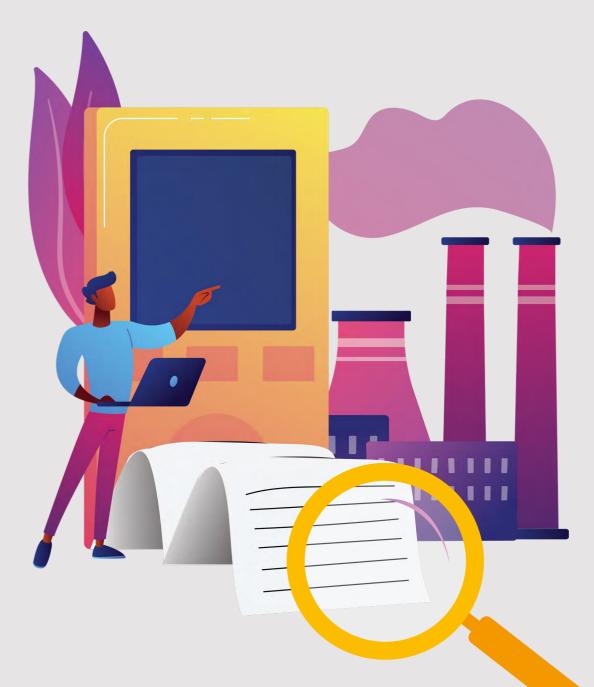


TRANSPARENCY INDEX

# RATING OF POLLUTION CONTROL BOARDS ON PUBLIC DISCLOSURE



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Maps are not to scale.

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#### TRANSPARENCY INDEX

# RATING OF POLLUTION CONTROL BOARDS ON PUBLIC DISCLOSURE

## **Contents**

Ab	brevia	tions	6
1.	Intro	<b>Description</b> Methodology	<b>7</b> 10
2.	<b>Avai</b> l 2.1	ability and assessment of information shared on website	<b>14</b> 14
	2.1	Board members of pollution control boards  Laboratories	14
	2.2	Contact and address of head and regional office	17
	2.4	Direction, show cause and closure notice	17 17
	2.4	Latest technical publication	18
	2.5	Action plans for non-attainment cities	18
	2.7	Action plans for polluted river stretches	19
	2.8	Continuous emission monitoring system	20
	2.9	Consent management and monitoring system	27
		Public hearing	32
		Waste information	36
		Right to information (RTI)	44
3.	<b>Avai</b> l 3.1	ability and assessment of information shared in annual reports  Availability and quality	<b>45</b> 45
	3.2	Information on regulated entities	46
	3.3	Information on compliance status of industries	49
	3.4	Inspection	52
	3.5	Manpower information	53
	3.6	Accounts and finance information	54
	3.7	Direction, show cause and closure notice	55
4.	Final	rating of boards based on public disclosure	56
5.	<b>Conc</b> 5.1	lusion and recommendations Conclusion	<b>57</b> 57
	5.2	Recommendations	59
An	nexur	es	61
Ref	ferenc	es	82

#### **Abbreviations**

BOD Biological Oxygen Demand

CEMS Continuous Emission Monitoring System

CPCB Central Pollution Control Board

CSE Centre for Science and Environment

CTO Consent to Operate

CTE Consent to Establish

EIA Environment Impact Assessment

**ENVIS** Environmental Information System

HOWM Hazardous and Other Wastes Management Rules

MoEF&CC Ministry of Environment, Forest and Climate Change

NAAQS National Ambient Air Quality Standards

NGT National Green Tribunal

NIC National Informatics Centre

SEIAA State Environment Impact Assessment Authority

SPCB State Pollution Control Board

PCC Pollution Control Committee

RTI Right to Information

OCMMS Online Consent Management and Monitoring System

XGN Xtended Green Node

#### 1. Introduction

One of the functions of state pollution control boards (SPCBs) and pollution control committees (PCCs) under Section 17 (c) of the Air Act is to 'collect and disseminate the information related to air pollution'. The same provision has been provided under section 17(c) of the Water Act—'collect and disseminate information relating to water pollution and the prevention, control or abatement thereof'.

Further, under Section 39 (2) of the Water Act, every state board shall, during each financial year, prepare, in such form as may be prescribed, an annual report giving full account of its activities under this Act during the previous financial year. The same provision has been enacted under Section 35 (2) of the Air Act. It is pertinent to mention that under the E(P) Act, a uniform format has been laid down for SPCBs/PCCs to prepare reports related to various waste management rules.

The SPCBs/PCCs generate large quantities of data every day, either online or manually, thus becoming repositories of information. Today, many SPCBs/PCCs are actively using information technology as a means of handling large amounts of data and sharing it in public domain. Currently, there are various sources for disclosure of information in public domain like annual report published by SPCBs/PCCs, their official websites and Online Consent Management and Monitoring System (OCMMS). However, the extent and format for disclosure of information varies greatly from board to board with respect to Water Act and Air Act, which is one of the main reasons that many SPCBs/PCCs are not providing adequate information in the public domain and have to spend a lot of time to respond to various RTI's received from the public. Under Section 3 (2) (XII), the same provision related to collection and dissemination of information in matters relating to environmental pollution has been provided under the E(P) Act for the Central Government. Within the purview of the E(P) Act, Central Government empowers the central pollution control board (CPCB) as a regulatory authority to implement various rules related to different types of waste management as stated below:

- Solid Waste Management Rules, 2016
- Plastic Waste Management Rules, 2016
- Bio-Medical Waste Management Rules, 2016
- Construction and Demolition Waste Management Rules, 2016

- E-waste Management Rules, 2016
- Hazardous and other Wastes (Management and Transboundary Movement)
   Rules, 2016
- Hazardous and other Wastes (Management and Transboundary Movement)
  Amendment Rules, 2016
- Hazardous and other Wastes (Management and Transboundary Movement) Amendment Rules, 2017

The Hon'ble Supreme Court of India on 22 February 2017 (in the matter of Writ Petition, Civil No. 375 of 2012 – Paryavaran Suraksha Samiti & Anr. v/s Union of India & Ors.), had directed all state governments to make provision for an 'online, real-time, continuous monitoring system' to display emission levels in the public domain or on the portal of the SPCB. States were given six months (by August 2017) to comply.

The Supreme Court order was further taken by National Green Tribunal (NGT). The Hon'ble NGT directed (NGT order dated 03.08.2018)<sup>1</sup> Central Pollution Control Board (CPCB) to prepare an action plan for implementation by SPCBs/PCCs to ensure the compliance of the Supreme Court order dated 22.02.2017 and to constitute a two-member monitoring committee (CPCB and MoEF&CC) for monthly review of the issues related to implementation, and to upload quarterly steps taken report on CPCB website.

However, it has been more than three years, and the status of compliance has been dismal in most states. In March 2021, NGT admitted<sup>2</sup> a petition on the non-compliance of the Supreme Court's order and issued following directions:

- NGT directed the concerned SPCBs and the CPCB to prepare a chart regarding the status of implementation of the directions issued by the Hon'ble Supreme Court in the respective states, and if it compliance has not been achieved, what is the nature of action taken by them for implementing the same.
- The state governments are also directed to file their response about the implementation status of the Supreme Court's direction and also how it is made available in the public domain and the monitoring mechanism as to how this is maintained and carried out properly by responsible persons. In the case of states which have not implemented the directions so far, what is the reason for the delay and how much time they require for implementing the directions.

CPCB is also directed to give the details and action plan for implementation of
the directions in states which have not yet implemented these so far, or for any
improvement required in the places where they have been implemented but
are not properly monitored.

It has been observed that most of the SPCBs/PCCs have taken minimal initiative to disclose the information in the public domain. And even amongst the states which have shared information, the data available is difficult to find, access or comprehend. A few SPCBs/PCCs do provide information on their websites, but navigation is a problem. And if the information is available, it is generally sparse and outdated. However, there are some SPCBs/PCCs which are proactively sharing a good amount of information in the public domain.

Therefore, the Centre for Science and Environment (CSE) has decided to conduct a study on the level of transparency maintained by SPCBs/PCCs in sharing information with the public. This report provides the status of the information shared by SPCBs/PCCs on their websites and annual reports. This study aims to identify the strength and weakness of SPCBs/PCCs in sharing information in the public domain.

Transparency and free flow of information are essential tools for compliance enforcement. They also have other benefits like accountability, public participation, public awareness and enforcement. The rationale of this report is to encourage public disclosure of information and to improve the quality of information shared by SPCBs/PCCs. This report critically evaluates the information shared by SPCBs/PCCs during the last four-five years (2016–21) and uses a number of indicators that provide a broader indication on type and quality of information shared. It is an effort to assess the action taken by SPCBs/PCCs in sharing information in public domain and also to encourage SPCBs/PCCs to place their information in public domain.

In order to ensure more transparency in the working of a board, information disclosure has to be improved. The SPCBs/PCCs should put all relevant information in public domain; for example, annual report of SPCBs/PCCs must include information like staff details, industrial information, compliance information of industry, laboratory infrastructure and accreditation details, etc. Their website should have CEMS data of 17 categories of industries, status of consent to operate (CTOs) and consent to establish (CTEs), public hearings for environmental clearance, and information on show cause/directions/closure notices issued. This will also help the boards because they will then have to deal with lesser numbers of RTI applications and provide fewer answers to questions asked by Hon'ble members of state assemblies and parliament.

#### 1.1 Methodology

For this study, data has been collected from two sources. The first is websites of SPCBs/PCCs and the second is their annual reports. The last date of data collection was 25 June 2021. We have carried out this study based on the list of indicators and rating criteria given in Table 2. The rationale for choice of indicators is explained below.

The choice of indicators is based on the statutory requirement as stated in annual report under Section 39 (2) of Water Act. 'Every state board shall, during each financial year prepare such form as may be prescribed, an annual report giving full account of its activities during the previous financial year.' The same is stated under Section 35 of Air Act. Beside this, waste rules under E(P) Act also provide a uniform format for reporting.

In addition to above, the choice of indicators is also based on the direction issued under Section 18 (1) (b) by CPCB under both Water and Air Acts for some activities such as information on continuous emission monitoring system (CEMS), inspection of industries, action plan for non-attainment cities and polluted river stretches, etc.

Table 1: List of activities and to be undertaken by SPCBs/PCCs

Sr. no.	Activities	Statutory provision
1.	Constitution of board	Under Section 4 of Water Act
2.	Contact of Head/RO Office/RTI	RTI AD 2005
3.	Consent information	Section 25/26 of Water Act and Section 21 of Air Act
4.	Inspection	17 (1) (f) of Water and Air act
5.	Compliance status of regulated Entities	1(c) of Water Act and Air Act
6.	Direction, show cause & closure	33 (A) of Water Act, 31 (A) of Air Act, 5 of E(P) Act
7.	Information related to laboratories	Under sections 52, 53 of Water Act, and 28 of Air Act
8.	CEMS information	Direction 18 1(b) of Water Act and Air Act, and notification under E(P) Act
9.	Waste Management	
	Biomedical Waste Rule	Specific format for each rule under E(P) Act
	Plastic Waste Rule	
	E-Waste Rule	
	Soild Waste Rule	
	Hazardous Waste Management Rule	
10.	Manpower information	Annual report
11.	Accounts/Finance	38/40 of Water Act, 34/36 of Air Act
12.	Annual report	39 (2) of Water Act, 35 (2) of Air Act
13.	Public hearing	Under EIA notification under E(P) Act

Table 2: List of indicators and rating criteria

	Section	Sub-indicator score	Total score
Α	Website		80
1	Website availability (Y/N)		4
2	Constitution of the board		3
	Information on board of members	1	
	Minutes of board meeting	2	
3	Contact of head office/RO office and RTI		4
	Contact and address of head/RO office	2	
	Information on name of RTI officer (PRO), contact no. and address	2	
			_
4	Laboratory infrastructure and accreditation		4
	No. of laboratoires	1	
	Parameters which can be analysed in lab	1	
	Accreditation of labs	1	
	Address	1	
5	Latest technical publication		1
	More than three latest technical reports (2018–2021)/one or two	1/0.5	
	technical reports		
	In		10
6	Direction, show cause & closure notice	_	12
	Availability of soft copy of direction issued	4	
	Availability of soft copy of show sause issued	4	
	Availability of soft copy of closure notice issued	4	
			1
7	CEMS	,	14
	Availability of CEMS data	6	
	Historical CEMS data available for more than 30 days/less than 30 days/ one day or 24 hrs	8/4/2	
	No CEMS data	0	
	110 OLINO WILL	•	
8	Consent information		6
	Consent information with CTO/CTE certificate/consent information	6/3/1.5	
	without CTO/CTE certificate/information only on no. of received,		
	granted, rejected CTO/CTE application		
9	Public hearing		10
	Draft EIA report	4	

	Section	Sub-indicator score	Total score
	Executive summary with state and english language/executive summary	4/2	
	in one language		
	MOM	2	
		1	I
10	Waste		14
	Biomedical waste		
	List of biomedical waste treatment facilities	1	
	Biomedical waste generation data	1	
	Biomedical waste treated	1	
	Plastic waste		
	List of plastic waste recyclers	1	
	Plastic waste generation data	1	
	Plastic waste treated/recycled	1	
	E-waste		
	List of electronic waste recyclers	1	
	Electronic waste generation data	1	
	Electronic waste treated/recycled	1	
	Solid waste		
	Solid waste generation data	1	
	Solid waste treated/disposed	1	
	Hazardous waste		
	List of hazardous waste recyclers	1	
	List of hazardous waste recyclers  Hazardous waste generation data	1	
	Hazardous waste generation data	1	
11	Hazardous waste generation data	1	8
11	Hazardous waste generation data Hazardous waste treated/recycled	1	8
11	Hazardous waste generation data Hazardous waste treated/recycled  Action plan for pollution control	1	8
11	Hazardous waste generation data Hazardous waste treated/recycled  Action plan for pollution control River	1 1 4	8
11	Hazardous waste generation data Hazardous waste treated/recycled  Action plan for pollution control River Air	1 1 4	
11 B	Hazardous waste generation data Hazardous waste treated/recycled  Action plan for pollution control River Air	1 1 4	
	Hazardous waste generation data Hazardous waste treated/recycled  Action plan for pollution control River Air Total score website	1 1 4	80
В	Hazardous waste generation data Hazardous waste treated/recycled  Action plan for pollution control River Air Total score website  Annual report	1 1 4	80

	Section	Sub-indicator score	Total score
13	Information on regulated entities		3
	Detailed information on regulated entities/only no. of red, orange, green industry	3/1.5	
	No information	0	
14	Information on compliance status of industry		3
	Information on compliance status	3	
	No information	0	
15	Inspection		2
	Detailed information on no. and category wise industry inspected/information on total no. of inspections	2/1	
16	Manpower information		2
	Information on total sanctioned strength, total working strength, vacancies/only no. of staff, name & designation	2/1	
17	Accounts and finance information		3
	Detailed information on accounts/only total income and expenditure	3/1.5	
18	Direction, show cause & closure notice		3
	Information on no. of directions issued	1	
	Information on no. of show cause notices issued	1	
	Information on no. of closure notices issued	1	
	Total score annual report		20
	Total score		100

The rationale of this scoring methodology is to give more weightage to statutory indicators which must be available in public domain like information on board of members, no. of board meetings, directions, consent information, compliance status of industry, inspection, accounts & financial details, and manpower details. Therefore transparency Index is evolved as below-

$$\begin{tabular}{ll} \mbox{Observed Value} \\ \mbox{Transparency index} = & \hline & $x$ 100 \\ \mbox{Expected Value} \\ \end{tabular}$$

Where Observed Value is the summation of marks secured by the SPCBs/PCCs in each indicator and Expected Value is the maximum attainable marks.

# 2. Availability and assessment of information shared on websites

The SPCB/PCC website is an important source for the dissemination of information among various stakeholders and the general public. A good website keeps all the information under the relevant heading for easy navigation so that anyone can easily access environmental information available on the SPCB website, whenever required. Out of 35 SPCBs/PCCs, 34 SPCBs/PCCs have their websites (see *Annexure 1: Website availability*). Only Lakshadweep PCC does not have a website. PCCs like Andaman & Nicobar, Chandigarh, Daman & Diu and Puducherry have shared information on OCMMS while state boards like Chhattisgarh and Tripura have shared information on the Environmental Information System (ENVIS). Recently, Tripura SPCB website has also become active.

Availability of a website is not the only criteria for judging the level of transparency of a board but the amount and sufficiency of information available on the website is also an important parameter. It is observed that SPCBs of Telangana, Tamil Nadu, West Bengal, Odisha and Kerala provide significant amounts of information on their websites. This includes the public hearing information, waste related information, action plan for polluted river stretches and non-attainment cities, directions issued by boards, latest technical reports, CEMS data, consent information, laboratory information, constitution of board and RTI details, etc.

It was observed that out of 34 SPCBs/PCCs, only three states—Andhra Pradesh, Telangana and Chhattisgarh—have shared list of industries category-wise (red, orange & green) and district-wise on their website. Whereas Jharkhand, Maharashtra and Tamil Nadu have shared the list of 17 categories of highly polluting industries. On the other hand, Uttar Pradesh only shared the number of 17 categories of large- and medium-scale industries and grossly polluting industries in the state.

#### 2.1 Board members of pollution control boards

The provision on constitution of state boards under sub-section (2) of Section 4 of Water Act states that the SPCB should have a maximum of 17 members, including chairman and member secretary, not exceeding 5 members from local authorities, not exceeding 5 officials from the state government, 3 non-official members representative of agriculture, fishery, industry or trade and 2 members from PSUs. There are rules for CPCB known

as Procedure on Transaction of Business, 1975. Under Section 6(1) of the said rules, five members form the quorum for any meeting.

Out of 34 SPCBs/PCCs which have a website, five SPCBs/PCCs—Andaman & Nicobar, Chandigarh, Daman & Diu, Puducherry and Rajasthan—have not provided any information about the board members.

Other than the information on board members, it is also important that they share minutes of the board meeting on their websites. It is mandatory for SPCBs/PCCs to meet at least once in every three months and board members are supposed to discuss various pertinent issues related to the functioning of the board, action plans for the pollution control boards, compliance and monitoring issues, and devising innovative methods to improve enforcement of laws. Therfore the minutes of the board meeting are important information and must be shared with the stakeholders through their respective websites.

It has been observed that many SPCBs/PCCs have not followed the provisions consistently. The following table shows the number of board members and the minutes of board meetings shared by SPCBs/PCCs on their website.

