## ONLINE CEMS DATA SUBMISSION PROCEDURE AT CPCB

- 01. All industrial units received directions from CPCB under Section 5 of EP Act 1986 to install online system for monitoring emission and effluent discharges from designated outlets should follow the procedure as detailed here.
- O2. The responsibility of selection of suitable equipment for Online Monitoring System, the data transmission and final data submission lies with the industrial unit. Any excuses for wrong data, delayed data submission, etc blaming third party will not be accepted. Every unit will ensure adequate infrastructure capacity built or hired for the purpose of data submission continuously.
- 03. CPCB has identified the parameters for all the industrial sectors and same are mentioned at FAQs. In case of any doubt on number of parameters required for monitoring and the prescribed limits applicable, the written clarifications should be obtained from SPCB/PCC, same authority which issues *Consents to Operate* under Water & Air Acts.
- 04. CPCB requires every stack and outlet identified in *Consent to Operate* documents to be monitored for those parameters communicated through Directions issued by CPCB. In case of any clarification required, it will be obtained in writing from the concerned SPCB/PCC.
- 05. The Online Monitoring System involved broadly three segments selection and installation of analysers/ equipment, data transmission and data submission.
- 06. Each segment-wise details are given here:

#### A. MONITROING EQUIPMENT/ ANALYSERS:

- a. As mentioned at FAQs on CPCB Website, Industrial units are free to choose any type/ make of analysers including the indigenous equipment, meeting the prerequisites. The unit should give calibration protocol, periodicity/ frequency of calibration and ± variation specified when matched with manually monitored results.
- b. The analysers should have capability to generate digital output and communicate directly with the software for 100% data & information on health of the analysers (diagnostics).

#### **B. DATA TRANSMISSION:**

- a. Every unit is required to provide leased-line Internet facility to ensure data and information from the analysers is transmitted continuously without any time-delay.
- b. In case of non-availability of leased-line, a broadband connection may be installed, as a temporary arrangement. In no case data transmission through data card/ dongle is accepted.

### C. DATA SUBMISSION:

- a. At present, the data submission is allowed through instrument suppliers and the data integrators. The platform on which the data provided should have basic capabilities, such as generation of alerts.
- b. Each unit is expected to test and verify all basic features before making regular submission of data. The basic features are listed here:
  - i. The platform should receive and display data as it is generated every second or minute in real-time. The information on health of the instruments is also communicated simultaneously for display along with the data on pollutants.
  - ii. It should provide 15-minute average values in tabular form and generate trend graph for each parameter at each stack or outlet.
  - iii. It should compare the 15-minute average values with the prescribed standards and generate alerts and reports on exceedances.
  - iv. All exceedances should be communicated in the form of SMS Alerts and through e-Mail to the concerned officials at industry, SPCB and CPCB.
  - v. Each industrial unit is expected to respond for the SMS alerts received at <a href="mailto:cems.cpcb@nic.in">cems.cpcb@nic.in</a> and sector specific e-Mail ID, such as <a href="mailto:paper-cpcb@nic.in">paper.cpcb@nic.in</a> in case of pulp& paper industry. The problem and time taken for its resolution is provided. The industry can also inform CPCB on all related issues affecting Online Monitoring such as scheduled shut down of operations, process upsets, raw material & fuel quality issues, etc.
  - vi. The real-time data acquired by the instrument suppliers and the data integrators is sent to a Central Portal of CPCB through a API. The industrial units will check their data regularly on Central Portal of CPCB and any delay reported here is taken up immediately with the concerned agencies.
  - vii. Data availability at central portal of CPCB is the responsibility of each industrial unit.
  - viii. The standard statistical reports in the form of graphs, tables, etc will be basic features of the platform. New reports will be generated on need-basis from time to time.
- c. The units asked to provide camera and flow meters in cases of Zero Liquid Discharge (ZLD) are required to follow basic procedure to ensure that the data in the form of camera feed and the flow is submitted.
  - The camera feed and flow data in an industrial unit should be linked and provided at same place. The units have to provide dedicated leased-line of Internet for continuous transmission of camera feed.

