximum 16 CEUs for electives

Level 4 – Certified Petroleum Craftsman

- Meet the requirements for Level 3
- Have a minimum 9 years of petroleum experience
- Have a minimum 126 total CEUs
 - Maximum 35 CEUs for 9 years of petroleum experience
 - Minimum 65 CEUs for Petroleum-related training/education
 - Maximum 26 CEUs for electives

Level 5 – Certified Petroleum Professional

- Meet the requirements for Level 4
- Have a minimum 14 years of petroleum experience
- Have a minimum 2 years of senior leadership experience running fuels operations***
- Have a minimum 168 total CEUs
 - Maximum 50 CEUs for 14 years of petroleum experience
 - Minimum 84 CEUs for Petroleum-related training/education
 - Maximum 34 CEUs for electives

*****Depending on the size of the unit/organization, the board may require more than two years of senior leadership experience.**

All certifications are valid for 3 years except for Level 5, which are valid for 5 years. At the end of the certification period, or earlier if they wish, an individual may request a recertification for a nominal fee. Recertification requires an updated worksheet, which the committee will review and either upgrade or renew the existing certification.

Any additional questions should be addressed to bill@npmc-fuelnet.org.