Table 3: Number of board members and minutes of board meeting

Sr. no.	Name of SPCB	No. of board members	Minutes of meeting	Latest MOM
1	Andaman & Nicobar Pollution Control Committee (ANPCC)	No information		
2	Andhra Pradesh Pollution Control Board (APPCB)	17	NA	
3	Arunachal Pradesh State Pollution Control Board (APSPCB)	16	NA	
4	Assam Pollution Control Board (APCB)	8	NA	
5	Bihar State Pollution Control Board (BSPCB)	14	NA	
6	Chandigarh Pollution Control Committee (CPCC)	No Information		
7	Chhattisgarh Environment Conservation Board (CECB)	6	NA	
8	Daman & Diu Pollution Control Committee	No Information		
9	Delhi Pollution Control Committee (DPCC)	16	Yes	30/12/2020 - 69th
10	Goa State Pollution Control Board (GSPCB)	16	Yes	27/05/2021- 147th
11	Gujarat Pollution Control Board (GPCB)	10	NA	
12	Haryana State Pollution Control Board (HSPCB)	17	Yes	12/05/2020 -188th
13	Himachal Pradesh State Pollution Control Board (HPSPCB)	8	NA	

Sr.	Name of SPCB	No. of board members	Minutes of meeting	Latest MOM
no.	18 K. Dellistian Control Board (18 KDCD)			
14	J&K Pollution Control Board (J&KPCB)	17	NA	
15	Jharkhand State Pollution Control Board (JSPCB)	15	NA	
16	Karnataka State Pollution Control Board (KSPCB)	17	NA	
17	Kerala State Pollution Control Board (KSPCB)	17	NA	
18	Madhya Pradesh Pollution Control Board (MPPCB)	9	NA	
19	Maharashtra Pollution Control Board (MPCB)	9	NA	
20	Manipur Pollution Control Board (MPCB)	11	NA	
21	Meghalaya State Pollution Control Board (MSPCB)	17	NA	
22	Mizoram Pollution Control Board	14	NA	
23	Nagaland Pollution Control Board (NPCB)	11	NA	
24	Odisha State Pollution Control Board (OSPCB)	17	NA	
25	Puducherry Pollution Control Committee (PPCC)	No		
		Information		
26	Punjab Pollution Control Board (PPCB)	19	NA	
27	Rajasthan State Pollution Control Board (RSPCB)	No		
		Information		
28	Sikkim State Pollution Control Board (SSPCB)	11	NA	
29	Tamil Nadu Pollution Control Board (TNPCB)	12	NA	
30	Telangana State Pollution Control Board (TSPCB)	9	NA	
31	Tripura State Pollution Control Board (TSPCB)	17	Yes	30-04-2021- 45th
32	Uttar Pradesh Pollution Control Board (UPPCB)	12	NA	
33	Uttarakhand Pollution Control Board (UPCB)	14	Yes	21.10.2020 - 25th
34	West Bengal Pollution Control Board (WBPCB)	17	NA	

From this table, it can be seen that out of 34 SPCBs/PCCs, only five have shared minutes of board/committee meeting—Delhi, Goa, Haryana, Tripura and Uttarakhand.

#### 2.2 Laboratories

Every state board must establish a laboratory to enable the board to perform its functions efficiently under the Water and Air Acts. It is also important that all SPCBs/PCCs share at least basic information about their laboratory on their websites like no. of laboratories in the state, accreditation of lab, parameters which can be analysed in lab, contact details, etc.

Out of 34 SPCBs/PCCs, seven SPCBs/PCCs—Goa, Himachal Pradesh, West Bengal, Kerala, Tamil Nadu, Madhya Pradesh and Mizoram—have provided a significant amount of information on laboratory infrastructure and accreditation (see *Annexure 2*:

Information on SPCB/PCC laboratories—infrastructure and accreditation). This includes the no. of laboratories in the state, accreditation of laboratories, parameters which can be analysed in lab and contact details. However, some SPCBs/PCCs—Maharashtra, Odisha, Andhra Pradesh, Assam, Punjab, Chhattisgarh, Tripura, Nagaland and Delhi—have provided all the above information except the information on accreditation of laboratory.

On the other hand, SPCBs/PCCs of states and union territories like J&K, Manipur, Puducherry, Rajasthan, Sikkim, Andaman & Nicobar, Arunachal Pradesh, Chandigarh, Uttarakhand and Daman & Diu have not shared any information on laboratory infrastructure and accreditation on their website.

#### 2.3 Contact and address of head and regional office

All SPCB/PCC websites must contain at least basic information about the state board or committee, like address and contact details of head and regional office, in order to facilitate easier communication with stakeholders as and when required. Apart from a few—such as Jharkhand, Tripura and Bihar—others have provided complete information on contact details of head and regional offices (see *Annexure 3: Contact and address of head and regional office*). Jharkhand and Tripura have shared information like contact details and address of head office, however no information is available on no. of regional offices in states and address and contact details of regional offices. Similarly, no contact information is available for regional offices in the Bihar SPCB.

#### 2.4 Direction, show cause and closure notice

Section 33 A of Water Act and Section 31(A) of Air Act have vested powers upon SPCBs/PCCs for issuing closure or prohibition notices to any industry, operation or process and/or proceed with stoppage or regulation of the supply of electricity or water or any other services (with regard to controlling pollution). Under Section 23 of Environment Protection Act (EPA) 1986, the central government delegated the powers of section (5) to state governments.

However, these directions can only be issued by a board after hearing the views of the defaulting industry. Information on direction, show cause or closure notice issued can act as name and shame policy for non-complying industries. However, majority of the SPCBs/PCCs have not shared information on direction, show cause or closure notices issued (see *Annexure 4: Information on direction, show cause and closure notices*). Out of 34 SPCBs/PCCs, 28 have not shared any information on direction, show cause or closure notices issued on their websites. Only five states—J&K, Rajasthan, Telangana, Uttarakhand and West Bengal—have shared soft copies of the same. In contrast, Uttar Pradesh which provides limited information on its website, has shared copies of closure notices on the website.

#### 2.5 Latest technical publication

It is imperative for all SPCBs/PCCs to publish technical reports to support compliance and sector-specific best practices and also to disseminate information. These reports build relationships of SPCBs/PCCs with the stakeholders who wish to source information on their area of interest. These reports are also essential for industrial sectors to improve their performance by learning from others.

Out of 34 SPCBs/PCCs, 10 SPCBs/PCCs have published latest technical publications (2018–2021) (see *Annexure 5: Latest technical publications shared by SPCBs/PCCs)*. Madhya Pradesh Pollution Control Board has published Comprehensive Environmental Monitoring of Dewas Industrial Area of M.P. (2020) and Mandideep Industrial Area of M.P. (2019), and Biomonitoring of River Chambal (2019–20) and Betwa river (2019). Maharashtra Pollution Control Board has published Air Quality Report and Water Quality Report 2020, Environment Action Plan for Maharashtra 2019 and impact of the release of effluents on the ecology of inshore and coastal areas of Maharashtra and their management. Odisha has shared technical reports like Environmental Impact of Fly Ash, report on coastal zone management and mitigation strategies for the Angul–Talcher Industrial Area, etc. The West Bengal Pollution Control Board has shared technical reports like State of Environment Report 2021 and PM<sub>10</sub> and PM<sub>2.5</sub> source apportionment studies. Tamil Nadu has shared technical reports like assessment of dust emissions from stone crushing industry and identification of sources of groundwater pollution.

States like Tripura, Bihar, J&K and Uttarakhand have one or two technical reports on their respective websites. Tripura has shared reports on brick kilns and rejuvenation reports for polluted water bodies. Bihar SPCB has shared fly ash brick industry report. J&K has published a report on water quality of Tawi River, and Uttarakhand has shared an air quality report. Whereas in the Rajasthan SPCB website, list of technical reports is showing but not opening.

#### 2.6 Action plans for non-attainment cities

CPCB has identified a list of polluted cities in which the prescribed NAAQS are violated. These cities have been identified based on the ambient air quality data obtained (2011–2015) under NAMP. There are a total of 122 non-attainment cities in India and these non-attainment cities are required to submit action plans to reduce their respective air pollution levels. The Hon'ble NGT in OA No. 681 issued an order dated 08 October 2018 that 'all the States and Union Territories with non-attainment cities must prepare appropriate action plans within two months aimed at bringing the standards of air quality within the prescribed norms within six month from the date of finalisation of action plans'. The goal is 'to meet the prescribed annual average ambient air quality standards at all locations in the country in a stipulated timeframe'.

There are 11 states/UTs which do not have any non-attainment cities—Andaman & Nicobar Islands, Arunachal Pradesh, Daman & Diu, Haryana, Kerala, Lakshadweep, Manipur, Mizoram, Tripura, Puducherry and Sikkim. It has been observed that out of 24 SPCBs/PCCs which have non-attainment cities, three states—Meghalaya, Himachal Pradesh and Rajasthan—have not shared their action plans on their respective websites (see *Annexure 6: Action plans for non-attainment cities*). Himachal Pradesh has seven, Rajasthan has five and Meghalaya has one non-attainment city but no action plans are available on their websites.

Whereas, Andhra Pradesh has 13 non-attainment cities but action plans for only five of them on its website. Gujarat has three non-attainment cities but action plan for only one city on its website. Karnataka has four non-attainment cities but action plan for only one city on its website. And Tamil Nadu has three non-attainment cities but action plan for only one city on its website. Maharashtra has 18 non-attainment cities and has shared action plans for 17 cities, Telangana has four non-attainment cities and shared action plans for thee, while Uttar Pradesh has 16 non-attainment cities and has shared action plans for 15 cities on its website. The remaining have provided complete information on action plans for non-attainment cities on their websites, wherever applicable.

#### 2.7 Action plans for polluted river stretches

The CPCB identified 351 polluted river stretches on 323 rivers. The water quality data under national water quality monitoring programme for the year 2016 and 2017 is analysed statistically and monitoring locations exceeding the water quality criteria are identified as polluted. These polluted river stretches are categorized in five priority classes based on biological oxygen demand (BOD) concentration—BOD levels >30 mg/l (Priority 1), BOD between 20 & 30 mg/l (Priority 2), BOD between 10 & 20 mg/l (Priority 3), BOD between 6–10 mg/l (Priority 4), and BOD between 3–6 mg/l (Priority 5). The assessment of water quality for identification of polluted river stretches has found that there are 31 states and union territories having rivers and streams not meeting water quality criteria.

The Hon'ble NGT (order dated 20/09/2018) directed all states and union territories 'to prepare action plans within two months for bringing all the polluted river stretches to be fit at least for bathing purposes (i.e BOD < 3 mg/L and FC < 500 MPN/100 ml) within six months from the date of finalisation of the action plans'. And all states/UTs with polluted river stretches are required to submit action plans to control river pollution and to restore the water quality of the rivers.

It has been observed that four states/UTs do not have any polluted river stretches—Lakshadweep, Chandigarh, Andaman & Nicobar and Arunachal Pradesh. Out of the remaining 31 states and union territories, two states—Manipur and Rajasthan—have not

shared action plans for any polluted river stretches on their respective websites. Majoirty of the the SPCBs and PCCs have shared complete information on number of polluted stretches and action plans for each polluted stretch (see *Annexure 7: Action plans for polluted river stretches*). Madhya Pradesh has 22 polluted river stretches out of which three polluted stretches are in priority 1, one polluted stretch in priority 2, one in priority 3, three in priority 4 and 14 in priority 5. Out of these 22 polluted river stretches in M.P., four action plans (for priority 1 and 2) are available on MPPCB website. Telangana has eight polluted river stretches, out of which three action plans are available on the website (one in priority 1 and two in priority 2).

#### 2.8 Continuous emission monitoring system

CPCB issued directions to SPCBs/PCCs to track release of pollutants through air emissions and effluent discharge under Section 18(1) b of the Water and Air Acts for directing the 17 categories of highly polluting industries, common effluent treatment plants (CETPs), and common bio-medical waste and common hazardous waste incinerators to install online effluent quality and emission monitoring systems. The Supreme Court in a 2017 judgement had mandated that all the SPCBs/PCCs in India should enable public access of CEMS data. In 2018, (G.S.R 96(E) January 29, 2018) MoEF&CC under EP Act also mandated installation of CEMS for industries using boilers.

The objective of making CEMS data public is to increase transparency in the pollution reporting and to consequently improve industry compliance. Automated emission or effluent monitoring system employs a set of equipment to monitor air and water quality data from industries and other polluting facilities in real-time. The main aim of the system is to derive emission data with minimal human interference and relay it to the respective state or central pollution control authorities.

#### Availability of CEMS data on website

It has been observed that out of 35 SPCBs/PCCs, 19 SPCBs/PCCs are displaying their CEMS data in the public domain—Andhra Pradesh, Assam, Bihar, Chhattisgarh, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, J&K, Jharkhand, Kerala, Madhya Pradesh, Meghalaya, Odisha, Puducherry, Punjab, Tamil Nadu and Telangana (see *Annexure 8: Availability of OCEMS data in public domain*). And three of the states/UTs—Lakshadweep, Arunachal Pradesh and Mizoram—do not have any industries which require installation of OCEMS (CPCB, 2020).

It has been observed that the CEMS data was previously available in the case of Goa, J&K, and Puducherry; however, it was not showing in the month of June 2021. Similarly, the CEMS portal link available on the Gujarat pollution control board website is not working and showing server issues.

There has been no provision made by states/UTs like Andaman & Nicobar, Chandigarh, Daman & Diu, Maharashtra, Manipur, Rajasthan, Nagaland, Sikkim, Uttarakhand, Uttar Pradesh and Tripura for making CEMS data available in the public domain. In case of Karnataka and West Bengal, they have not made CEMS data accessible to the public and CEMS data on their websites is password protected.

#### **Ease of CEMS data accessibility**

Easy access of CEMS data on the website is also very important for efficient use of CEMS data. The representation of CEMS data on SPCB/PCC websites varies greatly depending upon the platform/software SPCBs/PCCs are using. Most of the SPCBs have used the platform provided by National Informatics Centre (NIC), Glens and Enviro connect.

The SPCBs from Bihar, Delhi, Punjab and Haryana are using the platform developed by NIC. They have used a common format where they inform the public about the total number of industries connected to CEMS, which industry is transmitting data and industries in offline mode, industries showing delayed data, industries under maintenance and industries which are closed by CPCB and SPCB. It is surprising to find out that a large number of industries in these states are in offline mode. The portals did not offer any explanations for their offline status. In the case of Bihar SPCB, 45 per cent of industries are in offline mode; in Punjab and Delhi, 30 per cent of industries are offline; similarly, in Haryana, 30 per cent of the industries are either offline or delayed (see *Table 4: Status of CEMS in Bihar, Delhi, Punjab and Haryana*). There is also no reason provided why these industries are in offline mode, whether industries are not operational or CEMS is not working. Non-availability or non-connectivity of the CEMS to the SPCB portal is an indicator of poor monitoring and defeats the purpose of installation of CEMS.

Table 4: Status of CEMS in Bihar, Delhi, Punjab and Haryana

Sr. no.	State	No. of CEMS			
		Total no. of CEMS installed in industries	Online	Offline	Delay
1.	Bihar	42	20	19	3
2.	Punjab	188	123	60	5
3.	Haryana	1049	722	288	39
4.	Delhi	170	110	56	4

Source: Website viewed on 27 May 2021

There is also a serious software glitch that could be observed on the NIC platform. The information on CEMS in industries is provided under five headings—online, offline, delay (data transmission delay), under maintenance and industries closed down by SPCB/PCC. In the case of these four states—Bihar, Delhi, Haryana and Punjab—the dropdown menus titled 'closed by SPCB/CPCB' and 'under maintenance' both shows

total number of industries in the state, which is also available on the CEMS dashboard of these four states. The glitch has been there on the website for many months and has not been rectified yet. This clearly means that neither the regulator nor the other stakeholders are accessing the CEMS website of these states, which defeats the overall purpose.

#### **CEMS** historical data

Historical CEMS data is crucial to understand seasonal, monthly or yearly trends that could provide crucial information on industry emissions and help to monitor the efficacy of pollution abatement measures. Public access to this data is therefore an important and desirable element in an online CEMS programme. Out of 15 SPCBs/PCCs which are currently showing CEMS data (as of 25 June 2021) in the public domain, only five SPCBs—Assam, Himachal Pradesh, Meghalaya, Madhya Pradesh and Odisha—are showing historical CEMS data (more than 30 days). In contrast, Kerala is showing CEMS data for 30 days. And the rest display current monitoring values or data for the past 24 hours. Every day data or monthly data may not serve the exact purpose of information sharing.

#### **CEMS** data credibility

Another issue that is being observed while analysing the data on the website is its authenticity and accuracy. No mechanism is in place to ensure a quality check of CEMS data displayed on the website. From Table 5, it can be observed that all industries show CEMS connection status online but one or two of the parameters show zero value, which is not possible. There is the possibility that some of these industries are not operating during this particular period but what is missing in the whole system is to inform stakeholders for the same.

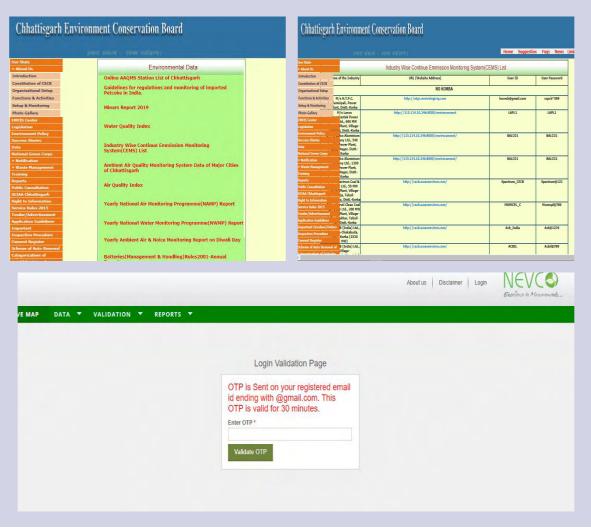
Table 5: Examples of some industries with online CEMS and less credible data

Sr. no.	Industry name	State	Installed parameter	Data viewed on	PM (mg/Nm³)	SO <sub>X</sub> (mg/Nm³)	NO <sub>X</sub> (mg/Nm³)
1.	Rajiv Gandhi		SOx, NOx,	06 Oct 2020	0	6.5	0
	Thermal Power Plant	Haryana	PM	14:25	2	4	1
2.	Chhotu Ram			06 Oct 2020	19.73	0	0
	Thermal Power Station	Haryana	SOx, NOx, PM	14:37	9.06	0	5.14
3.	My Home Industries (CPP-2)	Telangana	SOx, NOx, PM	10 Nov 2020 16:25	0	0	0
4.	NCL Industries Ltd.	Telangana	SOx, NOx, PM	10 Nov 2020 16:25	0	0	1.25
5.	Tancem Cement Plant	Tamil Nadu	SOx, NOx, PM	11 Nov 2020 14:25	0.9	0	0

# Box 1: Chhattisgarh Environment Conservation Board website and OCEMS portal

In the case of Chhattisgarh, navigation on the website is difficult; accessing the online CEMS data on their website is challenging as it involves multiple complex steps. Chhattisgarh Environment Conservation Board has provided the link for CEMS data under the tab 'Data' on the home page of its website. The board has provided a list of industries with user ids and passwords. Every industry has a different user id and password for login, which make CEMS data access difficult. There is no uniform format for CEMS data on the Chhattisgarh website as different software (EnviroConnect, GLens, EnviroLogicIQ, Swan Enviro, Vasthi, etc.) are used by different industries within the same state. Some industries are using software that asks for the user's email to send OTP to view CEMS data, but no OTP is received by the user and CEMS data for most industries remains inaccessible.

