

Report of three Member Committee constituted by MoEF&CC in compliance to the directions at para 55-vii & vii.a of the Hon'ble NGT order dated 11.01.2019 in the matter of O.A No. 95/2018; Aryavart Foundation Vs. Vapi Green Enviro Ltd

In compliance to the directions at para 55-vii and vii.a of Hon'ble NGT order dated 11.01.2019 in the matter of O.A No. 95/2018; Aryavart Foundation Vs. Vapi Green Enviro Ltd. &Ors., MoEF&CC vide office order dated 22/04/2019 constituted a three-member Expert Committee, which held two meetings on 05/07/2019 and 13/08/2019, to discuss various options for strengthening present system including future challenges.

As per the directions of Hon'ble Tribunal, three-member Expert Committee assessed compliance of SPCBs with regard to notification of recruitment rules for appointment of Member Secretaries and Chairmen of State Pollution Control Boards and Pollution Control Committees (SPCBs and PCCs). Further, committee also studied current functioning of SPCBs and PCCs, including the issues and challenges pertaining to regulatory, governance, HR capabilities, monitoring capabilities, etc. and suggested guidelines for effective functioning.

Observations and recommendation of the committee on above mentioned orders are given below:

1.0 Notification of Recruitment Rules (RRs) for appointment of Chairmen and Member Secretaries of SPCBs/PCCs:

The Committee observed that CPCB had regularly followed up with SPCBs/PCCs since 2017 regarding notification of Recruitment Rules (RRs) for appointment of Chairmen and Member Secretaries at SPCBs and PCCs. As a result, thirty States have responded and the status is given below:

- a) Ten States namely; Chhattisgarh, Goa, Gujarat, Kerala, Sikkim, Nagaland, Jharkhand, West Bengal, Tamil Nadu and Haryana have been notified RRs of Chairman & Member Secretary and whereas five States namely; Chhattisgarh, Jharkhand, Kerala, West Bengal & Nagaland have already made appointments in line with the notified rules. Tamil Nadu PCB has appointed Chairman & appointment of Member Secretary, TNPCB is in progress.
- b) Madhya Pradesh, HP & Punjab have notified RRs of Chairman. Punjab has appointed Chairman. In HPSPCB, appointment process of Chairman is under process, besides RRs of Member Secretary is under process.
- c) Thirteen SPCBs namely; Andhra Pradesh, Bihar, Karnataka, Maharashtra, Meghalaya, Odisha, Telangana, Tripura, Uttar Pradesh, Rajasthan, Assam, Jammu & Kashmir and

Uttarakhand informed that draft RRs have been forwarded to their respective State Govts for notification.

- d) Mizoram SPCB informed that Govt. of Mizoram has been constituted a drafting Committee to frame the RRs for appointment of Chairman and Member Secretary.
- e) Delhi PCC informed to CPCB that there is no sanctioned post of Chairman in DPCC and in the absence of sanctioned post, it is not feasible to frame RRs for the post of Chairman. Further, RRs for the post of Member Secretary is under process on the lines of uniform RRs, provided by CPCB.
- f) Puducherry PCC requested CPCB for need of amendments in existing notification (Constitution of Puducherry). However, CPCB has not accepted the proposal submitted due to the said proposal was not in line of Water Act, 1974 and Air Act, 1981.
- g) Chandigarh PCC informed CPCB that MoEF&CC has reconstituted Chandigarh PCC by notification issued by CPCB in year 2015. However, the Chandigarh PCC has not responded on RRs of Chairman & Member Secretary of CPCC till date.
- h) Remaining 5 SPCBs/PCCs namely; Arunachal Pradesh, Andaman & Nicobar, Daman & Diu and Dadra & Nagar Haveli, Lakshadweep and Manipur have not responded to CPCB's reminders in this issue till date.

2.0 Guidelines on Effective Functioning of SPCBs

The committee studied current issues in functioning of SPCBs/PCCs within the broad mandate under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, The Environment (Protection) Act, 1986 and rules notified thereunder. The following functional areas for suggested for improvements;

- I. Monitoring of Environmental quality and polluting sources:
- II. Regulatory Actions and environmental Governance:
- III. Data Management & Public Outreach:
- IV. Advisory for Decision Making:
- V. Research & Development and Training:
- VI. Imposition of environmental damages compensation liability
- VII. HR-Requirement:
- VIII. Adequate Infrastructure facilities
- IX. Capacity Building

X. Remediation of contaminated sites

Recommendations of three-member committee for effective functioning of SPCBS/PCCs are given below;

