

## Executive summary

### Chapter 1: Introduction

The World Health Organisation estimated in 2012 that 23 *per cent* of all deaths worldwide *i.e.* 12.6 million people was due to environmental causes, which included pollution in all forms. The United Nations Environment Program (UNEP)<sup>1</sup> defines pollution as introduction of substances into the environment that endanger human health, natural resources and ecosystems. The rapid industrial expansion in West Bengal has given rise to significant pressure on the environment. Industrial units have now become a major point source of pollution. The State contains diverse industries<sup>2</sup> which contribute significant amounts of pollution. Based on comprehensive environmental assessment, the Central Pollution Control Board (CPCB) had identified the cities of Haldia, Howrah and Asansol in West Bengal as critically polluted areas and Durgapur as a severely polluted area. As per the Report of the Ministry of Environment, Forest and Climatic Change (MoEF&CC), submitted to parliament in 2012, West Bengal had the highest number of red category industries<sup>3</sup> (12,810). West Bengal Pollution Control Board (WBPCB) under the Department of Environment is entrusted with the responsibility of regulating, controlling and implementing various environmental laws and rules including those, which relate to industrial pollution.

Taking these factors into consideration a Performance Audit on ‘Pollution by Industries’ was undertaken which seeks to examine the initiatives taken by WBPCB for prevention, control and monitoring of industrial pollution in the State. Audit examined Environment Clearance process of all 64 red category industries which received clearance from the State Environment Impact Assessment Authority (SEIAA) during the audit period (2012-13 to 2016-17). Further, 51 red category industrial units were also examined in detail including joint inspections, to assess the effectiveness of control and monitoring process.

Major audit findings relating to prevention, control and monitoring of industrial pollution in West Bengal are discussed below:

### Chapter 2: Prevention of Industrial Pollution

WBPCB had not prepared an inventory of industries giving cognizance to the Pollution Index. There was a mismatch in the basic data regarding sources of pollution between the databases of WBPCB and CPCB.

In October 2012, the WBPCB initiated ‘Inventorisation of Hazardous Waste’ through a consultant. In January 2013, 6,135 units were identified as potential hazardous waste generating units. Field visits of only 3,500 units were conducted. The inventory finalised in June 2017, included only 952 units as the

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<sup>1</sup> “Towards a Pollution Free Planet” Report of the Executive Director, United Nations Environment Assembly dated 15 October 2017.

<sup>2</sup> Like mining, iron and steel, metallurgy, engineering, petroleum, chemicals and petrochemicals, thermal power plants, tanneries, cement, paper etc.

<sup>3</sup> Most polluting industrial units.

hazardous waste generating units. Excluding 2548 units (72.8 per cent) from the field visits led to the inference that the final list could include more units.

**(Para 2.1)**

No activity envisaged in the Vision Documents for the period 2013-14 to 2015-16 were achieved till July 2017. Further, the Department did not have any vision/ plan/ policy for the year 2016-17 and onwards as such, there was no strategic vision to co-ordinate the activities of the various agencies of the Government to conserve and protect the environment.

**(Para 2.2)**

WBPCB had not prepared Zoning Atlas<sup>4</sup> for the State, which is the first step to prevent pollution. Industrial siting policy<sup>5</sup> was violated with heavily polluting industries being set up in municipal areas of Kolkata and critically polluted areas of Durgapur/Asansol/ Haldia where the Pollution Control Board restricted setting up of new industries. Further,

- None of the ecologically sensitive areas, that were to be avoided while setting up of industries, were considered in the siting policy.
- In May 2015, WBPCB had identified 170 red category units for relocation to Maheshtala. After more than two years, these units were not relocated as the Government failed to find suitable land and prepare a detailed project report.

In 2009, due to violation of environmental laws, CPCB asked WBPCB for a time bound action plan. In 2016, CPCB again directed WBPCB and fixed a certain timeline for preparation of the action plan. However, WBPCB did not comply. Far from reducing pollution, this was an indication of disinclination by the State Government to consider controlling the pollution levels.

**(Para 2.3)**

Study reports for promoting cleaner technology options were prepared by consultants in 2012-13 and 2013-14 by incurring an expenditure of ₹ 0.96 crore. However, these were yet to be implemented.

**(Para 2.5)**

The Environment Clearance (EC) procedure of category 'B'<sup>6</sup> projects was hampered due to deficiencies in the functioning of State Environment Impact Assessment Authority (SEIAA). Deviations from the laid down process of granting EC were observed in respect of 38 per cent of the cases to which EC was granted by SEIAA during the period under Audit. In six mining projects, SEIAA had granted (March 2015 to July 2016) ECs, where the respective lease tenures had already expired.