# Screenshots from Chhattisgarh Environment Conservation Board website and OCEMS portal



23

### BOX 2: CEMS data of industries available in state pollution control websites

Figure 1: CEMS connection for industries in Haryana showing online status

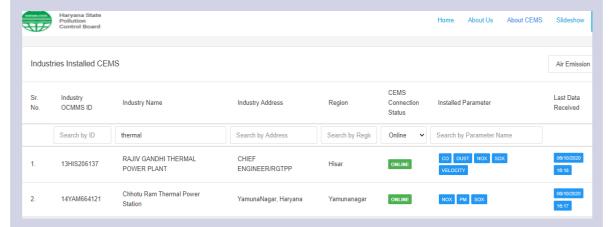


Figure 2: Rajiv Gandhi Thermal Power Plant showing dust & NO<sub>x</sub> as 0 mg/Nm<sup>3</sup>

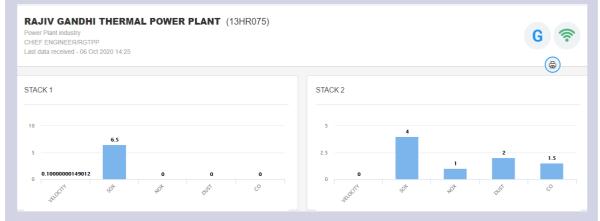
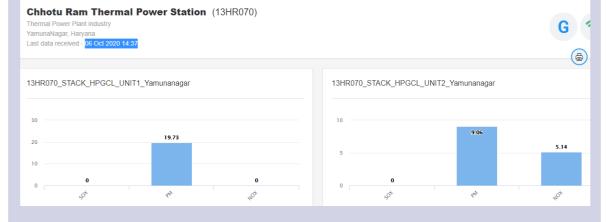


Figure 3: Chhotu Ram Thermal Power station showing  $SO_x \& NO_x$  as  $O mg/Nm^3$ 

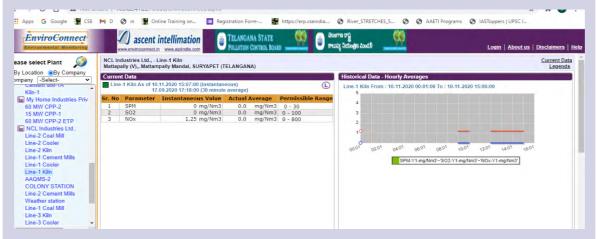


Source: Haryana pollution control Board, data viewed on 06 Oct 2020  $\,$ 

Figure 4: My Home Industries showing SPM,  $SO_2$  and  $NO_x$  as 0 mg/Nm<sup>3</sup> TELANGANA STATE
POLLUTION CONTROL BOARD ascent intellimation Login | About us | Disclaimers | Help ww.enviroconnect.in www.aiplindia.com My Home Industries Private Limited-POWER PLANT - 60 MW CPP-2 Current Data Please select Plant Srinagar,, Mellacheruvu Mandal, SURYAPET (TELANGANA) Legends ●By Location ○By Company

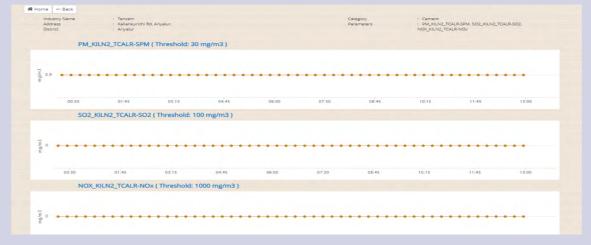
TFI ANGANA Current Data Historical Data - Hourly Averages TELANGANA 60 MW CPP-2 As of 10-11-2020 15:03:00 (Instantaneous) 20-10-2020 17:57:00 District SURYAPET 60 MW CPP-2 From: 10-11-2020 00:00:00 To: 10-11-2020 15:00:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 | 20.10.2020 17:57:00 Sr. No Parameter Instantaneous Value Actual Average Permissible Range 02:00 04:00 06:00 08:00 10:00 NOx-Y1-mg/Nm3'~'SO2-Y1-mg/Nm3'~'SPM-Y1-mg/Nm3' ★ SITAPURAM POWER LI
 ★ SPLENDID METAL PRO
 ★ SUVEN LIFE SCIENCES E Zuari Cement Ltd,

Figure 5: NCL Industries Ltd showing SPM and SO<sub>2</sub> as 0 mg/Nm<sup>3</sup>

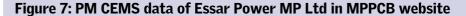


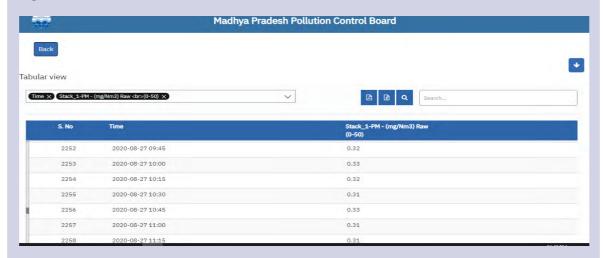
Source: Telangana pollution control board, data viewed on 10 Nov 2020

Figure 6: Tancem Cement Plant showing  $SO_2$  and  $NO_x$  as 0 mg/Nm<sup>3</sup>



Source: Tamil Nadu pollution control board, data viewed on 10 Nov 2020

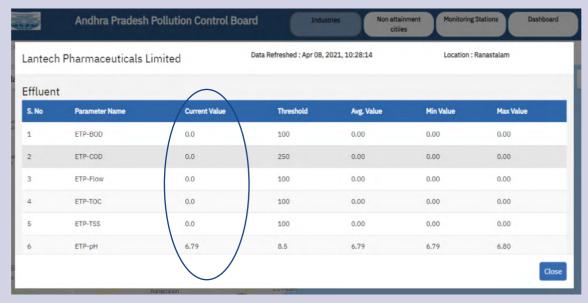




Source: MPPCB website viewed on 10 Oct 2020

CEMS data of Essar Power Plant, (a coal-based thermal power plant located near Singrauli town) showing its PM value ranging from 0.30 to 0.33 mg/Nm3 in the month of August and September 2020, which is significantly lower than it should be. The available data for PM is also not correct.

Figure 8: CEQMS data of Lantech Pharmaceuticals Limited in Andhra Pradesh



Source: APPCB website viewed on 08/April/2021.

CEQMS data available for Lantech Pharmaceuticals shows all the parameters BOD, COD, flow, TOC, TSS as zero and pH as 6.79, which means that CEQMS for all other parameters except pH is not in operating condition. The reason should be mentioned clearly why all the parameters except pH are showing zero value.

#### 2.9 Consent management and monitoring system

Under the Water (Prevention and Control of Pollution) Act, 1974, as amended, and Air (Prevention and Control of Pollution) Act, 1981, as amended, the industries have to obtain consent from SPCBs/PCCs to establish and operate. This is an important power and function of the SPCBs/PCCs, as it enables them to maintain an inventory of industries. To improve the consent management system and make consent processing more transparent and speedier, MOEF&CC has launched Online Consent Management & Monitoring System (OCMMS). This system is intended to improve the overall functioning and performance of the SPCBs.

The OCMMS is a web-based generic application software package for automating the workflow associated with consent management and monitoring. This system allows industries to submit applications online for CTE/CTO, renewal of consent, approval, online submission of clarification and to know the application status for all industries/institutions. OCMMS is integrated with the CPCB India E-track system for the status of compliance and noncompliance. It is a centralized dashboard for CPCB/MoEF&CC and the general public for accessing CTO/CTE/BMW/HWM/MSW information.

Figure 1: OCMMS web portal

Source: OCMMS portal

# Box 3: Consent information not available on OCMMS for Andaman Nicobar PCC

Andaman Nicobar PCC and Bihar PCB have registered their names in the OCMMS portal, however consent information is unavailable on OCMMS. Andaman Nicobar PCC and Bihar PCB are showing only no. of industries registered, total no. of applications received, no. of pending applications, no. of granted applications and no. of rejected applications in OCMMS portal.

Figure 1: Consent information available for Andaman Nicobar at OCMMS portal



Consent information available on the OCMMS website is easy to access for the various stakeholders. In Figure 1, the home page of OCMMS website gives a brief overview of the portal. In the OCMMS website, under the dashboard tab, consent information is given state-wise. The dashboard has information of total industry registrations, the total applications received, total applications pending, total applications granted and total applications rejected. All states have shared district-wise consent information with industry name, address, type and category of industry, type of application (CTO or CTE), and application status (approved or rejected with date) with a certificate.

States which have shared their consent information on OCMMS portal are highlighted with a blue dot in Figure 1. Out of 35 states/UTs, 22 states/UTs have shared their consent information (see *Table 6: States sharing consent information on OCMMS portal*) on OCMMS website, while seven states/UTs—Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Puducherry, Uttarakhand and Rajasthan—have shared their consent information on their SPCB websites. The rest of the states/UTs have neither shared consent information on their website nor on OCMMS website.

Table 6: States sharing consent information on OCMMS portal

Consent data available on OCMMS	Andhra Pradesh, Assam, Bihar, Chandigarh, Chhattisgarh, Daman & Diu and Dadra & Nagar Haveli, Delhi, Goa, Haryana, Himachal Pradesh, J&K, Jharkhand, Kerala, Meghalaya, Odisha, Punjab, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh and West Bengal.
Consent data available on SPCB/PCC website	Gujarat, Karnataka, Maharashtra, Madhya Pradesh, Puducherry, Rajasthan and Uttarakhand
Consent data not available anywhere	Arunachal Pradesh, Lakshadweep, Manipur, Mizoram, Nagaland, and Andaman & Nicobar Islands

Source: CSE analysis

Seven state boards have shared consent information on their website, in which four states—Gujarat, Madhya Pradesh, Uttarakhand and Karnataka—have adopted Xtended Green Node (XGN) software for sharing consent information. Gujarat, Uttarakhand and Madhya Pradesh have shared information such as industry name with the name of regional office under which it exists, type of consent (fresh/renewal/expansion), consent status, and inspection ID. However, no CTO/CTE certificate is available for Gujarat, Uttarakhand and Madhya Pradesh. Whereas Karnataka has shared all information like industry name with the name of regional office under which it exists, category of industry, type of consent (fresh/renewal/expansion), the status of consent, inspection ID and CTO/CTE certificate.

The other two state boards—Maharashtra and Rajasthan—have shared consent information on their website. Maharashtra has shared information like total no. of received, approved, rejected, disposed CTO/CTE/HWM/BMW/ applications; however, CTO/CTE certificates are not available on the website. RSPCB has shared information like industry name district-wise, consent status and CTO/ CTE certificate.

Puducherry PCC has shared only the total no. of received, granted, rejected and pending CTO/CTE/HWM/BMW applications on their PCC website.

The SPCBs that have shared their consent information on their websites also need to share their consent status/information on the OCMMS website, as a large number of industries are located in these states.

#### **India E-track in OCMMS website**

Other than consent information, OCMMS has an India E-track system for the status of compliance and non-compliance of 17 categories of industries; red, orange and green categories of industry; and grossly polluting industries. Figure 2 shows information on 17 categories of industries state-wise like total no. of industries in the state, operational industries, closed industries, and compliance and non-compliance status of the industry.

| Summary of India = Track 17 Category Online Application Status State Wive As On Dute 15/09/2020
| SNO | State Name | Track 17 Category Online Application Status State Wive As On Dute 15/09/2020
| SNO | State Name | Track 17 Category Online Application Status State Wive As On Dute 15/09/2020
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| SNO | State Name | Track 17 Category Online Application Status State Wive As On Dute 15/09/2020
| Application State Wive As On Dute 15/09/20

Figure 2: India E-track in OCMMS website

Source: OCMMS portal

Table 7: Data variation in no. of 17 categories of Industries

17 categories of Industries	OCMMS Data	SPCB website
U.P	93	476 (UPPCB website)
Maharashtra	314	506 (Annual report - as on 31/3/2019)
Punjab	89	188 (on Punjab pollution control board CEMS website,NIC)
Haryana	337	1049 (on Haryana pollution control board CEMS website, NIC)

It was observed that no data is available for 17 categories of industries for states like Bihar, Assam, Goa, Sikkim, Tripura and Himachal Pradesh. It shows total no. of industries operational, closed, complying and non-complying as zero.

The information available for most of the states like Uttar Pradesh, Haryana, Maharashtra, Odisha, Punjab and Telangana is not updated. For example (see *Table 7: Data variation in no. of 17 categories of Industries*), as per the UPPCB website, Uttar Pradesh has total number of 17 categories industries at 476, but as per the data available in the OCMMS portal, it is 93. Same in the case of Maharashtra, as per annual report 2018–19 total no. of 17 categories of the industries is 506; conversely, it is 314 as per OCMMS data. Similarly, 17 categories of industries in Punjab are 89 but as per data available on Punjab board's CEMS website, total no. of 17 categories of industries is 188. Similarly, in Haryana, total 17 categories of industries as per OCMMS portal is 337 and as per Haryana CEMS website, it is 1049. There is a huge difference in data available on both websites.

Figure 3: Compliance status of 17 categories of industries in Uttar Pradesh

llees	r Pradesh Pollution Control	Roard					Comp	liance Status of 17 cate	gories of Industri	es					
Ulla	r Fradesii Foliation Control	Duaru					Non Complying					CCA Expiry			
i.No	CPCB Category	Total no.of Industry	Operational	Closed by their own	Complying	Non Complying	No of Industries against which show cause notice/directions issued	No of Industries against which closure cause directions issued under the Env.Acts	No of Industries against which legal cases filed in the Court(s)	No of Industries against which action is under process / any other (prescribe)	CCA Expiry	No of Industries against which show cause notice/directions issued under the Env.Acts	No of Industries against which closure cause directions issued under the Env.Acts	No of Industries against which legal cases filed in the Court(s)	No of Industries against which action is under process / any other (prescribe)
1	Dyes and Dye- Intermediates	4	4	0	4	0/	0	0	0	0	0	0	0	0	0
2	Pesticides (technical) (excluding formulation)	1	1	0	1	1	0	0	0	Ó	0	0	0	0	0
3	Thermal Power Plants	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Iron & Steel (involving processing from ore/ integrated steel plants) and or Sponge Iron units	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Zinc Smelter	0	0	0		0	0	0	0	0	0	0	0	0	0
6	Sugar ( excluding Khandasari)	53	52	0	53	0	0	0	0	0	0	0	0	0	0
7	Copper Smelter	0	0	0	0	0	0		0	0	0	0	0	0	0
00	Oil Refinery (mineral Oil or Petro Refineries)	2	2	0	2	0	0		0	0	0	0	0	0	0
9	Cement	0	0	0	0	0	0		0	0	0	0	0	0	0
10	Tanneries	4	2	0	2	0	0	1	0	0	0	0	0	0	0
11	Aluminium Smelter	1	1	0	1	0	0		0	0	0	0	0	0	0
12	Fertilizer (basic) (excluding formulation)	0	0	0	0	0	0		0	0	0	0	0	0	Ō
	Distillery (molasses / grain / yeast based)	16	15	1	5	0	0	0	0	0	0	0	0	0	0
	Pulp & Paper (Large-Agro + wood), Small Pulp & Paper (agro based-wheat straw/rice husk)	7	7	0	7	0	0	0	0	0	0	0	0	0	0
15	Pharmaceuticals	3	3	0	3	0	0	0	0	0	0	0	0	0	0
	Petrochemicals Manufacturing (including processing of Emulsions of oil and water)	2	2	0	2	10	0	0	0	0	0	0	0	0	0
7	Chlor Alkali	0	0	0	0	0	0/	0	0	0	0	0	0	0	0

Source: OCMMS portal

In the OCMMS portal, the information available for the red category of industries is also not updated. For example, total no. of red category industries in Andhra Pradesh as per the APPCB website is 3164 (30.06.2019), conversely as per the information available on the OCMMS website (updated on 26/05/2021) the total red category industries in Andhra Pradesh is 202. It shows there are no industries against which show cause/direction/closure notices have been issued in Andhra Pradesh.

As per the information available on the OCMMS website (see *Figure 3: Compliance status of 17 categories of industries in U.P.*), there is no non-complying industry and no industry against which show cause/direction/closure notices have been issued in Uttar Pradesh. The same is the case with Odisha—OCMMS portal shows (see *Table 8: 17 category of Industries with their compliance status as per the information available in OCMMS*) that there is no industry against which show cause/direction/closure notices have been issued. This shows that data available on the OCMMS portal is not updated.

Table 8: 17 category of Industries with their compliance status as per the information available in OCMMS

State boards	Total industries	Non-complying	No. of Industries against which show cause notice/directions issued	No of Industries against which closure notice / directions issued
Odisha State Pollution Control Board	232	3	0	0
Uttar Pradesh Pollution Control Board	93	0	0	0

Source: OCMMS portal

OCMMS is a good step taken by MoEF&CC, it is a centralized database in the country which compiles data on consent and compliance status. For using this system efficiently, it must be updated regularly. MoEF&CC should make it compulsory for all state boards to share their consent and monitoring information on the OCMMS website. Otherwise, it will become defunct or redundant like other portals. MoEF&CC should ensure data availability and transparency so that it can become a common portal for all the stakeholders.

#### 2.10 Public hearing

Public hearing is a part of the environmental clearance process in which project-affected people can interact directly with the project proponent about the concerns regarding the upcoming project. Public hearing is a mandatory step in the process of environmental clearance from MoEF&CC for the projects falling under Category 'A' in the Schedule. While if the project falls under "B" category in the said Schedule, the project goes to state government, or the state level environment impact assessment authority (SEIAA), for clearance before any construction work, or preparation of land by the project management, can begin. The EIA notification 1994 had the activity termed as 'public hearing'; whereas in the 2006 notification, it is termed as 'public consultation'. As per EIA Notification, 2006, SPCBs have been given responsibility for conducting public consultation.

The affected communities have raised their concern several times about how lack of information prevents them from presenting their concerns effectively. A lot of time is lost in looking for a draft EIA or even executive summary. Several SPCBs/PCCs have taken steps to ensure that information is available to stakeholders in one place. The review of SPCB/PCC websites shows that out of 34 SPCBs/PCCs, nine have not shared public hearing information in the public domain. This is perplexing considering it is SPCB's job to conduct a public hearing and put the information in the public domain. Their website is the best medium to source information.

Only nine SPCBs/PCCs—Karnataka, Telangana, Delhi, Gujarat, Kerala, Punjab, Rajasthan, Goa and Mizoram—have provided detailed information on the public hearing section which includes executive summary, draft EIA of the project for which public hearing has to be conducted and minutes of meeting of the project the public hearing of which is over. These states—except Goa—have also provided the executive summary in state and English language.

#### Box 4: Nine SPCBs/PCCs with 'NO' information on public hearing

PCCs from Andaman & Nicobar Islands, Puducherry, Chandigarh and Daman & Diu.

PCBs from Arunachal Pradesh, Assam, Manipur, Nagaland and Uttar Pradesh.

There are around 16 SPCBs/PCCs which have provided limited information in their public hearing sections. For example, eight SPCBs—Bihar, Chhattisgarh, Maharashtra, Madhya Pradesh, West Bengal, Odisha, Tamil Nadu and Uttarakhand—have provided executive summary and minutes of the meeting but not provided the draft EIA report. However, SPCBs from Meghalaya, Andhra Pradesh, J&K and Sikkim have shared executive summary and draft EIA report but they have not shared minutes of the meeting for the projects of which the public hearings have already been conducted. Whereas Himachal Pradesh has shared minutes of meeting and draft EIA report but no information is available on next public hearing. There are few SPCBs such as Haryana, Jharkhand and Tripura which have only shared minutes of the meeting for the projects the public hearings of which are already over. Assam pollution control board has shared only the list of the public hearings conducted, no other information is shared on its website.