I. **Monitoring of Environmental quality and polluting sources:**

- 1) It is required to upgrade existing network for monitoring environmental quality with respect to ambient air, water and noise to represent State's environmental quality. Special attention be paid to regularly monitor hotspots of deteriorated air and water quality to take necessary corrective actions.
- 2) To the extent possible, Automatic Air Quality Monitoring (AAQM) stations installed by other agencies may also be integrated with State and national air quality monitoring network.
- 3) River water quality monitoring stations should be set-up at up-stream and down-stream of every city and towns with population more than 1 lakh. Water quality monitoring stations operated by various agencies like State Groundwater Board, irrigation department, and institutions including industry may become integrated water quality monitoring network.
- 4) While SPCBs strive to strengthen capabilities by augmenting monitoring infrastructure and capabilities in source monitoring, third party monitoring may be introduced by those SPCBs which are in shortage of manpower, and other infrastructural facilities.
- 5) Mini Mobile monitoring vans equipped with source emission and environmental quality monitoring equipment may also deployed at regional offices of SPCBs.
- 6) SPCBs/PCCs should ensure quality assurance and quality control (QAQC) of the monitoring systems through third party.

II. **Regulatory Actions and environmental Governance:**

- 7) Efforts should be made to educate industries for better compliance rather than taking recourse only through punitive actions. While directions are issued for closure or partial closure or restriction of certain activities, SPCBs/PCCs shall clearly specify what actions are expected to be taken by industry within a given time-frame. Except in case of grossly polluting scenarios, show cause notice be given prior to imposition of punitive actions.

- 8) In case of non-compliance leading to excess release of pollutants, resulting in direct or indirect damages, SPCBs shall impose Environmental Compensation for restoring damage to environment.
- 9) SPCBs shall ensure a transparent process of enforcing environmental regulations.
- 10) While issuing directions for stringent actions against industry based on their own monitoring and analysis of samples, legal provisions should be strictly followed to ensure transparency.
- 11) Apply principles of joint liability in case of non-compliance by common facilities, where non-compliance by common effluent treatment facility may be treated as non-compliance by member facilities.
- 12) In case of non-compliance by common treatment and disposal facilities like TSDFs and CBMWTFs, alternate nearby facility may be permitted to receive waste from member units of non-complying facility.
- 13) SPCBs/PCCs over the years have successfully implemented pollution abatement programs in different States, such implementation models may be shared among SPCBs on a common platform like "SPCB Sanyojan" created by CPCB. Use of E-governance to be encouraged in following areas:
 - Online tracking of waste movement, and
 - Web camera based surveillance.
- 14) SPCBs/PCCs should progress to a regime where self-monitoring and self-reporting by industry is an effective tool for effective monitoring of compliance. Industry to be encourage to install continuous emissions/effluent monitoring system (CEMS) for transmission of data to servers of SPCBs and CPCB. SPCBs should then make arrangement for analysis of such data to take corrective actions based on such analysis. For this purpose, data analytics cells to be set-up in all SPCBs. Further, officials of SPCBs/PCCs should be trained to ensure that the CEMS is properly installed and regularly tested for its robustness and accuracy.
- 15) SPCBs may conduct green rating of industries based on environmental compliance and management practices in a specific sector. State level ranking of industries and cities/towns would create an atmosphere of competition for better compliance among industry and ULBs.
- 16) SPCBs should facilitate compliance by industry by encouraging regular feedback analysis, information-exchange, innovative methods of pollution control, bring partnership between industry - institutions - technology providers.

- 17) Focus should be on landowning agencies to ensure that their premises are not utilized for illegal polluting activities such as waste dumping, burning of wastes, discharge of wastewater, etc.
- 18) SPCBs/PCCs may create a separate planning cell, which will report MS and Chairman directly on data analysis and future needs of regulatory interventions or planning.

III. Data Management & Public Outreach:

- 19) SPCBs should maintain inventory of actual source emissions and discharges including waste streams for each district. In this regard, dashboard for reporting data should be developed by SPCBs/PCCs. Once this is achieved, details provided in Consent and Authorization shall not be used for inventory reporting.
- 20) SSPCBs/PCCs should publish online data pertaining to real-time air and water quality monitoring stations after applying suitable data validation protocols. Current practice of long time gaps in publishing manual monitoring data should be replaced with data reporting within 15 days.
- 21) Data in public domain should be easily understandable for common public with easy formats, indices, trends, etc.
- 22) Address public concerns in time-bound manner. Public outreach is very important to instill confidence on functioning of SPCBs. Constructive feedback from public will therefore be useful for SPCBs/PCCs to take appropriate measures to improve environment. For this purpose, SPCBs/PCCs may create social media accounts to take feedback and to share information.
- 23) Sameer mobile App has been developed by CPCB for dissipation of Air Quality Index from continuous air quality monitoring stations and also to facilitate public in lodging complaints relating to Air Pollution. Sameer App is specifically designed for Delhi-NCR region where complaints lodged are automatically assigned to nodal agencies in Delhi-NCR for resolution. SPCBs/PCCs should also create Sameer like App for dissipation of State specific environmental information and also for redressing complaints pertaining to environmental problems in State.
- 24) There should be zero tolerance towards illegal industry or operations, for which a coordinated mechanism under supervision of State government and at district level led by District Magistrate should be put in place.

