

The Sindh Environmental Quality Standards (Certification of Environmental Laboratories) Regulations, 2014.

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**GOVERNMENT OF SINDH
SINDH ENVIRONMENT PROTECTION
AGENCY**

Karachi dated the 16th December, 2014.

NOTIFICATION

No. EPA/TECH/739/2014 - In exercise of the powers conferred by section 37 of the Sindh Environmental Protection Act, 2014 read with clause (k) of sub-section (1) of section 6 thereof, the Sindh Environmental Protection Agency with the approval of the Government of Sindh, is pleased to make the following regulations, namely:-

1. **Short title and commencement.** (1) These regulations may be called the Sindh Environmental Quality Standards (Certification of Environmental Laboratories) Regulations, 2014.

(2) They shall come into force at once.

2. **Definitions.** (1) In these regulations, unless there is anything repugnant in the subject or context –

(a) "**Act**" means the Sindh Environmental Protection Act, 2014;

(b) "**Agency**" means the Sindh Environmental Protection Agency established under the Act;

(c) "**certificate**" means certificate issued under regulation 7;

(d) "**Committee**" means the Committee of the officers of the Agency having relevant experience and qualification constituted by the Director General;

(e) "**Director General**" means the Director General of the Agency;

(f) "**Environmental Laboratory**" means a laboratory to whom certification as an Environmental laboratory has been granted under these regulations;

(g) "**laboratory**" means any premises equipped to conduct scientific and technical experiments, tests, analyses, studies, investigations; and

(h) "**Schedule**" means schedule appended to these regulations.

(2) All other words and expressions used but not defined in these regulations shall have the same meanings as are assigned to them in the Act.

3. **Functions of an Environmental Laboratory.**-The functions of an environmental laboratory shall be –

(a) to test and analyze samples of air, water, soil, effluents or wastes sent to it by any factory or any person authorized by the Agency to determine whether such samples comply with the Sindh Environmental Quality Standards;

(b) to measure noise being emitted at any place by any industrial or other activity or motor vehicle;

(c) to issue test reports containing the results of tests and analyses carried out under clauses (a) and (b);

(d) to carry out such experiments, studies and investigations as may be required by the Agency to monitor and enforce and where necessary to propose revision of the Sindh Environmental Quality Standards;

(e) to send an annual report of its activities to the Agency, including a list of all test reports issued by it and Environmental Management Plan and Audit report; and

(f) to carry out such other functions as may be entrusted to it by the Agency from time to time.

4. **Application for certification.**- (1) Any laboratory which fulfills the criteria laid down in regulation 5 may make an application in the form set out in Schedule-I, to the Agency for certification as an environmental laboratory.

(2) Every such application for certification shall be accompanied by a non-refundable scrutiny fee at the rate specified in Schedule-II.

5. **Criteria for certification.** (1) Subject to sub-regulation (2), a laboratory shall not be certified as an environmental laboratory unless it fulfills the following criteria, namely:-

- (a) the laboratory is located in a clean area and not adjacent to an open sewerage drain of factory from which emissions of air pollutants or discharge of effluents or wastes may interfere with, contaminate or otherwise adversely affect the reliability of its tests and analyses;
- (b) the building in which the laboratory is housed is suitable in size, design and quality of construction, for use as an environmental laboratory;
- (c) the laboratory has qualified and experienced scientific and technical staff and appropriate analytical equipment and apparatus as specified in Schedule-IV;
- (d) the laboratory has deposited with the Agency the scrutiny fee and certification fee at the rate specified in Schedule-II;
- (e) the laboratory has installed a comprehensive scientific system of reporting test results, supported by data handing facilities; and
- (f) the laboratory has proper waste disposal arrangements;

6. **Scrutiny of application.** (1) Every application for certification shall be scrutinized by the Committee.