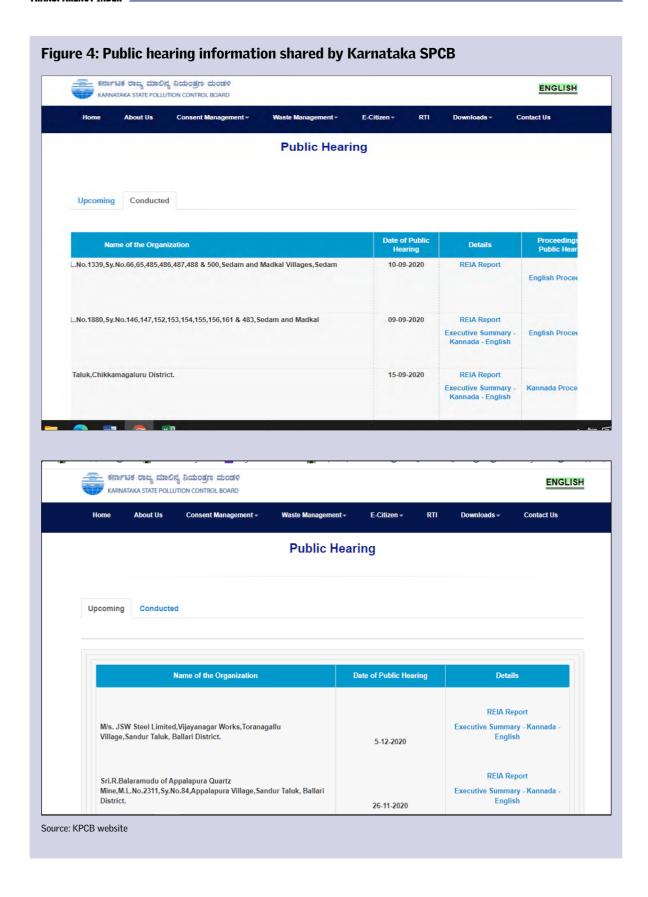


Table 9: Public hearing information shared by SPCBs/PCCs

Sr. no.	Indicators	Executive summary	Minutes of meeting	Draft EIA report	Language of executive summary
1.	Karnataka Pollution Control Board	Yes	Yes	Yes	Executive summary in two languages (English & Kannada)
2.	Telangana State pollution Control Board	Yes	Yes	Yes	Executive summary in two languages (English & Telegu)
3.	Gujarat Pollution Control Board	Yes	Yes	Yes	Executive summary in two languages (English & Guajrati)
4.	Delhi Pollution Control Committee	Yes	Yes	Yes	Executive summary in two languages (English & Hindi)
5.	Mizoram State Pollution Control Board	Yes	Yes	Yes	Executive summary in two languages (English & Mizo)
6.	Kerala State Pollution Control Board	Yes	Yes	Yes	Executive summary in two languages (English & Malayalam)
7.	Rajasthan State Pollution Control Board	Yes	Yes	Yes	Executive summary in two languages (English & Hindi)
8.	Punjab Pollution Control Board	Yes	Yes	Yes	Executive summary and MOM in two languages (English & Punjabi)
9.	Goa State Pollution Control Board	Yes	Yes	Yes	Executive summary in English only
10.	Bihar State Pollution Control Board	Yes	Yes	No	Executive summary in Hindi only
11.	Chhattisgarh State Pollution Control Board	Yes	Yes	No	Executive summary in two languages (English & Hindi)
12.	Madhya Pradesh Pollution Control Board	Yes	Yes	No	Executive summary in two languages (English & Hindi)
13.	Maharashtra Pollution Control Board	Yes	Yes	No	Executive summary in English only
14.	West Bengal Pollution Control Board	Yes	Yes	No	Executive summary in English only
15.	Odisha State Pollution Control Board	Yes	Yes	No	Executive summary in two languages (English & Odia)
16.	Tamil Nadu Pollution Control Board	Yes	Yes	No	Executive summary in two languages (English & Tamil)
17.	Uttarakhand Pollution Control Board	Yes	Yes	No	Executive summary in two languages (English and Hindi)
18.	J&K Pollution Control Board	Yes	No	Yes	Executive summary in two languages (English & Hindi)
19.	Andhra Pradesh Pollution Control Board	Yes-	No	Yes	Executive summary in two languages (English & Telegu)
20.	Meghalaya State Pollution Control Board	Yes	No	Yes	Executive summary in two languages (English & Khasi)

Sr. no.	Indicators	Executive summary	Minutes of meeting	Draft EIA report	Language of executive summary
21.	Sikkim State Pollution Control Board	Yes	No	Yes	Executive summary in English only
22.	Himachal Pradesh State Pollution Control Board	No	Yes	Yes	
23.	Haryana State Pollution Control Board	No	Yes	No	
24.	Jharkhand State Pollution Control Board	No	Yes	No	
25.	Tripura State Pollution Control Board	No	Yes	No	
26.	Andaman & Nicobar Islands PCC	No	No	No	
27.	Assam State Pollution Control Board	No	No	No	
28.	Uttar Pradesh Pollution Control Board	No	No	No	
29.	Puducherry PCC	No	No	No	
30.	Chandigarh PCC	No	No	No	
31.	Daman & Diu and Dadra & Nagar Haveli PCC	No	No	No	
32.	Arunachal Pradesh Pollution Control Board	No	No	No	
33.	Manipur Pollution Control Board	No	No	No	
34.	Nagaland Pollution Control Board	No	No	No	
35.	Lakshadweep PCC	No	No	No	

#### 2.11 Waste information

Solid wastes generated by domestic, commercial and industrial activities are often indiscriminately disposed. For proper and successful waste management planning, it is essential to have an inventory on the type and quantity of waste generated. The government of India, by its gazette notification of 13 March 1992, made it mandatory for all the industries to provide details of water, raw materials and energy resources used, and the products and wastes generated by them in an annual environmental statement. These audit reports were to be submitted to the respective SPCBs on or before 30 September every year. Every SPCB has information on amount of waste generated by industries, so it is very important that all SPCBs/PCCs prepare an inventory for waste generation, treatment and disposal/recycling and make this data available on the public domain for various stakeholders and the general public.

Government of India has categorized waste broadly into five main sections—biomedical waste, electronic waste, plastic waste, hazardous waste and municipal solid waste. Unscientific management of such wastes leads to serious environmental problems. There should be a proper arrangement for disposal/recycle/treatment of such waste. Some SPCBs/PCCs have shared the list of authorized waste treatment facilities and waste recyclers on their websites.

#### **Biomedical waste information**

Biomedical Waste Management Rules, 2016 mandate preparation of inventory on biomedical waste management by stakeholders like healthcare facilities, common biomedical waste treatment facilities, SPCBs/PCCs and CPCB. This inventory includes the number of occupiers, quantity of biomedical waste generation, collection, treatment, and disposal. Rules stipulate that SPCBs and PCCs compile the information in the format under rule 13(2) and submit the annual report information to CPCB for the preceding year before 31 July of every year. Then CPCB has to compile, review and analyse the annual data submitted by SPCBs and PCCs and submit the same to MoEF&CC.

Inventory will be useful to know the current generation, collection, treatment and disposal trends of biomedical waste, infrastructure available for treatment and disposal of bio-medical waste (captive and common bio-medical waste treatment facility (CBWTF)), and gaps in the management of biomedical waste. All this information will help in analysis of the current capacity of treatment and disposal and improvement required for proper management of biomedical waste. In spite of the rule for preparation of inventory, some states have not shared information on their websites. It has been observed that out of 34 SPCBs/PCCs which have websites, only 19—Andhra Pradesh, Chhattisgarh, Delhi, Haryana, Himachal Pradesh, Jharkhand, Kerala, Maharashtra, Madhya Pradesh, Rajasthan, Punjab, Puducherry, Odisha, Manipur, Uttarakhand, Telangana, Tamil Nadu, Sikkim and Mizoram—have shared good information on total biomedical waste generated, total amount of biomedical waste treated and list of authorized biomedical treatment facilities (see *Annexure 9: Information shared by SPCB/PCC on Biomedical waste*).

Whereas states like Arunachal Pradesh, Bihar and Karnataka have shared information on biomedical treatment facilities and total biomedical waste generation, Goa and Tripura have shared information on total biomedical waste generated and total biomedical waste treated. West Bengal only shared information on biomedical treatment facilities.

From the CPCB biomedical waste report, it was found that all SPCBs/PCCs are submitting their biomedical waste information to CPCB, but not sharing the same on their website. Seven states/UTs—Andaman Nicobar, Assam, Chandigarh, Daman and Diu, Meghalaya, Nagaland and Uttar Pradesh—have not taken any initiative

for sharing biomedical information on their website. The information furnished by various SPCB/PCC and the gap of information is summarized in table 10.

Table 10: Biomedical waste information shared by SPCBs/PCCs

Sr. no.	State	Biomedical waste generated	Biomedical waste treated	Biomedical waste treated and disposed by captive treatment facilities	Treated biomedical waste disposed by authorized recyclers
				(in Kg/day)	
1.	Andhra Pradesh	10662.27	10662.27		2049.46
2.	Chhattisgarh	3743.064		1207.081	3106.16
3.	Delhi	28785.15	28483		15187
4.	Goa	1488.95		1488.95	
5.	Haryana	14810	14810		1559
6.	Himachal Pradesh	3406.60	3035.36	183.85	1581.63
7.	Jharkhand	12788.2	5205	4333.62	2387
8.	Kerala	71976.142	37128	5097.8	138895.7
9.	Madhya Pradesh	17846.68	17007.08	281.9	4792.15
10.	Maharashtra	62254.62	61685.18	568	8678.75
11.	Manipur	1140.16			1140.16
12.	Mizoram	830.74		830.74	
13.	Odisha	14564.0	3391	11173	
14.	Punjab	15980.7	15980.7		8043.6
15.	Rajasthan	22502.57	13739.82	2427.17	2849
16.	Sikkim	276.27		203.15	
17.	Tamil Nadu	47196.9	47196.9		47196.9
18.	Tripura	1125.94	1124.44		
19.	Telangana	20472	20472		4390
20.	Uttarakhand	3814.23	2872.19	942.05	1685.39
21.	Puducherry	4319.8	5800		1704

Source: CSE analysis

Since there is a prescribed format under Biomedical Rule 13(2), state boards have attempted to follow it to provide information.

#### **Plastic waste information**

As per Rule 17(3) of Plastic Waste Management Rules, 2018, each SPCB or PCC shall prepare and submit an annual report to the CPCB on the implementation of these rules by 31 July of each year.

From the analysis, it was found that very few SPCBs/PCCs have shared information on plastic waste. Only three states have shared information on total plastic waste generation,

amount of plastic waste recycled/reused, and list of authorized plastic waste recyclers—Maharashtra, Madhya Pradesh, and Tamil Nadu (see *Annexure 10: Information shared by SPCB/PCC on plastic waste*).

Out of these three states which have shared information on plastic waste, only Maharashtra has shared detailed information like total amount of plastic waste generated in a year, amount of plastic collected, amount of plastic waste recycled and reprocessed (with their breakup —plastic waste used for Refuse Derived Fuel (RDF), sent for co-processing, used for granule making, used for pyrolysis, landfilling facility and used for road construction).

State boards like Andhra Pradesh, Goa, Haryana, Kerala, Manipur, Puducherry and Punjab have shared information on plastic waste generated and list of plastic waste recyclers, whereas Arunachal Pradesh, Chhattisgarh, Himachal Pradesh, Mizoram, Sikkim, Tripura and Telangana have shared only plastic waste generation data. Bihar, Gujarat, J&K, Karnataka, Uttar Pradesh and West Bengal have shared only list of plastic waste recyclers.

No initiative has been taken by 11 SPCBs/PCCs—Andaman & Nicobar Islands, Assam, Chandigarh, Daman and Diu, Delhi, Jharkhand, Meghalaya, Nagaland, Odisha, Rajasthan and Uttarakhand—to share plastic waste information on their websites. The information furnished by various SPCB/PCC and the gap of information is summarised in Table 11.

**Table 11: Plastic waste information shared by SPCBs/PCCs** 

Sr. no.	State	Plastic waste generation (in TPA)	Reuse/Disposal	Recycled
1.	Andhra Pradesh	46,222	Urban Local Bodies (ULBs) are collecting and segregating plastic waste and sending to recyclers. Non-recyclable plastic waste sent to cement plants and road formations.	No information
2.	Arunachal Pradesh	3787.37	No information	No information
3.	Chhattisgarh	51,100	CECB has authorized 3 cement plants in Chhattisgarh for co-processing of plastic waste.	No information
4.	Goa	26,068.3	The non-bio-degradable plastic waste collected by ULB's is sent for co-incineration in cement plants.	No information
5.	Haryana	1,90,163.9	No information	No information
6.	Himachal Pradesh	13,683	MC Manali sends plastic waste for incineration to ACC Barman.	No information
7.	Madhya Pradesh	1,21,079	Total plastic waste utilized = 1,16,898 MT.	Total plastic waste utilized = 1,16,898 MT.

Sr. no.	State	Plastic waste generation (in TPA)	Reuse/Disposal	Recycled
8.	Maharashtra	4,43,724	Plastic waste collection = 3,47,681 Plastic waste recycling and processing = 2,73,589 tonnes	Plastic waste used for RDF = 1,08,700 tonnes Plastic waste sent for co-processing = 15,857 tonnes Plastic waste used for granule making = 17,981 tonnes Plastic waste used for pyrolysis = 5,579 tonnes Plastic waste used for road construction = 5,515 tonnes Plastic waste sent to landfilling facility = 23,482 tonnes
9.	Manipur	12,453.8	No information	No information
10.	Mizoram	13.306	No information	No information
11.	Sikkim	99.6	No information	No information
12.	Punjab	1,19,414.64	No information	No information
13.	Tamil Nadu	4,31,472	Low value and multi-layered plastic used for road laying; recyclable plastic sold to recyclers; and non-recyclable plastic waste disposed to cement factories for co-processing.	268.575 TPA plastic waste channelized for recycling. 441.73 tonnes of plastic sent to pyrolysis plants. 46,032 TPA utilized for co-incineration in cement plants and road laying.
14.	Tripura	583.3	No information	No information
15.	Puducherry	11,753	No information	No information

#### **Electronic waste information**

As per the provision of section 18 (1) of E-Waste (Management) Rules 2016, SPCBs/PCCs have to share e-waste information in a prescribed format with CPCB every year.

It was found that very few SPCBs/PCCs have shared information on electronic waste. Only three state boards—Maharashtra, Madhya Pradesh and Telangana—have shared information on the total amount of e-waste generated, amount of e-waste recycled, and list of authorized e-waste recyclers (see *Annexure 11: Information shared by SPCBs/PCCs on e-waste*). Chhattisgarh, Goa, Haryana, Himachal Pradesh, Kerala, Mizoram, Tamil Nadu, Tripura and Uttarakhand have shared information on total e-waste generation and list of electronic waste recyclers whereas Andhra Pradesh, Assam, Bihar, Gujarat,

J&K, Jharkhand, Karnataka, Odisha, Punjab, Puducherry, Uttar Pradesh and West Bengal have shared only the list of e-waste recyclers. Sikkim has shared information only on total e-waste generation.

No effort has been taken by nine SPCBs/PCCs—Andaman & Nicobar, Arunachal Pradesh, Chandigarh, Daman and Diu, Delhi, Manipur, Meghalaya, Nagaland and Rajasthan—to share e-waste information on their websites.

#### Municipal solid waste

As per section 24 (3) of Municipal Solid Waste Rules, 2016, each SPCB/PCC shall prepare and submit an annual report to CPCB.

It has been observed that out of 34 states, 17 have shared information on total solid waste generation, collection and treatment—Andhra Pradesh, Chhattisgarh, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Maharashtra, Madhya Pradesh, Mizoram, Punjab, Puducherry, Sikkim, Tamil Nadu, Telangana, Uttar Pradesh and West Bengal. Whereas Arunachal Pradesh has shared information on solid waste generation and collection, Manipur and Tripura have shared information only on solid waste generation (see *Annexure 12: Information shared by SPCBs/PCCs on municipal soild waste*).

However, no initiative has been taken by 14 SPCBs/PCCs—Andaman & Nicobar, Assam, Bihar, Chandigarh, Daman Diu, Delhi, Goa, Gujarat, Jharkhand, Meghalaya, Nagaland, Odisha, Rajasthan and Uttarakhand—for sharing municipal solid waste information on their websites. As per CPCB report, municipalities do not keep/maintain regular data on waste generation and its composition<sup>3</sup>, which is one of the reasons for unavailability of municipal solid waste information on websites. The information furnished by various SPCBs/PCCs and the gap of information is summarized in Table 12.

Table 12: Municipal solid waste information shared by SPCBs/PCCs

Sr. no.	State	Solid waste generation (tonnes/day)	Collected (tonnes/day)	Treated (tonnes/day)	Land filled (tonnes/day)
1.	Andhra Pradesh	6766.0	6140	1059	203
2.	Arunachal Pradesh	270.96	215.00		
3.	Chhattisgarh	2000	1680	1411	Nil
4.	Haryana	4635.79	4430.25	815.93	3614.32
5.	Himachal Pradesh	389	340	150	190
6.	J&K	1518.91	1464	540	
7.	Karnataka	11186	9706	3475	5170
8.	Kerala	3521	880	1837	
9.	Madhya Pradesh	8000	7500	6100	1400

Sr. no.	State	Solid waste generation (tonnes/day)	Collected (tonnes/day)	Treated (tonnes/day)	Land filled (tonnes/day)
10.	Maharashtra	22945	22682.81	16037	
11.	Manipur	284.4	156.38	110.5	45.88
12.	Mizoram	251.42	213.07	29.22	Nil
13.	Punjab	4477.542	4413.952	2112.457	2301.5
14.	Uttar Pradesh	15500	12000	3115	Nil
15.	Tripura	445.72			
16.	Tamil Nadu	14228	13955	6620	6765
17.	Telangana	7804	7023	4795	593
18.	Sikkim	73.34	63	7.5	
19.	Puducherry	580	517	61	456

#### **Hazardous waste**

The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (HOWM Rules, 2016) stipulate provisions for maintaining records and filing annual returns pertaining to hazardous waste generation and their management by the occupiers/ actual users/operators of the disposal facility. As per Rule 20 (2) Form 4, the occupier handling hazardous waste and operator of the disposal facility are required to submit the annual return (about hazardous waste generation, storage, recycling, utilization, disposal, etc.) in the prescribed form to SPCBs/PCCs by 30 June of every financial year. Based on which, SPCBs/PCCs are required to prepare annual inventory of the waste generated, recycled, utilized, disposed, etc. for the respective state/UT and submit the same to CPCB by 30 September of every financial year in accordance with the provisions stipulated under Rule 20 (3). And, as per Rule 20(4), CPCB is required to prepare a consolidated report on management of hazardous and other wastes and submit the same to MoEF&CC before 30 December of every year.

CPCB has also prepared guidelines for 'Preparation of Inventories on Hazardous and Other Waste Generation and their Management' to help SPCBs/PCCs in inventorization of hazardous and other wastes. Various formats have been prescribed in the said guidelines to obtain information on annual inventory from SPCBs/PCCs. These formats and the guidelines were circulated to all SPCBs/PCCs vide letter dated 25/06/2019.

Most states have shared inventory of hazardous waste which includes waste information on oil sludge, spent catalyst, used oil, lead acid batteries, painting sludge and its generation. Out of 34 SPCBs/PCCs, 17 SPCBs/PCCs—Andhra Pradesh, Assam, Chhattisgarh, Goa, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Odisha, Rajasthan, Sikkim, Tamil Nadu, Telangana, Uttarakhand, Uttar Pradesh and West Bengal—have shared information on hazardous waste generation, amount of hazardous waste treated/

#### **Box 5: Information about hazardous waste**

Andhra Pradesh and West Bengal have shared detailed information on hazardous waste which includes information on lead battery waste, used oil, waste oil, zinc ash and spent solvents waste generation with the quantity of waste used for land fill, incineration and recycling. Inventory report shared by Andhra Pradesh has hazardous waste information district wise with name and type of unit/industry, product manufactured, name of hazardous waste generated, quantity of generation, quantity of waste used for landfilling, recycling and incineration, and list of authorized hazardous waste recyclers in the state. Whereas, West Bengal and Rajasthan have shared hazardous waste information district-wise with no. of hazardous waste generating units, quantity of hazardous waste generation, quantity of waste used for landfilling, recycling and incineration. They have also shared the list of authorized waste recyclers (district-wise) with the type of hazardous waste they are recycling and the quantity of waste recycled by them; and shared details on the import and export of hazardous waste.

disposed and list of authorized hazardous waste recyclers in state (see *Annexure 13: Information shared by SPCBs/PCCs on hazardous waste*).

