



**ENVIRONMENTAL PROTECTION AGENCY  
GOVERNMENT OF THE PUNJAB  
National Hockey Stadium, Gate No. 08  
Gaddafi Stadium Complex, Lahore**



**Dated: 27/05/2025**

**CERTIFICATION FOR SCOPE ENHANCEMENT OF  
ENVIRONMENTAL LABORATORY**

In exercise of powers conferred by Clause (k) of subsection (1) of section 6 of Punjab Environmental Protection Act, 1997 (XXXIV of 1997); and in continuation of Environmental Laboratory Certificate No. 195/DD(LAB)/EPA/2022 dated 09-06-2022, which remains valid until 08-06-2025, the Provincial Agency is pleased to approve scope enhancement application for the following laboratory:

**Name:** National Institute of Biotechnology and Genetic Engineering (NIBGE)  
**Address:** Jhang Road, Faisalabad  
**Certificate No.** 123 /Dir (ML&I)/EPA/05/2025

This scope enhancement includes the addition of parameters as detailed in Annexes A and B, related to Punjab Environmental Quality Standards (PEQS) for the following:

- |  |  |
|--|--|
| a) Municipal and Industrial Effluents Parameters<br>as per Annex-A | Oil and Grease, Phenolic Compounds (as Phenols)<br>Anionic Detergents as MBAs, CN <sup>-</sup> , S <sup>2-</sup> , Mn, Ba and B  |
| b) Drinking Water Quality Parameters<br>as per Annex-B             | E.Coli, Thermo Tolerant & Total Coliform, pH, Color, Odor, Taste, Turbidity, Total Hardness as CaCO <sub>3</sub> , Total Dissolved Solids (TDS), Cl <sup>-</sup> , F <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , NO <sub>2</sub> <sup>-</sup> , Residual Chlorine, Heavy Metals (Cd, Cr, Cu, Pb, Mn, Zn), Al, Ba, B, CN <sup>-</sup> , Phenolic Compounds as Phenols |

This enhancement is subject to the same conditions as outlined in Regulation 9 of the Certification of Environmental Laboratories Regulations, 2000, and all QA/QC requirements listed in Annex-C.

This scope extension shall remain valid until 08-06-2025, the expiry date of the previous certification, unless suspended or revoked earlier.

**Dated: 27/05/2025**

**Director General  
EPA Punjab**



**ENVIRONMENTAL PROTECTION AGENCY**  
**GOVERNMENT OF THE PUNJAB**  
*National Hockey Stadium, Gate No. 08*  
*Gaddafi Stadium Complex, Lahore*



**Annex-A**

In continuation of Environmental Laboratory Certificate No. 195/DD(LAB)/EPA/2022 dated 09-06-2022 read with conditions as Annex-C in favor of Environmental Monitoring and Phytoremediation Lab, National Institute for Biotechnology and Genetic Engineering (NIBGE) located at Jhang Road, Faisalabad.

**Municipal and Industrial Effluent**

<b>Sr. No.</b>	<b>Liquid Effluent/Waste Water Parameters</b>	<b>Standard Method/Equipment</b>	<b>Tests Capacity Per Month</b>
1.	Oil and Grease, Phenolic Compound (as Phenols)	APHA 5520 B, APHA 5530 B, APHA 5530 C, APHA 5530 D	30
2.	Anionic Detergents as MBAs and Cyanide (CN <sup>-</sup> )	APHA 5540 C, APHA 4500 – CN <sup>-</sup> E	30
3.	Sulphide (S <sup>2-</sup> )	APHA 4500- S <sup>2-</sup> F	80
4.	Manganese (Mn), Barium (Ba) and Boron (B)	APHA 3111 B, APHA 3111 D, APHA 4500 B	80

**The Laboratory (Service Provider) and service Receiver shall also comply all the conditions laid down in Regulation 9 of the Certification of Environmental Laboratories Regulations 2000, and QA/QC conditions contained in Annex-C.**

**Dated: 27 /05/2025**

**Director General**  
**EPA Punjab**



**ENVIRONMENTAL PROTECTION AGENCY**  
**GOVERNMENT OF THE PUNJAB**  
*National Hockey Stadium, Gate No. 08*  
*Gaddafi Stadium Complex, Lahore*



**Annex-B**

In continuation of Environmental Laboratory Certificate No. 195/DD(LAB)/EPA/2022 dated 09-06-2022 read with conditions as Annex-C in favor of Environmental Monitoring and Phytoremediation Lab, National Institute for Biotechnology and Genetic Engineering (NIBGE) located at Jhang Road, Faisalabad.