(2) The Committee shall carry out such inquiry as it may deem necessary to verify and evaluate the data mentioned in the application which shall include sending of trial sample; and obtaining sample test reports and a visit to the laboratory by the Committee itself, or its subcommittee, or a panel of experts appointed by the Committee for the purpose, for an onsite assessment of its capability and capacity as to whether or not it fulfills the criteria laid down in regulation 5.

(3) Subject to clause (4), the Committee shall submit its recommendations, in writing, to the Agency which may, after such further inquiry as it may consider necessary, accept or reject the said recommendations.

(4) In case the Agency decides to reject the recommendations referred to in clause 3, it shall record the reasons for decision.

7. **Decision on application.**- (1) Subject to sub-regulation (2), an application for certification may be rejected, accepted in full, or accepted partially for certain purposes or parameters only.

(2) Before the Agency decides to reject an application or accept it partially or conditionally, it shall give the applicant an opportunity of being heard.

(3) Where the Agency rejects an application, the applicant shall be informed of the reasons for such rejection.

(4) Subject to sub-regulation (5), the rejection of an application for certification shall not debar a laboratory from submitting a fresh application for certification.

(5) A fresh application shall not be entertained until the lapse of at least three months from the date of rejection of an application.

8. **Issue of certificate.** (1) Where the Agency approves an application for certification in full or partially or conditionally, the applicant shall be informed accordingly and asked to deposit with the Agency within fifteen days, the certification fee at the rate specified in Schedule-II.

(2) On receipt of the certification fee, the Agency shall issue a certificate to the laboratory in the form set out in Schedule V and notify the laboratory to be an Environmental Laboratory in the official Gazette.

(3) If a certificate is defaced, damaged or lost, duplicate thereof may be issued on payment of such fee as is specified in Schedule II.

9. **Conditions of certification.** (1) An environmental laboratory shall –

- (a) comply with all relevant provisions of the Act, rules and regulations;
- (b) carry out all tests and analyses, measurements, experimental studies and investigations with due diligence and in accordance with such guidelines, procedures and methods as may be stipulated by the Agency;
- (c) carry out and maintain record of calibration of its equipment and apparatus;
- (d) follow the quality control and quality assurance procedures established by the Agency and participate in performance, system audits, quality control and quality assurance programs organized by the Agency;
- (e) keep its premises neat and clean at all times;
- (f) allow any member of the Committee or any officer of the Agency, duly authorized in this behalf, to enter and inspect equipment and apparatus used in conducting tests and analyses and the reports and records in respect thereof;
- (g) retain records of all tests and analyses and measurements conducted by it for a period of three years from the date thereof;
- (h) take adequate safety measures and precautions against fire hazards and accidents including provision of first-aid facilities;
- (i) ensure availability in its store of adequate stocks of chemicals, back-up equipment and apparatus, and spare parts;
- (j) ensure that it fulfills the criteria laid down in regulation 5 at all times, and that if at any stage any equipment, apparatus or staff is required to be replaced, the replacement equipment, apparatus or replacement staff is of equivalent or qualifications and experience, respectively;
- (k) display the certificate issued to it under regulation 8 and a list of its fees for various tests and analyses and measurements, at a prominent place in its premises; and
- (l) submit to the Agency an annual report including a list of all tests and analyses conducted by it relating to the environment.

(2) An Environmental Laboratory shall not, without the prior permission, in writing, of the 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 Agency;
- (b) sub-contract any work to any other EPA Sindh Certified laboratory Certification of an environmental laboratory shall not be transferable to any other laboratory.

10. **Validity of certification.** (1) Subject to sub-regulation (2), a certificate issued under regulation 8 shall, unless earlier suspended or revoked, be valid for a period of two years from the date of issue; provided that all certificates issued immediately before the commencement of these regulations shall continue to be valid for a period for which they were granted.

(2) If an application for renewal of certification is made under regulation 13, the certificate shall continue to remain valid till the application for renewal is decided.

11. **Bar to function without certification.** No laboratory shall function as an environmental laboratory unless it is granted certification under these regulations.