Andaman & Nicobar, Arunachal Pradesh, Chandigarh, Daman Diu, Jharkhand, Manipur, Meghalaya, Mizoram, Nagaland and Punjab have not taken any initiative for sharing hazardous waste information on their websites. However, from CPCB hazardous waste report (2018–19), it was found that all states (except Arunachal Pradesh and Daman & Diu) have shared hazardous waste information with CPCB but not shared it on their websites.

However, J&K has shared district-wise information on hazardous waste with no. of waste generating units, the quantity of waste generation, quantity of waste used for landfilling, recycling, utilization and incineration. Tripura has also shared district-wise information on hazardous waste generation and quantity of waste sent to recyclers, whereas Maharashtra has shared region-wise information on hazardous waste and shared waste generation information based on disposable criteria which are land fillable, recyclable and incinerable waste. Maharahstra also shared a list of hazardous waste recyclers in the state. On the other hand, hazardous waste generation data shared by DPCC is old, lastly shared in 2007. Few states/UTs like Bihar, Puducherry and Gujarat have shared only the list of recyclers.

#### 2.12 Right to Information (RTI)

As per the Right to Information Act 2005, 'right to information' means an access to the information which is held by or under the control of any public authority, in order to promote transparency and accountability in the working of every public authority.

Out of 34 SPCBs/PCCs, 22 have shared detailed information like name of public relation officer/information officer, contact no. and email id. However, Jharkhand state pollution control board has not shared name and contact details of public relation officer but has shared an RTI portal on its website (see *Annexure 14: RTI details shared by SPCB/PCC*). There are SPCBs/PCCs which have no online mechanism to provide information with respect to RTI. Eleven SPCBs/PCCs—Andaman& Nicobar Islands, Arunachal Pradesh, Chandigarh, Daman & Diu, Delhi, Kerala, Manipur, Mizoram, Puducherry, Uttar Pradesh and Sikkim—have not provided any information of public relation officer on their website. RTI is an important tool to access information from any SPCB/PCC.

# 3. Availability and assessment of information shared in annual reports

#### 3.1 Availability and quality

Under the provision of Water Act (section 39), every SPCB/PCC during each financial year needs to prepare an annual report giving a full account of its activities. Section 35 of the Air Act also emphasizes the same. The annual report is a statutory document to be prepared by SPCBs/PCCs for disseminating information on their activities to the various concerned stakeholders and the general public. It is a essential document to track the progress of environmental improvement in the states. Thus, transparency in sharing the information will directly reveal the state board's efforts and key gaps in solving environmental issues in the states.

The annual reports of SPCBs/PCCs were sourced from their websites. However, it was found that out of 34 SPCBs/PCCs which have websites, 11 do not have their annual reports on the website (see *Annexure 15: Annual report availability on website*). They must be preparing it under the Water and Air Act but, unfortunately, they are not sharing it with stakeholders. There are special challenges with J&K with respect to internet access, but it is difficult to understand why Jharkhand and Bihar pollution control boards are not sharing their annual reports on their websites, as is done by other SPCBs/PCCs.

#### Box 7: 11 SPCBs/PCCs with no annual reports on their websites

SPCBs: Assam, Arunachal Pradesh, Bihar, J&K, Jharkhand, Manipur and Nagaland

PCCs: Andaman & Nicobar, Chandigarh, Daman & Diu and Dadra & Nagar Haveli and Puducherry.

It has been observed that there are twenty-three SPCBs/PCCs which have their annual report on their websites. However, it was interesting to find that six of them have uploaded annual reports which are 4–10 years old. Some large SPCBs like Telangana, Andhra Pradesh and Punjab have older reports on their websites. DPCC, which has been the centre of attention every year because of the winter pollution issue, has uploaded an annual report for the year 2010. Such reports are redundant and are of no use. The practice of putting an old annual report on the website is no better than boards not sharing their annual reports on their websites.

#### **Box 8: Six SPCBs/PCCs with old annual reports**

SPCBs: Kerala (2013–14), Meghalaya (2013–14), Punjab (2015–16), Telangana (2014–15) and Andhra Pradesh (2015–16).

PCCs: Delhi (2010).

Out of 34 SPCBs/PCCs, 12 state boards have shared their latest annual reports on the website (as on 25 June 2021). Gujarat, Madhya Pradesh, Sikkim, Tripura and West Bengal have shared annual reports of the year 2019–20. Whereas, Chhattisgarh, Karnataka, Maharashtra, Odisha, Rajasthan, Uttar Pradesh and Tamil Nadu have shared annual reports of the year 2018–19, which could be termed as the latest considering the COVID-19 pandemic situation in 2020.

Other five SPCBs/PCCs—Goa, Haryana, Himachal Pradesh, Uttarakhand and Mizoram—have shared annual reports for the year 2017–18 on their websites. In totality, there are 17 boards in the country that have at least tried to be transparent in terms of their annual activity.

Availability of the latest annual report cannot be the sole criteria for judging the level of transparency of the board. The quality of the annual report is an important parameter to gauge whether the information provided by a board is relevant or sufficient. As the Water Act says, the annual report enlists the board's activity for the previous year. Therefore, it should contain information such as the number of regulated entities, the compliance status of industries, number of inspections conducted, manpower and accounts, finance information, etc.

The review of various boards' annual reports reveals clearly that there is no uniform format that is used by different boards even though a uniform format has been formed under the Water Act. Every board is using their own format. Some are trying to provide as little information as possible while some have provided detailed information.

#### **3.2** Information on regulated entities

The basic information on number of regulated entities should be there in the state's or UT's annual report. Every annual report should provide information on number of industries, hotels or mines in the state and also number of red, orange and green category entities. We analysed annual reports of 17 states/UTs which have latest annual reports, i.e., annual report published after 2016. States/UTs with annual reports prior to 2016 were not considered. Out of 17 states/UTs, only 5 SPCBs namely **Haryana, Karnataka**,

Maharashtra, Madhya Pradesh and Tamil Nadu have shared information on regulated entities in their respective states (see *Annexure 16: Information on regulated entities in annual report*). The way they have provided information on regulated entities varies from state to state. Karnataka PCB is the only board to have provided detailed information on regulated entities in the state. They have provided number of red, orange, green and white category industries separately under industry, stone crushers, townships and residential areas, infrastructure projects, hospitality sector, mines, coffee estates, and number of

#### Box 9: Regulated entities information shared by:

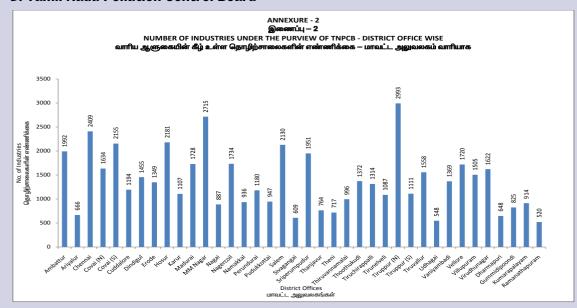
#### 1. Karnataka Pollution Control board

Particulars	Category	Total Nos.as on 31.03.2018	Operating	Closed	YTC
Number of Industries	Red	4822	2322	1915	585
	Orange	9532	5643	2723	1166
	Green	20796	11888	5690	3218
	White	4185	2755	836	594
Number of Stone crushers	Orange	4156	1713	1870	573
Townships and Residential Area development Projects covering an area > 10 Acers (Number of Layouts -10 acres and above)	Green	1751	55	8	1688
Number of Infrastructure projects (Apartment, Educational	Red	1211	650	6	555
institutions,commercial establishments, etc.,)	Orange	2579	695	19	1865
	Green	1286	196	218	872
Number of Hospitality organizations(Hotels, Resorts etc.) a. Hotels / Resorts having overall waste-water generation @ 100 KLD and more.	Red	149	106	6	37
b. Hotels (< 3 star) or hotels / Resorts having > 20 rooms and less than 100 rooms. and waste-water generation less than 100 KLD and having a coal /oil fired boiler	Orange	299	220	13	66
c. The Hotels/Resorts having morethan 20 rooms and wastewater generation less than 10 KLD and having no-boiler & no hazardous waste generation	Green	593	380	125	88
Number of Hospital /HCE's a) Wastewater generation > 100 KLDwith or without incinerator	Red	518	502	4	12
b) Wastewater generation < 100 KLD without incinerator	Orange	904	851	32	21
c) Non-bedded and <30 bedded	White	32318	31060	1244	14
Number of Mines	Red	750	202	427	121
Number of coffee estate	Orange	2748	2596	150	2
a) Number of Telephone towers having DG sets less than 250KVA	White	12379	12184	84	111
b) Number of banks, office complex, association office etc., having DG Sets as Air pollution sources	White	896	523	310	63
Total		101872	74541	15680	11651

2. Harvana S	State Pollution (	Control Board
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Region	Red	Orange	Green	White	Total
Bahadurgarh	251	961	51	4	1267
Ballabgarh	488	504	28	8	1028
Dharuhera	157	511	40	5	713
Faridabad	156	267	36	0	459
Gurugram (N)	257	615	44	11	927
Gurugram (S)	327	375	148	85	935
Hisar	64	760	23	00	847
Jind	78	1347	24	0	1449
Panchkula	146	902	143	49	1240
Panipat	385	223	22	06	636
Sonepat	264	718	164	33	1179
Yamuna Nagar	301	1132	50	1	1484
Total	2874	8315	773	202	12164

#### 3. Tamil Nadu Pollution Control Board



#### 4. Maharashtra Pollution Control Board

	Lage	Medium	Small
Red	2747	488	10,701
Orange	2801	968	23,950
Green	700	663	41,521
White	7542		

telephone towers and offices having DG sets; Tamil Nadu SPCB has simply provided number of industries year-wise since 1980; Haryana SPCB has provided district-wise information on red, orange and green category industries whereas Maharashtra and Madhya Pradesh PCBs have provided information only on red, orange and green category industries.

The above charts reveal how different SPCBs are using different formats to present data on regulated entities in their states. Such data cannot be used for any research or analysis purposes on pan-India basis or even for comparing regulated entities in two SPCBs.

#### 3.3 Information on compliance status of industries

One of the serious drawbacks found during the review of annual reports is the lack of information on the compliance status of industries under various acts and rules. One of the reasons for the lack of information could be that there is no definition of compliance. SPCB officers say compliance means complying with norms 24\*7\*365. However, no industry can comply with that. From the annual report analysis, it was found that no board has information on how many industries were non-complying during the year, which could also mean no industry was non-complying during the year. Few boards such as **Haryana and Karnataka have provided information on compliance status**. Haryana has shared compliance status information of grossly polluting and 17 categories of industries in their annual report. Karnataka has shared detailed information on the compliance status of water and air polluting industries.

Haryana has shared information on no. of grossly polluting industries region-wise, their compliance status and action taken against non-complying industries. Haryana has also shared no. of 17 categories of industries region-wise, industry compliance status (under Water and Air Acts and HWM rules) and action taken for non-complying industries.

Karnataka has shared good information on water and air pollution control status of industries zonal office wise. For water pollution control status, KSPCB has shared information on category of industries, total no. of operating industries in that specific zone, no. of ETPs/STPs operational, no. of industries connected to CETP, and defaulters (industries with no adequate facility). Similarly, Karnataka has also shared information on air pollution control status like category of industry, no. of operating industries, air pollution control system operational, and defaulters (industries with no adequate facility).

## Box 10: Haryana State Pollution Control Board: Status of grossly polluting industries

Region	No. of the	Complia	ance Status	Actio	n taken agains	Closure & Prosecutio n  0  0  0  0  0  0  0  0  0  0  0  0  0	units
	Grossly polluting Industries	Complying	Non Complying	Closure	Prosecutio n		Under SCN
Bahadurgarh	77	77	0	0	0	0	0
Ballabgarh	134	120	14	14	0	0	0
Dharuhera	12	12	0	0	0	0	0
Faridabad	14	14	0	0	0	0	0
Gurugram (N)	126	126	0	0	0	0	0
Gurugram (S)	115	115	0	0	0	0	0
Jind	02	2	0	0	0	0	0
Panchkula	45	37	8	8	0	0	0
Panipat	12	12	0	0	0	0	0
Sonepat	110	110	0	0	0	0	0
Yamuna Nagar	9	9	0	0	0	0	0
Total	656	634	22	22	0	0	0

#### The status of highly polluting 17 category industries is as below:

Region	No. of 17 category highly polluting Industry	Compliance Status Under			Action taken against non-complying units			
		Air Act	Water Act	HWM Rules	Closure	Prosecution	Closure & Prosecution	Under SCN
Bahadurgarh	25	25	25	22	0	0	0	0
Ballabgarh	4	4	4	4	0	0	0	0
Dharuhera	1	1	1	1	0	0	0	0
Faridabad	1	1	1	1	0	0	0	0
Gurugram (N)	1	1	1	1	0	0	0	0
Gurugram (S)	3	3	3	3	0	0	0	0
Hisar	5	4	4	4	1	0	0	0
Jind	7	4	4	2	0	0	0	0
Panchkula	13	11	11	11	1	0	0	0
Panipat	9	9	9	7	0	0	0	0
Sonepat	16	0	16	0	0	0	0	0
Yamuna Nagar	16	16	16	16	1	0	0	0
Total	101	79	95	72	3	0	0	0

### Box 11: Karnataka State Pollution Control Board: Water pollution status of industries

Zonal Office	Category	Particulars of generation of trade & sewage effluent	Total No. of Operating Industries	ETP /STP/ ST & SP Operation	Connected to UGD	Connected to CETP	No of industries transporting sewage effluent to BWSSB STP's	Defaulters (No adequate facility)
Bengaluru City	Red	Trade	305	43	0	262	0	0
Deligatar a Orey	Iteu	Sewage	414	128	286	0	0	0
	Orange	Trade	232	139	6	87	0	0
	Orange	Sewage	615	139	475	0	1	0
Bengaluru East	Red	Trade	135	60	0	75	0	0
Dengalara Last	l teu	Sewage	195	194	1	0	0	0
	Orange	Trade	128	99	0	25	0	4
	Orange	Sewage	327	326	1	0	0	0
Bengaluru South	Red	Trade	369	169	0	198	0	2
Deligaturu Soutii	Reu	Sewage	548	532	15	170	0	0
	Oueman	<u> </u>			<b>†</b>			-
	Orange	Trade	340	267 779	12 56	60	0	1
Danielium Naudh	Deal	Sewage	836					
Bengaluru North         Red         Trade         193         63           Sewage         272         257           Orange         Trade         107         71           Sewage         380         348	0	130	0	0				
		-			14	1	0	0
	Orange				2	32	1	1
		+ -			31	1	0	0
Mysuru		148	0	0	0	0		
		Sewage	22	22	0	0	0	0
	Orange	Trade	284	284	0	0	0	0
		Sewage	413	402	11	0	0	0
Mangaluru	Red	Trade	85	82	1	0	0	2
		Sewage	125	124	1	0	0	0
	Orange	Trade	461	445	2	13	0	1
		Sewage	1026	1005	21	0	0	0
Ballari	Red	Trade	32	32	0	0	0	0
		Sewage	202	202	0	0	0	0
	Orange	Trade	132	112	17	0	0	3
		Sewage	527	517	0	0	0	10
Chitradurga	Red	Trade	90	77	2	11	0	0
		Sewage	97	97	0	0	0	0
	Orange	Trade	363	250	69	4	0	40
		Sewage	622	617	5	0	0	0
Dharwad	Red	Trade	134	134	0	0	0	0
		Sewage	201	199	2	0	0	0
	Orange	Trade	195	180	9	0	0	6
	g	Sewage	559	554	5	0	0	0
Kalburagi	Red	Trade	79	79	0	0	0	0
ui ugi	, teu	Sewage	85	80	5	0	0	0
	Orange	Trade	123	106	17	0	0	0
	orange	Sewage	151	131	20	0	0	0

#### Karnataka State Pollution Control Board: Air pollution status of industries

Zonal Office	Category	Total No. of Operating	APC system under	Defaulters (No	
		Industries	Operation	adequate facility)	
Bengaluru City	Red	410	410	0	
	Orange	570	570	0	
Bengaluru East	Red	181	181	0	
	Orange	302	302	adequate facility) 0 0	
Bengaluru South	Red	510	510	0	
	Orange	652	652	adequate facility)  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 1 0	
Bengaluru North	Red	259	259	0	
	Orange	291	291	0	
Mysuru	Red	201	201	0	
	Orange	394	394 0		
Mangaluru	Red	114	113	1	
	Orange	916	410       0         570       0         181       0         302       0         510       0         652       0         259       0         291       0         201       0         394       0         113       1         916       0         179       5         564       11         99       0         606       14         187       0         588       0         88       0		
Ballari	Red	184	179	5	
	Orange	575	564	Operation         adequate facility)           410         0           570         0           181         0           302         0           510         0           652         0           259         0           291         0           201         0           394         0           113         1           916         0           179         5           564         11           99         0           606         14           187         0           588         0           88         0	
Chitradurga	Red	99	99	0	
	Orange	620	606	14	
Dharwad	3.00		0		
	Orange	588	588 0		
Kalburagi	Red	88	88	0	
	Orange	179	179	0	

#### 3.4 Inspection

Under the Water and Air Acts, SPCBs/PCCs have the authority to inspect facilities, impose corrective action and prescribe compliance schedules. The number of inspections undertaken by a board gives an idea of its pro-activeness in monitoring. Ideally, a greater number of inspections can keep board officials well informed about the performance of the industrial unit in accordance with prescribed pollution norms.

As per CSE analysis, it has been found that out of 17 states, five—Himachal Pradesh, Karnataka, Odisha, Tamil Nadu and West Bengal—have shared information on inspection conducted by the boards in their annual report (see *Annexure 17: Information on inspection in annual report*). The format used by all the boards varies significantly. For example, SPCBs from Himachal Pradesh and Odisha have provided information on total inspections carried out by the board. However, the boards from West Bengal and Karnataka have provided detailed information on no. and category of industry inspected by them. TNPCB has provided information only on surprise inspections carried out by them. Not a single board has provided information on the number of inspections carried out for air polluting, water polluting, and hazardous waste generating units.

#### 3.5 Manpower information

It is not hidden from anyone that the SPCBs have a manpower crunch. Shortage of manpower is an important factor which is affecting the performance of SPCBs at various levels. Such information is essential in the annual report as it provides the opportunity for the State Assembly to understand what is hindering environmental governance in the state. However, many of the boards have conveniently ignored providing information on manpower strength in their annual reports. The annual report should have manpower information like the total sanctioned posts, vacant posts, filled posts, no. of engineers, scientists and admin staff. Out of 17 states, only nine states, namely Goa, Gujarat, Haryana, Karnataka, Maharashtra, Odisha, Tamil Nadu, Tripura, and Chhattisgarh, have shared information on manpower in their annual reports. Boards from Chhattisgarh, Maharashtra, Haryana, Tamil Nadu, Karnataka, Odisha and Tripura have shared detailed information. However, boards from Goa and Gujarat have shared limited information (see *Annexure 18: Information on manpower in annual report*).

