



ENVIRONMENT PROTECTION DEPARTMENT

Government of the Punjab
National Hockey Stadium, Lahore.



CERTIFICATION AS AN ENVIRONMENTAL LABORATORY

In exercise of power conferred by clause (K) of sub section (1) of section 6 of the Punjab environmental protection Act 1997 (XXXIV of 1997). The provincial agency is pleased to certify the laboratory mentioned below as an environmental laboratory.

Name: Solution Environmental Analytical Laboratory (SEAL)
Address: Plot#12, Water Avenue, Green View Society, off Kacha Jail Road, Kot Lakhpat, Lahore

Certificate No. 165 /DD(Lab)/EPA 05/2019

1. This certification is valid for:
 - a) Liquid effluents/wastes as per Annexure – A
 - b) Drinking water quality as per Annexure – B
 - c) Industrial gaseous emissions Annexure – C
 - d) Ambient air quality Annexure – D
 - e) Motor Vehicle Exhaust and Noise (in use vehicle) Annexure – E
 - f) Subject to fulfillment of conditions of certificate as per Annexure – F
2. This certification is subject to the conditions laid down in regulation 9 of the National environmental quality Standards (Certification of Environmental Laboratories) Regulations, 1999.
3. This certificate is valid until 17.05.2022 unless earlier suspended or revoked.

Dated: 17.05.2019


Director General





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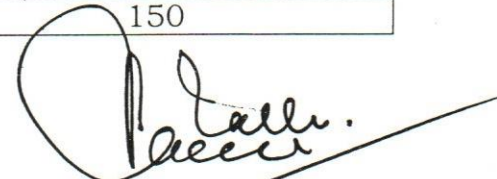
Annexure - A

To Environmental Laboratory Certificate No. 165/DD(Lab)/EPA/05/2017
in respect of "Certification as an Environmental Laboratory" in favor of Solution
Environmental Analytical Laboratory (SEAL), Plot#12, Water Avenue, Green View
Society, off Kacha Jail Road Kot Lakhpat, Lahore.

LIQUID EFFLUENTS/WASTES

No.	Liquid Effluent/Waste Parameter	Capacity per Month (No. of Samples)
1.	Temperature or Temperature Increase	200
2.	pH value (H^+)	200
3.	Biochemical Oxygen Demand (BOD_5) at $20^\circ C$	30
4.	Chemical Oxygen Demand (COD)	150
5.	Total Suspended Solids (TSS)	200
6.	Total Dissolved Solids (TDS)	200
7.	Oil and Grease	200
8.	Phenolic Compounds (as Phenol)	100
9.	Chloride (as Cl^-)	150
10.	Fluoride (as F^-)	150
11.	Cyanide (as CN^-) total	150
12.	Sulphate (SO_4^{2-})	150
13.	Sulphide (S^{2-})	150
14.	Ammonia (NH_3)	100
15.	Cadmium, Chromium (trivalent and hexavalent), Copper, Mercury, Nickel, Silver, Arsenic, Iron, Boron	200 Each
16.	Lead, Zinc, Barium	150 Each
17.	Chlorine	150

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Annexure – B

To Environmental Laboratory Certificate No. 165/DD(Lab)/EPA/05/2017
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Society, off Kacha Jail Road, Kot Lakhpat, Lahore.

DRINKING WATER QUALITY

No.	Drinking water quality parameter	Capacity per month (No. of Samples)
1.	E. Coli, Thermo tolerant Coliform, Total Coliform	80

Physical

No.	Drinking water quality parameter	Capacity per month (No. of Samples)
1.	Colour, Taste, Odour, Turbidity, TDS, PH	200 Each
2.	Total Hardness (as CaCO ₃)	150

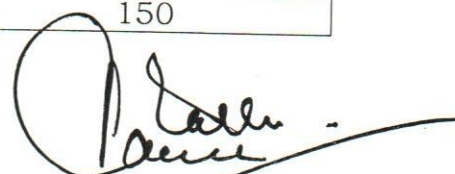
Chemical

No.	Drinking water quality parameter	Capacity per month (No. of Samples)
1.	Aluminium (Al), Antimony (Sb), Arsenic (As), Barium (Ba), Boron (B), Chromium (Cr), Copper (Cu)	200 Each
2.	Cadmium (Cd)	150
3.	Chloride (Cl)	200