12. **Test reports.** An Environmental Laboratory shall issue test reports in the form set out in Schedule-VI containing the results of tests and analysis carried out in discharge of its functions as provided under clauses (a) and (b) of regulation 3.

13. **Renewal of certification.** (1) An application for renewal of certification shall be made in the form set out in Schedule-IV, to the Agency at least thirty days prior to the date of expiry of the certificate issued under regulation 8.

(2) An application for renewal shall be accompanied by a copy of the annual report of the activities including Environmental Audit report of environmental laboratory prepared by third party.

(3) An application for renewal shall be dealt with, scrutinized and decided exactly in the same manner as an application for certification and the provisions of these regulations relating to an application

for certification shall, mutatis mutandis, apply to an application for renewal of certification.

(4) The fee for renewal of certification shall be payable at the rate specified in Schedule II, and the certificate issued on receipt thereof shall also be in the form set out in Schedule V.

14. **Revocation or suspension of certification.**- (1) Without prejudice to any other action that may be taken against an environmental laboratory under the Act, Rules or regulations or any other law for the time being in force, the Agency may, by an order in writing stating the reasons therefore, revoke a certification, or suspend it for such period as the Agency deems fit, if the environmental laboratory-

- (a) fails to comply with any of the conditions of certification listed in regulation 9;
- (b) violates aids or abets in the violation of, any of the provisions of the Act, rules or regulations;
- (c) issues any report which is false, or which is designed to misrepresent or conceal or suppress any material fact;
- (d) has obtained certification through fraud or misrepresentation;
- (e) fails or ceases to perform or is rendered incapable of performing any of the functions of an environmental laboratory listed in regulation 3; or
- (f) no longer fulfills the criteria of certification as an environmental laboratory as laid down in regulation 5; or

(2) The Agency shall, before revoking or suspending a certification, provide the environmental laboratory an opportunity of being heard.

(3) Where any order of revocation or suspension has been passed, the laboratory shall forthwith surrender its certificate to the Agency who shall make an entry of the revocation or suspension thereon.

(4) Certificate shall be returned to the laboratory on expiry of the suspension period or on restoration of the certification in appeal, after the Agency has made necessary entry thereon.

(5) Where certification of an environmental laboratory has been revoked, it shall not be eligible to apply again for certification until lapse of at least one year from the date of such revocation or for such period as the Agency may, after considering the reasons submitted by environmental laboratory, deem fit.

15. **Appeal.**- (1) Any person aggrieved by an order of the Agency on an application for certification or an application for renewal of certification or by an order revoking or suspending, or refusing to revoke or suspend, a certification may, within thirty days of the date of communication of the impugned order, file an appeal with the Environmental Protection Tribunal, as provided under section 27.

(2) The appeal shall be in such form and be accompanied by such fees as may be prescribed in the rules made in this behalf.

16. **Repeal and Savings.** (1) The provisions of the National Environmental Quality Standard (Certification of Environmental Laboratories) Regulations, 2000, to the extent of the Province of Sindh are hereby repealed.

(2) All orders made, notification issued, actions taken under the repealed Rules shall remain in force until amended, altered or repealed by the provisions of these Regulations.

**DIRECTOR GENERAL
SINDH ENVIRONMENTAL PROTECTION AGENCY**

SCHEDULE I
(see regulations 4 and 13)

APPLICATION FOR GRANT/RENEWAL OF CERTIFICATION AS AN ENVIRONMENTAL LABORATORY

Part A. GENERAL INFORMATION:

1. Name of laboratory.
Address.
Tel.
Fax.
Email.
2. Type of laboratory (please tick appropriate box):
 Government Public sector Semi- autonomous body
 Autonomous body Private sector other (please specify)
 Mandate or purpose of laboratory (please tick appropriate box and specify nature and field of operation):
 Research and development.
 Quality assurance.
 Quality control.
 Other (please specify).
3. Year of establishment:
4. Area of laboratory: sq.ft) (please attach copy of approved building (plan and equipment layout plan).
5. Has the laboratory been certified by any other authority? Yes No
If yes, please specify. _____

Part B. STAFF:

7. List of total scientific and technical staff:
(please attach list in the following form along with a copy of bio-data of Chief Executive).