There are six SPCBs who have not put their latest annual report in the public domain. Out of them, SPCBs from Kerala, Meghalaya, Punjab, and Telangana have shared detailed information on manpower in their old annual reports and SPCB from Andhra Pradesh has shared limited information on manpower.

There are a number of boards— West Bengal, Mizoram and Madhya Pradesh—which have not provided manpower information in their annual reports but have provided basic information on staff like name of employee and designation on their website.

Table 13 clearly shows that Karnataka SPCB has 52 per cent, Chhattisgarh 57 per cent and Haryana has 50 per cent vacant posts, which is very high in industrial states, and requires immediate attention from respectove state governments.

**Table 13: Staff Strength of SPCBs** 

Sr. no.	Name of SPCB	Total sanctioned strength	Total working strength	Vacant
1.	Karnataka	709	334	375
2.	Maharashtra	839	566	273
3.	Odisha	277	203	74
4.	Tamil Nadu	998	562	436
5.	Tripura	30	27	3
6.	Haryana	301	150	151
7.	Chhattisgarh	320	138	182

Source: CSE analysis

The functions of a state board are highly technical in nature and involve monitoring of industries and implementing programmes and policies for pollution control. Many boards represented in the graph below have more technical staff than non-technical staff. Gujarat has 80 per cent technical staff, Karnataka has 70 per cent, and Tamil Nadu has 56 per cent. Chhattisgarh and Odisha, on the other hand, are dominated by non-technical staff.

350 314 306 304 300 262 248 233 250 200 150 96 <sup>107</sup> 105 101 85 78 100 65 50 20 0 Haryana Gujarat amil Nadu Karnataka Odisha **Maharashtra** Tripura Technical Non- Technical

Graph 1: Details of technical and non-technical staff

Source: CSE analysis

#### 3.6 Accounts and finance information

As per Section 40 of the Water Act and Section 36 of the Air Act, every state board shall maintain proper accounts and other relevant records and prepare an annual statement of accounts in a form as prescribed by the central government or the state government.

Out of 17 states, 14—Chhattisgarh, Goa, Haryana, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh and West Bengal—have shared their account and financial information in their annual reports (see *Annexure 19: Information on account and finance in annual report*). Many big SPCBs have not shared their financial information in their annual reports, which is strange. They could be submitting information to the state government in a format which is not transparent.

It has been observed while reviewing the information on accounts and finance that there is no common format adopted across the boards. Few boards, such as Tamil Nadu, Uttarakhand, West Bengal, Odisha, Tripura, Maharashtra, Karnataka, Goa, Rajasthan and Haryana, have provided detailed information while SPCBs from Uttar Pradesh, Chhattisgarh, Madhya Pradesh, and Himachal Pradesh have shared only basic account information like total income and total expenditures.

#### 3.7 Direction, show cause and closure notice

Section 33 of Water Act and 31(A) of Air Act have vested powers upon the state boards for issuing closure or prohibition notices to any industry, operation or process and/or stop or regulate the supply of electricity or water or any other services (with regard to controlling pollution). However, these directions can only be issued by a board after hearing the views of the defaulting industry. This is one of the important pieces of information which must be given in the annual report. Under section 23 of EP Act, the central government delegated the powers of section 5 to state government.

Out of 17 states, 13— Chhattisgarh, Gujarat, Goa, Himachal Pradesh, Haryana, Tripura, Rajasthan, Tamil Nadu, Karnataka, Sikkim Odisha, West Bengal and Maharashtra—have shared information on no. of closure notices issued to industries (see *Annexure 20: Information on directions, show cause and closure notices in annual report*).

**Table 14: Directions, show cause and closure notices** 

Name of SPCB	Directions	Show cause notices	Closure notices
Goa (2017-18)	45	296	39
Gujarat (2017-18)	206	1395	325
Odisha (2017–18)	271	182	177
Maharashtra (2018-19)	328	-	272
Tripura (2018–19)	-	0	4

Goa, Gujarat and Odisha have shared information on no. of show cause notices, closure notices and no. of directions issued to industries, whereas Maharashtra has shared information only on no. of closure notices and directions issued and Tripura has shared information on no. of show cause and closure notices issued to industries.

# 4. Final rating of boards based on public disclosure

Considering all the indicators and information furnished by SPCBs/PCCs, the rating has been summarized in the table below.

Table 15: Final rating of SPCBs/PCCs based on information availability

i abie 1	5. Final facility of SPGDS/PGGS based on information as	variability
Rank	List of SPCB	%
1.	Odisha State Pollution Control Board	67.0
1.	Telangana State Pollution Control Board	67.0
2.	Tamil Nadu Pollution Control Board	65.5
3.	Madhya Pradesh Pollution Control Board	64.0
4.	West Bengal Pollution Control Board	62.0
5.	Goa State Pollution Control Board	60.6
6.	Karnataka State Pollution Control Board	60.0
7.	Haryana State Pollution Control Board	59.9
8.	Chhattisgarh Environment Conservation Board	59.5
8.	Himachal Pradesh State Pollution Control Board	59.5
9.	J&K Pollution Control Board	56.5
10.	Kerala State Pollution Control Board	56.3
11.	Maharashtra Pollution Control Board	53.5
11.	Uttarakhand Pollution Control Board	53.5
12.	Punjab Pollution Control Board	53.0
13.	Andhra Pradesh Pollution Control Board	52.0
14.	Rajasthan State Pollution Control Board	50.0
15.	Delhi Pollution Control Committee	49.5
16.	Gujarat Pollution Control Board	49.0
17.	Tripura State Pollution Control Board	45.3
18.	Meghalaya State Pollution Control Board	44.4
19.	Assam Pollution Control Board	44.0
20.	Sikkim State Pollution Control Board	42.1
21.	Mizoram Pollution Control Board	40.7
22.	Bihar State Pollution Control Board	40.5
23.	Uttar Pradesh Pollution Control Board	38.5
24.	Jharkhand State Pollution Control Board	33.0
25.	Puducherry Pollution Control Committee	26.8
26.	Nagaland Pollution Control Board	19.2
27.	Chandigarh Pollution Control Committee	15.8
27.	Daman & Diu and Dadra & Nagar Haveli Pollution Control Committee	15.8
28.	Arunachal Pradesh State Pollution Control Board	13.0
29.	Manipur Pollution Control Board	12.6
30.	Andaman & Nicobar Islands Pollution Control Committee	5.5
31.	Lakshadweep Pollution Control Committee	No information

# 5. Conclusion and recommendations

#### **5.1 Conclusion**

SPCBs and PCCs are important players when we talk about environmental governance in the country. They are custodians of all the environmental pollution data of the country. It is also a known fact that SPCBs/PCCs are facing a manpower constraint. With the advent of RTI and interest in environmental governance, there is great demand for information on environmental quality, which is available only with SPCBs/PCCs. However, since their creation, no mechanism has been evolved where information sharing from them is possible. Environmental governance in the 21<sup>st</sup> century requires involvement of all the stakeholders directly and indirectly to support environmental regulator in implementation of their responsibility. The problem is that while there is significant demand for environmental data from politicians, courts, researchers and civil society organizations, SPCBs/PCCs have been unable to meet it because of a number of limitations and this creates mistrust between SPCBs/PCCs and other stakeholders.

The easiet option for SPCBs/PCCs to reduce the mistrust is to share the information with all. They have strong mediums such as annual reports and websites which are being accessed by all stakeholders. Barring a few boards which have taken the steps to use their website and annual report for information sharing, majority of SPCBS/PCCs have made little effort to build a relationship with all stakeholders by sharing information. In addition to above, the format adopted by them varies significantly and thus, even when the information is shared, it is useless for analysis.

#### From CSE's study it was observed that:

- There are some indicators in annual reports on which very few states have given information like compliance status of industries (only Karnataka and Haryana have shared information); no. of inspections; no. of directions, show cause and closure notices issued; and information on regulated entities in the state. Only few boards have shared miniutes of board meetings on their websites. All this information is important and should be shared in public domain.
- Some SPCBs/PCCs are sharing their biomedical waste annual report, municipal soild
  waste annual report, hazardous waste annual report, action plan for polluted river
  stretches and action plan for non-attainment cities with CPCB but not sharing the
  same on their website.

• It is observed that PCCs and boards from states in the North-East have shared limited information on their websites.

SPCBs/PCCs have to prepare themselves for 21<sup>st</sup> century environmental governance where they are supposed to work with all the stakeholders. With the same objective, CSE compared the performance of SPCBs/PCCs on 25 indicators. This report is more focused on availability of information in the public domain provided by state boards, not much with the quality of information. The exercise was carried out for the period 2015–2021, considering the current COVID situation. The final score shows there are only 10 SPCBs in the country which have made serious efforts to share information. All the SPCBs/PCCs have shared information but these top ten boards have walked the extra mile to put meaningful information in public domain. Majority of the top ten boards have shared latest annual reports on their website; provided details on manpower, accounts and finance; detailed information and copy of direction, show cause and closure notices; information on waste management; information on consent management; and complete information on public hearing. This is basic information which should be there in the public domain. However, CSE's exercise did not find the same in majority of SPCBs/PCCs. The reasons for good perfomance of ten state boards is given below:

#### Information shared by good performing states

Transparency index	Why they fared well
Good performers Odisha, Telangana, Tamil Nadu, Madhya Pradesh, West Bengal, Goa, Karnataka, Haryana, Chhattisgarh and Himachal Pradesh	<ul> <li>Availability of latest annual report</li> <li>Detailed information on public hearing</li> <li>CEMS data display</li> <li>Detailed consent information along with CTO/CTE certificate</li> <li>Detailed information on waste</li> <li>Detailed information on laboratory infrastructure and accredation</li> <li>Detailed information on manpower</li> <li>Detailed information on accounts and finance</li> <li>Information on no. of closure notices, direction and show cause notices issued</li> <li>Availability of action plan for non-attainment cities and polluted river stretches</li> </ul>

#### **5.2 Recommendations**

- Availability of annual report: All the SPCBs and PCCs should ensure their annual
  reports are available on their website for at least 5 years. CPCB should fix a timeline
  by which all SPCBs and PCCs should upload their latest annual report without delay.
- Guideline on framing annual report: CPCB shall come up with a guideline on framing annual report. The format for sharing information by each board varies significantly which makes it difficult to conduct any national level analysis. SPCBs/PCCs shall update their websites at least three times in a year.
- Format for SPCB/PCC website: CPCB shall also come up with a format for SPCB/PCC websites. As all SPCBs/CPCBs have different website formats, accessing same information on different websites is difficult
- Industry wise compliance history: SPCBs/PCCs have been protective of industries when it comes to non-compliance. It is therefore pertinent for CPCB to come up with a website format where all SPCBs/PCCs upload information about compliance history of industries, atleast starting with 17 categories of industries and grossly polluting industries. Each industry section should have soft copy of CTE, CTO, direction/show cause/closure issued since inception.
- Uniform format for consent management system: Same format for consent information should be there on OCMMS and state specific website. In this study, it was found that despite the presence of centralized software for consent information—OCMMS—few state boards share consent information on their websites. They have developed their independent systems for consent information. As a result, there will be issues of compatibility and comparison between the state-level information systems. This has created a roadblock to compile a nationwide database. Further, the information available on the OCMMS website should be updated regularly.
- Make CEMS data accessible to everyone: Despite specific directions from the Supreme Court, few SPCBs/PCCs are still not providing public access to CEMS data. Most PCBs are reluctant to make information public. CEMS historical data is to be available at least for the previous one year (per day basis) in the public domain.
- Make information on public hearing mandatory for all SPCBs/PCCs. Public hearing information should be available on SPCB/PCC websites under tabs 'Public hearing conducted' and 'Upcoming public hearing' with executive summary, draft EIA report in English and state language, and minutes of the meeting. It is the

responsibility of SPCBs/PCCs to provide soft copy of these reports on the website to facilitate public interaction.

- Availability of waste management information on website: Information related to waste management should be submitted to CPCB every year and it should be made available on SPCB/PCC websites in the same format.
- **Availability of RTI information:** Every SPCB/PCC must share RTI information i.e., contact details of officers realted to RTI, on their websites.
- Availability of technical report: Some states boards have shared technical reports.
   Sharing technical report is an important means of learning from each other. It also enhances their image on their technical capabilities. Stakeholders may provide their valued suggestions for further improvement of reports and open up new area of research.

### **Annexures**

#### Annexure 1: Website availability

Sr. no.	Name of SPCB/PCC	Website availability (Y/N)
1.	Andaman & Nicobar Islands PCC	Υ
2.	Andhra Pradesh Pollution Control Board	Υ
3.	Arunachal Pradesh State Pollution Control Board	Υ
4.	Assam State Pollution Control Board	Υ
5.	Bihar State Pollution Control Board	Υ
6.	Chandigarh PCC	Υ
7.	Chhattisgarh Environment Conservation Board	Υ
8.	Daman & Diu and Dadra & Nagar Haveli PCC	Υ
9.	Delhi Pollution Control Committee	Υ
10.	Goa State Pollution Control Board	Υ
11.	Gujarat Pollution Control Board	Υ
12.	Haryana State Pollution Control Board	Υ
13.	Himachal Pradesh Pollution Control Board	Υ
14.	J&K Pollution Control Board	Υ
15.	Jharkhand State Pollution Control Board	Υ
16.	Karnataka Pollution Control Board	Υ
17.	Kerala State Pollution Control Board	Υ
18.	Lakshadweep PCC	No website
19.	Madhya Pradesh Pollution Control Board	Υ
20.	Maharashtra Pollution Control Board	Υ
21.	Manipur Pollution Control Board	Υ
22.	Meghalaya State Pollution Control Board	Υ
23.	Mizoram State Pollution Control Board	Υ
24.	Nagaland Pollution Control Board	Y
25.	Odisha State Pollution Control Board	Υ
26.	Puducherry PCC	Υ
27.	Punjab Pollution Control Board	Υ
28.	Rajasthan State Pollution Control Board	Υ
29.	Sikkim State Pollution Control Board	Υ
30.	Tamilnadu Pollution Control Board	Υ
31.	Telangana State pollution Control Board	Υ
32.	Tripura State Pollution Control Board	Υ
33.	Uttar Pradesh Pollution Control Board	Υ
34.	Uttarakhand Pollution Control Board	Υ
35.	West Bengal Pollution Control Board	Υ

Annexure 2: Information on SPCB/PCC laboratories—infrastructure and accreditation

Sr. no.	Name of SPCB/PCC	No. of laboratories	Accreditation of labs	Parameters which can be analysed in lab	Address
1.	Andaman & Nicobar Islands PCC	No	No	No	No
2.	Andhra Pradesh Pollution Control Board	Yes	No	Yes	Yes
3.	Arunachal Pradesh Pollution Control Board	No	No	No	No
4.	Assam State Pollution Control Board	Yes	No	Yes	Yes
5.	Bihar State Pollution Control Board	Yes	No	No	No
6.	Chandigarh PCC	No	No	No	No
7.	Chhattisgarh Environment Conservation Board	Yes	No	Yes	Yes
8.	Daman & Diu and Dadra & Nagar Haveli PCC	No	No	No	No
9.	Delhi Pollution Control Committee	Yes	No	Yes	Yes
10.	Goa State Pollution Control Board	Yes	Yes	Yes	Yes
11.	Gujarat Pollution Control Board	Yes	Yes	No	Yes
12.	Haryana State Pollution Control Board	Yes	No	No	Yes
13.	Himachal Pradesh Pollution Control Board	Yes	Yes	Yes	Yes
14.	J&K Pollution Control Board	No	No	No	No
15.	Jharkhand State Pollution Control Board	Yes	No	No	No
16.	Karnataka Pollution Control Board	Yes	No	No	Yes
17.	Kerala State Pollution Control Board	Yes	Yes	Yes	Yes
18.	Lakshadweep PCC		No v	vebsite	
19.	Madhya Pradesh Pollution Control Board	Yes	Yes	Yes	Yes
20.	Maharashtra Pollution Control Board	Yes	No	Yes	Yes
21.	Manipur Pollution Control Board	No	No	No	No
22.	Meghalaya State Pollution Control Board	Yes	Yes	Yes	No
23.	Mizoram State Pollution Control Board	Yes	Yes	Yes	Yes
24.	Nagaland Pollution Control Board	Yes	No	Yes	Yes
25.	Odisha State Pollution Control Board	Yes	No	Yes	Yes
26.	Puducherry PCC	No	No	No	No
27.	Punjab Pollution Control Board	Yes	No	Yes	Yes
28.	Rajasthan State Pollution Control Board	No	No	No	No
29.	Sikkim State Pollution Control Board	No	No	No	No
30.	Tamilnadu Pollution Control Board	Yes	Yes	Yes	Yes
31.	Telangana State pollution Control Board	No	Yes	Yes	Yes
32.	Tripura State Pollution Control Board	Yes	No	Yes	Yes
33.	Uttar Pradesh Pollution Control Board	Yes	No	No	No
34.	Uttarakhand Pollution Control Board	No	No	No	No
35.	West Bengal Pollution Control Board	Yes	Yes	Yes	Yes

Annexure 3: Contact and address of head and regional office

Sr. no.	Name of SPCB/PCC	RO office address	RO office contact	Head office address	Head office contact
1.	Andaman & Nicobar Islands PCC	NO RO office	NA	Yes	Yes
2.	Andhra Pradesh Pollution Control Board	Yes	Yes	Yes	Yes
3.	Arunachal Pradesh Pollution Control Board	NO RO office	NA	Yes	Yes
4.	Assam State Pollution Control Board	Yes	Yes	Yes	Yes
5.	Bihar State Pollution Control Board	Yes	No	Yes	Yes
6.	Chandigarh PCC	NO RO office	NA	Yes	Yes
7.	Chhattisgarh Environment Conservation Board	Yes	Yes	Yes	Yes
8.	Daman & Diu and Dadra & Nagar Haveli PCC	NO RO office	NA	Yes	Yes
9.	Delhi Pollution Control Committee	NO RO office	NA	Yes	Yes
10.	Goa State Pollution Control Board	NO RO office	NA	Yes	Yes
11.	Gujarat Pollution Control Board	Yes	Yes	Yes	Yes
12.	Haryana State Pollution Control Board	Yes	Yes	Yes	Yes
13.	Himachal Pradesh Pollution Control Board	Yes	Yes	Yes	Yes
14.	J&K Pollution Control Board	Yes	Yes	Yes	Yes
15.	Jharkhand State Pollution Control Board	No	No	Yes	Yes
16.	Karnataka Pollution Control Board	Yes	Yes	Yes	Yes
17.	Kerala State Pollution Control Board	Yes	Yes	Yes	Yes
18.	Lakshadweep PCC		No websi	te	
19.	Madhya Pradesh Pollution Control Board	Yes	Yes	Yes	Yes
20.	Maharashtra Pollution Control Board	Yes	Yes	Yes	Yes
21.	Manipur Pollution Control Board	NO RO office	NA	Yes	Yes
22.	Meghalaya State Pollution Control Board	NO RO office	NA	Yes	Yes
23.	Mizoram State Pollution Control Board	NO RO office	NA	Yes	Yes
24.	Nagaland Pollution Control Board	NO RO office	NA	Yes	Yes
25.	Odisha State Pollution Control Board	Yes	Yes	Yes	Yes
26.	Puducherry PCC	NO RO office	NA	Yes	Yes
27.	Punjab Pollution Control Board	Yes	Yes	Yes	Yes
28.	Rajasthan State Pollution Control Board	Yes	Yes	Yes	Yes
29.	Sikkim State Pollution Control Board	NO RO office	NA	Yes	Yes
30.	Tamilnadu Pollution Control Board	Yes	Yes	Yes	Yes
31.	Telangana State pollution Control Board	Yes	Yes	Yes	Yes
32.	Tripura State Pollution Control Board	No	No	Yes	Yes
33.	Uttar Pradesh Pollution Control Board	Yes	Yes	Yes	Yes
34.	Uttarakhand Pollution Control Board	Yes	Yes	Yes	Yes
35.	West Bengal Pollution Control Board	Yes	Yes	Yes	Yes