**Drinking Water Quality**

<b>Sr. No</b>	<b>Drinking Water Quality Parameter</b>	<b>Standard Method/SOP</b>	<b>Test Capacity per month</b>
1.	E.Coli, Thermo Tolerant Coliform & Total Coliform	APHA 9221F, E & 9221D	150 each
2.	pH, Color, Odor, Taste, Turbidity, Total Hardness as CaCO <sub>3</sub> , Total Dissolved Solids (TDS)	APHA -4500- H <sup>+</sup> B, APHA 2120 C, APHA 2150 B, APHA 2160 B, APHA -2130 B, APHA -2340 C, APHA- 2540 C	150 each
3.	Chloride, Fluoride, Nitrate, Nitrite	APHA 4500-Cl <sup>-</sup> B, APHA 4500-F <sup>-</sup> D, APHA 4500 NO <sub>3</sub> <sup>-</sup> -e. APHA 4500 NO <sub>2</sub> <sup>-</sup> - B	150 each
4.	Residual Chlorine	APHA 4500-Cl B & G	100
5.	Heavy Metals (Cd, Cr, Cu, Pb, Mn, Zn)	APHA 3111 B	80 each
6.	Aluminum	APHA 3111D	80
7.	Barium and Boron	APHA 3111 D, APHA 4500 B	80 each
8.	Cyanide (CN <sup>-</sup> )	APHA 4500-CN <sup>-</sup> E	50
9.	Phenolic Compounds as Phenols	APHA 5530 C	40

**The Laboratory (Service Provider) and Service Receiver shall also comply all the conditions laid down in Regulation 9 of the Certification of Environmental Laboratories Regulations 2000, and QA/QC conditions contained in Annex-C.**

**Dated: 27 /05/2025**

  
**Director General**  
**EPA Punjab**



**ENVIRONMENTAL PROTECTION AGENCY  
GOVERNMENT OF THE PUNJAB  
National Hockey Stadium, Gate No. 08  
Gaddafi Stadium Complex, Lahore**



**Annex-C**

In continuation of Environmental Laboratory Certificate No. 195/DD(LAB)/EPA/2022 dated 09-06-2022 read with conditions as Annex-C in favor of Environmental Monitoring and Phytoremediation Lab, National Institute for Biotechnology and Genetic Engineering (NIBGE) located at Jhang Road, Faisalabad.

**CONDITIONS OF CERTIFICATIONS**

**1. The Environmental Laboratory shall**

- a) Conduct tests, analyses, and measurements per Provisional Agency guidelines.
- b) Maintain calibration records for its equipment and apparatus.
- c) Follow QA/QC procedures and participate in audits and quality programs organized by Provincial Agency.
- d) Keep its premises clean.
- e) Allow EPA for inspections of equipment, reports, and records.
- f) Retain test records for three years from the date thereof.
- g) Implement safety measures, including fire hazard precautions and first aid.
- h) Maintain adequate stocks of chemicals, backup equipment, and spare parts.
- i) Ensure compliance with regulation 5, using equivalent or better replacements for staff and equipment.
- j) Display its certification and fee list prominently in its premises.
- k) Submit an annual report listing all environmental tests and analyses

**2. An environmental laboratory shall not, without the prior permission, in writing, of the Provisional Agency-**

- a) Shift its location or remove any equipment or apparatus from its premises but the equipment or apparatus requiring repair or maintenance outside the premises may be removed for this purpose for a specific period under intimation to the Provisional Agency;
- b) sub-contract any work to any other laboratory.
- c) Use EPA logo for lab test reports.