**(Para 2.6)**

WBPCB was unaware of the industries operating without Consent to Establish (CTE), which had received EC due to non-maintenance of centralised database of industries. Test check of 51 CTE files revealed that none of these industries

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<sup>4</sup> Classifies the environment in a District and presents the pollution receiving potential of various sites /zones in the District and the possible alternate sites for industries through easy-to-read maps.

<sup>5</sup> Policy to set up industries in specific areas considering environmental aspects.

<sup>6</sup> Red category industries are further divided into 'A' and 'B' categories. Environment Clearance to 'B' category Red Industries are issued by SEIAA.

had furnished prescribed documents; however, the CTEs were issued to them. The Department noted the audit observation for compliance.

*(Para 2.8)*

### **Chapter 3: Control and Abatement of industrial pollution**

As of July 2017, out of 5,452 Red category industries in the State, only 1908 units were running with valid Consent to Operate (CTO). Whereas 2,797 units i.e. 65 per cent, were running on CTOs which had already expired. Instances of non-compliance with the conditions of CTOs were observed during joint physical verifications of the units.

*(Para 3.1)*

Remedial Action Plans of three Critically Polluted Areas (Haldia, Howrah and Asansol) were not implemented. Action plan for the Severely Polluted Area (Durgapur) was yet to be prepared. WBPCB had not set up any new real time air/ water quality monitoring stations in any of these four areas as per the CPCB guidelines. Analysis of air quality monitoring reports prepared by the third party showed that particulate matter (both  $PM_{10}$  and  $PM_{2.5}$ ) exceeded permissible limits in all stations in Howrah, Asansol and Durgapur.

*(Para 3.2)*

No inspection and regular monitoring of 376 seriously polluting units situated on the banks of the River Ganga was carried out.

*(Para 3.3.1)*

Industrial effluents from 54 drainage channels were released into Ganga. However, WBPCB had not taken up construction of a Common Effluent Treatment Plant on any of these drainage channels.

*(Para 3.3.2)*

### **Chapter 4: Monitoring of industrial pollution**

Out of 64 industries which were granted EC by SEIAA during 2012-17, no industry had ever submitted compliance reports. Monitoring Committee had not met even once during 2012-17 to monitor these industries. Hence, non-compliant industries could not be identified.

*(Para 4.1)*

CPCB approved installation of six Continuous Ambient Air Quality Monitoring Systems (CAAQMS) in April 2016. Subsequently, it reduced (February 2017) it to two, as WBPCB failed to provide suitable sites. CPCB had to reduce/dilute its standards due to unpreparedness of WBPCB regarding site selection.

*(Para 4.2)*

Control of pollution of Grossly Polluting Industries (GPIs) lying beside the Ganga River was not taken up, in violation of CPCB Guidelines. Audit observed that during March 2015-December 2016, the WBPCB had monitored only 33 per cent of the 131 GPIs. From the available monitoring reports during January to March 2017 of these GPIs, it was observed that 80 units had not complied with the discharge standards, thus causing water pollution.

*(Para 4.3)*

Out of 958 hazardous waste generating units, authorisation of 136 units had expired. Audit observed that there was a wide gap, between generation and safe disposal of Hazardous waste. Fourteen *per cent* of these units that were generating hazardous waste, resorted to illegal disposal, thus causing severe pollution. Joint physical verification revealed that 15 units stored the hazardous waste for more than 90 days against the Hazardous Waste Authorisation (HWA) norms of 90 days of storage.

- No records in respect of filing of annual return of hazardous waste management by the hazardous waste generating units were made available, however, the Department admitted that only 40 *per cent* of the units filed returns during 2016-17.
- During 2012-13 to 2015-16, 77 *per cent* to 66 *per cent* of the hazardous waste was not treated and disposed at the Common Hazardous Waste Treatment, Storage and Disposal Facility at Haldia.

***(Para 4.4)***

Inspection of the red category industries were inadequate due to lack of infrastructure and manpower. WBPCB operated from 11 Regional Offices (ROs) covering 23 districts in West Bengal with an average one RO covering two districts. The infrastructure of monitoring and surveillance of 47,894 industries including 5,452 red categories was vested on 39 technical officers deployed in the Regional offices. Only the Central Laboratory was upgraded and had received (November 2013) National Accreditation Board for Testing and Calibration Laboratories (NABL) accreditation. Upgradation and NABL accreditation process was not initiated for the other laboratories

***(Para 4.5)***