

PERFORMANCE AUDIT OF STATE POLLUTION CONTROL BOARDS / POLLUTION CONTROL COMMITTEES

1.0 Background:

Hon'ble National Green Tribunal (NGT) in the matter of O.A. NO. 95 of 2018; Arawali Foundation Vs Vapi Green Enviro Limited and others has directed CPCB to conduct Performance Audit of State Pollution Control Boards / Pollution Control Committees (SPCBs / PCCs). Also further directed that "Performance Audit be done with reference to issues such as adequacy with regard to environmental monitoring, efficacy of regulatory setup / mechanisms, staffing both technical and scientific manpower, adequacy of laboratories and scientific equipment's, logistic support, competence etc. rather than ranking the States and State-wise reports submitted along with recommendations based on thorough analysis in terms of statutory functions. CPCB may advise appropriate mechanism for the purpose".

2.0 Objective & Outcome:

The objective of the performance audit of SPCBs / PCCs was strengthening of such institutions so that the duties and responsibilities conferred on them are performed with dedication and sincerity in public interest.

The outcome of this exercise will provide factual assessment of SPCBs / PCCs in performing their activities and areas which are mandated under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986. The exercise shall provide an opportunity for identifying the functional areas of SPCBs / PCCs which require strengthening.

3.0 Methodology adopted:

The methodology was framed by CPCB to conduct Performance Audit on issues such as adequacy with regard to environmental monitoring, efficacy of regulatory setup / mechanisms, staffing both technical and scientific manpower, adequacy of laboratories and scientific equipment's, logistics support and competence etc., in compliance to the Hon'ble NGT Directions and designed a format to address broadly the ***five functional areas with the weightage*** mandated under Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and Environment (Protection) Act, 1986. Accordingly, CPCB constituted a Committees (**Core Committee and Expert Teams**) and the Expert Team shall conduct the Audit of the concerned SPCB /PCC in line with Baseline Sheet and Questionnaire.

The details of methodology of performance audit of SPCBs/ PCCs are as follow:

A. Baseline Data:

General Information such as name of SPCB / PCC; date of establishment; number of regional offices; manpower; number of industries of pre-defined categories and common facilities, environmental quality monitoring stations under jurisdiction of SPCB/PCC and financial aspects shall be collected in the Sheet named '***General Info***'. Format used for

Baseline Data for Performance Audit covering manpower details, Category Wise No. of Industries, Common Facilities, Water / Air Quality Monitoring Stations / Locations, Budget etc. is attached as **Annexure - I**.

B. Questionnaire:

The Questionnaire covers the following five major functional areas of SPCBs / PCCs and weightage has been allocated as given below for normalizing the scores obtained in the Performance Audit. The details of five major functional areas covered during Performance Audit are:

1. Environmental Quality Monitoring – 25 %

- a. Air Quality Monitoring
- b. Water Quality Monitoring
- c. Laboratory Facility

2. Regulatory Actions – 35 %

- a. Industries / Common Facilities - Industrial Pollution Control and Common Treatment Facilities such as STP, CETP, TSDF and BMW
- b. Sewage Management
- c. Battery Waste
- d. Hazardous Waste
- e. Bio – Medical Waste
- f. Solid Waste
- g. E-Waste
- h. Plastic Waste
- i. Legal

3. Data Management & Public Outreach – 20 %

4. Advisory for Decision Making – 10 %

5. Research & Development and Training – 9.5%

6. Specific Observation by Expert Team – 0.5%

Most of the questions are related to consent mechanism and compliance with the prescribed / notified standards. Apart from major activities, other mandated activities are also included. Public Outreach is seen as one of the major areas in addition to advisory / facilitator role. Efforts have been made to remove subjectivity in the reply to each question. Mainly two types of questions were used.

- i. Yes / No
- ii. Data based

- **Yes / No Questions** - Different Marks have been allocated for different questions based on their relative importance.

- **Data Based Questions** – These Questions, mostly aimed to collect information on achievements with respect to objectives and various slabs of % allocated for different questions on case to case basis. The examples are:

Examples 1: 0 % - 0 Mark, 1-20% - 1 Mark, 21-40% - 2 Marks, 41-60% - 3 marks, 61-80% 4 Marks and more than 80% - 5 Marks.

