



मध्यप्रदेश प्रदूषण नियंत्रण बोर्ड
Madhya Pradesh Pollution Control Board

**An Integrated
&
Automated Pollution
Surveillance System
for
Effective Environmental
Governance**



M.P. Pollution Control Board

(A Statutory Body)

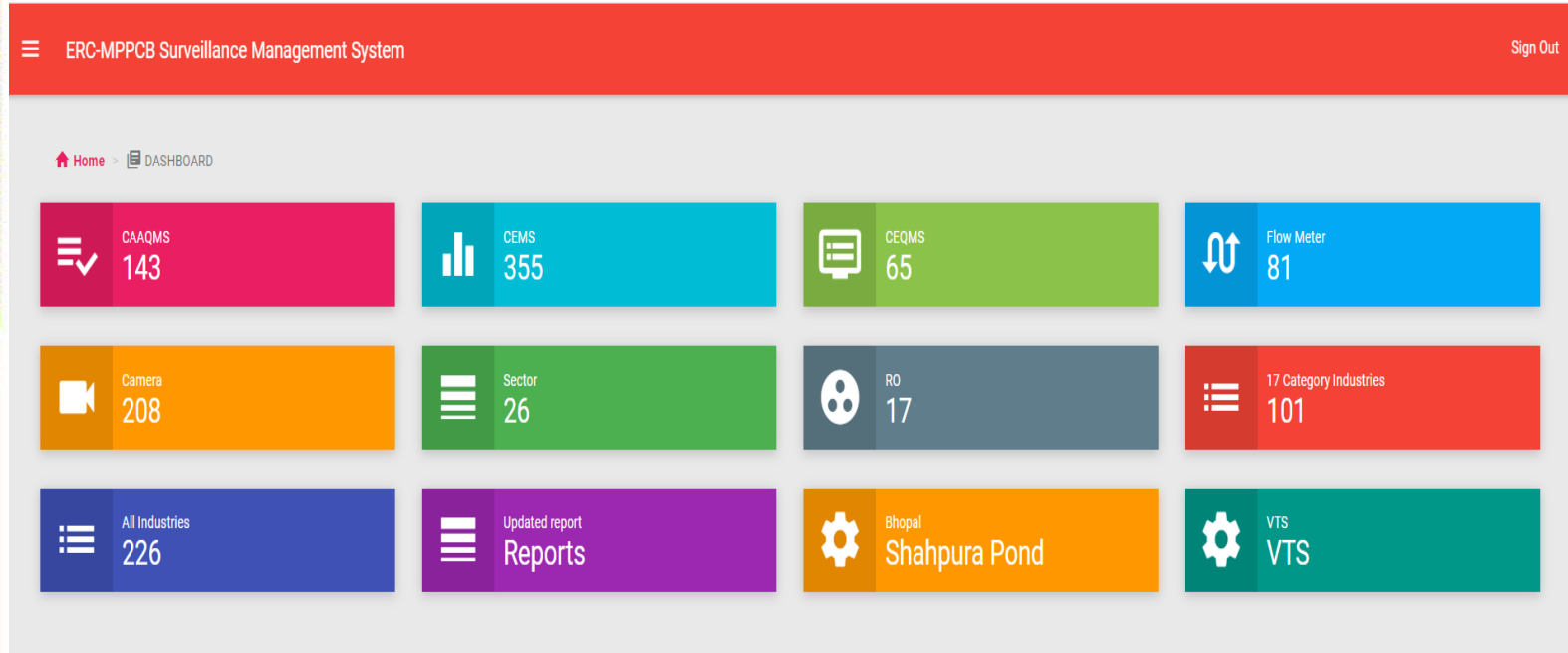


What Prompted the Innovation ?