**3. Certification of an environmental laboratory shall not be transferable to any other laboratory.**

**4. The Environmental Laboratory shall comply following conditions in the light of regulation 3, 9(1)(d), 12;**



**ENVIRONMENTAL PROTECTION AGENCY  
GOVERNMENT OF THE PUNJAB  
National Hockey Stadium, Gate No. 08  
Gaddafi Stadium Complex, Lahore**



- a) Ensure treatment of waste water and air emission of the Laboratory to comply PEQS limits. EPA shall randomly check the compliance of PEQS.
- b) Shall comply to EPA-Notified Rates issued vide Notification No. 1011/LS/f-227/LAB dated 09-09-2013) for minimum testing charges.
- c) The lab shall conduct testing of at least certified priority parameters for any specific industry to be reported upon.
- d) The compliance of EPA rates shall be applicable on service provider as well as service receiver.
- e) The Certified Laboratory shall submit monthly progress report on first week of every month indicating the scope of the parameters, compliance of test rates by the laboratory to the office of Director General EPA.
- f) GPS Map Camera (Google Play) must be used for pictorial evidence in reports, showing location, date, and time for EPA verification.
- g) Labs must only conduct tests within their certified scope; violations may lead to certificate suspension/revocation.
- h) The lab having its own calibration facility may extend its services to the other certified lab;
- i) Lab shall ensure compliance to regular supply or generation of reagent water to meet reagent grade water of Type-I & Type-II in accordance with latest ASTM standard.
- j) The testing report issued by the lab on the format of Schedule VI under Regulation 12 will exhibit the following disclaimer on the top of the page:  
*"Report Limitation: This report is not valid for Court cases, Environment Protection Orders, Compliance Report for Operational Phase Approvals, or any regulatory action under Punjab Environmental Protection (Smog Prevention and Control) Rules, 2023 etc."*
- k) The Environmental Samples Rule, 2001 for sampling, testing & reporting shall not be applicable on Private Certified Laboratory.
- l) The Technical & Scientific Staff of Certified Laboratory will collect sample on request of Service Receiver under Regulation 3(a). The sampling/monitoring staff of certified laboratory shall not be below the rank of Assistant/Deputy Analyst.
- m) The collected sample under Regulation 3(a) shall be preserved in right container as per protocol prescribed with relevant Standard Method & the quality control check of sample under Regulation 9(1)(d) during its collection & preservation shall be additionally ensured by Validation Performa.
- n) If a factory/individual provides the sample under Regulation 3(a) to the certified laboratory for analysis, the "Remarks" column should be omitted from the test report.
- o) The sampling of waste water will be validated by designated officer of EPA which includes inspectors, RAs, ROs, ADs, DDs. The field test of waste water like pH, Temperature etc. will only be validated by Directorate of ML&I representative not below the rank of RA. The sampling / monitoring/ on-site testing related to ambient air monitoring, stack emission,



**ENVIRONMENTAL PROTECTION AGENCY  
GOVERNMENT OF THE PUNJAB  
National Hockey Stadium, Gate No. 08  
Gaddafi Stadium Complex, Lahore**



- vehicular emissions, noise monitoring shall only be validated by representative of EPA official laboratory not below the rank of Research Assistant (RA).
- p) The tests reports of which sampling /monitoring has been validated, may be used for non-punitive actions such as baseline study EIA/IEE, Self-monitoring & reporting, Industrial periodic reporting under conditions of EIA/IEE.
- q) The report of Certified Laboratory is not applicable for punitive actions and in such cases reports of EPA official Laboratory shall only be applicable for punitive actions as well as regulatory and compliance purposes.
- r) The validation process witnesses the performance of the sampling at site and validation sheet cannot be produced as supporting document of the Chemical analysis report.
- s) The Chemical Analysis Report (Schedule VI) will clearly mention the name and designation of validating officer for sampling.
- t) The Certified Laboratory is not impartial third party because its revenue is dependent on Service Receiver.
- u) The violation of conditions of certificate will lead to legal proceedings under Regulation 14 of Regulation *ibid*.
- v) Laboratories will be bound to keep their auditable five years testing record and record backup of ICP, AAS, Spectrophotometer, Stack emission equipment, ambient air lab, dead stock items, soft record saved into instruments memory etc.
- w) The lab will maintain suitable record of procurement of spares and consumables for five years which will be checked accordingly.
- x) In case of conflict of interest, the certified lab shall hire service of another certified Laboratory.
- y) Private laboratories may file complaints with the Director General, EPA if a service receiver (industrial unit) awards a contract to the EPA-certified lab at rates lower than the notified rates. If a complaint is lodged, the service receiver must provide additional information to the EPA.
- z) The request for validation shall be submitted to the office of Director (ML&I) at least one week prior to the sampling/monitoring.
- aa) No tests & Analysis report shall be entertained by EPA officers for allowed purpose/scope without validation.

**Dated: 27 /05/2025**

  
**Director General  
EPA Punjab**