Examples 2: < 91 % - 0 Mark, 91-92% - 1 Mark, 93-94% - 2 Marks, 95-96% - 3 Marks, 97-98% 4 Marks and more than 98% - 5 Marks.

Examples 3: 0 % - 0 Mark, 1-2% - 1 Mark, 3-4% - 2 Marks, 5-6% - 3 Marks, 7-8% -4 Marks and more than 8% - 5 Marks.

Detailed questionnaires covering above functional area of SPCBs / PCCs for Performance Audit with scoring criteria is enclosed as **Annexure-II**.

C. Conduction of Audit

The Questionnaire has been prepared in Excel File with a basic idea for ease of collecting information; automated assignment of marks based on the answers provided; keeping print-outs as Records of Audit; forwarding the duly filled in Questionnaire to the **Core Committee** for easy processing, compilation and report preparation.

The score obtained will be available automatically in sheet named '**Final Score**'.

The **Yes / No type Questions** may be answered by selecting either 'Yes' or 'No' by mouse from the Drop Down list provided in relevant cells in Column C (Green shaded). Any other text / number entered will show Error message, in such case click 'Cancel' in the Pop Up dialogue box or press 'Esc' key.

Data based questions may be answered by entering numbers between 0 and 100 in the relevant cells in Column C; any negative number or number higher than 100 or text entered will show Error message, in such case click 'Cancel' in the Pop Up dialogue box or press 'Esc' key.

The Excel File is locked for protection from unintended changes to formulas, except those cells where information is to be entered in.

D. Audit Report preparation

- The Expert team required to assess the information provided by the SPCBs / PCCs so as to validate the reply to each question.
- The Expert Team will also visit a field office (Regional Office / Sub-Regional Office) to gather information for assessment as required in the Questionnaire. The visit is mandatory for SPCBs having more than 10 field offices.
- Expert Team shall collect documents / records from SPCB/PCC wherever required, in support of information provided to the enclosed Questionnaire. One set of copy of such documents/records shall be sent to Core Committee by email/post.

- The Expert team shall identify the areas of strength and weakness as well as the challenges faced by each SPCB/PCC in a separate sheet.

E. Submission of Audit Report

- The Expert Teams shall save the duly filled Excel File preferably by the name of the concerned SPCB/PCC, e.g. 'Performance Audit – Kerala SPCB' or 'Performance Audit – Delhi PCC'.
- The Expert Team shall make three print copies of Audit Report including 'Questionnaire' and 'General Info' sheets, each copy of Audit Sheet shall be signed by representative of concerned SPCB/PCC and Expert Team Members.
- One signed printed copy of the Audit Sheet shall be forwarded to the 'Core Committee' at CPCB, Delhi.
- The Soft Copy of the Performance Audit as saved after completion of the Audit shall be sent by email to the Member Convener of the Core Committee

BASELINE DATA FORMAT

1	Name of the SPCB / PCC		
2	Date of Establishment		
3	No. of Regional Offices / District Offices		
4	No. of Staff		
4.1	Technical and Scientific		
	(i)	Engineers	
	(ii)	Scientists	
	(iii)	Project Staff	
	(iv)	Administrative staff	
4.2	Other Streams (Supporting)		
	(i)	Legal	
	(ii)	Training Cell	
	(iii)	I.T.	
	(iv)	Public Relation	
4.3	Office and Laboratory Network		
	(i)	Central	
	(ii)	Zonal	
	(iii)	Regional	
	(iv)	Sub-Regional	
4.4	Transport		
	(i)	General Vehicles	
	(ii)	Vehicle for sampling / monitoring	
	(iii)	Mobile Laboratories	
5	Category Wise No. of Industries		
	(i)	17 category	
	(ii)	Red	
	(iii)	Orange	
	(iv)	Green	
	(v)	White	
	(vi)	GPI	
6	No. of Common Facilities		
	(i)	STP	
	(ii)	CETP	
	(iii)	TSDf	
	(iv)	CBMWTF	
	(v)	MSW Dumpsites	
7	Water/Air Quality Monitoring Stations/Locations		
	(i)	Air	
		NAMP/SAMP	
		CAAQMS	
	(ii)	Water	
		NWMP / SWMP	