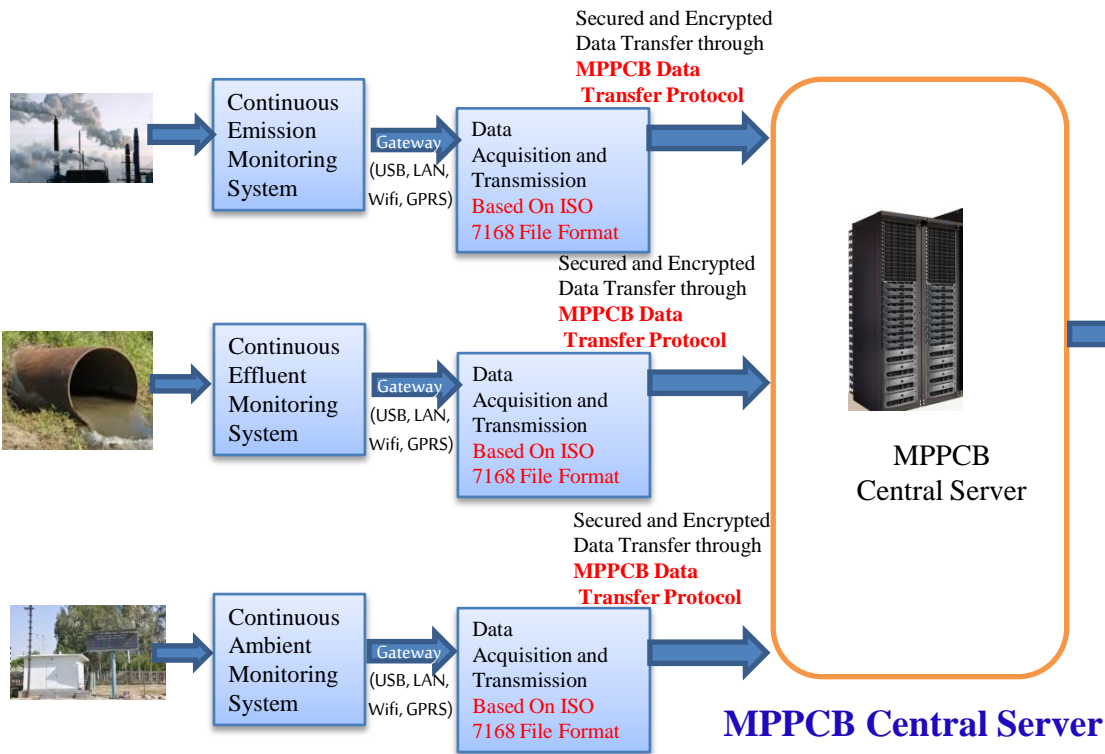
A Glimpse of Integrated Monitoring Solution

Live Remote Surveillance Dashboard







MPPCB Integrated RTM Data Transmission

An Overview of Online Real-time Monitoring System



Live Industrial Monitoring

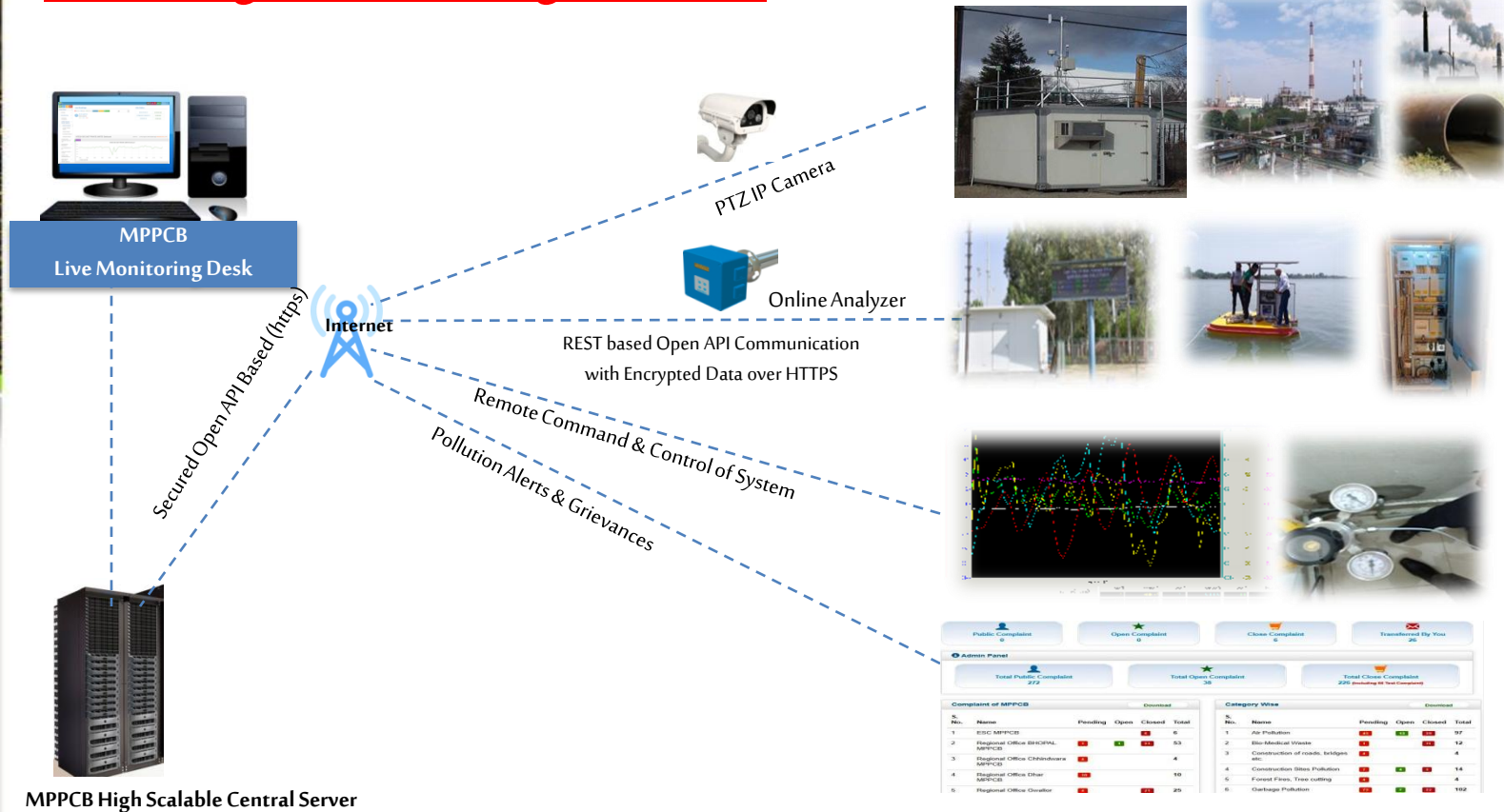
- 
 • Effective Environment Decision Making
- 
 • Live Monitoring of Pollution Levels
- 

