

# Annual Report 2020-21



West Bengal  
Pollution Control Board

# Annual Report

2020-2021



**West Bengal Pollution Control Board**

**Published by:**

**Member Secretary,**

West Bengal Pollution Control Board,  
Paribesh Bhawan,  
10A, Block – LA, Sector – III,  
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## **About the Annual Report**

The Annual Report of the West Bengal Pollution Control Board during the financial year 2020-2021 is a compact and detail informative report. In its first chapter, it describes about the Board - its constitution, composition, statutory mandates, infrastructure and it's functional structure. The remaining chapters elaborates the activities (including necessary data and information) performed by the State Board in various environmental aspects during the period.



## Message

The West Bengal Pollution Control Board (WBPCB) is the prime and statutory organization under the Department of Environment, Govt. of West Bengal. It is functioning tirelessly as the regulatory as well as the technical and scientific organization with the objective of environmental pollution control by implementing various environmental laws and rules within the jurisdiction of West Bengal since its establishment in the year 1974.

I am very happy to release the Board's **Annual Report, 2020-2021** which highlights the multifaceted activities of the State Board throughout the year in order to keep the environment CLEAN and GREEN across the State. It is a very informative and resourceful documentation containing the description of the State Board's regulatory as well as the environmental activities and a detail database of air quality, water quality and noise level at various monitoring stations across the State. Therefore, this is very useful for the researchers, students and environmentalists.

Despite all the adversities due to Covid-19 pandemic for the last two years, the WBPCB continued its duties whole heartedly and has become successful to publish this report in time. I am very proud and heartily congratulate the WBPCB officials for this achievement. Hope, we will be able to overcome the difficult situation soon.



**Dr. Ratna De Nag,**  
**Minister of State (Independent charge),**  
**Dept. of Environment, Govt. of West Bengal**



**Dr. Kalyan Rudra**  
Chairman

**West Bengal Pollution Control Board**  
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ডঃ কল্যাণ রুদ্র  
চেয়ারম্যান

পশ্চিমবঙ্গ দূষণ নিয়ন্ত্রণ পর্ষদ  
(পরিবেশ দপ্তর, পশ্চিমবঙ্গ সরকার)

পরিবেশ ভবন

১০-এ, ব্লক-এল.এ, সেক্টর-৩, বিধাননগর, কলকাতা-৭০০ ১০৬  
দূরভাষ : ২৩৩৫ ৫৯৭৫, ফ্যাক্স : ০০৯১-৩৩-২৩৩৫-২৮১৩

## Foreword

We have come across a difficult situation due to the pandemic during last two years. We all have spent the tough time of our life during the long lockdown period and onwards. At present, we are also facing the challenge and fighting at our level best to overcome it.

I am very proud that the West Bengal Pollution Control Board (**WBPCB**) has taken up the challenge of carrying out its multi-faceted activities during this period. These activities include issuing of Environmental Clearance, Management of different classified wastes, industrial and automobile pollution control measures, monitoring of ambient air quality, river water quality, noise level and various regulatory activities. Apart from these, the WBPCB successfully handled all legal matters, a number of public complaints regarding environmental matters, different RTI issues, externally aided projects, a number of new significant initiatives and organized various environmental awareness programmes on the digital platform also. Beside this, the Board has tried hard for the timely publication of its **Annual Report, 2020-2021**.

The fifteen (15) chapters and eight (08) annexures of the Annual Report provide a detail description about all the important regulatory activities, useful data, orders by Hon'ble National Green Tribunal, environmental campaigns including National Green Corps (NGC) Programmes and other relevant activities, achievements, different types of programmes or events and functions performed by the State Board during the aforesaid period in a very comprehensive manner.

The compilation of all the data and timely publication of this Report is undoubtedly one of the most challenging tasks in this pandemic situation. Our team has given all their sincere efforts to take up the challenge and I am very happy to say that they have achieved the target successfully. I further heartily appreciate them for this impressive job and wish them all the best for continuous improvement in the future. The report is also available in our website-[www.wbpcb.gov.in](http://www.wbpcb.gov.in).