	RTWQMS	
8	Associated Facilities (Infrastructure) Yes / No	
	(i) Library	
	(ii) Training Hall	
	(iii) Conference Hall	
9	Budget	
	(i) Annual 2017-18	
	2018-19	
	(ii) Source of Funds	
	Own	
	State	
	Central	
	Other sources	
	(iii) Reserve Funds available	
	FDs	
	Funds provided as loans	
	Others, if any	
	(iv) Expenditure (Plan)	
	FY 2017-18	
	FY 2018-19	
	(v) Expenditure (Non-Plan) : Establishment + Salary	
	FY 2017-18	
	FY 2018-19	

SCORE ASSIGNING CRITERIA USED BY CPCB

Percent Class for Score Assignment

S. No.	Category	0	1	2	3	4	5	Weightage	Yes	No	Max Score
I	ENVIRONMENTAL MONITORING							25 %			72
A	Air Quality Monitoring										29
1	Percentage of Districts covered with Air Quality Monitoring Stations.	0	1	21	41	61	81				5
2	Percentage of Stations having PM _{2.5} monitoring facility.	0	1	21	41	61	81				5
3	Does SPCB/PCC have its own network of Air Quality Monitoring Stations?								1	0	1
4	Has SPCB/PCC shared Air Quality Data with CPCB? (for 2 years up to 31 March 2019)								1	0	1
5	Percentage decrease in Average PM _{2.5} concentration value in state in 2018-19 over 2017-18 (For increase Zero points to be awarded).	0	1	2	3	4	5				5
6	Percentage Decrease in Average PM ₁₀ concentration value for state in 2018-19 over 2017-18 (For increase Zero points to be awarded).	0	1	3	5	7	9				5
7	Whether SPCB/PCC has reviewed the Air Quality Data to identify polluted areas in addition to non-attainment cities and critically polluted areas (CPAs) identified by CPCB?								2	0	2
8	Percentage of these identified polluted areas for which action plans have been prepared.	0	1	21	41	61	81				5
B	Water Quality Monitoring										25
9	Has SPCB/PCC identified river segments as per suitability for designated best use?								2	0	2
10	Number of Water Quality Monitoring stations being operated / 1000 km length of major/medium rivers in the state?	0	1	2	3	4	5				5
11	Does SPCB/PCC have its own Water Quality Monitoring Programme?								5	0	5

S. No.	Category	0	1	2	3	4	5	Weightage	Yes	No	Max Score
a	Red Category / 17 Categories								1	0	1
b	Orange Category								1	0	1
c	Green Category								1	0	1
d	White Category								1	0	1
e	Grossly Polluting Industries (GPIs)								1	0	1
24	Whether SPCB/PCC has categorized industries as per CPCB directions /guidelines?								1	0	1
25	Whether SPCB/PCC have linked / updated India e-Track up to 31-03-2019?								1	0	1
26	Whether SPCB/PCC has developed its own standards / guidelines?								2	0	2
27	Have inlet standards been specified for CETP?								2	0	2
28	Percentage of non-attainment cities (CPCB identified) for which Action Plan has been approved (OA No. 681 of 2018 of Hon'ble NGT Order dt. 08-10-2018).	0	1	21	41	61	81				5
29	Percentage of polluted river stretches (CPCB identified) for which Action Plan has been approved (OA No. 673 of 2018 of Hon'ble NGT Order dt. 20-09-2018).	0	1	21	41	61	81				5
30	Percentage of utilization of treated sewage for which Action Plan has been approved (OA No. 148 of 2016 of Hon'ble NGT Order dt. 27-11-2018).	0	1	21	41	61	81				5
31	Whether required information w.r.t Hazardous Waste Management in NGT matter (OA No. 804 of 2017 of Hon'ble NGT Order dt. 30-07-2018) has been submitted.								2	0	2
32	Whether the Consents issued by SPCB/PCC contain essential details about Production Capacity, Quantity and Quality of Effluent, Quality of Emission, Fuel Type and Quantity and Standards?								5	0	5
33	Whether SPCB/PCC maintains Consent register (computer based or otherwise) as required under Water Act and Air Act?								1	0	1