 SMS Alerts Alert Emails
- Real Time Alerts on any Exceedance

| Station | PM ₁₀ | PM _{2.5} | NO _x | CO | SO ₂ | NH ₃ | O ₃ |
|------------|------------------|-------------------|-----------------|------|-----------------|-----------------|----------------|
| Bhopal | -30% | -23% | -69% | -39% | -27% | -7% | 8% |
| Damoh | -33% | -43% | 0% | 0% | 21% | - | 34% |
| Dewas | -18% | -6% | -33% | -18% | 40% | -33% | 34% |
| Gwalior JU | -32% | -52% | -71% | 1% | -22% | -17% | 6% |
| Indore | -30% | -38% | -41% | -50% | -37% | -42% | 49% |
| Jabalpur | -44% | -42% | -61% | -49% | -24% | -17% | 63% |
| Katni | -36% | -50% | -66% | -31% | -47% | -28% | 47% |
| Maibhar | -26% | -34% | -3% | 3% | -1% | - | - |
| Mandideep | -55% | -19% | -64% | -29% | -19% | -54% | 8% |
| Pithampur | -15% | -28% | -40% | -40% | -41% | -46% | -8% |
| Ratlam | -23% | 13% | -60% | - | -68% | - | - |

- Environmental Data for Common Citizens

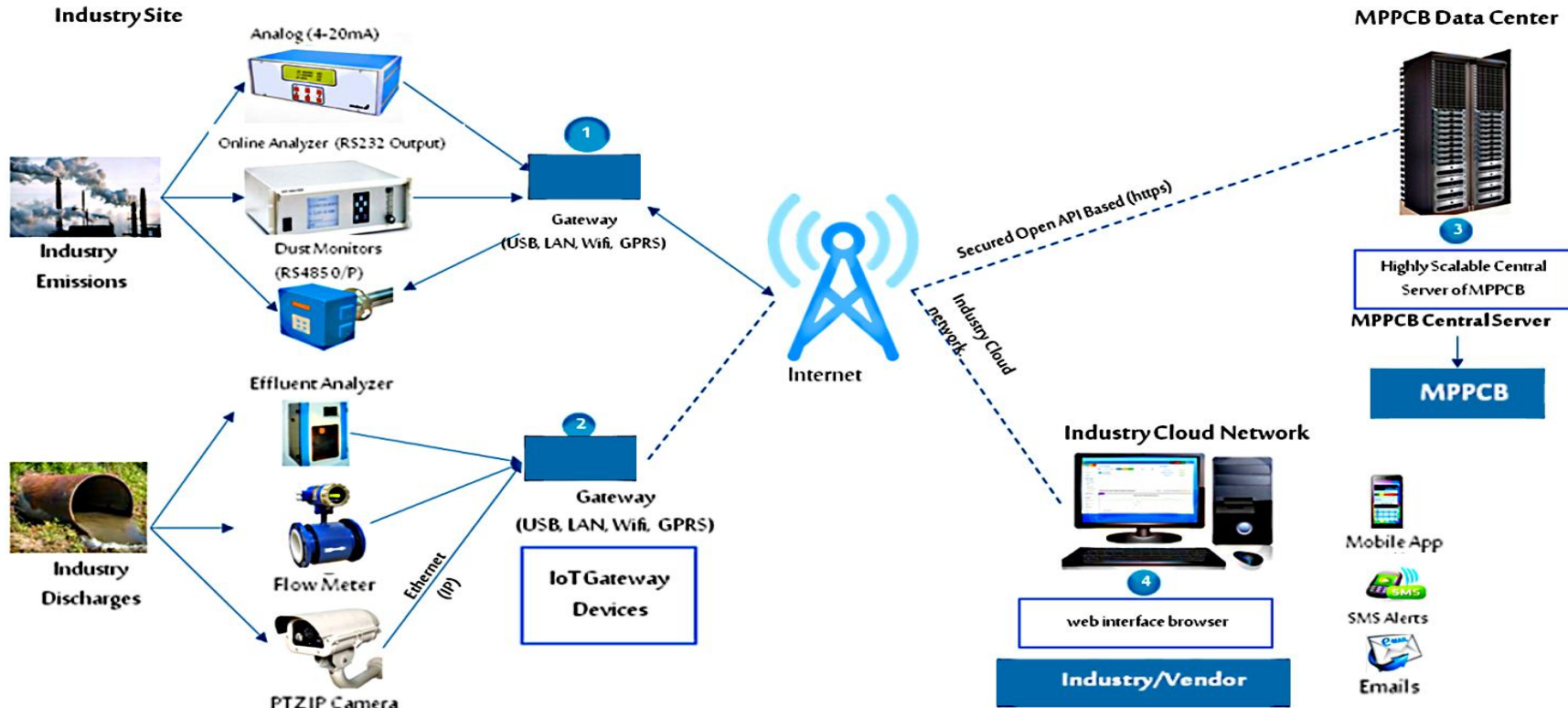
Real-time Integrated Environmental Surveillance

Promoting Ease of Doing Business



Remote Validation of Instruments & Data Quality

Derived a mechanism and initiated a process to check the performance of the analyzers remotely for the genuineness of monitoring data received at ESC, MPPCB. This has proved to be a landmark solution, acknowledged by the CPCB and later recommended to all the State Pollution Control Boards to adopt.



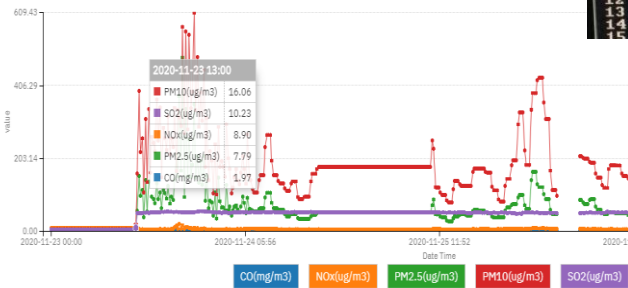
Site Audit Soln. for Communication Architecture

Check and verify Data logger, Data Converter, Network, IP tracing, System internals etc.



