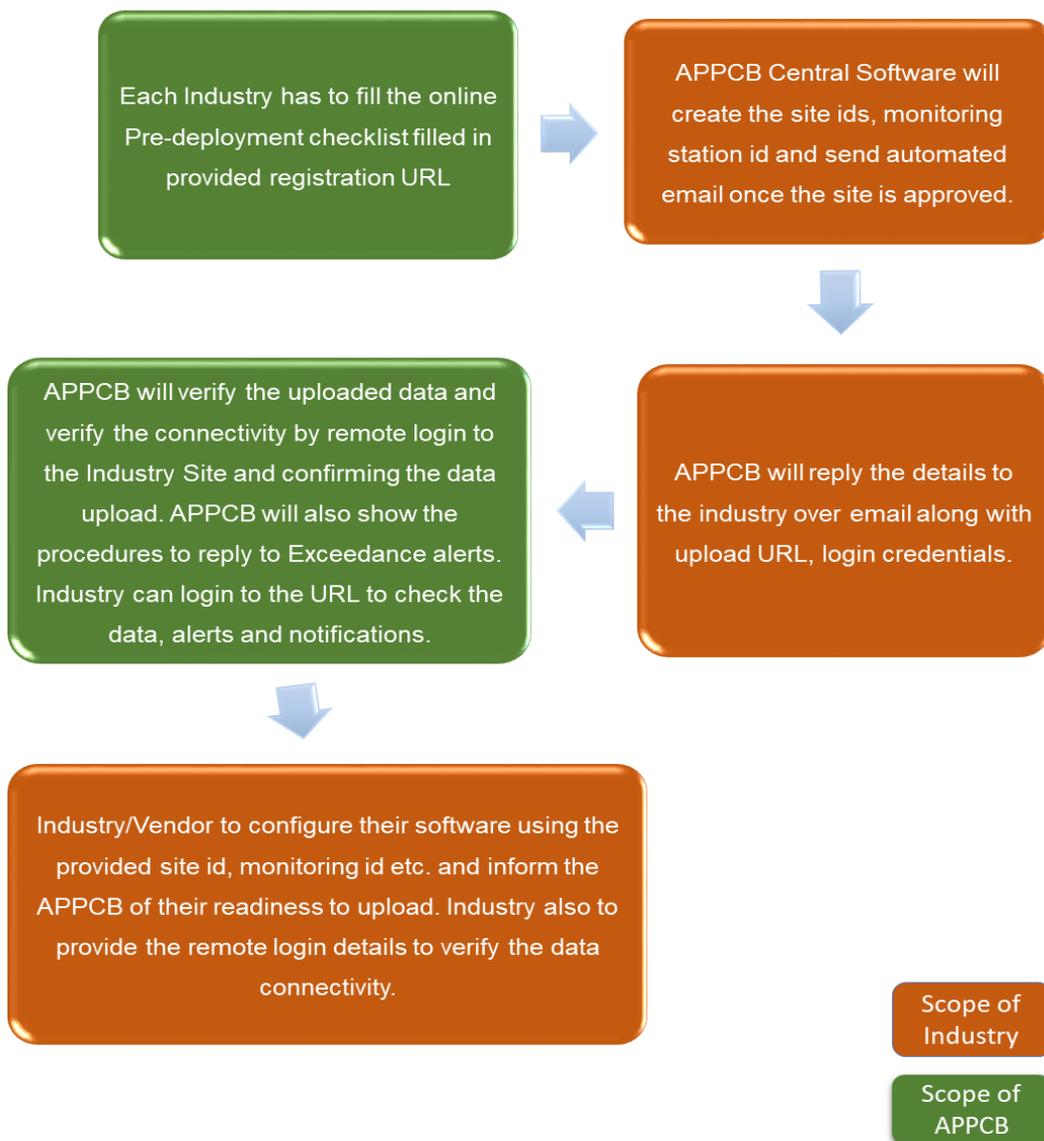# FAQ on Real Time Online Data connectivity to APPCB server

APPCB

FAQ on Real Time Online Data connectivity to APPCB server
Monitoring of the Effluent &Emission Monitoring System

1. What is the connectivity Procedure to upload data to Andhra Pradesh State Pollution Control Board (APPCB)?

Connectivity Procedure:

Each Industry has to fill the online Pre-deployment checklist filled in provided registration URL

APPCB Central Software will create the site ids, monitoring station id and send automated email once the site is approved.

APPCB will verify the uploaded data and verify the connectivity by remote login to the Industry Site and confirming the data upload. APPCB will also show the procedures to reply to Exceedance alerts. Industry can login to the URL to check the data, alerts and notifications.

APPCB will reply the details to the industry over email along with upload URL, login credentials.

Industry/Vendor to configure their software using the provided site id, monitoring id etc. and inform the APPCB of their readiness to upload. Industry also to provide the remote login details to verify the data connectivity.

Scope of Industry

Scope of APPCB

2. What is the URL for Industry registration?
   http://183.82.2.202/registration.html
3. What is the name and format of the uploaded data to the Central Server?

