

**BEFORE THE NATIONAL GREEN TRIBUNAL (SOUTHERN ZONE)  
CHENNAI**

**Original Application No 195 of 2016 (SZ)**

**IN THE MATTER OF:**

Tandur Citizens Welfare Society

..... Applicant

Versus

Government of Telangana & Ors.

.....Respondent(s)

**INDEX**

<b>S. No.</b>	<b>Particulars</b>	<b>Page No.</b>
01	Report of CPCB	01 - 04
02	Annexure 1: A copy of CPCB office order dated 02.02.2022 for constitution of Committee	05 - 07

**Date: 06.05.2022**

**Place: Chennai**



*H.D. Varalaxmi*  
**DEPONENT**  
**H.D. VARALAXMI, M. Tech**  
Regional Director  
CENTRAL POLLUTION CONTROL BOARD  
(MoEF & CC, Govt. of India)  
Regional Directorate (Chennai)  
2nd Floor, 77-A, South Avenue Road,  
SriBabdur Industrial Estate, Chennai - 600 058

**Report on Feasibility of Interlocking System in Industries  
having Online Continuous Emission Monitoring Systems  
(OCEMS)**

*Submitted before*

**The Hon'ble National Green Tribunal, Southern Zone, Chennai**

*In the matter of*

**Tandur Citizens Welfare Society**

**v/s**

**Government of Telangana & Ors. (OA No. 195/2016 (SZ))**

**(May 06, 2022)**



**Central Pollution Control Board**  
**'Parivesh Bhawan', East Arjun Nagar**  
**Delhi-11003**

## **Table of Contents**

1. Background .....	1
2. Inception of Online Continuous Effluent/Emission Monitoring System (OCEMS) in industries.....	2
3. Industrial Inter-Locking System.....	2
4. Assessment of feasibility of interlocking of industrial processes with OCEMS .	3
5. Steps taken by CPCB to ensure industrial compliance through OCEMS .....	4
6. Conclusion.....	4
Annexure-I: CPCB office order dated 02.02.2022 regarding constitution of Committee to asses the feasibility of interlocking sytem in industries having OCEMS .....	5

# **Report on Feasibility of Interlocking System in Industries having Online Continuous Emission Monitoring Systems (OCEMS)**

## **1. Background**

In the matter of Tandur Citizens Welfare Society v/s Government of Telangana & Ors., OA No. 195/2016 (SZ), filed before the Hon'ble NGT, Southern Zone, Chennai, the Telangana State Pollution Control Board in its report dated 26.07.2021 mentioned the following:

*“3. The OCEMS was functioning continuously without any interruption from January 2021 to till date. With regard to the production, there will not be any impact on production due to non-functional of the OCEMS. However, based on the directions of the Board, all the three cement industries (M/s. India Cements Limited, M/s. Penna Cement Industries Ltd and M/s. Cement Corporation of India Ltd.) have installed interlocking systems. The purpose of the interlocking system is that whenever the control systems fails, the feed of raw material is cut off automatically and the emissions are controlled.”*

Considering the fact regarding interlocking systems in cement industries, the Hon'ble NGT vide order dated 24.08.2021, directed as follow:

*“iv. The question of the interlocking system which has been introduced in cement factories can be extended to other industries as well where this Online Continuous Emission Monitoring System (OCEMS) is installed and State of Telangana and State Pollution Control Board are directed to take steps in this regard.*

*v. The Central Pollution Control Board (CPCB) is also directed to consider this aspect and implement the same in other States as well.”*

## **2. Inception of Online Continuous Effluent/Emission Monitoring System (OCEMS) in industries**

In order to strengthen the monitoring and compliance through self-regulatory mechanism, CPCB vide directions dated 05.02.2014 issued under Section 18(1)(b) of the Water (Prevention & Control of Pollution) Act, 1974, and 18(1)(b) of the Air (Prevention & Control of Pollution) Act, 1981 directed State Pollution Control Boards (SPCBs)/ Pollution Control Committees (PCCs) to ensure installation of Online Continuous Effluent/Emission Monitoring Systems (OCEMS) in 17 categories of highly polluting industries and common waste treatment facilities.

