

F. No. Q-15018/40/2017-CPW
Government of India
Ministry of Environment, Forest and Climate Change
(CP Division)

Agni-233, Indira Paryavaran Bhavan,
Jor Bagh Road,
New Delhi – 110 003.
Dated, the 20 December, 2019

To

M/s Kadam Environmental Consultants
871/B/3, Nr. Himalaya Machinery
GIDC Makarpura
Vadodara-390010
Gujarat

Subject: -Recognition of M/s Kadam Environmental Consultants, 871/B/3, Nr. Himalaya Machinery, GIDC Makarpura, Vadodara-390010, Gujarat as Environmental Laboratory under the Environment (Protection) Act, 1986 – regarding.

Sir,

I am directed to refer to your application dated: Nil 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 60th meeting held on 30.08.2019 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 Kadam Environmental Consultants, 871/B/3, Nr. Himalaya Machinery, GIDC Makarpura, Vadodara-390010, Gujarat as shall be notified in the Gazette of India. **Considering the current validity of mandatory accreditations/certifications of the laboratory, this renewal shall be valid up to 26.03.2020**

2. As sought in your aforementioned application M/s Kadam Environmental Consultants, Vadodara 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, Flocculation test (jar test), Odour, Salinity, Settleable solids and Sludge volume index.
- 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, Carbon dioxide, Chlorine demand, 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, Cobalt and Vanadium..
- iv. **Organics (General) and Trace Organics:** Bio-chemical oxygen demand (BOD), Chemical oxygen demand (COD), Oil & grease, Phenol, Pesticide ((Organo-chlorine, Organo nitrogen-phosphorous), Surfactants, Polynuclear aromatic hydrocarbon (PAH) each, Organic Carbon (in solid) and Carbon/Nitrogen ratio.
- v. **Microbiological Tests:** Total Coliform, Faecal Coliform, Faecal streptococci, E. coli, Total Plate count.
- vi. **Toxicological Tests:** Bioassay method for evaluation of toxicity using fish, Measurement of toxicity factor using zebra fish (dimensionless toxicity test).
- vii. **Biological Tests:** Benthic organism identification and count, Macrophytic identification, Planktonic identification count, Measurement of various diversity index and Chlorophyll.
- viii. **Hazardous Waste:** Preparation of Leachate (TCLP extract/water extract), Corrosivity, Reactivity, 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,

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TKN, Calorific value, Ammonia, Bicarbonate, Calcium, Calcium carbonate, Chloride, Colour, Exchangeable sodium percentage (ESP), Heavy metal, Magnesium, Mechanical soil analysis, Nitrate, Nitrite, PAH, Pesticide, Potash (availbale), Sulphate, Sulphur, TOC, Total water-soluble salt and Water holding capacity.

- x. **Ambient Air/ Fugitive Emissions:** Nitrogen dioxide (NO₂), Sulphur dioxide (SO₂), Total Suspended particulate matter, Reparable suspended particulate matter (PM₁₀), Ammonia, Carbon monoxide, Chlorine, Fluoride, Non methane hydrocarbon, Lead, Methane, Ozone, Benzene Toluene Xylene, Polycyclic aromatic hydrocarbon (PAH) Benzo-a- pyrine & others, PM_{2.5}, Volatile Organics Carbon.
- xi. **Stack Gases/ Source Emission:** Particulate matter, Sulphur dioxide, Velocity & flow, Carbon dioxide, Carbon monoxide, Temperature, Oxygen, Oxides of nitrogen, Acide Mist, Ammonia, Chlorine, Fluoride (Gaseous), Hydro-Chloric Acid, Total Hydro carbon, Hydrogen Sulphide, Carbon disulphide.
- xii. **Noise Level:** Noise level measurement (20 to 140 db (A)), Ambient Noise & Source-specific Noise.
- xiii. **Meteorological:** Ambient temperature, Wind direction, Wind speed, Relative Humidity, Solar radiation and Rainfall.

3. Further, the following analysts have been approved for recognition as Government Analysts.

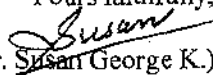
- (i) Mr. Ramesh G. Kotasthane
- (ii) Ms. Sapana S. Amin
- (iii) Ms. Ashal B. Patel

4. 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.

5. 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.

6. It is also mandatory for the laboratory to have requisite accreditations of the NABL/ ISO 9001 and OHSAS and its renewal as per accreditation rules. This recognition is subject to such accreditations and renewal, as applicable. **The laboratory may approach this Ministry for further extension of validity of recognition after renewal of the mandatory accreditations/ certification concerned.** Such application for extension of validity may be submitted to this Ministry in due advance, preferably before 6 months.

7. 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. 011-24695327
Email: susan.george@nic.in

Copy to:

1. Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, New Delhi - 110032.
2. Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhawan, Sector-10A, Gandhinagar-382010, Gujarat
3. Additional Principal Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Area Colony, Link Road-3, Ravishankar, Bhopal-462016
4. Director, IT Division, MoEF&CC, New Delhi-110003: for uploading on MoEF&CC website