Average Report

HEG_CAAQMS - 15 Min - Average Data



```
Microsoft Windows [Version 6.0.6002.18005] Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Users\PC>tracert 15.206.79.241
Tracing route to ec2-15-206-79-241.ap-south-1.compute.amazonaws.com [15.206.79.241]
over a maximum of 30 hops:
  0  0 ms  0 ms  0 ms  103.85.92.65
  1  24 ms  27 ms  17 ms  103.85.92.1
  2  13 ms  43 ms  6 ms  static-89.247.98.14-tataidc.co.in [14.98.247.89]
  3  *  *  *  Request timed out.
  4  *  *  *  10.117.229.134
  5  40 ms  17 ms  21 ms  Request timed out.
  6  *  *  *  Request timed out.
  7  30 ms  50 ms  21 ms  10.117.227.229
  8  14 ms  13 ms  16 ms  121.241.90.69.static-ahmedabad.vsn1.net.in [121.241.90.69]
  9  39 ms  48 ms  25 ms  172.23.78.230
 10  77 ms  51 ms  74 ms  115.110.234.234.static.Mumbai.vsn1.net.in [115.110.234.234]
 11  70 ms  28 ms  27 ms  52.95.66.134
 12  52 ms  25 ms  24 ms  52.95.64.184
 13  62 ms  43 ms  51 ms  52.95.64.183
 14  52 ms  53 ms  55 ms  52.95.66.127
 15  48 ms  24 ms  24 ms  52.95.67.176
```

```
E:\Test_Decryption>Test_Decryption.exe
XX
XX
XX, XX
India
3 3
1541Temp analyzer_206 3 0 0
329Effluent mg/l 0 10.035179 76.29280279 3 0 0
1611TSS analyzer_201 3 0 0
329Effluent mg/l 0 10.035179 76.29280279 3 0 0
1501pH analyzer_97 3 0 0
329Effluent mg/l 0 10.035179 76.29280279 3 0 0
541 329 120 11181442 0 0 0 0 1 0 0 0 0 1 0 0 1
U 2.43
G11 329 120 11181442 0 0 0 0 1 0 0 0 0 1 0 0 1
U 6.55
501 329 120 11181442 0 0 0 0 1 0 0 0 0 1 0 0 1
U 4.17
E:\Test_Decryption>
```



