## F.Ng. Q-15018/02/2017-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 1/2 2017

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M/s Mineral Engineering Services, 25/XXV, Club Road, Bellary - 583103 Karnataka

Subject: Application for Renewal of Recognition of M/s Mineral Engineering Services, 25/XXV, Club Road, Bellary – 583103, Karnataka as Environmental Laboratory under the Environment (Protection) Act, 1986 – regarding.

Sir,

I am directed to refer to your application submitted vide letter No. Nil dated 12<sup>th</sup> January, 2017 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 50<sup>th</sup> meeting held on 07.06.2017 and 16.06.2017 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 Mineral Engineering Services, 25/XXV, Club Road, Bellary – 583103, Karnataka for five years, as shall be notified in the Gazette of India.

- 2. As sought in your aforementioned application, M/s Mineral Engineering Services 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, Carbon dioxide, Chlorine demand, Iodine, Sulphite, Silica, Cyanide and Sulphide
  - iii. Inorganic (Trace metals): Boron, Cadmium, Calcium, Chromium Total, Chromium Ilexavalent, Copper, Iron, Lead, Magnesium, Mercury, Nickel, Potassium, Sodium, Sodium absorption ratio, Zinc, Arsenic, Aluminium, Beryllium, Barium, Lithium, Manganese, Selenium, Silver, Strontium, Tin, Antimony, 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, Tannin & lignin, Poly-chlorinated biphenyls (PCB), and Polynuclear aromatic hydrocarbons (PAH)

- v. Microbiological: Total coliform. Faccal coliform. Vaccal streptococci. E.coli. Total plate count, and Enterococcus
- vi. Toxicological: Bioassay method for evaluation of toxicity using fish, measurement of toxicity using Daphnia or other organism and measurement of toxicity factor using zebra fish
- vii. Biological: Macrophytic identification. Planktonic identification count. Chlorophyll and Primary productivity
- viii. Hazardous Waste: Corrosivity, Ignibility (Flash point), and Reactivity
- 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), H. Acid. Heavy metal, Magnesium, Mechanical soil analysis, Nitrate, Nitrite, PAH, Pesticide, Potash (available). Sulphate, Sulphur, Total water soluble salt and Water holding capacity
- x. Ambient Air/ Fugitive Emissions: Nitrogen dioxide (NO<sub>2</sub>), Sulphur dioxide (SO<sub>2</sub>). Total suspended particulate matter, Respirable suspended particulate matter (PM<sub>10</sub>). Ammonia, Carbon monoxide, Chlorine, Lead, Ozone, Benzene Toluene Xylene (BTX), Polycyclic aromatic hydrocarbon (PAH), Benzo-a-pyrine & others, PM<sub>2.5</sub> 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, Fluoride (particulate), Fluoride (gaseous), Total hydrocarbon. Hydrogen sulphide, and Carbon disulphide
- xii. Noise Level: Noise level measurement (20 to 140 dba) and Amhient noise & source specific noise
- xiii. Meteorological: Ambient temperature. Wind direction, Wind speed, Relative Humidity, Solar radiation 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 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, Karnataka State Pollution Control Board "Parisara Bhavan", #49, 4th & 5th Floor, Church Street, Bangalore-560001
- 3. Additional Principal Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (SZ), Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, Bangalore 560034
- 4. IT Division, MoEF&CC, New Delhi 110003: for uploading of MoEF&CC website