F.No.15018/44/2017-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 16th April ,2019

To

M/s Aavanira Biotech (P) Ltd. Kinetic Innovation Park, D-1 Block Plot No.18/1 Part, MIDC Chinchwad Pune 411019, Maharashtra

Subject: - Recognition of M/s Aavanira Biotech (P) Ltd., Kinetic Innovation Park, D-1 Block, Plot No.18/1 Part, MIDC Chinchwad, Pune 411019, Maharashtra as Environmental Laboratory under the Environment (Protection)Act. 1986.

Sir.

I am directed to refer to your application dated: 17.07.2017 for recognition of your laboratory under Environment (Protection) Act, 1986. Based on the recommendations of the Expert Committee for Recognition of Environmental Laboratories in its 58th meeting held on 26th March, 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 recognition of M/s Aavanira Biotech (P) Ltd., Kinetic Innovation Park, D-1 Block, Plot No.18/1 Part, MIDC Chinchwad, Pune 411019, Maharashtra for five years, as shall be notified in the Gazette of India.

2. As sought in your aforementioned application M/s Aavanira Biotech (P) Ltd., Pune 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, Odour, Salinity, Settleable solids and Sludge volume index (SVI).
- 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, Carbon dioxide, Sulphite, Silica 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, Beryllium, Barium, Lithium, Manganese, Selenium, Silver, 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), Total organic carbon (TOC), Surfactants, Polynuclear aromatic hydrocarbon (PAH) each, Organic Carbon (in Solid) and Carbon/Nitrogen ratio.
- v. Microbiological: Total coliform, Faecal Coliform, Faecal streptococci, E. coli and Total Plate Count
- vi. **Toxicological Tests:** Bioassay method for evaluation of toxicity using fish after 96 hrs and Measurement of toxicity factor using Zebra fish.
- vii. **Biological Tests:** Benthic organism identification and Count, Planktonic identification count and Chlorophyll.
- viii. **Hazardous Waste:** Preparation of Leachate (TCLP extract/water extract), Reactivity, Measurement of heavy metals/pesticide 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, Sodim, Soil moisture, TKN, Calorific Value, Ammonia, Bicarbonate, Calcium, Calcium carbonate, Chloride,

Colour, Exchangeable sodium percentage (ESP), Heavy metal, Magnesium., Nitrate, Nitrite, Sulphate, TOC and Water holding capacity.

- x. Ambient Air/ Fugitive Emissions: Nitrogen dioxide as NO₂, Sulphur dioxide (SO₂), Total suspended particulate matter, Respirable suspended particulate matter, Ammonia, Carbon monoxide, Lead, Ozone, Benzene Toluene Xylene (BTX), Polycyclic aromatic hydrocarbon (PAH) Benzo-a-pyrine & others, PM_{2.5}, Volatile Organic Carbon.
- xi. Stack Gases/ Source Emission: Particulate matter, Sulphur dioxide, Velocity & flow, Carbon dioxide, Carbon monoxide, Temperature. Oxygen, Oxides of nitrogen. Ammonia, Chlorine, Fluoride (Gaseous), Total Hydro carbon, 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. Further, the following analysts have been approved for recognition as Government Analysts.
 - (i) Dr. Bikash Ajit Aich
 - (ii) Ms. Sarita Jayant Upadhye
 - (iii) Dr. Neeta Hiten Zatakia

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. Permission in para 2 above is subject to such accreditations and renewal, as applicable.

7. The laboratory should compulsorily follow the accepted Terms & Conditions. In case of serious noncompliance 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.
- Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point. 3rd and 4th floor. Opp. Cine Planet, Sion Circle, Rd Number 8, Jay Bharat Mata Nagar. Air Force Quarters, Sion. Mumbai, Maharashtra 400022
- Additional Principal Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur-440001.

4. Director, IT Division, MoEF&CC, New Delhi-110003: for uploading on MoEF&CC website