NA - Not Applicable

Annexure 4: : Information on direction/show cause and closure notices on SPCB/PCC websites

Sr. no.	Name of SPCB/PCC	Direction	Show cause	Closure
1.	Andaman & Nicobar Islands PCC	No	No	No
2.	Andhra Pradesh Pollution Control Board	No	No	No
3.	Arunachal Pradesh Pollution Control Board	No	No	No
4.	Assam State Pollution Control Board	No	No	No
5.	Bihar State Pollution Control Board	No	No	No
6.	Chandigarh PCC	No	No	No
7.	Chhattisgarh Environment Conservation Board	No	No	No
8.	Daman & Diu and Dadra & Nagar Haveli PCC	No	No	No
9.	Delhi Pollution Control Committee	No	No	No
10.	Goa State Pollution Control Board	No	No	No
11.	Gujarat Pollution Control Board	No	No	No
12.	Haryana State Pollution Control Board	No	No	No
13.	Himachal Pradesh Pollution Control Board	No	No	No
14.	J&K Pollution Control Board	YES	YES	YES
15.	Jharkhand State Pollution Control Board	No	No	No
16.	Karnataka Pollution Control Board	No	No	No
17.	Kerala State Pollution Control Board	No	No	No
18.	Lakshadweep PCC		No website	
19.	Madhya Pradesh Pollution Control Board	No	No	No
20.	Maharashtra Pollution Control Board	No	No	No
21.	Manipur Pollution Control Board	No	No	No
22.	Meghalaya State Pollution Control Board	No	No	No
23.	Mizoram State Pollution Control Board	No	No	No
24.	Nagaland Pollution Control Board	No	No	No
25.	Odisha State Pollution Control Board	No	No	No
26.	Puducherry PCC	No	No	No
27.	Punjab Pollution Control Board	No	No	No
28.	Rajasthan State Pollution Control Board	YES	YES	YES
29.	Sikkim State Pollution Control Board	No	No	No
30.	Tamilnadu Pollution Control Board	No	No	No
31.	Telangana State pollution Control Board	YES	YES	YES
32.	Tripura State Pollution Control Board	No	No	No
33.	Uttar Pradesh Pollution Control Board	No	No	YES
34.	Uttarakhand Pollution Control Board	YES	YES	YES
35.	West Bengal Pollution Control Board	YES	YES	YES

#### Annexure 5: Latest technical publication shared by SPCB/PCC

Sr. no.	Name of SPCB/PCC	Latest technical publication
1.	Andaman & Nicobar Islands PCC	No
2.	Andhra Pradesh Pollution Control Board	No
3.	Arunachal PradeshPollution Control Board	No
4.	Assam State Pollution Control Board	No
5.	Bihar State Pollution Control Board	Yes
6.	Chandigarh PCC	No
7.	Chhattisgarh Environment Conservation Board	No
8.	Daman & Diu and Dadra & Nagar Haveli PCC	No
9.	Delhi Pollution Control Committee	No
10.	Goa State Pollution Control Board	No
11.	Gujarat Pollution Control Board	No
12.	Haryana State Pollution Control Board	No
13.	Himachal Pradesh Pollution Control Board	No
14.	J&K Pollution Control Board	Yes
15.	Jharkhand State Pollution Control Board	No
16.	Karnataka Pollution Control Board	No
17.	Kerala State Pollution Control Board	No
18.	Lakshadweep PCC	No website
19.	Madhya Pradesh Pollution Control Board	Yes
20.	Maharashtra Pollution Control Board	Yes
21.	Manipur Pollution Control Board	No
22.	Meghalaya State Pollution Control Board	No
23.	Mizoram State Pollution Control Board	No
24.	Nagaland Pollution Control Board	No
25.	Odisha State Pollution Control Board	Yes
26.	Puducherry PCC	No
27.	Punjab Pollution Control Board	No
28.	Rajasthan State Pollution Control Board	No
29.	Sikkim State Pollution Control Board	Yes
30.	Tamilnadu Pollution Control Board	Yes
31.	Telangana State pollution Control Board	No
32.	Tripura State Pollution Control Board	Yes
33.	Uttar Pradesh Pollution Control Board	No
34.	Uttarakhand Pollution Control Board	Yes
35.	West Bengal Pollution Control Board	Yes

#### Annexure 6: Action plan for non-attainment cities

Sr. no.	Name of SPCB/PCC	No. of non-attainment cities	Action plan available on website
1.	Andaman & Nicobar Islands PCC	No non-attainment cities	
2.	Andhra Pradesh Pollution Control Board	13	5
3.	Arunachal Pradesh Pollution Control Board	No non-attainment cities	
4.	Assam State Pollution Control Board	5	5
5.	Bihar State Pollution Control Board	3	3
6.	Chandigarh PCC	1	1
7.	Chhattisgarh Environment Conservation	3	3
8.	Daman & Diu and Dadra & Nagar Haveli PCC	No non-attainment cities	
9.	Delhi Pollution Control Committee	1	1
10.	Goa State Pollution Control Board	4	4
11.	Gujarat Pollution Control Board	3	1
12.	Haryana State Pollution Control Board	No non-attainment cities	
13.	Himachal Pradesh State Pollution Control Board	7	0
14.	J&K Pollution Control Board	2	2
15.	Jharkhand State Pollution Control Board	1	1
16.	Karnataka Pollution Control Board	4	1
17.	Kerala State Pollution Control Board	No non-attainment cities	
18.	Lakshadweep PCC	No non-attainment cities	
19.	Madhya Pradesh Pollution Control Board	6	6
20.	Maharashtra Pollution Control Board	18	17
21.	Manipur Pollution Control Board	No non-attainment cities	
22.	Meghalaya State Pollution Control Board	1	0
23.	Mizoram State Pollution Control Board	No non-attainment cities	
24.	Nagaland Pollution Control Board	2	2
25.	Odisha State Pollution Control Board	7	7
26.	Puducherry PCC	No non-attainment cities	
27.	Punjab Pollution Control Board	9	9
28.	Rajasthan State Pollution Control Board	5	0
29.	Sikkim State Pollution Control Board	No non-attainment cities	
30.	Tamilnadu Pollution Control Board (TNPCB)	3	1
31.	Telangana State pollution Control Board	4	3
32.	Tripura State Pollution Control Board	No non-attainment cities	
33.	Uttar Pradesh Pollution Control Board	16	15
34.	Uttarakhand Pollution Control Board	3	3
35.	West Bengal Pollution Control Board	7	7

Annexure 7: Action plan for polluted river stretches

Name of SPCB/PCC	No. of	pollute	d stret	ches			No	o. of ac	tion pl	ans on t	heir wel	osite
	P-1	P-2	P-3	P-4	P-5	Total	P-1	P-2	P-3	P-4	P-5	Total
Andaman & Nicobar Islands	No polluted stretches											
Andhra Pradesh				2	3	5				2	3	5
Arunachal Pradesh	No polluted stretches											
Assam	3	1	3	4	33	44	3	1	3	4	33	44
Bihar	0	0	1	0	5	6	0	0	1	0	5	6
Chandigarh	No polluted stretches											
Chhattisgarh	0	0	0	4	1	5	0	0	0	4	1	5
Daman & Diu and Dadra & Nagar Haveli	1					1	1					1
Delhi	1					1	1					1
Goa	0	0	1	2	8	11			1	2	8	11
Gujarat	5	1	2	6	6	20	5	1	2	6	6	20
Haryana	2					2	2					2
Himachal Pradesh	1	1	1	0	4	7	1	1	1	0	4	7
J&K	0	1	2	2	4	9	0	1	2	2	4	9
Jharkhand	0	0	0	3	4	7				3	4	7
Karnataka	0	0	4	7	6	17			4	7	6	17
Kerala	1	0	0	5	15	21	1	0	0	5	15	21
Lakshadweep	No polluted stretches											
Madhya Pradesh	3	1	1	3	14	22	3	1				4
Maharashtra	9	6	14	10	14	53	9	6	14	10	14	53
Manipur		1			8	9						0
Meghalaya	2			3	2	7	2			3	2	7
Mizoram State			1	3	5	9			1	3	5	9
Nagaland	1		1	2	2	6	1		1	2	2	6
Odisha	1		3	2	13	19	1		3	1	13	18
Puducherry				1	1	2				1	1	2
Punjab	2			1	1	4	2				1	3
Rajasthan			1		1	2						0
Sikkim					4	4					4	4
Tamilnadu	4	0	0	1	1	6	4	0	0	1	1	6
Telangana	1	2	2	2	1	8	1	2				3
Tripura					6	6					6	6
Uttar Pradesh	4	0	1	2	5	12	4	0	1	2	5	12
Uttarakhand	3	1	1	4	0	9	3	1	1	4	0	9
West Bengal	1	1	3	4	8	17	1	1	3	4	8	17

P - Priority

#### Annexure 8: Availability of OCEMS data in public domain

Sr. no.	Name of SPCBs/PCCs	Web-link of the page	OCEMS data on SPCB/PCC/OCMMS website, as per CSE analysis 2020	Remarks
1	Andaman & Nicobar Islands PCC		No	
2	Andhra Pradesh Pollution Control Board	http://aprtpms.ap.gov.in/ publicview.html	Yes	
3	Arunachal Pradesh State Pollution Control Board	No industry requiring OCEMS		
4	Assam State Pollution Control Board	http://pcba.rtdas.in/	Yes	
5	Bihar State Pollution Control Board	http://bpcbcems.nic.in/login	Yes	
6	Chandigarh PCC		No	
7	Chhattisgarh State Pollution Control Board	https://www.enviscecb.org/ data.htm	Yes	
8	Daman & Diu Dadra & Nagar Haveli PCC		No	
9	Delhi Pollution Control Committee	http://dpcccems.nic.in/login	Yes	
10	Goa State Pollution Control Board	https://gspcb.glensserver. com/GSPCB_ONLINE/index. html	Yes	
11	Gujarat Pollution Control Board	https://gpcb.gujarat.gov.in/ webcontroller/viewpage/ online-monitoring-system- dashboard	Yes	
12	Haryana State Pollution Control Board	http://hspcbcems.nic.in/login	Yes	
13	Himachal Pradesh State Pollution Control Board	https://hppcb.glensserver. com/public/	Yes	
14	J&K Pollution Control Board	http://jkspcb.glensweb.com/ public/index.html	Yes	
15	Jharkhand State Pollution Control Board	http://jsac.jharkhand.gov.in/ pollution/	Yes	
16	Karnataka Pollution Control Board	https://kspcb.gov.in/ online%20MDE.html	No	CEMS data password protected
17	Kerala State Pollution Control Board	https://keralapcb.glensserver. com/public/	Yes	
18	Lakshadweep PCC	No industry requiring OCEMS		
19	Madhya Pradesh Pollution Control Board	https://esc.mp.gov.in/v3.0/#/ publicPortal/categoryList	Yes	
20	Maharashtra Pollution Control Board	https://www.mpcb.gov.in/ Online_CEMS.php	No	
21	Manipur Pollution Control Board		No	

Sr. no.	Name of SPCBs/PCCs	Web-link of the page	OCEMS data on SPCB/PCC/OCMMS website, as per CSE analysis 2020	Remarks	
22	Meghalaya State Pollution Control Board	http://megspcb.glensserver. com/#/publicPortal/ categoryList	Yes		
23	Mizoram State Pollution Control Board	No industry requiring OCEMS	MS		
24	Nagaland Pollution Control Board		No		
25	Odisha State Pollution Control Board	https://ospcb-rtdas.com/#/ login	Yes		
26	Puducherry PCC	https://ppcc.glensserver.com/ PPCC_ONLINE/index.html	Yes		
27	Punjab Pollution Control Board	http://ppcbcems.nic.in/public	Yes		
28	Rajasthan State Pollution Control Board		No		
29	Sikkim State Pollution Control Board		No		
30	Tamil Nadu Pollution Control Board	http://117.232.97.121/ RealTime_tnpcb_cac/index. html	Yes		
31	Telangana State pollution Control Board	http://183.82.41.227:8080/ enviroconnect/aqms	Yes		
32	Tripura State Pollution Control Board		No		
33	Uttar Pradesh Pollution Control Board		No		
34	Uttarakhand Pollution Control Board		No		
35	West Bengal Pollution Control Board	http://www.wbpcb.gov.in/ cmsdata.php	No	CEMS Data password protected	

#### Annexure 9: Information shared by SPCB/PCC on biomedical waste

Sr. no.	Name of SPCB/PCC	List of biomedical waste treatment facilities	Biomedical waste generation data	Biomedical waste treated
1	Andaman & Nicobar Islands PCC	No	No	No
2	Andhra Pradesh Pollution Control Board	Yes	Yes	Yes
3	Arunachal Pradesh Pollution Control Board	Yes	Yes	No
4	Assam State Pollution Control Board	No	No	No
5	Bihar State Pollution Control Board	Yes	Yes	No
6	Chandigarh PCC	No	No	No
7	Chhattisgarh State Pollution Control Board	Yes	Yes	Yes
8	Daman & Diu and Dadra & Nagar Haveli PCC	No	No	No
9	Delhi Pollution Control Committee	Yes	Yes	Yes
10	Goa State Pollution Control Board	No	Yes	Yes
11	Gujarat Pollution Control Board	Yes	No	No
12	Haryana State Pollution Control Board	Yes	Yes	Yes
13	Himachal Pradesh State Pollution Control Board	Yes	Yes	Yes
14	J&K Pollution Control Board	Yes	No	No
15	Jharkhand State Pollution Control Board	Yes	Yes	Yes
16	Karnataka Pollution Control Board	Yes	Yes	No
17	Kerala State Pollution Control Board	Yes	Yes	Yes
18	Lakshadweep PCC		No website	
19	Madhya Pradesh Pollution Control Board	Yes	Yes	Yes
20	Maharashtra Pollution Control Board	Yes	Yes	Yes
21	Manipur Pollution Control Board	Yes	Yes	Yes
22	Meghalaya State Pollution Control Board	No	No	No
23	Mizoram State Pollution Control Board	Yes	Yes	Yes
24	Nagaland Pollution Control Board	No	No	No
25	Odisha State Pollution Control Board	Yes	Yes	Yes
26	Puducherry PCC	Yes	Yes	Yes
27	Punjab Pollution Control Board	Yes	Yes	Yes
28	Rajasthan State Pollution Control Board	Yes	Yes	Yes
29	Sikkim State Pollution Control Board	Yes	Yes	Yes
30	Tamilnadu Pollution Control Board	Yes	Yes	Yes
31	Telangana State pollution Control Board	Yes	Yes	Yes
32	Tripura State Pollution Control Board	No	Yes	Yes
33	Uttar Pradesh Pollution Control Board	No	No	No
34	Uttarakhand Pollution Control Board	Yes	Yes	Yes
35	West Bengal Pollution Control Board	Yes	No	No

#### Annexure 10: Information shared by SPCB/PCC on plastic waste

Sr. no.	Name of SPCB/PCC	List of plastic waste recyclers	Plastic waste generation data	Disposal/ Recycled data
1	Andaman & Nicobar Islands PCC	No	No	No
2	Andhra Pradesh Pollution Control Board	Yes	Yes	No
3	Arunachal Pradesh Pollution Control Board	No	Yes	No
4	Assam State Pollution Control Board	No	No	No
5	Bihar State Pollution Control Board	Yes	No	No
6	Chandigarh PCC	No	No	No
7	Chhattisgarh State Pollution Control Board	No	Yes	No
8	Daman & Diu and Dadra & Nagar Haveli PCC	No	No	No
9	Delhi Pollution Control Committee	No	No	No
10	Goa State Pollution Control Board	Yes	Yes	No
11	Gujarat Pollution Control Board	Yes	No	No
12	Haryana State Pollution Control Board	Yes	Yes	No
13	Himachal Pradesh State Pollution Control Board	No	Yes	No
14	J&K Pollution Control Board	Yes	No	No
15	Jharkhand State Pollution Control Board	No	No	No
16	Karnataka Pollution Control Board	Yes	No	No
17	Kerala State Pollution Control Board	Yes	Yes	No
18	Lakshadweep PCC		No website	
19	Madhya Pradesh Pollution Control Board	Yes	Yes	Yes
20	Maharashtra Pollution Control Board	Yes	Yes	Yes
21	Manipur Pollution Control Board	Yes	Yes	No
22	Meghalaya State Pollution Control Board	No	No	No
23	Mizoram State Pollution Control Board	No	Yes	No
24	Nagaland Pollution Control	No	No	No
25	Odisha State Pollution Control Board	No	No	No
26	Puducherry PCC	Yes	Yes	No
27	Punjab Pollution Control Board	Yes	Yes	No
28	Rajasthan State Pollution Control Board	No	No	No
29	Sikkim State Pollution Control Board	No	Yes	No
30	Tamilnadu Pollution Control Board	Yes	Yes	Yes
31	Telangana State pollution Control Board	No	Yes	No
32	Tripura State Pollution Control Board	No	Yes	No
33	Uttar Pradesh Pollution Control Board	Yes	No	No
34	Uttarakhand Pollution Control Board	No	No	No
35	West Bengal Pollution Control Board	Yes	No	No

#### Annexure 11: Information shared by SPCB/PCC on e-waste

Sr. no.	Name of SPCB/PCC	List of electronic waste recyclers	E-waste generation data	Recycle data
1	Andaman & Nicobar Islands PCC	No	No	No
2	Andhra Pradesh Pollution Control Board	Yes	No	No
3	Arunachal Pradesh State Pollution Control Board	No	No	No
4	Assam State Pollution Control Board	Yes	No	No
5	Bihar State Pollution Control Board (BSPCB)	Yes	No	No
6	Chandigarh PCC	No	No	No
7	Chhattisgarh State Pollution Control Board	Yes	Yes	No
8	Daman & Diu and Dadra & Nagar Haveli PCC	No	No	No
9	Delhi Pollution Control Committee	No	No	No
10	Goa State Pollution Control Board	Yes	Yes	No
11	Gujarat Pollution Control Board	Yes	No	No
12	Haryana State Pollution Control Board	Yes	yes	No
13	Himachal Pradesh State Pollution Control Board	Yes	Yes	No
14	J&K Pollution Control Board	Yes	No	No
15	Jharkhand State Pollution Control Board	Yes	No	No
16	Karnataka Pollution Control Board	Yes	No	No
17	Kerala State Pollution Control Board	Yes	Yes	No
18	Lakshadweep PCC	No website		
19	Madhya Pradesh Pollution Control Board	Yes	Yes	Yes
20	Maharashtra Pollution Control Board	Yes	Yes	Yes
21	Manipur Pollution Control Board	No	No	No
22	Meghalaya State Pollution Control Board	No	No	No
23	Mizoram State Pollution Control Board	Yes	Yes	No
24	Nagaland Pollution Control Board	No	No	No
25	Odisha State Pollution Control Board	Yes	No	No
26	Puducherry PCC	Yes	No	No
27	Punjab Pollution Control Board	Yes	No	No
28	Rajasthan State Pollution Control Board	No	No	No
29	Sikkim State Pollution Control Board	No	Yes	No
30	Tamilnadu Pollution Control Board	Yes	Yes	No
31	Telangana State pollution Control Board	Yes	Yes	Yes
32	Tripura State Pollution Control Board	Yes	No	No
33	Uttar Pradesh Pollution Control Board	Yes	No	No
34	Uttarakhand Pollution Control Board	Yes	Yes	No
35	West Bengal Pollution Control Board	Yes	No	No