IV. Advisory for Decision Making:

- 25) State Governments may invite SPCBs/PCCs to participate in development of policies having bearing on recipient environment.
- 26) Convert technical matters into easily understandable information for State Governments. For example, indicators like water quality index and air quality index may drive decisions to regulate certain activities.

V. Research & Development and Training:

- 27) SPCBs/PCCs need to pay attention to research activities to resolve specific issues in areas concerning States. Environmental compensation funds may be utilized for research studies and specific restoration works.
- 28) Since, Research & Development and Training are specialized and only selected professional organizations possess the capability, SPCBs may enter into agreements with such expert institutes to address research and training requirements. May associate with institutions like NEERI, ETI-Chennai, EPTRI-Hyderabad and EMPRI-Bengaluru, CSIR labs and prominent institute like CSE and TERI for meeting training and research requirements. SPCBs may also consider setting up their own training institute for meeting State's requirement.

VI. Imposition of environmental compensation

- 29) SPCBs/PCCs may impose Environmental Compensation as an effective regulatory tool for ensuring environmental performance. EC is also based on precautionary principle that ensures occupier to take appropriate action to prevent environmental damage from occurring.

VII. HR-Requirement:

- 30) Functions of State Pollution Control Boards have steadily multiplied with introduction of mandates under various waste management Rules notified under E(P) Act, 1986. However sanctioned manpower in most of the States has remained the same and is not commensurate with additional work load. Therefore, SPCBs/PCCs require additional human resources for meeting specific needs in reconnaissance, monitoring and assessment of pollution sources, assessment of environmental quality and e-governance.

- 31) Each SPCB may engage professional agencies such as IIMs, IIPM, to assess requirement of additional manpower considering their functional requirements. Further, in order to meet the increasing workload and for compliance with the orders of Hon'ble Courts, SPCBs may consider engaging third party monitoring agencies/institutions and also engage project specific temporary human resources.

VIII. Adequate Infrastructure facilities:

- 32) SPCBs/PCCs should have their own premises or building to house head office and regional offices along with full-fledged laboratories including mobile laboratories, field monitoring tools, IT facilities, library, conference rooms and training hall/auditorium. These facilities support SPCB's mission and mandates by developing appropriate knowledge base.
- 33) SPCBs may assess their existing infrastructural facilities and take requisite steps to strengthen the same on top priority. SPCBs may establish regional and sub-regional offices based on the density of industries in a specific area and distance to be covered by each office.
- 34) SPCBs/PCCs should carefully study performance audit reports prepared by CPCB and address gaps in infrastructure and human resources as required.

IX. Capacity Building:

- 35) Controlling pollution is most important functions of SPCB, which demands capacity building to its cadre in multi-disciplinary areas. SPCBs/PCCs need to impart training to scientists and engineers at the time of induction and thereafter, periodic refresher courses be provided at various levels through professional institutes, field trips, certification courses, specifically designed quality improvement programs and skill upgradation.
- 36) Training Need Analysis may be done based on a detailed outcome based action plan for upgradation of SPCBs for the next ten years, to begin with.
- 37) Besides capacity building on physio-chemical aspects of air, water and soil, biological, bio-chemical, including ecology and biodiversity; attention may also be paid to training on management of environmental quality, restoration of environmental damages, remediation of contaminated soils, sediments, groundwater, etc.
- 38) Training should be imparted in handling of chemicals, hazardous wastes, management ODS, etc. as per the requirements of countries obligation under International

conventions under UN ratified by the country namely Basel, Stockholm, Rotterdam, Minamata etc.

- 39) SPCB may refer to report of CPCB on training requirement for various stakeholders in State submitted before Hon'ble NGT, which provides a framework for organizing State level capacity building programs on environmental management.

X. Remediation of contaminated sites:

- 40) SPCBs/PCCs as part its regular activity shall identify contaminated sites arising due to improper handling of hazardous wastes and chemicals, open discharge of untreated effluent, leakage from underground storage tanks of fuel or chemicals, etc. and a State level priority list for remediation of sites should be maintained. Guidelines prepared by MoEF&CC/CPCB for identification and assessment of contaminated sites may be followed. CPCB Guidelines on Implementing Liabilities for Environmental Damages due to improper handling & disposal of Hazardous Waste, 2016 and also the guidelines for assessment of environmental damage compensation liability being prepared by CPCB may be referred by SPCBs.
- 41) In case of orphans contaminated sites or sites where polluter is yet to be identified, SPCBs shall refer the matter to respective State governments to ensure remediation with public funds. An empowered Monitoring Committee at State level with representation from all the stakeholders from Department of Environment, Industries, SPCB/PCC, Ground Water Authority, research institutes, etc. may be involved in execution of remediation works.
