



**DEMERARA HARBOUR BRIDGE CORPORATION
SUPERVISORY JOB DESCRIPTION**

JOB TITLE:	LABORATORY TECHNICIAN	LOCATION:	ASPHALT PLANT
REPORTS TO:	SENIOR ENGINEER	GRADE:	
DEPARTMENT:	PLANT OPERATIONS	SECTION:	LABORATORY

1. SUMMARY STATEMENT:

Responsible for testing and inspecting materials for each component of the Asphalt mix during the production and design phase of the operations to determine whether their characteristics, properties and quality meet or exceed the standards and specifications prescribed by customers.

2. NATURE AND SCOPE OF THE JOB

The **Materials Laboratory Technician** is required to identify, prepare and test/evaluate samples of construction materials to determine their quality and structural integrity. The **Incumbent** performs soil compaction/density testing on multiple projects in accordance with ASTM specifications.

The **Incumbent** determines appropriate testing procedures for material evaluation; conducts standardized and specialized tests on materials such as soil, asphalt, concrete, concrete ingredients, concrete related materials, aggregates, steel etc.

The **Materials Laboratory Technician** prepares and submits written daily field reports summarizing daily activities/observation and density test calculations and results. The **Incumbent** communicates with on-site personnel, contractors, clients about schedule, testing and results.

The **Incumbent** ensures a safe work environment in compliance with all safety policies and procedures using the appropriate tools and equipment for the task. The **Incumbent** maintains all laboratory equipment, keeping track of all certification documentation that requires annual re-certification.

3. PRINCIPAL ORGANISATIONAL RELATIONSHIPS:

(The incumbent relates to the following areas/titles internally and externally within the Nature and Scope of the Job)

AREA/TITLE:

RESPONSIBILITY:

INTERNAL:

Laboratory Supervisor

To agree accepted methods to inspect, sample, and test aggregates, asphalt, or other materials for the purpose of quality control.

EXTERNAL:

Suppliers/Clients

To disseminate technical information on the performance of materials and products in tests.

4. DUTIES, WORK FIELD, TRAITS:

<p>D U T I E S R E Q U I R E D</p> <p>J O B R E S P O N S I B I L I T I E S</p>	<p>JOB TITLE: Laboratory Technician</p> <p>DESCRIPTION OF DUTIES:</p> <p>PERFORMS all laboratory testing in accordance with ASTM and AASHTO standard for quality products and to establish which tests are needed for each component of the asphalt mix.</p> <p>CONDUCTS testing on asphalt, concrete and aggregate material samples in accordance with specified standards.</p> <p>DETERMINES what testing is required for samples and decides sampling frequencies. APPLIES the Marshall Mix design testing procedure when testing the Asphalt mix.</p> <p>IDENTIFIES issues with the mix production and FORMULATES recommendations to resolve issues for approval by Supervisor.</p> <p>COMPUTES, ANALYSES and DOCUMENTS test results and COMPARES with specifications to ensure materials meet quality standards and report findings.</p> <p>PERFORMS calibrations and proficiency testing to ensure documentation and testing information is accurate and timely.</p> <p>PERFORMS troubleshooting of field and jobsite problems. INSPECTS material sources, stockpiles, and truck loads of aggregate plants.</p> <p>COMMUNICATES test results to Supervisors and plant personnel.</p> <p>USES, CALIBRATES and MAINTAINS all material testing equipment.</p> <p>PREPARES laboratory or field test data for reports.</p>
<p>The above responsibility statements identify specific duties necessary to attain DHBC's overall objectives while not precluding the jobholder from carrying out other related activities that may be inherent in the job.</p>	

5. SUPERVISORY JOB DESCRIPTION EVALUATION: QUALIFICATIONS PROFILE

JOB TITLE: Laboratory Technician		
FACTORS	SUBSTANTIATING DATA	
1	EDUCATION	Diploma or Associate Degree in Civil Engineering from the University of Guyana or any other recognised institution. Must be proficient with Microsoft Word, PowerPoint, and Excel.
2	EXPERIENCE/JOB KNOWLEDGE	Requiring up to four years' experience of laboratory work. Must have good knowledge of laboratory techniques and processes. Knowledge of all types of construction materials and experience using materials testing equipment.
3	TECHNICAL/ PROFESSIONAL	Application of advanced skills in techniques or practices which require professional or technical qualification to practice them. Such skills are acquired by practical experience and training.
4	PROBLEM SOLVING /DECISION MAKING	Decisions are made within well-defined parameters, standard practices, and adherence to performance standards. Identifies issues with the mix production and formulates recommendations to resolve issues for approval by Supervisor.
5	INTERPERSONAL	The interpersonal contacts are with employees within the Department/Section and those of other Sections. Prepares and communicates test and inspection results as directed.
6	RESPONSIBILITY FOR MATERIALS, CASH, ETC	Responsible for testing and inspecting materials for each component of the Asphalt mix during the production and design phase of the operations to determine whether their characteristics, properties and quality meet or exceed the standards and specifications prescribed by customers.
7	PROCEDURES/ REGULATIONS/ COMPLIANCE	Application of advanced skills, techniques or practices which require professional or technical qualification to practice them. Such skills are acquired by practical experience and training. Performs all laboratory testing in accordance with ASTM and AASHTO standard for quality products.
8	TEAMWORK	The Team identifies its functions; acknowledges defined objectives, priorities, and deadlines; and collaborates with others in resolving perceivable and unprecedented challenges.
9	WORKING ENVIRONMENT/ SAFETY OF OTHERS	Moderate risks or discomforts which require special safety precautions. Employees may be required to use protective clothing or gear such as masks, coats, boots, or gloves. Exposed to noise, dust, fumes, and vibrations. Specific vision abilities required by this job that include close vision, and ability to adjust focus.