

The State of India's Pollution Control Boards

Who has a seat at the table?

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Initiative on Climate, Energy and Environment

WORKING
PAPER

October 2022

1. INTRODUCTION

The Indo-Gangetic plain (IGP) in India is one of the most polluted regions in the world. A densely populated region, with a large number of sources emitting a range of pollutants, regulating air pollution here is an extremely difficult and complex task. Several measures are afoot to improve air quality in this region, and the State Pollution Control Boards and Pollution Control Committees (SPCBs/PCCs) are playing a key role. However, these frontline agencies in pollution regulation are faced with several institutional constraints and challenges in discharging their mandate effectively.

In *'The State of India's Pollution Control Boards'*, we explore some of these key institutional issues faced by Boards in the IGP through a series of working papers:

- 1) **"Who has a seat at the table?"** – Examines the composition of the Boards and their ability to engage in policymaking and take decisions in furtherance of statutory goals;
- 2) **"Who is at the helm?"** – Analyses the qualifications of the Board's leadership - the Chairperson and the Member Secretary, the length and stability of their tenure, and whether they are well-placed to guide the Boards' functioning; and
- 3) **"Who is in the field?"** – Evaluates the adequacy of the Boards' capacity – particularly technical capacity – to perform critical functions like consent granting, inspection, monitoring, and enforcement.

In this paper – the first in the series – we focus on the Board composition. The Water Act¹ and the Air Act² prescribe up to fifteen members on the Board which is headed by a Chairperson and a Member Secretary. Who are these members and what are their qualifications? The laws require various constituencies to be represented: officials representing State Government departments, urban local bodies, and public sector corporations. Three members may be nominated to represent interests of agriculture, fishery, industry, trade or any other interest. The laws do not lay down the qualifications of these members, apart from the requirement under the Air Act that at least two persons on the board must have special knowledge or practical experience in the field of air quality management.

During the Parliamentary discussions prior to the enactment of the Water Act, arguments were raised on whether these Boards based on "old, traditional management systems", would be effective regulators or whether there was a need for boards with fewer members (1). Despite these concerns, the Water Act was enacted prescribing the above-mentioned Board composition. More than four decades later, as the regulatory framework created by these two laws is unable to effectively control water pollution, and air pollution has become a public health emergency in the country, there are fundamental questions on institutional design: Are the Boards, in their present statutory composition, appropriately representative of the various potentially affected interests? Do they have relevant air quality expertise? More importantly, are they able to provide the necessary oversight required of a Board to our frontline environmental regulators?

Based on information collected from SPCBs/PCC through applications filed under the Right to Information Act, 2005 (RTI Act), information that is available on various government websites, and interviews conducted with senior board officials, this paper identifies the following key takeaways on the Boards and their functioning in the IGP states:

- **Skewed representation:** There is limited representation from civil society (including those working on environmental and labour issues), academia, and the public health and medical community on these Boards;

¹ The Water (Prevention and Control of Pollution) Act, 1974 ('Water Act')

² The Air (Prevention and Control of Pollution) Act, 1981 ('Air Act')

- **Air quality expertise absent:** Most Boards do not have the requisite air quality expertise as stipulated under the Air Act. Even when Boards do identify the two members who are said to qualify under this criterion, they are unable to provide details of their qualifications to substantiate the claim.
- **Conflict of interest:** Several Board members represent interests of potentially polluting entities and those who are regulated by the Board, such as the municipal corporations and the industries. This could potentially result in situations where conflict of interest arises.
- **Non-substantive board meetings:** An analysis of the minutes of meetings of 3 SPCBs/PCC is instructive. Discussions in these meetings reflect the minimal attention paid to pollution control planning, the Boards' largely singular focus on industrial pollution, and the lack of efforts to undertake inter-departmental coordination necessary for multisectoral actions.

2. WHO IS REPRESENTED ON THE BOARD?

2.1. Composition of the Board in law

The SPCBs are constituted under the Water Act and the Air Act.³ They are headed by a Chairperson and include a Member Secretary and a maximum of fifteen members. The Board members represent the following constituencies:

- 1) *State Government* (maximum of five officials);
- 2) *Local authorities* functioning within the States (maximum five persons nominated from amongst the members of such authorities);
- 3) *Various interests* of agriculture, fishery, industry, trade or any other interest as identified by the state government (maximum of three non-official); and
- 4) Two persons to represent *companies or corporations* owned, controlled or managed by the State Government.