S.No.	Name.	Designation.	Qualifications (with specification).	Experience in analytical Laboratory work No of (No. of years)
(1)	(2)	(3)	(4)	(5)

Part C. EQUIPMENT:

8. List of significant analytical equipment and apparatus:
(Please attach list in the following form of functional equipment only).

S.No	Name of equipment/ apparatus (with make).	Year of manufacture.
(1)	(2)	(3)

9. Which of the Sindh Environmental Quality Standards parameters can be measured (other than those mentioned at entry No. 8 above) using wet analysis methods
10. Back-up equipment and apparatus in the laboratory instrumental and any services agreement for repair and maintenance of workshop for equipment/apparatus.
 Yes No. If yes, please specify: _____

Part D. CHEMICALS:

11. (a) Whether analytical grade chemicals are available in store for 6 months 12 months 2 years . Mention expiry date of chemicals.
(b) What is source for supply of chemicals.
Local purchase Direct import.

Part E. REPORTING SYSTEM:

12. Does the laboratory has computerized data handling facilities?
 Yes No.
13. Are there other facilities available in the laboratory?
 Yes No. If yes, please specify:_____ .
14. Whether adequate facilities for collection and storage of samples are available:
 Yes No.
15. Whether waste handling procedures and facilities for waste disposals are available:
 Yes No.

Part F. EXPERIENCE:

16. When did the following activities started?
(a) Analytical work: _____
(b) Environment related work: _____
17. List of some significant environment-related analytical work and research studies carried out, indicating the sponsors and beneficiaries (in case of application for renewal, attach copy of annual report of activities)_____
18. Does the laboratory provide training in environment related laboratory techniques?
 Yes No. If yes, please specify_____
19. Total current annual budget: Rs.
20. List revenue generated from environment-related analytical work during the last five years

SCHEDULE II

[See regulations 4 (2) , 5 (1)(d), 8(3) and 13(4)]

RATES OF FEES IN RESPECT OF AN APPLICATION FOR GRANT OR RENEWAL OF CERTIFICATION

S.No.	Name of fee.	Rate (Rs).
1.	Scrutiny fee.	20,000/=
2.	Certification fee	50,000/=
3.	Issue of duplicate certificate.	20,000/=
4.	Renewal of certification	50,000/=

SCHEDULE III
 [See regulations 5(1) (c) and 5(2)]
SCIENTIFIC AND TECHNICAL STAFF OF AN ENVIRONMENTAL LABORATORY

S. No	Title or equivalent.	Qualification.	Experience (minimum)	Number required (minimum)
(1)	(2)	(3)	(4)	(5)
	1. Chief Analyst.	Ph. D., M.Phil or M. Sc. (Analytical Chemistry preferably Physical/ Organic/ Inorganic Chemistry).	For Ph.D. 3 years for M.Phil. 5 years and for M.Sc. 7 years in analytical laboratory work testing of air/ water pollutants, noise, effluents or wastes preferably with regard to the National Environmental Quality Standards parameters.	One.
	2. Analyst.	M.Sc. or M.Phil. (Analytical Chemistry preferably Physical/ Organic/Inorganic Chemistry).	For M.Phil. 1 year and for M.Sc. 3 years in analytical laboratory work preferably in analysis of effluents or wastes.	Two.
2.	Deputy Analyst and/ or Assistant Analyst.	B.Sc (with chemistry as one of the major subject).	5 years and 3 years for Deputy Analyst and Assistant Analyst, respectively, in analytical laboratory work preferably with regard to the National Environmental Quality Standards parameters testing.	Three.
4.	Laboratory support staff.	F. Sc (with chemistry as one of the major subject).	1 year in analytical laboratory work.	Three.