  
(Dr. Kalyan Rudra)  
Chairman





ডঃ রাজেশ কুমার, আইপিএস  
Dr. Rajesh Kumar, IPS



সদস্য সচিব  
পশ্চিমবঙ্গ দূষণ নিয়ন্ত্রণ পর্ষদ  
Member Secretary  
West Bengal Pollution Control Board

## Preface

The West Bengal Pollution Control Board (WBPCB) is committed towards the people of this State to ensure clean, green and healthy environment to live in. The WBPCB works continuously and tirelessly throughout the year to achieve this goal. There was no exception of this effort even during the COVID-19 pandemic period. The WBPCB continues its multi-dimensional activities utilizing the digital medium to the optimum level during the challenging time.

In the recent past, the WBPCB has initiated number of innovative steps involving different government agencies and with the active participation of representatives of civil societies. Proactive efforts towards betterment of air quality of different cities like Kolkata, Howrah, Siliguri, Asansol and others by extensive water sprinkling on busy roads to mitigate air pollution caused by vehicular movement during the winter months, dousing of fire in active dumpsites of Dhapa and Promodnagar areas, strict monitoring of construction activities to minimise their contribution towards air pollution, completely banning indiscriminate open burning of solid waste, distribution of LPG cylinders to coal based road-side eateries have led to remarkable improvement of air quality in Kolkata and other cities. Apart from this, the WBPCB has decided to establish AQI monitoring stations in all the District Head quarter towns throughout the State. Such noticeable improvement has led to immediate recognitions from independent assessors: West Bengal has been chosen as the *Best Improved State in the Field of Environment* in a recent study conducted by the *India Today* Group, in the recently published *2019 World Air Quality Report* by *IQAIR*, all the major cities of the State including Kolkata, Asansol, Haldia and Siliguri has shown significant improvement in global ranking in terms of PM<sub>2.5</sub> content in the ambient air. The WBPCB has also taken some advanced steps of noise monitoring programme to combat noise pollution throughout the State.

The WBPCB has recently launched a good numbers of digital initiatives including launching of West Bengal Paribesh App, introduction of Social Media Page (Facebook, Twitter), Integrated



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পশ্চিমবঙ্গ দূষণ নিয়ন্ত্রণ পর্ষদ  
**Member Secretary**  
**West Bengal Pollution Control Board**

Grievance Management System (IGMS), Online Consent Management & Monitoring System (OCMMS) etc. Through these digital facilities common people will be able to easily lodge complaints, access different environmental information, apply for different certificates and authorizations and school students may share some relevant environmental information as well as their views for the betterment of the environment. The whole process has become transparent, interactive and time saving.

The Annual Report, 2020-21 showcases the manifold annual activities and relevant initiatives of the State Board including regulatory activities, monitoring of environmental parameters, ground level campaigning about various environmental issues. I trust this will enable the readers the desired insight into the activities of our esteemed organisation. I would like to extend my heartiest congratulations to all my colleagues whose tireless endeavours are the key to the success of the State Board. Many miles to go – this journey is continuing. Our aim is to make it more inclusive, effective and fruitful - leading to a greener and cleaner West Bengal for the future generations.

**(Rajesh Kumar)**  
**Member Secretary**



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# Chapter 1



# ABOUT THE WEST BENGAL POLLUTION CONTROL BOARD

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## 1.1 Constitution of the Board

The West Bengal Pollution Control Board was constituted by the Government of West Bengal in the year 1974 under the first federal environmental legislation of the country the Water (Prevention and Control of Pollution) Act. The West Bengal Pollution Control Board is the statutory authority responsible for abatement and control of environmental pollution within the territorial jurisdiction of the state of West Bengal. During the subsequent years a number of environmental regulations on different environmental issues were promulgated by the Indian Parliament and the State Boards of different states were given the responsibilities to implement those regulations in their respective jurisdictions. The major environmental Acts and Rules being implemented by the State Board are mentioned below.

### ➤ **The Water (Prevention and Control of Pollution) Act, 1974, as amended**

This was the first federal environmental legislation of the country enacted for prevention and control of water pollution. The Central and the State Pollution Control Boards were constituted under this Act for its implementation under the Act. The Act provides the State Pollution Control Boards necessary regulatory powers for prevention and control of water pollution from point sources and also to maintain and restore wholesomeness of the water.

### ➤ **The Air (Prevention and Control of Pollution) Act, 1981, as amended**

This Act empowered the State Pollution Control Boards for prevention, control and abatement of air pollution. This Act also empowered the State Pollution Control Boards to ensure emission of various gaseous pollutants from different point and non-point sources within the prescribed standards.

