

Title	Portland Cement Concrete Lab Technician
Vacancy Number	MoPW/SRTAP/CMTL/1400-85
Ministry	Ministry of Public Works
Organization	Directorate of Construction Material Testing Laboratory
Project	Sustainable Reform & Technical Assistance Project
Duty Station	Kabul + Travel
Duration	1 Year (with possibility of extension)
No of Jobs	4
Nationality	Afghan
Sex	Male/Female
Salary Range	According to NTA Salary Scale (Grade-D)
Announcing Date	31/May/2021
Closing Date	11/June/2021
Job Type	Engineering
Shift	Full Time
Job Status	Sourcing
Experience	Specific 3 year and general 5 years

Background:

The Ministry of Public Works (MoPW) is responsible for the planning, design, procurement, implementation, monitoring, and maintenance of the various transportation infrastructure projects such as roads, bridges, and its relevant drainage and retaining/protection structures in the government of the Islamic Republic of Afghanistan.

Laboratory's Department of MoPW is responsible for testing of all road and bridge construction materials such as: soil, aggregate, cement, bitumen, asphalt concrete and other distractive and non-distractive tests on fresh and hardened concrete. Laboratory's department is also responsible for geotechnical investigation of for roads/highways, bridges, and related structures. Besides these, Laboratory's department, MoPW is responsible for soil sample collection from various sites and conducting both simple and advanced tests on the collected samples. Moreover, Laboratory's department, MoPW is committed to provide proper geotechnical, geo investigation data and also supervise the process of testing, check, and review the existing reports. Laboratory's department of MoPW witness all quality tests, check, and review of all mix designs provided for asphaltic pavement layers.

Scope of Work/Job Summary:

A Portland Cement Concrete Lab Technician conducts a wide variety of materials tests related to aggregate, cement, and mix design of concrete, In addition to some limited public works inspections. The aggregate, cement, and water materials' testing is conducted primarily in the Lab Department of MoPW. Also, depending upon need, can be conducted in the field. Performing different tests including cement tests, concrete slump tests, compression tests on cylinders, and other relevant and required tests. Technicians are required to use appropriate safety equipment and follow procedures while performing assignments. A Portland cement concrete Lab technician reports to the Portland cement concrete Engineer who reviews work through inspections, observation, and gathers overall results achieved.

Duties & Responsibilities:

- Receiving, processing and analyzing samples.
- Conducting tests on samples and experimental processes.
- Using, cleaning and maintaining various types of equipment.
- Handling and storing chemicals and other materials.
- Administrative tasks such as maintaining notebooks, registration the samples and documenting procedures
- Picking-up and delivering items for the lab
- Monitor and authorize entrance and departure of employees, visitors, and other persons.

- Storing and keeping all test materials including cement, aggregate, water, and concrete samples delivered from the test site in nominal condition;
- Testing of Portland cement, aggregate, and water according to ACI, ASTM, ASHTO and BS codes and standards;
- Preparing mix design of concrete using ACI, ASTM, ASHTO codes and standards.
- Conducting core tests on field if needed;
- Carrying out concrete compressive strength, slump, unit weight, temperature and workability tests within MoPW's Portland cement laboratory and in the field
- Ensuring laboratory equipment is, calibrated, maintained in good condition
- Check construction supplies for damage, moisture, loss or other problems before using the material.
- Write the results and conclusions of the inspection in a clear and intelligible way. Log the inspection's processes such as contact, outcome, and steps taken.
- Inspect the placement of Portland cement concrete ensuring that the specifications are meet and no flows are present.
- Make sure that laboratory equipment is used in a safe manner and the handling of samples and specimens is correct. Work to ensure the validity of results obtained in research.
- Use elements of protective clothing such as steel-tipped shoes, and gear such as protective goggles, in order to minimize risk of accidents in construction and to mitigate any injury if an accident does occur.
- Check the quality of basic materials used for the production of semi-finished and finished goods by assessing some of its characteristics and, if needed, select samples to be analyzed.
- Curing all the test samples and observing the procedure from the beginning till the end;
- Prepare a detailed report of all tests performed using customized computer program and present to Portland cement concrete engineer;
- Performing site trips if needed;
- Assisting with the other Lab sections in relevant tasks and operations;
- Performing any other related duties and tasks as assigned by the head/supervisor.

Skills & Competencies:

- Be familiar with all sample and advanced tests required for Portland cement concrete, data collection and their analysis;
- Be able to record all test results in the prepared formats;
- Ability to overcome challenges and work in difficult work environments/conditions (especially in the field if required);
- High degree of personal initiative and willingness to accept responsibility for all poor Portland cement concrete investigations and test results related to it;
- Familiarity with Excel, Word, Power Point, and any other software used for Portland cement concrete engineering.

Job Requirements:

- Minimum of higher baccalaureate or bachelor's degree in civil engineering, and or any other similar discipline;
- Having minimum of 3-year work experience as Job related work experience and 5 years general experience in civil engineering.
- Knowledge of standard practices of Portland cement concrete and all relevant AASHTO, ASTM and ACI standards;
- Good experience in working with relevant lab equipment and machinery;
- Required verbal and written communication skills in English, Pashto, and Dari;
- Proven organizational and problem-solving skills.

Required Documents:

- CV with an application form for the relevant position;
- Copy of verified Afghan ID Card (Tazkera) or Passport copy;
- Copy of verified last Posting Contract;
- Copy of other documents seems to be necessary.

Submission Guideline:

Interested candidates are requested to forward their applications, detailed CV and other required documents to **jobs.mopw1400@yahoo.com** indicate the vacancy number (**MoPW/SRTAP/CMTL/1400-85**) and the post title (**Portland Cement Concrete Specialist**) in the subject line when applying by email to the Human Resource Unit – Sustainable Reform and Technical Assistance Project of Ministry of Public Works (MoPW) at Kabul, Afghanistan.

Office Add: SRTAP Office, Kabul Jalalabad Road, In front of KMTC, Ministry of Public Work, Kabul Afghanistan.

Only short-listed candidates will be notified