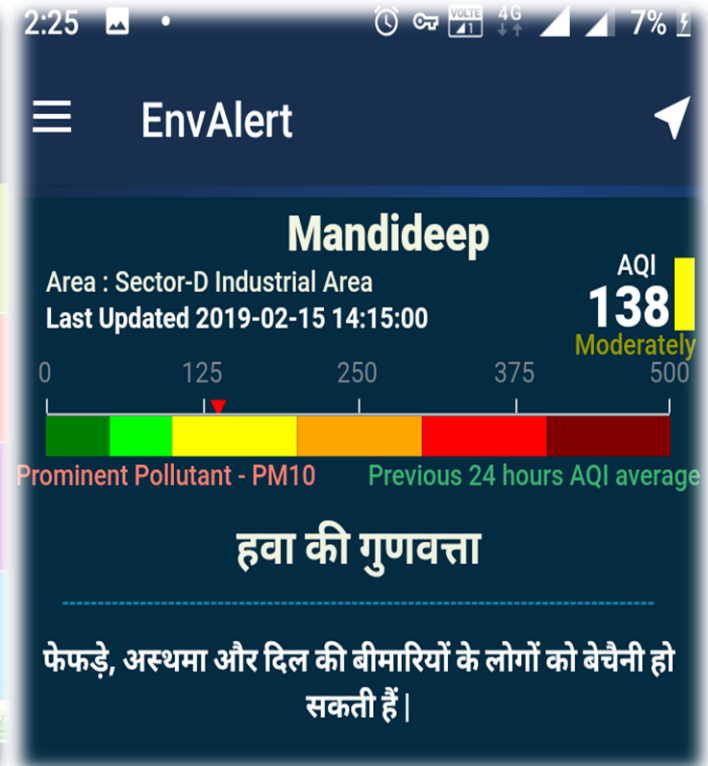
Facilitating the Community

Environment Alert - First ever in-house designed and developed mobile App for Citizens awareness and grievance redressal.



Engaging Wider Community for Awareness

The in-house developed 'EnvAlert' App makes the citizens aware about local pollution, AQI levels, Performance of city STPs, supports in redressing complaints etc.



Inter Departmental approach for Pollution Control

Inter departmental coordination tool for quick response to the pollution related complaints, routing through a single window system developed by the MPPCB




Public Complaint
0


Open Complaint
0


Close Complaint
6


Transferred By You
26

Admin Panel


Total Public Complaint
272


Total Open Complaint
38


Total Close Complaint
226 (Including 66 Test Complaint)

Complaint of MPPCB

Download

| S. No. | Name | Pending | Open | Closed | Total |
|--------|----------------------------------|---------|------|--------|-------|
| 1 | ESC MPPCB | | | 6 | 6 |
| 2 | Regional Office BHOPAL MPPCB | 1 | 1 | 51 | 53 |
| 3 | Regional Office Chhindwara MPPCB | 4 | | | 4 |
| 4 | Regional Office Dhar MPPCB | 10 | | | 10 |

Category Wise

Download

| S. No. | Name | Pending | Open | Closed | Total |
|--------|-------------------------------------|---------|------|--------|-------|
| 1 | Air Pollution | 45 | 13 | 39 | 97 |
| 2 | Bio-Medical Waste | 1 | | 11 | 12 |
| 3 | Construction of roads, bridges etc. | 4 | | | 4 |
| 4 | Construction Sites Pollution | 7 | 4 | 3 | 14 |
| 5 | Forest Fires, Tree cutting | 4 | | | 4 |

Technology Awareness Programmes

MPPCB Conducts training Programs for the target groups. The workshop helped in capacity building and skill enhancement. The ultimate outcome of all the workshops help in better implementation of environmental protocols in the State in its true spirit.