This step was taken to inculcate the habit of self-monitoring within the industries to ensure compliance of prescribed environmental standards. The OCEMS informs industries regarding the quality of effluent/emissions being discharged from stack/outlet on real-time basis and alerts them to take appropriate action in case of exceedance of pollutant parameters, to meet the prescribed environmental norms.

There are 4,247 industries under 17 categories of highly polluting industries, out of which 3,535 industries have installed OCEMS and provided data connectivity to CPCB and SPCB. For remaining 712 units, closure directions have been issued.

## **3. Industrial Inter-Locking System**

Many industrial sectors adopt interlocking system, where industrial operations are regulated with different control system such as instruments, devices, networks, etc. In such system, the control devices operate at pre-set parameters/range (such as temperature, pressure, etc.), failing which interlocking system get triggered/activated to regulate the process.

Such interlocking systems are used by industries to ensure quality control in product manufacturing, minimizing wastages/losses of raw-material/final product and to ensure safety in operations.

#### **4. Assessment of feasibility of interlocking of industrial processes with OCEMS**

In order to examine the feasibility of introduction of interlocking system in various industrial sectors having OCEMS, CPCB constituted a Committee, vide order no. CPCB/IPC-VI/OCEMS/Interlocking, dated 02.02.2022 (copy given at **Annexure-I**), comprising of the representatives of (i) National Environmental Engineering Research Institute (NEERI), Nagpur, (ii) National Chemical Laboratory (NCL), Pune, (iii) West Bengal Pollution Control Board, (iv) Maharashtra Pollution Control Board and (v) Central Pollution Control Board.

During the meetings held on 05.02.2022 and 02.05.2022, the Committee examined the matter and recommended the following:

- i. The purpose of OCEMS is to regulate and minimize inspection of industries on routine basis by bringing self-discipline in the industries to exercise self-monitoring and compliance. Further, through continuous access of effluent and emission data, SPCBs/PCCs and CPCB also ensure constant vigil on environmental compliance by industries.
- ii. OCEMS are linked to both CPCB and SPCB servers and SMS messages/alerts get generated in case of value of pollutant parameter exceeds prescribed environmental norms, non-acceptable variations in data and offline behaviour of OCEMS. The existing set up is adequate for self-monitoring and to initiate corrective action, including regulating the production process.
- iii. It is not recommendable to use OCEMS based interlocking for instant shutting down of industrial processes, as the same may pose risk to

safety, health hazard and uncontrolled emissions, due to incomplete chemical reactions/processing, especially in the industrial sectors such as chemical industries, copper smelters, thermal power plants etc.

## 5. Steps taken by CPCB to ensure industrial compliance through OCEMS

The real-time OCEMS values of environmental pollutants of trade effluent and emissions, discharged from industrial units are transmitted online to CPCB and concerned SPCB/PCC servers on 24x7 basis. The central software processes the data and in case of value of pollutant parameter exceeds prescribed environmental norms, an automatic SMS messages/alert is generated and sent to industrial unit, SPCB and CPCB, so that corrective measures can be taken by the industry immediately and appropriate action can be taken by concerned SPCB/PCC.

CPCB also carries out inspection-cum-monitoring of industries, selected on the basis of the real time data received through OCEMS installed in industries. Since 2016, on the basis of SMS alerts generated due to violations of environmental norms, CPCB has been carrying out inspection-cum-monitoring of 17 categories of highly polluting industries on random basis. In case of non-compliance, action against industry is taken under the provisions of Water Act, 1974, Air Act, 1981 and Environment (Protection) Act, 1986.

## 6. Conclusion

Considering the present status of OCEMS and also keeping in view the risk to safety, health hazard and uncontrolled emissions in case of sudden shut-down of processes, it is not recommendable to force industries to install interlocking system between production processes and OCEMS.





**केन्द्रीय प्रदूषण नियंत्रण बोर्ड**  
**CENTRAL POLLUTION CONTROL BOARD**  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार  
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE GOVT. OF INDIA

**OFFICE ORDER**

**CPCB/IPC-/OCEMS/Interlocking**

**02.02.2022**

**Sub: Constitution of the Committee to examine the feasibility of interlocking system in industries having Online Continuous Effluent/Emission Monitoring System (OCEMS).**

The Hon'ble NGT vide order dated 24.08.2021, in the matter of Tandur Citizens Welfare Society v/s. Govt. of Telangana & Ors., OA No. 195/2016 (SZ), directed Central Pollution Control Board (CPCB) to consider the aspect of interlocking system, which has been introduced in some of the cement industries in Telangana and implement the same in other industries where OCEMS systems are installed. The purpose of the interlocking system is that whenever the control system fails, the feed of raw material is cut-off automatically and the emissions are controlled.