According to the Air Act, the state government must ensure that at least two persons on the Board have special knowledge on or practical experience in matters relating to improvement of air quality or the prevention, control or abatement of air pollution.⁴ A similar expertise requirement is not included in the Water Act. The composition of PCCs is not prescribed in the same manner as for SPCBs in the law. According to the Water Act and the Air Act, the Central Pollution Control Board (CPCB) exercises the powers of an SPCB in a union territory, and these powers may be delegated to such person or body of persons as the Central Government may specify. The Central Government has exercised this power to constitute (and reconstitute) such a body – i.e., the PCC – in all the union territories.

2.2. Composition of the Board in IGP States

Information on the Board members in the 10 chosen Indo-Gangetic Plain (IGP) states and union territory were obtained through Right to Information Act, 2005 (RTI) applications filed in August-September 2021. Through the applications we sought information on the qualifications of persons appointed to the Board, their prior experience, and details of the non-officials appointed. None of the 10 SPCBs/PCC provided resumes/biodatas or records of the Board members that would indicate their educational qualifications and prior work experience. An overview of the government notifications constituting the Boards in the ten states has been tabulated in the Annexure.

We also spoke to 18 current and former senior leadership of the CPCB and SPCBs (Chairpersons, Member Secretaries, Environmental Engineers, and Legal Officers) across the IGP states. Interviewee responses were anonymised, and States were coded to ensure participant confidentiality. These data were supplemented by a review of previously published reports on SPCB functioning, and data that are available on various government websites.

³ Water Act, sec 4; Air Act, sec 5.

⁴ Air Act, proviso to sec 5(2).

Most Boards are predominantly comprised of officials representing state government departments, urban local body representatives, and industry representatives, with little if any representation from civil society, the health sector, or academia (detailed membership provided in the Annexure). Comparisons of the representation of state departments, various interest groups, and state companies or corporations on the Boards of the 10 SPCBs/PCC can also be found in the Annexure. A summary is given below in Figure 1:

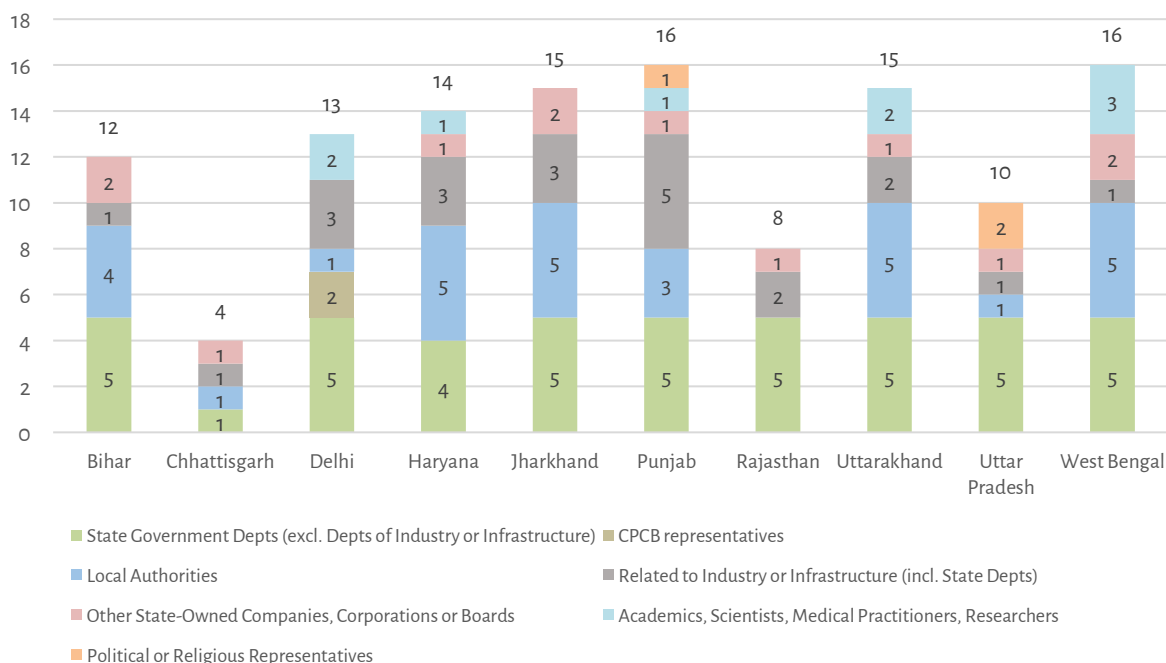


Figure 1. A snapshot of representation on State Pollution Control Boards⁵

The State Environment Department is represented on every Board. The Department for Urban Development is present on the Boards of 9 states. Industry is particularly well represented across the Boards. Departments related to industries are present in 5 Boards, and industry representatives are the most common non-official interest group and are represented on 6 Boards. State Government corporations and companies related to industries are also represented on 6 Boards. In contrast, technical experts such as academics, researchers or medical practitioners are present only in 5 Boards. In Uttar Pradesh, two members of the Board represent political parties, while a member of the Punjab PCB represents a religious charitable trust. In the state government corporations or companies category, power sector corporations and water boards are each present on 4 out of 10 Boards.

