



Form OD2.7

**PAPUA NEW GUINEA PUBLIC SERVICE  
JOB DESCRIPTION**

**1. IDENTIFICATION**

<b>AGENCY:</b> WORKS & HIGHWAYS	<b>SYS.POSN.NO:</b>	<b>REF.NO:</b> 60ESMST15	
<b>WING:</b> NETWORK PLANNING, DESIGN & STANDARDS	<b>DESIGNATION/CLASSIFICATION:</b> MATERIAL ENGINEER <b>GRADE 13</b>		
<b>DIVISION:</b> ENGINEERING SERV.& STANDARDS	<b>LOCAL DESIGNATION:</b> MATERIALS ENGINEER – MT HAGEN		
<b>BRANCH:</b> MATERIALS SCIENCE & TECHNOLOGY	<b>REPORTING TO :</b> REGIONAL LABORATORY MANAGER – MT HGN GRADE 14	<b>SYS.POS.NO:</b>	<b>REF.NO:</b> 60ESMST06
<b>SECTION:</b> MT HAGEN LABORATORY	<b>LOCATION:</b> HEADQUARTER - BOROKO		

**HISTORY OF POSITION**

<b>FILE REF:</b>	<b>DATE OF VARIATION</b>	<b>DETAILS</b>
111-60-A00	10/12/2021	RE-NO, RE-CLASS, RE-DESIGN

**2. PURPOSE**

- 2.1 To assist Regional Laboratory Manager and perform the day to day function of the Mt Hagen Regional Laboratory
- 2.2 Plan and Program all field and laboratory Testing activities under the direction of Regional Laboratory Manager
- 2.3 Liaise with Materials Engineer in other region for the effective delivery of compliance materials testing and quality control testing activities
- 2.4 Ensure all laboratory and field testing conducted in the region are in accordance to required Australian Standards and are in compliance to DoW Specification and Standards

**2. DIMENSIONS**

Materials Engineer's responsibility is to carry out all duties relation to day to day operation of the Mt Hagen Regional Laboratory and Provincial Laboratories and managing the laboratory personal

**4. PRINCIPLE ACCOUNTABILITIES**

To co-ordinate and co-operate with all sectors within public and private sector in regard to materials testing services.

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## **5. MAJOR DUTIES**

- 5.1 Assist the Regional Laboratory Manager for the overall efficient organizational and day to day functions of the Mt Hagen Regional Laboratory and the Provincial Laboratories within the Highlands Region
- 5.2 Assist in programming, managing and carrying out all the laboratory testing and all field investigations for the public and private sectors
- 5.3 Assist and conduct staff weekly and monthly meetings and produce and distribute meeting minutes to all staff under the direction of Regional Laboratory Manager (RLM) to Principal Engineer (MTS) and or Assistant Secretary (MST)
- 5.4 Assist by providing weekly and monthly reports on the operation of the Regional and Provincial Laboratories and report to Principle Engineer (MTS) and or Assistant Secretary (MST), through RLM – Mt Hagen
- 5.5 Assist, program and perform calibrations of all testing equipment and ensure they conform to the required testing standards and in accordance with the terms of Registration of the Mt Hagen Regional Laboratory and the Provincial Laboratories within the region
- 5.6 Check and monitor the testing procedures undertaken and test results produced by subordinates are in compliance to required Australian Standards before it is approved by an Authorised signatory in accordance with the terms of Registration of the Laboratory and then test report is produce and issued
- 5.7 Assist Regional Laboratory Manager in maintaining the laboratory equipment inventory, quality assurance and laboratory environment in accordance with the Quality Manual and ISO17025
- 5.8 Make sure quality is maintained in the laboratory and the field testing
- 5.9 Assist and participate in organising in-house training for the technical staff
- 5.10 Maintain implementation of Occupational Health and Safety principals within laboratory
- 5.11 Liaise with Materials Engineers & Geotechnical Engineers from other region on various material compliance, quality control testing and geotechnical investigation works in their region for the updating of work output deliverables and reporting purposes
- 5.12 Involve in reviewing of various documents and reports if and when required or directed by Assistant Secretary (MST) or Principle Engineer (R&D) or Principle Engineer (MTS)
- 5.13 Attend to all training as appropriate to the role and when required and mentoring and provide on –job training for new recruits and graduates
- 5.14 Other related duties and tasks as directed by Principal Engineer (R&D) through Assistant Secretary (MST)

## 6. NATURE AND SCOPE

### 6.1 WORKING RELATIONSHIP

#### (a) Internal

Principal Engineer (MTS), Regional Laboratory Manager and all laboratory personal

#### (b) External

Suppliers, Consultants and Contractors from private sector in aspect of Materials Testing Services

### 6.2 WORKING ENVIRONMENT

Technical and Administrative

## 7. CONSTRAINTS FRAMEWORK AND BOUNDARIES

- **Rules /Procedures**

Ensure all testings are done in according to Australian standards and as specified  
To ensure day to day function of the laboratory is carried out according to ISO 17025

- **Decision**

Do make decisions in the operation of the day to day function of Mt Hagen Regional Laboratory

- **Recommendations**

Make recommendations on matters relating to the operation of the Laboratory

## 8. CHALLENGES

- Formulating and strategising on new priority areas to deliver quality outcome in materials testing services.
- Customer satisfaction is priority
- Continuous improvement in all aspects of laboratory operation

## 9. QUALIFICATIONS, EXPERIENCES AND SKILLS

### (a) Qualifications

A minimum of Engineering Degree in Civil Engineering from a recognized University and a registered member to Institution of Engineers is essential with appropriate experience would be preferable

### (b) Knowledge

- Some knowledge in the field of geotechnical engineering, with extensive knowledge in the construction materials testing methods, and report writing. A knowledge of and the ability to understand technical specifications is essential
- **Legislative knowledge:** General knowledge about the range of Acts, laws and policies governing the work of the Department of Works.

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**(c) Skills**

- Ability to program work, supervise and manage. Must possess very effective written and oral communication, negotiation, persuasion and representation skills is necessary
- Demonstrate substantial proficiency in the use of email and internet, in the application of software such as MS Word and MS Excel to perform complex tasks, and in the creation of presentations using MS PowerPoint
- Lead with personal drive, commitment and resilience. Act as a positive role model on ethical behaviour for staff and demonstrate personal qualities of honesty, fairness, and professionalism.
- Demonstrate and practice high levels of integrity, honesty, accountability, respect and wisdom and accept responsibility for one's own actions at all times

**(d) Work Experience**

- A minimum of five (5) years or more work experience in the fields of Geotechnical Investigations and Construction Materials testing is necessary, this combining time spent in laboratory and field supervision work.
- Have sound experience in teamwork and teambuilding activities with effective mentoring and training is more preferable