- ii. The camera feed should be integrated with all camera controls (pan, zoom, tilt) and shown on central platform, where data on other parameters is displayed/ submitted. CPCB doesn't accept pre-requirement of any plug-in software for data display or data submission.
- iii. The historical data of camera recordings should be kept for a minimum period of 2 months in a DVR at industrial unit, accessible to CPCB and SPCB at all times.
- iv. Each industrial unit will provide separate flow meter for each stream. In no case two different streams such as Low-Total-Dissolved-Solids (LTDS) and High-Total-Dissolved-Solids (HTDS) will use common flow meter.
- v. Flow and cumulative totalizer data is shown in the display and hourly and daily reports are generated. The exceedances are recorded as per the limits given in Consent to Operate and alerts ar generated, whenever exceedances occur.
- D. COMPLIANCE: Compliance with the Directions issued by CPCB is complete by following above procedure in addition to the instructions given from time to time.

## **MECHANISIM FOR DATA SUBMISSION TO CPCB**

# **PART-I**

#### CPCB GIVES DIRECTIONS TO INDUSTRY TO INSTALL OCEMS



INDUSTRY AFTER ENQUIRING IN MARKET, FINALISES INSTRUMENT SUPPLIER AND INSTRUMENT



INSTALLATION COMPLETED AT THE INDUSTRY BY INSTRUMENT SUPPLIER



DATA INTEGRATION DEMONSTRATED ON INSTRUMENT SUPPLIER'S TEMPORARY PORTAL BY INSTRUMENT SUPPLIER TO INDUSTRY



INDUSTRY REGISTERS WITH BASIC INFORMATION ABOUT THEIR INSTRUMENTATION AND PROCESSES AT CPCB INDUSTRY REGISTRATION PORTAL (www.assetlogiciq.com)



INDUSTRY PROVIDES CPCB THE DETAILS ON INSTRUMENTS (IN REQUISITE FORMAT) AND COPY OF CONSENT TO OPERATE THROUGH THE INSTRUMENT SUPPLIER FOR APPROVAL OF DATA SUBMISSION

(ON EVERY FIRST WORKING DAY OF THE WEEK)



CPCB CHECKS THE DETAILS AS PER FORMAT (SMS ALERT GENERATION, REGISTRATION PORTAL ETC.) AND ACCORDS APPROVAL WITH CORRECTIONS, IF ANY

(BEFORE LAST WORKING DAY OF THE WEEK)



INDUSTRY GETS INTEGRATION DONE WITH INSTRUMENT SUPPLIER'S PORTAL WITH CORRECTIONS AS SUGGESTED BY CPCB



INDUSTRY STARTS SUBMITTING OCEMS DATA TO INSTRUMENT SUPPLIER'S PORTAL



INDUSTRY SUBMITS INFORMATION TO NODAL OFFICERS OF CPCB FOR COMPLIANCE



INSTRUMENT SUPPLIER GENERATES SMS ALERTS & SENDS TO CPCB OFFICIALS, INDUSTRY REPRESENTATIVES



**DATA ANALYSED BY CPCB FOR COMPLIANCE** 

# **MECHANISIM FOR DATA SUBMISSION**

## **PART-II**

### DATA IS AVAILABLE AT DIFFERENT INSTRUMENT SUPPLIERS PORTALS



INSTRUMENT SUPPLIER PUSHES DATA TO CPCB CENTRAL PORTAL THROUGH STANDARDISED API (APPLICATION PROGRAMMING INTERFACE)



SMS WILL BE GENERATED THROUGH CENTRAL PORTAL OF CPCB ONCE COMPLETE DATA INTEGRATION TAKES PLACE (AS OF NOW 1200 INDUSTRIES ARE INTEGRATED)

**Action by instrument suppliers** 

**Action by CPCB** 

**Action by Industry**