2.3. Analysis

Three key points emerge from an analysis of the composition of SPCBs/PCC members:

First, Boards are not representative of several stakeholder groups that are directly affected or can contribute constructively to policy making on air quality regulation. The problem lies in the composition mandated by the law. Those appointed in the 'non-officials' category do not do justice to the diversity of stakeholders and interests. There is a sizeable presence of industry bodies or industrial development authorities. Such groups must be consulted by the Boards, as policies and decisions made by the Boards directly affect them. At the same time other groups, in particular those who can speak for victims of pollution or speak with authority on the impact of pollution also need to find a voice at the table.

⁵ DPCC has been reconstituted subsequently in May 2022. The Chairperson of the newly constituted committee has not been appointed (2).

Despite their limited number, non-official members on the Boards have made crucial contributions by increasing accountability, highlighting citizen concerns, broadening the scope of work of the agency, and offering technical expertise. Some examples of their involvement as observed through the Minutes of the Board Meetings (MoMs) that were accessible have been summarised in Box 1.

BOX 1:

Contributions of non-official members at Board Meetings

We analysed the minutes of Board Meetings of Haryana SPCB (HSPCB), Uttarakhand PCB (UKPCB) and Delhi PCC (DPCC),⁶ and below we highlight some important contributions of non-official members in the functioning of their respective Boards.

- **Increased accountability:** Prof. Narsi Ram Bishnoi, member of the HSPCB has intervened on several occasions on administrative issues of the HSPCB. The Chairperson deferred the 189th meeting of the Board based on the objections raised by Prof. Bishnoi regarding the agenda items and the meeting notice not being circulated prior to the meeting.⁷ In a previous meeting he has also called upon the Board to clarify the status of pending financial audit reports of the HSPCB.
- **Representation of citizens concerns and broadening the scope of work:** Members of the DPCC have on multiple occasions drawn the Board's attention toward citizen concerns and other sources of pollution.
 - In the DPCC's 64th Board Meeting, Mr Ravi Agarwal raised concerns about poor compliance of laws and made suggestions on how citizens could be involved in pollution control programs. Based on his intervention, the Chairperson constituted a sub-committee where it was decided that a mass awareness campaign for each season shall be undertaken by the Committee.
 - Mr Ravi Agarwal and Dr TK Joshi have also invited the attention of the Committee toward other sources of pollution such as electronic waste and light pollution.
- **Technical expertise:** The non-governmental members appointed to represent the interests of labour, fishery agriculture, industry, trade or other interests are often individuals having technical expertise in a specific sector. Some examples of their intervention are given below-
 - A representative from the School of Planning and Architecture, Delhi advised the DPCC on the provisions of the Master Plan for Delhi - 2021 and how they must be adhered to prior to granting consents to ready mix concrete plants. The Board approved the suggestion and directed ready mix concrete plants to seek prior approval from Delhi Development Authority prior to seeking consent from the DPCC.⁸
 - Dr TK Joshi, DPCC member, offered his services for sensitizing and imparting training to organisations selected for conducting third party inspections.⁹
 - IIT Roorkee, an institution represented on the UKPCB, undertook a study on the emission inventory and source apportionment for the non-attainment city of Dehradun. The study was to be placed before the Board.¹⁰

Second, a majority of members of most Boards are unlikely to have the expertise to deal with issues relating to sources and impacts of air pollution. Several of the Board members are persons who hold *ex officio* positions and therefore do

⁶ Please refer to section 4.2 and the Annexure for further details.

⁷ HSPCB, Minutes of the 189th Board meeting held on 14.08.2020.

⁸ DPCC, Minutes of 64th Board meeting held on 23.06.2017.

⁹ DPCC, Minutes of 65th Board meeting held on 27.09.2017.

¹⁰ UKPCB, Minutes of 24th Board meeting held on 10.06.2020.

not necessarily have a background in environmental issues. Figure 2 details the number of technical and non-technical members across each of the Boards, with Delhi having the highest presence of technical members. Bihar, Chhattisgarh, Jharkhand and Uttar Pradesh have no members on the Board with technical expertise.

