



## Public Service of Papua New Guinea

**JOB DESCRIPTION**

|                                                                               |                                                                         |                                  |
|-------------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------|
|                                                                               |                                                                         | <b>POS. NO.:</b><br>NISITMET-072 |
| <b>DEPARTMENT:</b> TRADE, COMMERCE AND INDUSTRY                               | <b>DESIGNATION/CLASSIFICATION:</b><br>VOLUME FLOW METROLOGIST - GRADE 9 |                                  |
| <b>OFFICE/AGENCY:</b> NATIONAL INSTITUTE OF STANDARDS & INDUSTRIAL TECHNOLOGY | <b>LOCAL DESIGNATION:</b><br>VOLUME FLOW METROLOGIST                    |                                  |
| <b>DIVISION:</b><br>METROLOGY                                                 | <b>HIGHEST SUBORDINATE:</b>                                             | <b>POS. NO.:</b>                 |
| <b>BRANCH:</b> LEGAL METROLOGY                                                | <b>IMMEDIATE SUPERVISOR:</b><br>SENIOR LEGAL METROLOGIST                | <b>POS. NO.:</b><br>NISITMET-064 |
| <b>SECTION:</b> TRADE & HEALTH                                                | <b>LOCATION:</b>                                                        | BOROKO, NCD                      |

**HISTORY OF POSITION**

| <b>DPM FILE NO:</b> | <b>DATE OF VARIATION</b> | <b>DETAILS</b>                    |
|---------------------|--------------------------|-----------------------------------|
|                     | 01.03.2017               | Reno/Redes/Reclass/Revise duties. |
|                     |                          |                                   |
|                     |                          |                                   |

**1. PURPOSE & FUNCTIONAL OBJECTIVE OF THE POSITION**

The Volume Flow Metrologist (Legal Metrology) is responsible to:

- Ensure the verification and legal compliance of volume and flow measuring instruments used in trade, health, environment, and safety sectors.
- Support NISIT's mission to uphold measurement integrity, promote fair commerce, and align with international metrology standards.

**2. ACCOUNTABILITIES**

The Volume Flow Metrologist (Legal Metrology) shall report to the Senior Legal Metrologist – *Trade & Health*, on all matters regarding the Section's functions and objectives, and occupational duties as follows:

- Perform field and laboratory verification of fuel dispensers, water meters, and flow measurement systems.
- Maintain calibration traceability and safeguard volumetric reference standards.
- Provide documentation to support enforcement and regulatory actions.
- Conduct stakeholder engagement to raise awareness of legal metrology requirements.

### 3. MAJOR DUTIES (JOB FUNCTIONS)

#### 3.1 Key Roles:

The roles of the Volume Flow Metrologist (Legal Metrology) include but are not limited to the following:

- **Technical Verifier:** Conduct inspections and flow performance assessments of volume/flow instruments.
- **Compliance Officer:** Apply verification procedures and legal tolerances based on OIML R117, ISO 4185, and PNG standards.
- **Legal Units Enforcer:** Ensure all flow and volume-related transactions conform to PNG's legally recognized units of measurement.
- **Stakeholder Liaison:** Offer technical guidance and engage with traders, utility providers, inspectors, and regulators.
- **Records Custodian:** Manage verification certificates, reports, and audit-ready documentation.

#### 3.2 Key Responsibilities:

The responsibilities of the Volume Flow Metrologist (Legal Metrology) include but are not limited to the following:

- Verify instruments such as fuel dispensers, water meters, and industrial flow systems.
- Assess instruments for conformity to approved types or patterns and report any non-compliances.
- Operate and calibrate standard volumetric kits, flow rigs, and testing apparatus with precision.
- Maintain comprehensive records of verification results, including inspection logs and compliance certificates.
- Support outreach programs and facilitate technical briefings on volume/flow compliance protocols.
- Ensure impartiality, confidentiality, and occupational safety during all verification processes.

### 4. POSITION AND PERSON SPECIFICATIONS

#### 4.1 Qualifications:

- Bachelor's degree in Physics, Engineering, Applied Sciences, or a related discipline.
- Sound understanding of pressure measurement principles and instrumentation.
- Knowledge of PNG Legislations relating to Metrology and international standards such as OIML R105 and ISO 4126.

#### 4.2 Knowledge & Skills:

- Sound understanding of measurement and instrumentation.
- Good written and oral communication skills.
- Computer literate.

#### 4.3 Work Experience:

- Minimum one year of experience in metrology, flow calibration, or verification inspections would be desirable but not necessary.
- Demonstrated ability to conduct stakeholder engagement and provide technical support.
- Background in documentation, compliance reporting, and legal metrology enforcement.

#### **4.4 Personal Characteristics/Attributes:**

The Officer should demonstrate competence in some or all of the following:

- **Adaptability:** Demonstrate a willingness to be flexible, versatile and/or tolerant in a changing work environment while maintaining effectiveness and efficiency.
- **Behave Ethically:** Understand ethical behavior and business practices, and ensure that own behavior and the behavior of others is consistent with these standards and aligns with the values of the division and organization.
- **Build Relationships:** Establish and maintain positive working relationships with others, both internally and externally, to achieve the goals of the division and organization.
- **Communicate Effectively:** Speak, listen and write in a clear, thorough and timely manner using appropriate and effective communication tools and techniques.
- **Creativity/Innovation:** Develop new and unique ways to improve operations of the division and to create new opportunities.
- **Focus on Client Needs:** Anticipate, understand, and respond to the needs of internal and external clients to meet or exceed their expectations within the divisional and organizational parameters.
- **Foster Teamwork:** Work cooperatively and effectively with others to set goals, resolve problems, and make decisions that enhance divisional or organizational effectiveness.
- **Lead:** Positively influence others to achieve results that are in the best interest of the division.
- **Make Decisions:** Assess situations to determine the importance, urgency and risks, and make clear decisions which are timely and in the best interests of the division.
- **Organize:** Set priorities, develop a work schedule, monitor progress towards goals, and track details, data, information and activities
- **Plan:** Determine strategies to move the division forward, set goals, create and implement actions plans, and evaluate the process and results.
- **Solve Problems:** Assess problem situations to identify causes, gather and process relevant information, generate possible solutions, and make recommendations and/or resolve the problem.
- **Think Strategically:** Assesses options and actions based on trends and conditions in the environment, and the vision and values of the division.

#### **5. WORKING CONDITIONS**

- Frequent field visits to industrial sites, fuel depots, manufacturing facilities, and remote areas.
- Use of precision pressure standards, verification kits, and safety testing equipment.
- Full-time work schedule with flexibility for field operations and stakeholder meetings.
- Mandatory use of PPE and adherence to NISIT safety protocols.
- Exposure to outdoor, industrial, and occasionally hazardous environments during verification tasks.
- Officer may be required to work evenings, weekends, or public holidays to support field campaigns, trade operations, or regulatory requirements.