



ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ
Karnataka State Pollution Control Board

“ಪರಿಸರ ಭವನ”, 1 ರಿಂದ 5ನೇ ಮಹಡಿಗಳು, ನಂ. 49, ಚರ್ಚ್ ಸ್ಟ್ರೀಟ್, ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ ರಾಜ್ಯ, ಭಾರತ
“Parisara Bhavan”, 1st to 5th Floor, # 49, Church Street, Bangalore - 560 001, Karnataka State, India

No.KSPCB/SEO-INFRA/SENSOR-STP/2020-21/ 4792

Date:

29 JAN 2021

OFFICE MEMORANDUM

Sub: Mandatory installation of Sensors for STPs- Reg

- Ref: 1.CPCB guidelines on Specification of Sensors dated: 10/07/2018.
2. CPCB guidelines via Circular dated: 07/08/2020.
3. Proceedings of the meeting held on 18/06/2020 with the Chief Secretary,
Government of Karnataka
4. Directions of the Board in its meeting No 227 dated 13/01/2020.
5. Technical Committee Meeting dated: 19/09/2020.
6. Expression of Interest Called by the Board dated. 2.10.2020
6. Technical Presentation held with the Vendors/ Manufacturers dated:

14/12/2020

Preamble:

As a part of the Action plan to prevent the discharge of untreated / partially treated sewage into the water bodies as per the Honorable NGT Directions in OA 125/2017, it was decided to monitor the quality of treated sewage through installation of sensors. Meanwhile the Central Pollution Control Board in its circular dated 07/08/2020 as shown vide ref.2 has directed for the installation of sensors. The details are as below:

SI No	Details	Directions of CPCB
1	Parameters to be analyzed by the	pH, TSS, COD, BOD and Flow

	Sensors	meter
2	Last Date for STPs being operated in Million Plus cities	31/01/2021
3	Last date for STPs being operated in the remaining cities and towns	31/07/2021

The Board had called for Expression of Interest in leading Newspapers on 02/10/2020 to submit the details of sensors technologies. Many Companies submitted the EOs. A presentation was held on 14/12/2020 to evaluate the Technologies in association with the Indian Institute of Science(IISc) Bangalore. After the detailed deliberations, it was decided to strictly follow the guidelines of CPCB for the technology to be adopted for the sensors. The brief Guidelines are as shown below:

S.No	Parameter	Type of Measurement	Type of Sensor	Communication Protocol
1.	pH	Inline	Ion selective glass electrodes	RS 485 communication with Modbus
2.	Total Suspended Solids	Inline	Turbidity to TSS correlation with nephelometric technique	RS 485 communication with Modbus
3	BOD	Inline	UV-Vis Spectrophotometry & combustion(Double beam with entire spectrum scanning	RS 485 communication with Modbus
4	COD	Inline	UV-Vis Spectrophotometry & combustion(Double beam with entire spectrum scanning	RS 485 communication with Modbus
5.	Flow	Inline	Electromagnetic flow measurement	RS 485 communication

				with Modbus
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The list of suppliers of the Sensors who had participated in the EOI, with compliance to the CPCB guidelines are available in the Website of the Board(www.kspcb.gov.in), to help the STP owners identify the approved technology. The results and reports of the Sensors are required to be synced with the KSPCB dashboard inly through the Communication Protocol approved by CPCB. The same will be monitored by the Board at the Command Control Center. In future, if any other suppliers / Manufacturers approach the Board in compliance with the CPCB guidelines, the same will be reviewed by the technical committee and the list will be updated from time to time.


MEMBER SECRETARY


To

1. All the Chief Environmental Officers for Information
2. All Senior Environmental Officers at Head Office
3. All RSEOs at Zonal Offices to ensure strict compliance
4. All the Regional Officers to ensure strict compliance
5. Chief Scientific Officer
6. Office Copy.