   The uploaded data will be transmitted using HTTP REST interface to the provided URL

   The zip file containing the metadata and data should be uploaded. The format is defined in the Open API Document

   The zip file name should be SiteID_MonitoringID_UploadTime.zip. The SiteID, MonitoringID values will be provided by APPCB Central Software Team as part of the Industry Onboarding process.

   Each zip file should be uploaded per monitoring station. The sample file format is uploaded separately on the APPCB website

   Please note that the upload time should be uploaded immediately, if there is a lag, the software will reject the upload. All delayed data should be uploaded through the delayed URL only.

4. Which parameters to be sent, any specific or all gas parameter?

   All parameters specified as per CPCB guidelines has to be sent to APPCB.

5. What is the frequency of the File? Do we need instantaneous data or average record?
   Transmission has to be at 1 Minute frequency. Average data with poll frequency of 10 seconds for 1 minute to be captured and sent. The data should be with the proper quality codes. Refer to question 6 for details on Quality Code.

   If Transmission is not done within 15 minute, then it should be posted as delayed data.

   Transmission time to the data time shouldn't have more than 15 min lag. If delayed, post as delayed data only, otherwise feed will be rejected. Delayed Data has to be transmitted with Data Quality Code "L".

6. What is the File Transmission Mechanism, FTP, and REST?

   There is no FTP based transmission. All upload has to HTTP Rest based transmission. The URL will be provided once the Pre-deployment form for the site is completed. There are very specific URL for the site, so the URL is shared only once the Pre-deployment checklist is completed.

7. What is Data Quality Code?

   Here are the data quality code to be used while transmission of the data. For detail explanation of these, refer to ISO-7168 specifications.

Data Qualifier	Code
Calibration Drift	D
Calibration mode	C

Corrected datum	O
Estimated datum	E
faulty measurement	F
invalid datum	I
maintenance mode	M
no datum	N
usable datum	U
zero mode	Z
Delayed datum	L

8. Who will provide the ID's and how to we apply for it?

   The ID's will be generated by the APPCB Central Software Team and available through the registration link. Once the pre-deployment checklist are filled and submitted, the system will create the site and the corresponding ID's and send back to you in email. Usually, it will take one day to process the siteid creation as it goes through the verification and approval process. Ensure you provide proper email id during registration.

9. Is there any particular Nomenclature which we need to adopt for naming of the csv file?

   Zip file containing CSV data and Metadata file. File name to be

   SiteID_MonitoringID_UploadTime.zip $\rightarrow$ Data can be uploaded per Monitoring Station. The sample file format is uploaded on APPCB website.

10. Why do we need the metadata file to be uploaded along with data?

    There will be multiple versions of the upload format that will be transmitted from various sites as we enhance the specifications to include security features for the API.

11. Do we generate our own ID?
    No. The ID's will be shared from APPCB team, based on the Industry Details provided.

12. What is raw reading? Is the unprocessed data?

    Yes. These are the raw readings directly from the instruments. In case of 4-20mA output, the Raw Reading (RAW_READING) will be 10.2 in mA, and the converted and linearized reading (READING) will be 120 ppm. It is mandatory to send the raw reading and linearized reading to ensure that accuracy of data transmitted.

13. What is the time format that is desired?

Time has to be transmitted as Unix Timestamp. E.g. 6/9/2015, 12:00:00 AM IST will be equal to 1433788200 as Unix Time. Refer to http://www.epochconverter.com/.

14. What is SITE_ID, SITE_UID?

    SITE_ID will be the Industry MIS ID provided by APPCB. SITE_UID is the unique key for each Industry assigned by the software. SITE_UID will be generated by software and shared as part of the pre-deployment checklist email

15. What is UNIT_ID?

    UNIT_ID will also be an ID generated based on the Industry Details. This is the unique id associated for each of the different measurement units. A particular parameter can be measured in multiple units, this provides the correct unit id associated with the measurement.

16. What is the exact functionality of the monitoring unit ID?

    Monitoring unit ID corresponds to the Monitoring Station Location. E.g. RAW_MILL, BOILER_STACK, HOLDING_POND, EAST_GATE_AMBIENT, etc.

17. If there is a defined format, provide list of all parameter names and respective ID's?

    We will use the standard parameter names given in the Industry Details Sheet. Based on that the ID's will be shared.

18. Is ANALYZER_ID a unique ID for each analyzer given to each vendor specific analyzer?

    Yes. This will be a Unique ID for each analyzer based on its make and model. E.g. BAM -1020 Analyzer will have an id analyzer_23. This will be the same for all the Industries having that analyzer make and model.

19. Can Industry transmit data from SCADA or Local PC software?

    No. Industry has to transmit the data directly from the Analyzer without any intermediate or third party software. It has come from the analyzer directly through approved Clients with Open API Compliance. Industry should use data logger modules with approved Client Software to transmit the data to Andhra Pradesh State Pollution Control Board.