### ➤ **The Environment (Protection) Act, 1986, as amended**

This umbrella Act was introduced to protect and improve the environment on a holistic basis with a necessary legal framework for ensuring the same. The Act also provides the Government of India the power to notify any Rules, as felt necessary, for protection and improvement of the environment. Some major environmental Rules, as mentioned below, were subsequently notified by the Government of India under this Act.

### ➤ **The Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016**

These Rules were notified to ensure safe storage, transport, treatment and disposal of various categories of hazardous wastes specifically mentioned in the Rules. Under the provisions of these Rules, the occupier of different activities generating hazardous wastes becomes legally responsible for taking all practical steps to ensure proper handling and disposal of such wastes.

➤ **The Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, as amended**

These Rules provide the State Pollution Control Boards and some other Government Departments necessary power to ensure that various hazardous chemicals with their respective threshold limits are manufactured, imported, stored and used in an environmentally safe manner.

➤ **The Biomedical Waste Management Rules, 2016, as amended**

These Rules were formulated for environment friendly and safe management and handling of Bio-medical wastes generated from different health care facilities.

➤ **The Plastics Waste Management Rules, 2016, as amended**

These Rules were introduced to ensure recycling of plastic wastes in an environmentally safe manner without creating any environmental problem. It also imposed certain restrictions on the manufacture and use of recycled plastic carry bags and containers.

➤ **The Solid Waste Management Rules, 2016.**

Under these Rules the duties of different stakeholders who are legally responsible for ensuring safe management and handling of municipal solid wastes by proper transport, treatment and disposal of such wastes as per the provisions of the rule, have been mentioned.

➤ **The Noise Pollution (Regulation and Control) Rules, 2000, as amended**

These Rules intend to regulate and control noise-producing and noise-generating sources.

➤ **The Ozone Depleting Substances (Regulation and Control) Rules, 2000**

These Rules were framed in compliance with the international obligations for gradual phasing out of various Ozone Depleting Substances (ODS) and to provide the major user of ODS to access non-ODS technologies using international funding.

➤ **The Batteries (Management and Handling) Rules, 2001, as amended**

These Rules were prepared on the concept of extended producer responsibility ensuring inter-alia that the generator of batteries takes the responsibility of environmental friendly recycling of used batteries.

➤ **The E-waste (Management) Rules, 2016, as amended**

These Rules were introduced on the concept of extended producer responsibility to regulate the management and handling of all types of wastes of electric or electronic equipment, whole or in part or rejects from their manufacturing and repair process, which are intended to be discarded.

➤ **Environmental Impact Assessment Notification, 2006, as amended**

The notification was first published in 1994 necessitating a group of listed activities requiring environmental clearance from the Ministry of Environment and Forests, Government of India. In 1997, the process of public consultation was made mandatory for the listed activities for obtaining environmental clearance. Major restructuring of this notification was done by the Ministry of Environment and Forests, Government of India in the year 2006, whereupon the process was made simpler and unambiguous as also avoiding unnecessary delay in getting environmental clearance for the listed activities. Restructuring of the notification provides formation of State Level Environment Impact Assessment Authority (SEIAA) in addition to the Central Authority and both these authorities were provided with the power to consider the

environmental clearance for specified projects as listed in this notification depending on the spatial and temporal impact of such activities.

➤ **The Public Liability Insurance Act, 1991, as amended**

The Act ensured that chemical industries using various hazardous chemicals provides the necessary funding for meeting the financial implication of any chemical accidents arising out of manufacture, storage, usage etc. of listed hazardous chemicals. The funds are to be kept with the insurance authority. The district authorities have been empowered to take decisions to compensate the public affected due to any possible chemical accidents.

## 1.2 Composition of the Board

As per the section 4 of the Water (Prevention and Control of Pollution) Act, 1974, and section 5 of the Air (Prevention and Control of Pollution) Act, 1981, the State Board is comprised of the Chairman, the Member Secretary and sixteen other members nominated by the State Government. The members of the Board include the representatives of government, local authorities and state-controlled corporations and also some technical experts. The composition of the Board is as follows:

### Chairman

Dr. Kalyan Rudra

### Representatives of the State Government

Additional Chief Secretary/Principal Secretary/Secretary/or his authorised representative not below the rank of Joint Secretary, Department of Environment, West Bengal