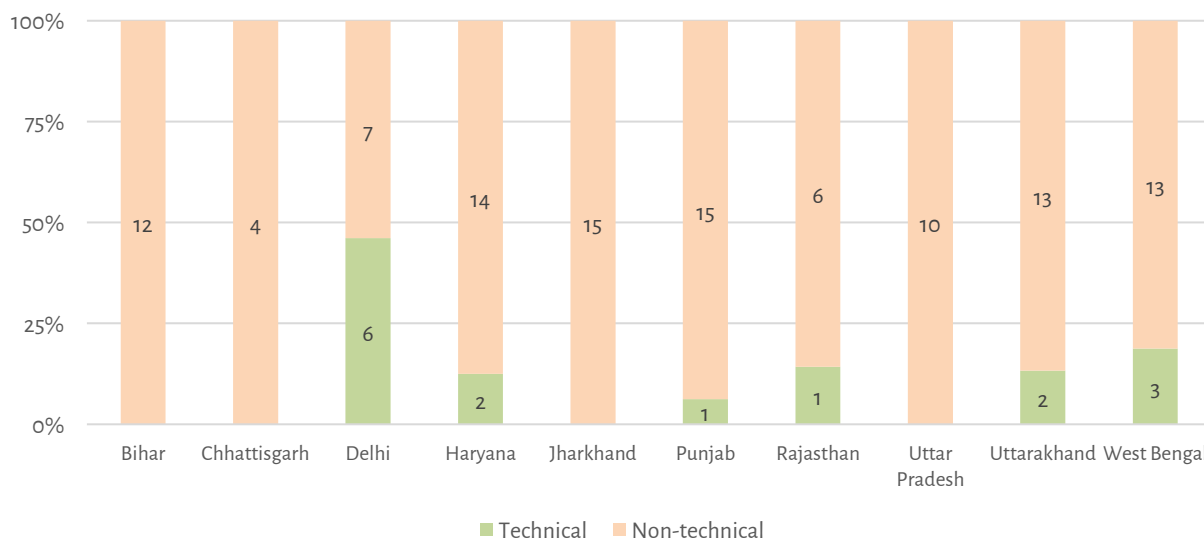


Figure 2. Presence of members with technical expertise on each Board¹¹

This issue of under-representation of technical members in the Boards has been previously discussed by the Planning Commission in its evaluation of SPCBs for the period between 1992-98. That report recognised that SPCBs are required to perform functions that are complex and highly technical and so it is essential that *persons possessing scientific knowledge about matters relating to pollution and pollution control hold an upper hand* (3). A similar view was taken by the High-Level Committee on Forest and Environment related laws appointed by the Central Government and chaired by former Cabinet Secretary T.S.R. Subramanian. The Committee observed that most SPCBs had members on their Board who did not have the technical expertise to carry out the Board’s mandate under the Water Act and the Air Act (4).

The lack of expertise on the Boards raises the question as to whether there should be minimum qualifying criteria for Board members similar to those prescribed for the Chairperson and the Member Secretary. For most SPCBs, eligibility criteria have been prescribed for the SPCB staff that comprises engineers, scientists, and administrative personnel. This leaves the only the appointment of Board members outside the purview of regulation where details of their manner of selection, tenure and minimum qualifications are unclear.

Third, most Boards have a significant number of representatives from industries. In the words of the Member Secretary of State 6, *“The Board is comprised of representatives of polluters or polluters themselves. Local government is often a big polluter”*. This raises serious questions as to the inherent conflict of interest if the group of people tasked with overseeing and guiding the functioning of the SPCBs/PCC includes potential polluters or bodies representing polluters. The probability of this group taking decisions which promote statutory objectives of pollution control and improved air quality, possibly at the cost of ease of doing business or harming the business interests of their peers, is low.

At the same time, there is little to no representation from health, labour, or rural departments – areas that are deeply connected with industrial activities. 5 of the 10 Boards studied did not have a single person representing health interests. Of the 5 Boards that did have health representatives, 2 were secretary-level *ex-officio* posts. None of

¹¹ Members with technical expertise include academics, air quality experts, researchers, medical practitioners, representatives of the CPCB, or any other members with relevant expertise.

the 10 Boards analysed had any persons representing the interests of labour. This is concerning given that decisions relating to siting, categorisation and closure of industrial units affects labour. Apart from labour from the organised sector, these measures will also have a significant impact on the unorganised labour force either employed at these places or dependent on them for their livelihood. The representation from rural areas is similarly absent as only urban local bodies are represented on the Boards, and no equivalent rural body can be found on any of the Boards. Air pollution is not an issue that is limited to the administrative boundaries of urban areas; villages within the same airshed as large cities, proximate to industrial units and power plants are exposed to the same toxic air.