Emergency Response Centre
M.P. POLLUTION CONTROL BOARD

Three-day State level Workshop on
ONLINE REAL-TIME ENVIRONMENTAL MONITORING TECHNOLOGY
04 - 06 July 2017

Venue : Auditorium, Lake Conservation Authority, Bhopal



INTERNATIONAL CENTRE FOR SUSTAINABLE CARBON

Technology Collaboration Programme
by IBC



Environment Surveillance Centre, MPPCB
TRAINING WORKSHOP ON

**BEST PRACTICES AND HANDLING OF
CEMS IN EMISSION MONITORING**

19-22 JULY 2022



“Technology Exposure to the Participants under Green Skill Development Programme”

Tuesday, 15th January 2019

Venue – Environment Surveillance Centre, MPPCB, Bhopal

“Orientation Workshop for MPPCB Officials on Central Server Application for Real-time Monitoring”

Friday, 15th November 2019

Venue : New Conference Hall, MPPCB-HQ, Bhopal

“Interaction Meet with Suppliers and Service Providers of Online Real-Time Monitoring Systems”

Friday, 24th August 2018

Venue - conference Hall, HQ, MPPCB, Bhopal

ENVIRONMENT SURVEILLANCE CENTRE
M.P. POLLUTION CONTROL BOARD



WORKSHOP-CUM-REVIEW MEET ON POST IMPLEMENTATION OF
REAL-TIME MONITORING PROGRAMME IN MADHYA PRADESH STATE

December 11th, 2019
Venue – LCA Auditorium, Bhopal

MPPCB Solution Acknowledged at National Level



ए. सुधाकर
सदस्य सचिव
A. SUDHAKAR
Member Secretary

Emergency Response Centre
R.No-211
Dt. 02/6/18
MPPCB

केन्द्रीय प्रदूषण नियंत्रण
पर्यावरण, वन एवं जलवायु परिवर्तन :
(भारत सरकार)
CENTRAL POLLUTION CONTROL BOARD
Ministry of Environment, Forest & Climate
(Government of India)

No.C-12011/33/2017-18/Tech.
13th April, 2018-04-1

Dear Shri Mishra,

Please refer our earlier mail dated 23/03/2018, wherein SPCBs were advised to check tampering of OCEMS data through Remote Calibration for emission parameters.


In this context, it is again reiterated that for proper operation of OCEMS, regular calibration is an important activity to verify the data manipulation by some industrial units. Although this facility is available only for gaseous parameters (except PM & Effluent parameters), the exercise will enhance the understanding of monitoring mechanism (OCEMS) among the industries.

For this purpose, it is advised to please direct all such industries falling under 17 categories & Grossly Polluting Industries (GPI) to ensure that:

1. Calibration facility is available at the industry end.
2. Instruments are periodically calibrated & calibration data is also entered automatically into the system through the software installed at Industry and
3. Remote calibration facility is available at each gaseous OCEMS.

It is also requested that Remote Calibration facility should be made mandatory and should be made available at each industry on or before 31.05.2018, as initiated by MP-SPCB in the state.

With Regards

Yours sincerely,

(A. Sudhakar)

CE (ESC)
Dr. A. A. Mishra
Dr. J. C. Mishra
To,
Sh. A.A. Mishra
Member Secretary
MADHYA PRADESH POLLUTION CONTROL BOARD
Paryawaran Parisar, E-5, Arera colony,
Bhopal - 462016

DA /
Cems file for compliance -
Raj
23/04/2018

परिवेश भवन', सी.बी.डी.-कम-ऑफिस कॉम्प्लेक्स, पूर्वी अर्जुन नगर, दिल्ली-110032
'PARIVESH BHAVAN', C.B.D.-CUM-OFFICE COMPLEX, EAST ARJUN NAGAR, DELHI-110032
'HC' E: f 1-22 7387 TE' FA: 91-11-227707 e-r: il: r-udh'kar@'cb@'nic'li'



मध्यप्रदेश प्रदूषण नियंत्रण बोर्ड
Madhya Pradesh Pollution Control Board

Presentation to the SKOCH Award Jury

- Friday, January 6th, 2023 -

M.P. Pollution Control Board

Environment Surveillance Centre

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