Toxic Inorganic

No.	Drinking water quality parameter	Capacity per month (No. of Samples)
1.	Cyanide (CN), Fluoride (F ⁻), Nitrate (NO ₃), Nitrite (NO ₂ ⁻), Residual Chlorine	150 Each
2.	Lead (Pb), Mercury (Hg), Nickel (Ni)	200 Each
3.	Zinc (Zn)	150

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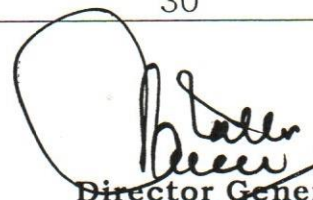
Annexure - C

To Environmental Laboratory Certificate No. 167/DD(Lab)/EPA/05/2017
in respect of "Certification as an Environmental Laboratory" in favor of Solution
Environmental Analytical Laboratory, Plot#12, Water Avenue, Green View
Society, off Kacha Jail Road, Kot Lakhpat, Lahore.

INDUSTRIAL GASEOUS EMISSIONS

No.	Industrial Gaseous Emissions parameters.	Capacity per month (No. of Samples)
1.	Smoke	150
2.	Particulate matter	30
3.	Sulphur Oxides	30
4.	Carbon Monoxide	30
5.	Lead	30
6.	Mercury	30
7.	Cadmium	30
8.	Arsenic	30
9.	Copper	30
10.	Antimony	30
11.	Zinc	30
12.	Oxides of Nitrogen	30

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Annexure - D

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AMBIENT AIR QUALITY

No.	Ambient air quality parameters	Capacity per month (No. of Samples)
1.	Sulphur Dioxide (SO ₂)	30
2.	Oxides of Nitrogen (NO)	30
3.	Oxides of Nitrogen (NO ₂)	30
4.	Suspended Particulate Matter (SPM)	10
5.	Respirable Particulate Matter PM ₁₀	10
6.	Respirable Particulate Matter PM _{2.5}	10
7.	Carbon Monoxide (CO)	30

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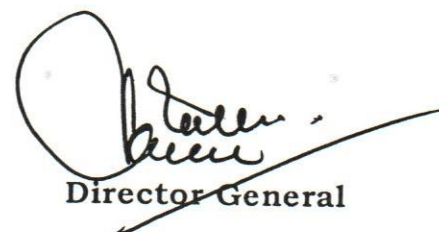
Annexure - E

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MOTOR VEHICLE EXHAUST AND NOISE (IN USE VEHICLE)

No.	Parameters	Capacity per month (No. of Samples)
1.	Smoke	30
2.	Carbon Monoxide	30
3.	Noise	50

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Annexure - F

Conditions of certification

(1) The environmental laboratory shall:

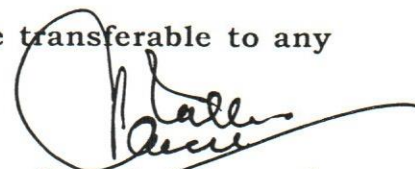
- Carry out all tests and analyses, measurements, experimental studies and investigations with due diligence and in accordance with such guidelines, procedures, and methods as may be stipulated by the provincial Agency;
- Carry out and maintain record of calibration of its equipment and apparatus;
- Follow the quality control and quality assurance procedures established by the provincial agency and participate in performance, system audits, quality control and quality assurance programs organized by the provincial agency;
- Keep its premises neat and clean at all times;
- Allow any member of the committee or any officer of the provincial 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;
- Retain records of all tests and analyses and measurements conducted by it for a period of three years from the date thereof;
- Take adequate safety measures and precautions against fire hazards and accidents including provision of first-aid facilities;
- Ensure availability in its store of adequate stocks of chemicals, back-up equipment and apparatus, and spare parts;
- 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 better, specifications, or qualifications and experience, respectively;
- 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
- Submit to the provincial 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 provincial agency:

- 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 Provincial Agency;
- Charge more than the rates as may be fixed from time to time by the provincial agency for specified tests and analysis; or
- Sub-contract any work to any other laboratory.

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

Dated: 17.05.2019


Director General