We have also studied the MoMs to understand the implications of this inadequate representation. It is relevant to note that the minutes were only available for Uttarakhand, Haryana and Delhi. Nine MoMs were analysed for Haryana from 2019-22, six for Delhi from 2017-20 and five for Uttarakhand from 2020-22. The Board members did not raise any agenda items concerning rural or labour interests in any of these meetings. The issue of health was raised in a limited capacity, and only by the DPCC members.¹²

3. WHAT KIND OF AIR QUALITY EXPERTISE DO BOARDS HAVE?

3.1. Requirement in law

As mentioned earlier, the Air Act requires that at least two members of the Board should have expertise in air quality management. Proviso to Section 5(2) states:

“Provided that the State Government shall ensure that not less than two of the members are persons having special knowledge or practical experience in respect of matters relating to the improvement of the quality of air or the prevention, control or abatement of air pollution.”

It is noteworthy that these two members could be from any of the aforementioned four constituencies represented on the Board, the Chairperson, or the Member Secretary. While this allows for a degree of flexibility in compliance, it also means that the law requires two members to meet a minimum qualifying criterion – i.e., of expertise in air quality management - apart from their official positions that qualifies them for a place on the Board. The rationale for this proviso can be found in the Report of the Joint Committee on the Air Bill of 1978 (1). The report states that *“in order to ensure effective implementation of the proposed legislation which is of a technical nature and to achieve the desired results, the Board should also consist of technical experts on the subject as its members.”*

The requirement for technical experts is commonplace in environmental regulators in other countries. For example, in the United States of America, the California Air Resources Board consists of 16 members, of which 14 are voting members and the remaining are ex-officio non-voting members (5). Of the 14 voting members, 4 members are *“experts in fields that shape air quality rules”*. The US Environment Protection Agency (USEPA) has a Board of Scientific Counsellors (BOSC) advising the Office of Research and Development of the USEPA (6). The BOSC Executive Committee consists of 27 expert members with a range of specializations needed to guide the federal environmental regulatory agency including epidemiology, statistics, toxicology, oceanography, and atmospheric science.

3.2. Presence of air quality expertise on IGP Boards

¹² DPCC, Minutes of 68th Board meeting held on 15.03.2019.

While the requirement for air quality management expertise on Boards has existed since the Air Act came into force, how compliant are Boards with this requirement currently? Through RTI queries, all 10 SPCBs/PCC were asked to respond to the following two queries regarding the proviso in Section 5(2) of the Air Act:

- Query 1 – Please provide the names of those Board Members fulfilling this criterion.
- Query 2 – Please provide the Resume/Curriculum Vitae/biodata/record of work experience of the members listed above.

The responses received to both queries are tabulated below.¹³

Table 1. RTI responses to query regarding the presence of air quality management expertise on Boards/Committee

State	Response to Query 1	Response to Query 2
Bihar	i. Mayor, Patna Municipal Corporation ii. Mayor, Muzaffarpur Municipal Corporation	Not available.
Chhattisgarh	i. Shri P.C. Pandey, Managing Director, Forest Development Corporation, Raipur ii. Shri Anil Rai, Managing Director, Chhattisgarh Infrastructure Development Corporation, Raipur	Information related to Educational Qualification, Experience, Resume, CV. Biodata is not available in the Board.
Delhi	No such information available.	
Haryana	No information is available in this branch.	
Jharkhand	It is not related to the Board.	
Punjab	<i>The response provides some details of the composition of the Board, but does not identify the two air quality experts and states that remaining information can be provided by the Dept. Of Science, Technology and Environment.</i>	
Rajasthan	The information pertaining to the query listed in the application letter is not maintained by this office.	
Uttarakhand	<i>The response refers to the notification listing the members of the Board. Two members are identified as individuals with a specialization related to air pollution-related issues, namely:</i> i. Nominated representative of IIT Roorkee ii. Nominated representative of Doon University, Dehradun	Not held in this office.
Uttar Pradesh	<i>The response refers to the notification listing the members of the Board. However, no member is listed as having special knowledge regarding air quality management.</i>	Information is not held.
West Bengal	Information is not available in this office.	

3.3. Analysis

The responses point to a clear conclusion – there are virtually no members with air quality management expertise on any of the 10 Boards/Committee. Only 3 of the Boards listed the two members they consider as meeting this criterion. Of those 3 states, only Uttarakhand listed two members from academic institutions. However, as the identity of these members was not provided, it was not possible to verify this claim. Further, none of the states provided any information regarding the records of professional experience of these Board members, as asked for in Query 2. Several responses indicated that this information is not held or is not available at the offices of the Board.

¹³ Responses received in Hindi have been translated to English.