### Annexure 12: Information shared by SPCB/PCC on municipal solid waste

Sr. no.	Name of SPCB/PCC	Solid waste generation	Solid waste disposal/ treated
1	Andaman & Nicobar Islands PCC	No	No
2	Andhra Pradesh Pollution Control Board	Yes	Yes
3	Arunachal Pradesh State Pollution Control Board	Yes	No
4	Assam State Pollution Control Board	No	No
5	Bihar State Pollution Control Board	No	No
6	Chandigarh PCC	No	No
7	Chhattisgarh State Pollution Control Board	Yes	Yes
8	Daman & Diu and Dadra & Nagar Haveli PCC	No	No
9	Delhi Pollution Control Committee	No	No
10	Goa State Pollution Control Board	No	No
11	Gujarat Pollution Control Board	No	No
12	Haryana State Pollution Control Board	Yes	Yes
13	Himachal Pradesh State Pollution Control Board	Yes	Yes
14	J&K Pollution Control Board	Yes	Yes
15	Jharkhand State Pollution Control Board	No	No
16	Karnataka Pollution Control Board	Yes	Yes
17	Kerala State Pollution Control Board	Yes Yes	
18	Lakshadweep PCC	No website	
19	Madhya Pradesh Pollution Control Board	Yes	Yes
20	Maharashtra Pollution Control Board	Yes	Yes
21	Manipur Pollution Control Board	Yes	No
22	Meghalaya State Pollution Control Board	No	No
23	Mizoram State Pollution Control Board	Yes	No
24	Nagaland Pollution Control Board	No	No
25	Odisha State Pollution Control Board	No	No
26	Puducherry PCC	Yes	Yes
27	Punjab Pollution Control Board	Yes	Yes
28	Rajasthan State Pollution Control Board	No	No
29	Sikkim State Pollution Control Board	Yes	Yes
30	Tamilnadu Pollution Control Board	Yes	Yes
31	Telangana State pollution Control Board	Yes	Yes
32	Tripura State Pollution Control Board	Yes	No
33	Uttar Pradesh Pollution Control Board	Yes	Yes
34	Uttarakhand Pollution Control Board	No	No
35	West Bengal Pollution Control Board	Yes	Yes

### Annexure 13: Information shared by SPCB/PCC on hazardous waste

Sr. no.	Name of SPCB/PCC	Overall Generation Data with/without Breakup	Overall Recyclers Data	Hazardous waste disposed data
1	Andaman & Nicobar Islands PCC	No	No	No
2	Andhra Pradesh Pollution Control Board	Yes	Yes	Yes
3	Arunachal Pradesh State Pollution Control Board	No	No	No
4	Assam State Pollution Control Board	Yes	Yes	Yes
5	Bihar State Pollution Control Board	No	Yes	No
6	Chandigarh PCC	No	No	No
7	Chhattisgarh State Pollution Control Board	Yes	Yes	Yes
8	Daman & Diu and Dadra & Nagar Haveli PCC	No	No	No
9	Delhi Pollution Control Committee	Yes	Yes	No
10	Goa State Pollution Control Board	yes	yes	Yes
11	Gujarat Pollution Control Board	No	Yes	No
12	Haryana State Pollution Control Board	Yes	Yes	Yes
13	Himachal Pradesh State Pollution Control Board	Yes	Yes	Yes
14	J&K Pollution Control Board	Yes	No	Yes
15	Jharkhand State Pollution Control Board	No	No	No
16	Karnataka Pollution Control Board	Yes	Yes	Yes
17	Kerala State Pollution Control Board	Yes	Yes	Yes
18	Lakshadweep PCC	N	lo website	
19	Madhya Pradesh Pollution Control Board	Yes	Yes	Yes
20	Maharashtra Pollution Control Board	Yes	Yes	No
21	Manipur Pollution Control Board	No	No	No
22	Meghalaya State Pollution Control Board	No	No	No
23	Mizoram State Pollution Control Board	No	No	No
24	Nagaland Pollution Control Board	No	No	No
25	Odisha State Pollution Control Board	Yes	Yes	Yes
26	Puducherry PCC	No	Yes	No
27	Punjab Pollution Control Board	No	No	No
28	Rajasthan State Pollution Control Board	Yes	Yes	Yes
29	Sikkim State Pollution Control Board	Yes	Yes	Yes
30	Tamilnadu Pollution Control Board	Yes	Yes	Yes
31	Telangana State pollution Control Board	Yes	Yes	Yes
32	Tripura State Pollution Control Board	Yes	No	Yes
33	Uttar Pradesh Pollution Control Board	Yes	Yes	Yes
34	Uttarakhand Pollution Control Board	Yes	Yes	Yes
35	West Bengal Pollution Control Board	Yes	Yes	Yes

### Annexure 14: RTI details shared by SPCB/PCC

		Right to Information		
Sr. no.	List of SPCB/PCC	RTI, name of public information officers	RTI, contact of public information officers	
1	Andhra Pradesh Pollution Control Board	Yes	Yes	
2	Andaman & Nicobar Islands PCC	No	No	
3	Arunachal Pradesh Pollution Control Board	No	No	
4	Assam State Pollution Control Board	Yes	Yes	
5	Bihar State Pollution Control Board	Yes	Yes	
6	Chandigarh PCC	No	No	
7	Chhattisgarh Environment Conservation Board	Yes	Yes	
8	Daman & Diu and Dadra & Nagar Haveli PCC	No	No	
9	Delhi Pollution Control Committee	No	No	
10	Goa State Pollution Control Board	Yes	Yes	
11	Gujarat Pollution Control Board	Yes	Yes	
12	Haryana State Pollution Control Board	Yes	Yes	
13	Himachal Pradesh State Pollution Control Board	Yes	Yes	
14	J&K Pollution Control Board	Yes	Yes	
15	Jharkhand State Pollution Control Board	No	No	
16	Karnataka Pollution Control Board	Yes	Yes	
17	Kerala State Pollution Control Board	No	No	
18	Lakshadweep PCC	No website		
19	Madhya Pradesh Pollution Control Board	Yes	Yes	
20	Maharashtra Pollution Control Board	Yes	Yes	
21	Manipur Pollution Control Board	No	No	
22	Meghalaya State Pollution Control Board	Yes	Yes	
23	Mizoram State Pollution Control Board	No	No	
24	Nagaland Pollution Control Board	Yes	Yes	
25	Odisha State Pollution Control Board	Yes	Yes	
26	Puducherry PCC	No	No	
27	Punjab Pollution Control Board	Yes	Yes	
28	Rajasthan State Pollution Control Board	Yes	Yes	
29	Sikkim State Pollution Control Board	No	No	
30	Tamil Nadu Pollution Control Board	Yes	Yes	
31	Telangana State pollution Control Board	Yes	Yes	
32	Tripura State Pollution Control Board	Yes	Yes	
33	Uttar Pradesh Pollution Control Board	No	No	
34	Uttarakhand Pollution Control Board	Yes	Yes	
35	West Bengal Pollution Control Board	Yes	Yes	

Annexure 15: Annual report availability on website

Annexate 13. Annual report availability on website			
Sr. no.	List of SPCB/PCC	Annual report	Latest report year
1	Andhra Pradesh Pollution Control Board	YES	2015-16
2	Andaman & Nicobar Islands PCC	NA	
3	Arunachal Pradesh State Pollution Control Board	NA	
4	Assam State Pollution Control Board	NA	
5	Bihar State Pollution Control Board	NA	
6	Chandigarh PCC	NA	
7	Chhattisgarh Environment Conservation Board	Yes	2018-19
8	Daman & Diu and Dadra & Nagar Haveli PCC	NA	
9	Delhi Pollution Control Committee	YES	2010
10	Goa State Pollution Control Board	YES	2017-18
11	Gujarat Pollution Control Board	YES	2019-20
12	Haryana State Pollution Control Board	YES	2017-18
13	Himachal Pradesh State Pollution Control Board	YES	2017-18
14	J&K Pollution Control Board	NA	
15	Jharkhand State Pollution Control Board	NA	
16	Karnataka Pollution Control Board	YES	2018-19
17	Kerala State Pollution Control Board	YES	2013-14
18	Lakshadweep PCC	NA	No website
19	Madhya Pradesh Pollution Control Board	YES	2019-20
20	Maharashtra Pollution Control Board	YES	2018-19
21	Manipur Pollution Control Board	NA	
22	Meghalaya State Pollution Control Board	YES	2013-14
23	Mizoram State Pollution Control Board	YES	2017-18
24	Nagaland Pollution Control Board	NA	
25	Odisha State Pollution Control Board	Yes	2018-19
26	Puducherry PCC	NA	
27	Punjab Pollution Control Board	YES	2015-16
28	Rajasthan State Pollution Control Board	YES	2018-19
29	Sikkim State Pollution Control Board	YES	2019-20
30	Tamil Nadu Pollution Control Board	YES	2018-19
31	Telangana State pollution Control Board	YES	2014-15
32	Tripura State Pollution Control Board	YES	2019-20
33	Uttar Pradesh Pollution Control Board	YES	2018-19
34	Uttarakhand Pollution Control Board	YES	2017-18
35	West Bengal Pollution Control Board	YES	2019-20
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### Annexure 16: Information on regulated entities in annual report

Sr. no.	List of SPCB/PCC	Information on regulated entities
1	Andaman & Nicobar Islands PCC	No AR
2	Andhra Pradesh Pollution Control Board	Latest AR NA
3	Arunachal Pradesh State Pollution Control Board	No AR
4	Assam State Pollution Control Board	No AR
5	Bihar State Pollution Control Board	No AR
6	Chandigarh PCC	No AR
7	Chhattisgarh Environment Conservation Board	No
8	Daman & Diu and Dadra & Nagar Haveli PCC	No AR
9	Delhi Pollution Control Committee	Latest AR NA
10	Goa State Pollution Control Board	No
11	Gujarat Pollution Control Board	No
12	Haryana State Pollution Control Board	Yes
13	Himachal Pradesh State Pollution Control Board	No
14	J&K Pollution Control Board	No AR
15	Jharkhand State Pollution Control Board	No AR
16	Karnataka Pollution Control Board	Yes
17	Kerala State Pollution Control Board	Latest AR NA
18	Lakshadweep PCC	No website
19	Madhya Pradesh Pollution Control Board	Yes
20	Maharashtra Pollution Control Board	Yes
21	Manipur Pollution Control Board	No AR
22	Meghalaya State Pollution Control Board	Latest AR NA
23	Mizoram State Pollution Control Board	No
24	Nagaland Pollution Control Board	No AR
25	Odisha State Pollution Control Board	No
26	Puducherry PCC	No AR
27	Punjab Pollution Control Board	Latest AR NA
28	Rajasthan State Pollution Control Board	No
29	Sikkim State Pollution Control Board	No
30	Tamilnadu Pollution Control Board	Yes
31	Telangana State pollution Control Board	Latest AR NA
32	Tripura State Pollution Control Board	No
33	Uttar Pradesh Pollution Control Board	No
34	Uttarakhand Pollution Control Board	No
35	West Bengal Pollution Control Board	No

NO AR- No annual report

Latest AR NA- Latest Annual Report Not Available

### Annexure 17: Information on inspection in annual report

Sr. no.	List of SPCB/PCC	Inspection
1	Andaman & Nicobar Islands PCC	No
2	Andhra Pradesh Pollution Control Board	No
3	Arunachal Pradesh State Pollution Control Board	No
4	Assam State Pollution Control Board	No
5	Bihar State Pollution Control Board	No
6	Chandigarh PCC	No
7	Chhattisgarh Environment Conservation Board	No
8	Daman & Diu and Dadra & Nagar Haveli PCC	No
9	Delhi Pollution Control Committee	No
10	Goa State Pollution Control Board	No
11	Gujarat Pollution Control Board	No
12	Haryana State Pollution Control Board	No
13	Himachal Pradesh State Pollution Control Board	Yes
14	J&K Pollution Control Board	No
15	Jharkhand State Pollution Control Board	No
16	Karnataka Pollution Control Board	Yes
17	Kerala State Pollution Control Board	No
18	Lakshadweep PCC	No
19	Madhya Pradesh Pollution Control Board	No
20	Maharashtra Pollution Control Board	No
21	Manipur Pollution Control Board	No
22	Meghalaya State Pollution Control Board	No
23	Mizoram State Pollution Control Board	No
24	Nagaland Pollution Control Board	No
25	Odisha State Pollution Control Board	Yes
26	Puducherry PCC	No
27	Punjab Pollution Control Board	No
28	Rajasthan State Pollution Control Board	No
29	Sikkim State Pollution Control Board	No
30	Tamilnadu Pollution Control Board	Yes
31	Telangana State pollution Control Board	No
32	Tripura State Pollution Control Board	No
33	Uttar Pradesh Pollution Control Board	No
34	Uttarakhand Pollution Control Board	No
35	West Bengal Pollution Control Board	Yes

### Annexure 18: Information on manpower in annual report

Sr. no.	List of SPCB/PCC	Manpower information
1	Andaman & Nicobar Islands PCC	No
2	Andhra Pradesh Pollution Control Board	Old annual report
3	Arunachal Pradesh State Pollution Control Board	No
4	Assam State Pollution Control Board	No
5	Bihar State Pollution Control Board	No
6	Chandigarh PCC	No
7	Chhattisgarh Environment Conservation Board	Yes
8	Daman & Diu and Dadra & Nagar Haveli PCC	No
9	Delhi Pollution Control Committee	Old annual report
10	Goa State Pollution Control Board	Yes
11	Gujarat Pollution Control Board	Yes
12	Haryana State Pollution Control Board	Yes
13	Himachal Pradesh State Pollution Control Board	No
14	J&K Pollution Control Board	No
15	Jharkhand State Pollution Control Board	No
16	Karnataka Pollution Control Board	Yes
17	Kerala State Pollution Control Board	Old annual report
18	Lakshadweep PCC	No
19	Madhya Pradesh Pollution Control Board	No
20	Maharashtra Pollution Control Board	Yes
21	Manipur Pollution Control Board	No
22	Meghalaya State Pollution Control Board	Old annual report
23	Mizoram State Pollution Control Board	No
24	Nagaland Pollution Control Board	No
25	Odisha State Pollution Control Board	Yes
26	Puducherry PCC	No
27	Punjab Pollution Control Board	Old annual report
28	Rajasthan State Pollution Control Board	No
29	Sikkim State Pollution Control Board	No
30	Tamilnadu Pollution Control Board	Yes
31	Telangana State pollution Control Board	Old annual report
32	Tripura State Pollution Control Board	Yes
33	Uttar Pradesh Pollution Control Board	No
34	Uttarakhand Pollution Control Board	No
35	West Bengal Pollution Control Board	No

### Annexure 19: Information on accounts and finanace in annual report

Sr. no.	List of SPCB/PCC	Accounts and Finance Information
1	Andaman & Nicobar Islands PCC	No
2	Andhra Pradesh Pollution Control Board	No
3	Arunachal Pradesh State Pollution Control Board	No
4	Assam State Pollution Control Board	No
5	Bihar State Pollution Control Board	No
6	Chandigarh PCC	No
7	Chhattisgarh Environment Conservation Board	Yes
8	Daman & Diu and Dadra & Nagar Haveli PCC	No
9	Delhi Pollution Control Committee	No
10	Goa State Pollution Control Board	Yes
11	Gujarat Pollution Control Board	No
12	Haryana State Pollution Control Board	Yes
13	Himachal Pradesh State Pollution Control Board	Yes
14	J&K Pollution Control Board	No
15	Jharkhand State Pollution Control Board	No
16	Karnataka Pollution Control Board	Yes
17	Kerala State Pollution Control Board	No
18	Lakshadweep PCC	No
19	Madhya Pradesh Pollution Control Board	Yes
20	Maharashtra Pollution Control Board	Yes
21	Manipur Pollution Control Board	No
22	Meghalaya State Pollution Control Board	No
23	Mizoram State Pollution Control Board	No
24	Nagaland Pollution Control Board	No
25	Odisha State Pollution Control Board	Yes
26	Puducherry PCC	No
27	Punjab Pollution Control Board	No
28	Rajasthan State Pollution Control Board	Yes
29	Sikkim State Pollution Control Board	No
30	Tamilnadu Pollution Control Board	Yes
31	Telangana State pollution Control Board	No
32	Tripura State Pollution Control Board	Yes
33	Uttar Pradesh Pollution Control Board	Yes
34	Uttarakhand Pollution Control Board	Yes
35	West Bengal Pollution Control Board	Yes

# Annexure 20: Information in annual report on no. of directions, show cause and closure notices issued

List of SPCB/PCC	Direction	Show cause	Closure notice
Andaman & Nicobar Islands PCC	No	No	No
Andhra Pradesh Pollution Control Board	No	No	No
Arunachal Pradesh State Pollution Control Board	No	No	No
Assam State Pollution Control Board	No	No	No
Bihar State Pollution Control Board	No	No	No
Chandigarh PCC	No	No	No
Chhattisgarh Environment Conservation Board	No	No	Yes
Daman & Diu and Dadra & Nagar Haveli PCC	No	No	No
Delhi Pollution Control Committee	No	No	No
Goa State Pollution Control Board	Yes	Yes	Yes
Gujarat Pollution Control Board	Yes	Yes	Yes
Haryana State Pollution Control Board	No	No	Yes
Himachal Pradesh State Pollution Control Board	No	No	Yes
J&K Pollution Control Board	No	No	No
Jharkhand State Pollution Control Board	No	No	No
Karnataka Pollution Control Board	No	No	Yes
Kerala State Pollution Control Board	No	No	No
Lakshadweep PCC	No	No	No
Madhya Pradesh Pollution Control Board	No	No	No
Maharashtra Pollution Control Board	Yes	No	Yes
Manipur Pollution Control Board	No	No	No
Meghalaya State Pollution Control Board	No	No	No
Mizoram State Pollution Control Board	No	No	No
Nagaland Pollution Control Board	No	No	No
Odisha State Pollution Control Board	Yes	Yes	Yes
Puducherry PCC	No	No	No
Punjab Pollution Control Board	No	No	No
Rajasthan State Pollution Control Board	No	No	Yes
Sikkim State Pollution Control Board	No	No	Yes
Tamilnadu Pollution Control Board	No	No	Yes
Telangana State pollution Control Board	No	No	No
Tripura State Pollution Control Board	No	Yes	Yes
Uttar Pradesh Pollution Control Board	No	No	No
Uttarakhand Pollution Control Board	No	No	No
West Bengal Pollution Control Board	No	No	Yes

## References

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- 2 CPCB 2020. Status Report in Compliance of Hon'ble NGT Order Dated 09th March, 2021 in OA No. 82/2021(SZ) (Dharmesh Shah, Chennai v/s Union of India & Ors.). Accessed at https://greentribunal.gov.in/sites/default/files/news\_updates/Status%20 Report%20filed%20by%20CPCB%20in%20OA%20No%2082%20of%202021(SZ). pdf on 20 June 2021
- 3 CPCB. The National Action Plan for Municipal Solid Waste Management. Accessed at https://cpcb.nic.in/uploads/MSW/Action\_plan.pdf on 20 June 2021

Transparency and free flow of information are essential tools for compliance enforcement. They also offer other benefits like accountability, public participation, public awareness and enforcement. The rationale of this report is to encourage public disclosure of information and improve the quality of information shared by pollution control boards.



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