Note. The number of analysts, Deputy/ Assistant Analysts and laboratory support staff may be reduced if the laboratory is to be certified for testing only some pollutants or Sindh Environmental Quality Standards parameters [see regulation 5(2)].

SCHEDULE IV

[See regulations 5(1) (c) and 5(2)]

ANALYTICAL EQUIPMENT AND APPARATUS OF AN ENVIRONMENTAL LABORATORY

S.No	Description.	
1.	<p><u>Analytical Instruments.</u></p> <p><u>A-.ForLiquidEffluents/Wastes:</u></p> <p>At least one of -</p> <ul style="list-style-type: none">• Spectrophotometer;• Atomic Absorption Spectrophotometer;• High Performance Liquid Chromatograph; or• Gas Chromatograph;and the following laboratory apparatus and wet analysis facilities-• ConductivityMeter;• pH meter;• Analytical Balances;• Biology Oxygen Demand determination facilities;• Liquid Effluent Samplers;• Thermometer/temperature measuring devices;• Incubator (minimum range 15-40° C);• Furnaces;• Ovens;• Refrigerators ; and• A-grade volumetric glass apparatus. <p><u>B. For Gaseous Emissions:</u></p> <ul style="list-style-type: none">• At least one of Air/Dust Sampler;• Analyzer (continuous monitoring and portable) for measuring oxides of sulfur oxides of nitrogen, carbon monoxide, hydrogen fluoride and hydrogen sulfides;• Smoke Analyzer or Ringlemann Scale; or• Emission Analyzer. <p><u>C. For Noise:</u></p> <ul style="list-style-type: none">• Sound Level Meter with equivalent noise level measuring facilities; and• Noise Frequency Analyzer.	
2.	Back-up equipment and apparatus.	Adequate stocks in store.
3.	Calibration.	Arrangements for regular calibration and checks for proper maintenance of record pertaining
4.	Chemicals.	Adequate stocks and store and assured regular source of supply.
5.	Test Reporting System.	Comprehensive and scientific system of reporting test results supported by data handling facilities.

SCHEDULE V

[See regulations 8(2) and 13(4)]

**SINDH ENVIRONMENTAL PROTECTION AGENCY
CERTIFICATE
REGARDING
CERTIFICATION AS AN ENVIRONMENTAL LABORATORY**

In exercise of power conferred by clause (k) of sub section (1) of section 6 of the Sindh Environmental Protection Act, 2014, the Provincial Agency is pleased to certify the laboratory mentioned below as an Environmental Laboratory.

Name. _____

Address. _____

Certificate No. _____

1. This certification is valid for (delete items not applicable):

- (a) Liquid effluents/wastes.
- (b) Gaseous emissions.
- (c) Noise.
- (d) Only the following Sindh Environmental Quality Standards parameters:

2. This certification is subject to the conditions laid down in regulation 9 of the Sindh Environmental Quality Standards (Certification of Environmental Laboratory) Regulations, 2014.

3. _____ This certificate is valid until unless earlier suspended or revoked.

Dated. _____

Director General
Karachi.

SCHEDULE-VI

(See regulation 12)

(NAME OF THE ENVIRONMENTAL LABORATORY THAT CARRIED OUT THE ANALYSIS)
CHEMICAL ANALYSIS TEST REPORT

Report reference No: _____ Date. _____

Name of industry: _____

Address: _____

Telephone No. _____

Nature of sample: _____

Date of sample received: _____ (Grab/Composite). _____

Date of sample collection: _____

Sample collected/sent by: _____

Date of completion of analysis: _____

S.No.	Parameters	NEQS Limits.	Concentration.	Method used.	Remarks.
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A. **Field Analysis**

B. **Lab. Analysis**

Sindh Environmental Quality Standards.

1. Sample analyzed by: _____

Name of Chief Analyst with seal: _____

2. Signature of incharge of the environmental laboratory _____

Name: _____

Designation: _____

Dated: _____