The states under consideration suffer from very poor air quality. 52 of the 132 Non-Attainment Cities identified by the National Clean Air Programme (NCAP) lie in these 10 states (7). SPCBs/PCC have to address wide ranging issues pertaining to air quality, including installing and maintaining Continuous Ambient Air Quality Monitoring Systems (CAAQMS), undertaking source apportionment studies, and building emissions inventories. Further, Boards have been empowered to develop comprehensive air quality management strategies and enforce them. Given this context, it is worrying that virtually none of these states have any verifiable expertise related to air quality management on their Boards that can guide the development and implementation of appropriate policy actions to combat the air pollution crisis.

4. DO THE BOARDS ENGAGE IN SUBSTANTIVE DIALOGUE?

4.1. Board Functioning

The day-to-day functioning of a pollution control board that involves consent management, standard setting and enforcement, planning and advisory functions is primarily undertaken by its staff led by the Chairperson and the Member Secretary. While the Boards – as a group of individuals – are not involved in these functions on a daily basis, they are normatively expected to play a significant role in guiding the long-term strategy and planning of the organisation and overseeing its functioning along with its statutory requirements viz. financial management. This is commonly reflected in the MoMs, where ideas are presented by senior leadership, and deliberated on by the members.

As per the Water Act and the Air Act, the Boards are required to meet at least once every three months to transact business on various issues concerning the SPCB.¹⁴ The frequency of meetings varies across Boards. During an interview, a former senior official of the CPCB said, “*The board is “naam ka board” (in name only). There [are] hardly [meetings] once in three months as they are supposed to meet, and a quorum is [often] not complete*”.

In contrast, the Chairperson of State 2 observed that there being “*not that much work*” was the cause for fewer meetings. In his words, “*There isn’t enough on the agenda for 4 board meetings in a year—because of low levels of industrialization*”. The Member Secretary of State 2 agreed with his Chairperson’s characterization, suggesting that the work of the larger organization “*hinges on the Member Secretary’s effort*”. The Member Secretary of State 3 agreed with this account while noting that “*most boards delegate decision-making power to the leadership (Chairperson and Member Secretary)*”, indirectly confirming that they are more or less the “*naam ka board*” in practice.

An aspect of Board meetings that needs close review is what kind of guidance and oversight of SPCB actions, if any, is provided by Board members. In the subsequent section, we attempt to analyse whether the Boards carry out such functions.

4.2. What do Boards discuss in the meetings?

As mentioned earlier, only two Boards (Haryana and Uttarakhand) and one Committee (Delhi) have made their meeting minutes publicly available on their websites. The other seven Boards have not, making their functioning completely opaque. Given this constraint, this section details a case study on the functions performed by these three Boards/Committee, as understood from an analysis of the MoMs. An overview of the main items discussed during these meetings is tabulated below.

4.2.1. Haryana State Pollution Control Board

¹⁴ Water Act, sec 8(1); Air Act, sec 10(1).

The Minutes of Meetings were available from December 2016 to May 2020 (8). During this three-and-a-half-year period, the Chairperson convened thirteen Board meetings. It is relevant to note that five of these thirteen meetings took place in 2018, four in 2019 and two in 2020, all under the Chairpersonship of Mr. Ashok Khetarpal.

Monitoring and Enforcement	<ul style="list-style-type: none"> ● Installation of 6 CAAQMS ● Upgradation and modernisation of 2 laboratories ● Inventory of e-waste generation in State - outsourced to third party ● Setting up air quality monitoring cell for implementation of the Graded Response Action Plan (GRAP) ● Consider time period for shifting stone crushers not meeting the standards ● Allow only upcoming industrial units using cleaner fuel
Research & Development	<ul style="list-style-type: none"> ● Conduct profile studies for identification of hazardous waste. ● Remote sensing study for monitoring stubble burning- outsourced to Haryana Space Applications Centre (HARSAC) ● Outsourcing study on the levels and sources of pollution in Haryana ● Conducting gap analysis study of 11 existing Common bio-medical waste treatment facilities (CBWTF) for Bio-Medical Waste (BMW) generation ● Outsourcing the preparation of action plan for noise mapping
Standard Setting and Guidelines	<ul style="list-style-type: none"> ● Amending siting criteria for stone crushers ● Amending the category of 'rubber goods industry' ● Categorisation of restaurants, dhabas based on waste water discharge ● Revised procedure for examining, assessing and imposing environmental compensation
Planning programmes	<ul style="list-style-type: none"> ● Environment educations camps for school children, farmers, women
Administrative and Staff	<ul style="list-style-type: none"> ● Annual Budget estimates ● How Board funds will be invested, with which bank and through what process ● Change of regional office location ● Amendment in the Haryana SPCB Service Regulations ● Approval of promotions and appointments ● Strengthening the scientist and engineer cadres ● Decision to be taken on whether appeal should be filed in a case

4.2.2. Delhi Pollution Control Committee

Details for the meetings held by the DPCC were available on the official website for the duration from July 2007 to December 2020 (9). During this thirteen-year period, the Chairperson has convened only nineteen meetings. Four of these meetings were undertaken in 2017, three in 2008 and none during the period between October 2012 to February 2015. In the present paper, we review meetings held from 2017-20 for the purpose of understanding the role played by the Committee.