S. No.	Category	0	1	2	3	4	5	Weightage	Yes	No	Max Score
34	Percentage of industries having valid CTO.	0	91	93	95	97	99				5
35	Percentage of CTOs which have been issued within stipulated period in 2018-19.	0	91	93	95	97	99				5
36	Is checklist for issuing CTO/CTE available in public domain?								2	0	2
37	Has Online System for Consent Mechanism been adopted in the state?								2	0	2
38	Has SOP/protocol been developed for inspection of industries / common facilities?								2	0	2
39	Is the OCEMS data generated by the industry utilized for identification of industry for inspection?								1	0	1
40	Whether timeline has been defined for action on non-complying industries?								5	0	5
41	Percentage of actions taken against non-complying industries / common facilities during last two years.	0	81	85	89	93	97				5
42	Percentage compliance found in SPCB/PCC inspections during last two years.										
a	(a) Industries	0	81	85	89	93	97				5
b	(b) common treatment facilities such as STP, CETP, TSDF and BMW.	0	61	69	77	85	93				5
B	Sewage Management										20
43	Percentage of installed capacity of treatment (STP) against sewage generation.	0	1	21	41	61	81				5
44	Percentage utilization of installed sewage treatment capacity (STP).	0	1	21	41	61	81				5
45	Percentage of complying treatment against operating capacity (STP).	0	1	21	41	61	81				5
46	Percentage of inspection conducted by SPCB/PCC of STPs to monitor the compliance of various provisions and conditions of authorisation during last three years?	0	1	21	41	61	81				5
C	Battery Waste										2
47	Percentage of half yearly returns received by SPCB/PCC from all the stake	0.0	0.4	0.8	1.2	1.6	2.0				2
		0	1	21	41	61	81				

S. No.	Category	0	1	2	3	4	5	Weightage	Yes	No	Max Score
	holders during the period October-March and April-September of last year.										
D	Hazardous Waste										30
48	Whether SPCB/PCC has conducted inventory of Hazardous waste generation, collection and disposal (SLF & incinerated) during last three years.								2	0	2
49	Percentage of HW generators having valid authorization granted by SPCB/PCC.	0	91	93	95	97	99				5
50	Percentage of authorisation which have been issued within stipulated period in 2018- 19.	0	91	93	95	97	99				5
51	Percentage of common HW secured landfills are maintaining ESCROW Account in tripartite agreement as per the MoEF&CC.	0.0	0.4	0.8	1.2	1.6	2.0				
		0	1	21	41	61	81				5
52	Percentage of occupiers randomly verified by SPCB/PCC w.r.t. annual returns (Form 4) filled by them.	0	1	21	41	61	81				5
53	Percentage of inspection of CHWTSDFs to monitor the compliance of various provisions and conditions of authorization during last year?	0	1	2							2
		0	51	76							
54	Is there any process/ protocol developed for indentifying contaminated sites?								2	0	2
55	Whether identification of contaminated sites / illegal dumps has been completed?								2	0	2
56	Percentage of identified contaminated sites for which action plans prepared.	0	1	11	21	31	41				5
E	BIO-MEDICAL WASTE										10
57	Whether SPCB/PCC has conducted inventory on no. of health care facilities (HCFs) and bio-medical waste generation, treatment & disposal during last three years?								2	0	2
58	Whether SPCB/PCC submitted the Annual Report for the year 2017-18 within the deadline i.e. 31.07.2018?								2	0	2