02. To examine the matter, a Committee comprising of the following members is constituted:

Sl. No.	Name, Designation and Organization	Role
1	Shri B. Vinod Babu Sc. 'F' & Div. Head (IT), CPCB, Delhi	Chairman
2	Representative, CSIR- National Environmental Engineering Research Institute (NEERI), Nagpur	Member
3	Representative, CSIR-National Chemical Laboratory (NCL), Pune	Member
4	Representative, West Bengal Pollution Control Board	Member
5	Representative, Maharashtra Pollution Control Board	Member
6	Shri Nazimuddin Sc. 'F' & Div. Head (IPC-II), CPCB, Delhi	Member
7	Shri Abhijit Pathak Sc. 'D', AQMN Division, CPCB, Delhi	Member
8	Shri Ajay Aggarwal Sc. 'F' & Div. Head (IPC-VI), CPCB, Delhi	Member Convener

03. The 'Terms of Reference' of the Committee are as follows:

- i. To examine the feasibility of introduction of interlocking system in various industrial sectors, where OCEMS are installed.
- ii. The Committee may invite/nominate/co-opt expert members, industrial associations, etc., having expertise in the field of industrial process and pollution control.
- iii. The Committee may meet as often as necessary.

---

**'परिवेश भवन' पूर्वी अर्जुन नगर, दिल्ली-110032**  
Parivesh Bhawan, East Arjun Nagar, Delhi-110032  
दूरभाष/Tel : 43102030, 22305792, वेबसाइट/Website : www.cpcb.nic.in

---

- iv. The tenure of the Committee shall be for a period of three months from the date of issue of this office order.
- v. The Committee will submit its recommendations by 31.03.2022, for further consideration.
- vi. TA/DA reimbursement and sitting fees will be provided in accordance with the order dated 20/4/2017 of Hon'ble NGT, Principal Bench, New Delhi in the matter of O.A. No. 24 of 2011.
- vii. The expenditure in this regard will be met from the Budget Head "NGT 25%" of CPCB.

This is issued with the approval of Competent Authority, CPCB.

  
(Ajay Aggarwal)

Director & Div. Head, IPC-VI

To:

1. All the Members of the Committee  
(as per the list)

Copy to:

1. PS to MS : *for information of MS. please*
2. Div. Head (Law), CPCB, Delhi : *for information, please*

  
(Ajay Aggarwal)

To:

- 1 Shri B. Vinod Babu  
Sc. 'F' & Div. Head (IT),  
CPCB, Delhi
- 2 Director, CSIR- National Environmental Engineering Research Institute (NEERI),  
Nehru Marg,  
Nagpur- 440 020 : *with a request to nominate a representative.*
- 3 Director, CSIR-National Chemical Laboratory (NCL),  
Dr. Homi Bhabha Road,  
Pune - 411 008 : *with a request to nominate a representative.*
- 4 Member Secretary,  
West Bengal Pollution Control Board  
Paribesh Bhavan  
Building, No.10-A, Block -LA, Sector 3,  
Salt Lake City,  
Kolkata - 700 091 : *with a request to nominate a representative.*
- 5 Member Secretary,  
Maharashtra Pollution Control Board  
Kalpataru Point, 3rd& 4th floors  
Sion Matunga Scheme Road No. 6  
Opp. Cine Planet, Sion Circle, Sion (E),  
Mumbai 400 022 : *with a request to nominate a representative.*
- 6 Shri Nazimuddin  
Sc. 'F' & Div. Head (IPC-II),  
CPCB, Delhi
- 7 Shri Abhijit Pathak  
Sc. 'D', AQMN Division,  
CPCB, Delhi
- 8 Shri Ajay Aggarwal  
Sc. 'F' & Div. Head (IPC-VI),  
CPCB, Delhi

*A. Aggarwal*  
2/2/22