Monitoring and Enforcement	<ul style="list-style-type: none"> • Procurement of instruments and modernisation of laboratories • Procurement of 20 CAAQMS • Board directed officers to increase the number of inspections in Malviya Nagar for restaurants dumping solid waste • Discussion on whether DPCC should allow third party inspections. Proposal dropped. • Strong action to be taken against those units not conforming with Consent to Operate (CTO)/ Consent to Establish (CTE) norms • Industries to install Online Monitoring System for control of water pollution • Set up Online Monitoring System at 35 locations on Yamuna
Research & Development	<ul style="list-style-type: none"> • Approval of rapid source apportionment study by IIT Madras • Convene meeting with concerned agencies to decide un-sealing of restaurants issue
Standard Setting and Guidelines	<ul style="list-style-type: none"> • Units may apply for revocation of closure directions only if they intend to apply for fresh CTO • Guidelines prescribed for action subsequent to closure directions • Guidelines for transportation of x-ray fixer and developer • Examining whether pre inspections should be discontinued for units applying for Hazardous Waste authorisation • Permitting the activity of dismantling used electronic appliances in the industrial area - Green Category • DPCC to require Completion Certificate as per building bye laws before
Planning programmes	<ul style="list-style-type: none"> • Discussion on the mass awareness campaign to be undertaken by DPCC • Educating and training select schools in Delhi
Administrative and Staff	<ul style="list-style-type: none"> • Regularised service of ad-hoc officers. • Setting up a panel of technical consultants to guide industries on pollution control equipment • Increasing staff strength and engaging consultants • Deliberation on how the system of engaging trainees due to staff constraint must be discontinued. • Appointment of Chartered Accountant • Sub-Committee constituted to suggest procedure for management of domestic hazardous waste

4.2.3. Uttarakhand Pollution Control Board

The official website maintained by the UKPCB lists Minutes of the Board Meetings from April 2011 to July 2022 (10). During this period, the Board has had twenty-nine meetings which averages to less than three Board meetings a year. We have reviewed the MoMs from 2020-22, and an overview of the agenda items discussed by the Board has been summarised below.

Monitoring and Enforcement	<ul style="list-style-type: none"> • Upgrading existing air pollution control system in induction furnace industries • Decision not to set up CAAQMS keeping in view the expenditure required • "State Air Quality Monitoring program" and "State Water Quality Program" instructions given to Municipal Corporation, Kotdwar
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Research & Development	<ul style="list-style-type: none"> Emission Inventory and Source Apportionment study for non-attainment cities through TERI and IIT Roorkee
Planning programmes and policies	<ul style="list-style-type: none"> Promulgation of fuel policy for the State of Uttarakhand Giving incentive amount for purchase of e-vehicles
Administrative and Staff	<ul style="list-style-type: none"> Decision to keep retired officer as consultant Approval of design for Common Hazardous Waste facility Annual Budget approval Release of funds as per CM's instruction for COVID-19 response Sub-committee constituted to develop rules for utilisation of financial resources Approving financial assistance for reconstruction of electric crematorium
Consent Management	<ul style="list-style-type: none"> Decision not to charge consent fee from dharamshalas/ashrams Consent fees must be decided on the basis of pollution index Revised proposal for consent charges to be circulated to various industrial organisations for comments Hydroelectric projects by Uttarakhand Jal Vidyut Nigam will receive 100% exemption

4.3. Analysis

The minutes provide a reasonable understanding of the issues being discussed by the Board, their decision-making process and their role in guiding the SPCBs/PCC towards meeting their mandate. On the basis of the agenda items discussed during these meetings the following conclusions may be drawn -

First, Boards play a limited role in planning programmes and action plans for the control of pollution. Across the three SPCBs/PCC it was observed that their contribution to planning programmes was limited to programmes focused on monitoring and public awareness. The Board members have seldom discussed any pollution control programmes during Board meetings. The presence of technical members with expertise on the issue may potentially alter this, as was observed in section 2.3, where technical members raised several concerns around the programming of the SPCBs.