S. No.	Category	0	1	2	3	4	5	Weightage	Yes	No	Max Score
59	Percentage of application disposed by SPCB / PCC for authorisation especially for non-bedded Health Care Facilities (HCFs) such as Clinics, etc. within stipulated days?	0.0	0.4	0.8	1.2	1.6	2.0				2
		0	1	21	41	61	81				
60	Percentage of inspection conducted by SPCB/PCC of CBWTFs to monitor the compliance of various provisions and conditions of authorisation during last three years?	0	1	2							2
		0	51	76							
61	Percentage of third party audits of the CBWTFs conducted by SPCB/PCC	0.0	0.4	0.8	1.2	1.6	2.0				2
		0	1	21	41	61	81				
F	Solid Waste										9
62	Whether SPCB/PCC has compiled inventory data carried out by ULBs on MSW generation, collection, treatment and disposal during last year?								2	0	2
63	Percentage of inspection conducted by SPCB/PCC of MSW Disposal and processing facilities to monitor the compliance of various provisions and conditions of authorisation during last year?	0	1	21	41	61	81				5
64	Whether SPCB/PCC submitted the Annual Report for the year 2017-2018 within the deadline i.e. 31.07.2018?								2	0	2
G	E-Waste										
65	Whether SPCB/PCC has conducted or completed inventory of E-Waste in the State/UT during last year?								2	0	2
66	Whether SPCB/PCC has submitted the Annual Reports for the year 2017-18 within the deadline i.e. 30.06.2018								2	0	2
67	Percentage of valid authorisation from SPCB/PCC of manufacturers, dismantlers, recyclers and refurbisher including EEE code wise.	0	1	21	41	61	81				5
H	Plastic Waste										
68	Whether SPCB/PCC has conducted inventory on plastic waste generation, collection, recycled/treatment & disposal								2	0	2

S. No.	Category	0	1	2	3	4	5	Weightage	Yes	No	Max Score
	during last year?										
69	Whether any additional measures have been taken to stop usage of plastic in the State?								2	0	2
70	Whether SPCB/PCC has submitted Annual Report for the year 2017-2018 within the deadline i.e. 31.07.2018								2	0	2
I	Legal										
71	Percentage of legal cases filed in courts against non-compliance of directions issued under Water, Air and EP Acts.	0	81	85	89	93	97				5
72	Whether SPCB/PCC has system for empaneling Advocates?								1	0	1
73	Whether SPCB/PCC has any IT based system for monitoring of legal cases?								1	0	1
74	Percentage of court cases been decided in favour of the SPCB/PCC	0	1	13	25	37	49				5
75	Whether prosecutions have been launched against non-complying Local bodies?								2	0	2
III	Data Management & Public Outreach							20%			29
76	Does SPCB/ PCC has public grievance registration and redressal system?								2	0	2
77	Percentage of public complaints addressed in stipulated time by SPCB/PCC.	0	81	85	89	93	97				5
78	Does the SPCB/PCC have an online complaint management system?								1	0	1
79	Are the Directions issued by SPCB/PCC displayed on their website?								1	0	1
80	Are the Environmental Quality Data displayed on their website?								2	0	2
81	Are the industrial CEMS Data (17 Categories, common facilities and GPI in Ganga River Basin) System connected to SPCB/PCC Data Server?								2	0	2
82	Are the technical reports prepared by								2	0	2

S. No.	Category	0	1	2	3	4	5	Weightage	Yes	No	Max Score
	SPCB/PCC displayed on their website?										
83	Is the Annual Report prepared by SPCB/PCC displayed on their website?								2	0	2
84	Has State Environmental Status Report been prepared?								2	0	2
85	Are the Public Hearing Proceedings by SPCB/PCC displayed on their website?								2	0	2
86	Whether SPCB/PCC has organised stakeholder meeting/Awareness for new environmental Rules/Standards amended from time to time in your state?								2	0	2
87	Whether SPCB/PCC has provided citizen's charter?								2	0	2
88	Whether there are any success stories displayed on public domain on technologies (BAT) or practices (BEP) by industries / municipalities?								2	0	2
89	Whether SPCB/PCC has been compiling environmental statement submitted by industries every year?								2	0	2
IV	Advisory for Decision Making							10%			13
90	Whether State/UT has Environmental Policy?								2	0	2
91	Whether SPCB/PCC has advised State Govt. on Policy Issues on Environment?								2	0	2
92	Whether State has industrial siting policy/criteria?								5	0	5
93	Are there any State Level Monitoring Committee on Environmental issues?								2	0	2
94	Whether SPCB/PCC has prescribed / published any guideline for green belt development in industrial premises?								2	0	2
V	Research & Development and Training							9.5%			10
95	Does SPCB/PCC conduct orientation programme for newly recruited staffs?								2	0	2
96	Whether SPCB/PCC organizes mass								2	0	2

