F.No. Q-15018/15/2016-CPW

Government of India
Ministry of Environment, Forest and Climate Change
(CP Division)

Prithvi-324, Indira Paryavaran Bhavan, Jor Bagh Road, New Delhi -- 110 003.

Dated, the 20th September, 2017

Te

M/s Nawal Analytical Laboratories, Plot No.100, New SIDCO Industrial Estate, Sri Nagar, Hosur – 635109. Tamil Nadu

Subject: Application for Renewal of Recognition of M/s Nawal Analytical Laboratorics, Plot No.100, New SIDCO Industrial Estate, Sri Nagar, Hosur – 635109, Tamil Nadu as Environmental Laboratory under the Environment (Protection) Act, 1986 – regarding.

Sir.

Lam directed to refer to your application submitted vide letter No. Nil dated 6th August. 2016 for renewal of recognition of your laboratory under Environment (Protection) Act, 1986. Based on the recommendations of the Expert Committee for Recognition of Environmental Laboratories in its 48th meeting held on 06.02.2017 and your acceptance of the revised terms and conditions at Annexure-III & IV of the Guidelines for recognition of Environmental Laboratories, this Ministry approves the renewal of recognition of M/s Nawal Analytical Laboratories, Plot No.100, New SIDCO Industrial Estate, Sri Nagar, Hosur – 635109, Tamil Nadu for five years, as shall be notified in the Gazette of India.

- 2. As sought in your aforementioned application, M/s Nawal Analytical Laboratorics may undertake the following tests:
 - i. **Physical Tests:** Conductivity, Colour, pH, Fixed & volatile solids, Total solids, Total dissolved solids, Total suspended solids, Turbidity, Temperature, Velocity & discharge measurement of industrial effluent stream, Flocculation test (Jar test). Odour, Salinity, Settleable solids and Sludge Volume Index (SVI)
 - ii. Inorganic (General & Non-metallic): Acidity, Alkalinity, Ammonical nitrogen. Chloride, Chlorine residual, Dissolved oxygen, Fluoride, Total hardness, Total kjehldal nitrogen (TKN), Nitrite nitrogen, Nitrate nitrogen, Phosphate, Sulphate, Bromide, Carhon dioxide, Chlorine demand, Iodine, Sulphite, Silica, Cyanide and Sulphide
 - iii. Inorganic (Trace metals): Boron, Cadmium, Calcium, Chromium Total, Chromium Hexavalent, Copper, Iron, Lead, Magnesium, Mercury, Nickel, Potassium, Sodium, Sodium absorption ratio, Zinc, Arsenic, Aluminium, Barium, Manganese, Selenium, Silver, Tin, and Antimony
 - iv. Organics (General) and Trace Organics: Bio-chemical oxygen demand (BOD), Chemical oxygen demand (COD), Oil & grease, Phenol, Pesticide (Organo-chlorine, Organo nitrogen-phosphorous), Total organic carbon (TOC), Adsorbable organic

- halide (AOX). Surfactants, Tannin & lignin, Poly-chlorinated biphenyls (PCB), Polynuclear aromatic hydrocarbons (PAH), Organic carbon (in solid) and Carbon/Nitrogen ratio
- v. Microbiological: Total coliform, Faecal coliform, Faecal streptococci. E.coli, Total plate count, and Enterococcus
- vi. **Toxicological:** Bioassay method for evaluation of toxicity using fish and measurement of toxicity factor using zebra fish
- vii. Biologieal: Planktonic identification count, Chlorophyll and P/R ratio
- viii. **Hazardous Waste:** Preparation of Leachate (TCLP extract/water estract), Ignibility (Flash point), Toxicity and Measurement of heavy metals/ pesticides in the waste/leachate
- ix. Soil/ Sludge/ Sediment and Solid Waste: Boron, Cation Exchange Capacity (CEC). Electrical Conductivity, Nitrogen available, Organic carbon/ matter (chemical method), pH, Phosphorous (available), Phosphate (ortho), Phosphate (total), Potassium, SAR in soil extract, sodium. Soil moisture, TKN, Calorific value, Ammonia, Bicarbonate, Calcium, Calcium carbonate, Chloride, Colour, Exchangeable Sodium Percentage (ESP), Gypsum requirement, Heavy metal, Magnesium, Nitrate, Nitrite, PAH, Pesticide, Potash (available). Sulphate, Sulphur, TOC, and Total water soluble salt
- x. Ambient Air/ Fugitive Emissions: Nitrogen dioxide (NO₂), Sulphur dioxide (SO₂), Total suspended particulate matter. Respirable suspended particulate matter (PM₁₀), Ammonia, Carbon monoxide, Chlorine, Fluoride, Non Methane Hydrocarbon, Lead. Methane, Ozone, Benzene Toluene Xylene (BTX), Polycyclic aromatic hydrocarbon (PAH), Benzo-a-pyrine & others, PM_{2.5} and Volatile Organics Carbon
- xi. Stack Gases/ Source Emission: Particulate matter, Sulphur dioxide, Velocity & flow, Carbon dioxide, Carbon monoxide. Temperature. Oxygen. Oxides of nitrogen. Acid mist, Ammonia, Chlorinc, Fluoride (particulate), Fluoride (gaseous). Hydrochloric acid, Total hydrocarbon, Hydrogen sulphide, and Carbon disulphide
- xii. Noise Level: Noise level measurement (20 to 140 dba) and Ambient noise & source specific noise
- xiii. Meteorological: Ambient temperature. Wind direction, Wind speed, Relative Humidity, and Rain fall
- 3. The laboratory shall compulsorily participate in the Analytical Quality Control (AQC) exercise conducted by the Central Pollution Control Board (CPCB) at least once a year to ascertain the capability of the laboratory and analyses carried out and shall submit quarterly progress reports to this Ministry.
- 4. Periodic surveillance of the recognized environmental laboratory will be undertaken by this Ministry/ CPCB to assess its proper functioning, systematic operation and reliability of data generated at the laboratory.

- 5. It is also mandatory for the laboratory to have requisite accreditations of the NABL/1SO 9001 and OHSAS and its renewal as per accreditation rules. Permission in para 2 above is subject to such accreditations and renewal, as applicable.
- 6. The laboratory should compulsorily follow the accepted Terms & Conditions. In case of serious non-compliance of any of the Terms and Conditions, the laboratory may be black-listed for a minimum period of two years and civil/ criminal proceedings, as applicable, may be initiated for performing functions on behalf of the Government in an unauthorized manner.

Yours faithfully.

(Dr. Susan George K.)

Scientist 'D' Tel. No. 011-24695439

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Copy to:

- 1. Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, New Delhi 110032.
- 2. Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai 600 032
- 3. Additional Principal Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (SEZ), Ist and IInd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai 34
- 4/ IT Division, MoEF&CC, New Delhi 110003: for uploading on MoEF&CC website