Second, discussions are often limited to regulating only industrial pollution. The Air Act empowers the Boards to regulate point sources of pollution, which include industries and power plants, as well as dispersed sources such as vehicular emissions. However, from the minutes discussed above it is clear that across all three Boards/Committee discussions are focused primarily on industrial pollution. On the ground, most SPCBs consider the regulation of industrial pollution as their sole mandate. They lack the convening power necessary to direct and facilitate intersectoral measures to combat pollution and therefore, such measures are only taken when a different authority with convening power intervenes (11). The presence of various government departments on these Boards does not appear to substantially improve their convening power, as one would expect.

Third, the Boards are often seen to be working in silos with minimal coordination and interaction with agencies outside the SPCB. External agencies are primarily relied on solely for the purpose of research or undertaking some studies. Within the current air quality framework comprising the NCAP and the Fifteenth Finance Commission grants to urban local bodies, SPCBs are expected to play a key technical role in guiding the development and implementation of action plans. This also requires significant coordination across multiple agencies and departments, however the level of coordination expected for such an exercise does not appear to exist at this time.

Of greater concern however is the fact that none of the minutes analysed provide any indication of the Boards coordinating even with the regional offices of the SPCBs. The DPCC has no regional offices, but Uttarakhand has

four and Haryana has seventeen. These regional offices are the main drivers of enforcement through issuing consents, undertaking inspections and issuing directions against polluting units. However, none of the agenda items listed in the minutes discuss status reports from the regional office or their functioning.

Finally, it is unclear what level of oversight is provided by the Board with respect to the SPCB meeting its statutory objectives and discharging its statutory mandate. No long-term plans appear to be tabled, with no subsequent action-taken reports submitted or discussed. In the absence of these basic checks and balances, there is a fundamental concern – are the Boards as a structure supporting the SPCBs effective or obsolete and in need of structural reform?

5. CONCLUSION

The Board of an institution is tasked with providing guidance on its direction and strategy, establishing policies and frameworks for its management, and performing oversight from the perspective of processual integrity and financial management in its functioning. From our analysis, it is clear that the Boards in the IGP states fulfil these tasks poorly. Overtime, the Boards have limited their remit to matters of administration almost exclusively, to the detriment of the larger mandate that they are expected to guide the SPCBs/PCC on.

Industrial projects can have far reaching environmental and social impacts. That the composition of these Boards continues to be dominated by representatives from government or industry reflects the lack of attention given to public participation in environmental policy making and management. It also raises questions as to the inherent conflict of interest if the group of people tasked with overseeing and guiding the functioning of our frontline environmental regulators includes potential polluters or bodies representing polluters.

The absence of technical expertise on the Boards makes it challenging to provide the appropriate guidance on planning and execution of pollution mitigation measures. In most states there was no air quality expertise represented on the Board as required by law. As our analysis of Board MoMs show, there is scarce discussion on substantive issues of pollution control beyond the traditional consent management process. At a time when SPCBs are expected to guide cities in developing and implementing their action plans to improve air quality, the distinct lack of discourse around pollution beyond industrial sources indicates an unfortunate self-imposed curb by SPCBs on their mandate to improve air quality.

As we discuss in this series of working papers, SPCBs face several challenges from the perspective of leadership and staffing. As a result, they are flailing in their attempts to fulfil their basic mandate. The situation is exacerbated by an evolving regulatory structure that involves an expanded use of technological innovations and market-based regulatory mechanisms. It is clear that the expertise present on the Boards currently, and the views represented on them, are inadequate to confront the challenges of guiding our frontline regulators effectively.

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Acknowledgments

This working paper series is produced by the Initiative on Climate, Energy and Environment at the Centre for Policy Research (CPR-ICEE). CPR-ICEE aims to stimulate an informed debate on the laws, policies and institutions shaping climate, energy and environmental governance in India. Our research focuses on improved understanding of climate, development and environmental challenges and pathways to improved outcomes, in three key areas: climate policy and institutions, the political economy of electricity in India, and air quality governance.

The authors are grateful to Abinaya Sekar for research assistance, and to Prof. Navroz K. Dubash for his valuable comments and insights. We are also grateful to Dr Santosh Harish for conceptualizing and co-leading this project in its early stages. All our interviewees took the time to speak to us openly and at length, and for that we wish to express our deepest appreciation. The authors thank Sonali Verma for her support in production and outreach. This work was supported by grants from the John D. and Catherine T. MacArthur Foundation, the William and Flora Hewlett Foundation and the Oak Foundation. The report represents analysis and views of the authors alone, who are responsible for accuracy and interpretation.