Additional Chief Secretary/Principal Secretary/Secretary/or his authorised representative not below the rank of Joint Secretary, Department of Commerce and Industries, West Bengal

Additional Chief Secretary/Principal Secretary/Secretary/or his authorised representative not below the rank of Joint Secretary, Department of Urban Development, West Bengal

Additional Chief Secretary/Principal Secretary/Secretary/or his authorised representative not below the rank of Joint Secretary, Department of Transport, West Bengal

Additional Chief Secretary/Principal Secretary/Secretary/or his authorised representative not below the rank of Joint Secretary, Department of Science and Technology, West Bengal

### Representatives of the Local Authorities

Mayor, Kolkata Municipal Corporation/or his authorised representative not below the rank of Chief Engineer

Chairman, Barasat Municipality/ or his authorised representative

Chief Executive Officer, Asansol Durgapur Development Authority

Chief Executive Officer, Kolkata Metropolitan Development Authority

Mayor, Bidhannagar Municipal Corporation/or his authorised representative

### Representatives of the Technical & Scientific Community

Prof. Sudarshan Neogi, Professor, Department of Chemical Engineering, Indian Institute of Technology, Kharagpur.

Dr. Bhaskar Chakraborty, General Practitioner, Apollo Gleneagles Hospital

Prof. (Dr.) Debashis Chatterjee, Retired Professor, Kalyani University

### **Representatives of the State-Controlled Corporations**

Principal Chief Conservator of Forests, Directorate of Forests, West Bengal

Managing Director, West Bengal Power Development Corporation Ltd.

### **Member Secretary**

Shri Rajesh Kumar, IPS

### **Representative of Finance Department**

Financial Advisor, Department of Environment, Govt. of West Bengal [Invitee Member]

## **1.3 Functions of the Board:**

The State Board is primarily responsible to implement the provisions of various environmental regulations within the state of West Bengal. Section 17 of both the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 has clearly declared the legally mandated responsibilities of the State Pollution Control Boards which are summarized below:

- To plan a comprehensive program for the prevention, control or abatement of pollution of streams and wells and air pollution in the state and to secure the execution thereof;
- To advise the State Government on any matter concerning the prevention, control or abatement of water and air pollution;
- To collect and disseminate information relating to water and air pollution, and the prevention, control or abatement thereof;
- To collaborate with the Central Board in organizing the training of persons engaged or to be engaged in programmes relating to prevention, control or abatement of water and air pollution and to organise mass education programmes relating thereto.
- To inspect sewage or trade effluents, works and plants for the treatment or sewage and trade effluents and to review plans, specifications or other data relating to plants set up for the treatment of water, works for the purification thereof and the system for the disposal of sewage or trade effluents or in connection with the grant of any consent as required by the Water Act;
- To inspect, at all reasonable times, any control equipment, industrial plant or manufacturing process and to give, by order, such directions to such persons as it may consider necessary to take steps for the prevention, control or abatement of air pollution;
- To inspect air pollution control areas at such intervals as it may think necessary, assess the quality of air therein and take steps for the prevention, control or abatement of air pollution in such areas;
- To encourage, conduct and participate in investigations and research relating to problems of water pollution and prevention, control or abatement of water pollution;
- To lay down, modify or annual effluent standards for the sewage and trade effluents and for the quality of receiving waters (not being water in an inter-State stream) resulting from discharge of effluents and to classify waters of the state;

- To lay down standards of treatment of sewage and trade effluents to be discharged into any particular stream taking into account the minimum fair weather dilution available in that stream and the tolerance limits of pollution permissible in the water of the stream, after the discharge of such effluents;
- To lay down effluent standards to be complied with by persons while causing discharge of sewage or sullage or both and to lay down, modify or annul effluent standards for the sewage and trade effluents;
- To lay down, in consultation with the Central Board and having regard to the standards for the quality of air laid down by the Central Board, standards for emission of air pollutants into the atmosphere from industrial plants and automobiles or for the discharge of any air pollutant into the atmosphere from any other source whatsoever not being a ship or an aircraft:

Provided that different standards for emission may be laid down under this clause for different industrial plants having regard to the quantity and composition of emission of air pollutants into the atmosphere from such industrial plants;

- To generate environmental awareness among the people, the State Board organized various water pollution, restrictions on use of single-use plastic carry bags etc. throughout the year;
- The West Bengal Pollution Control Board (WBPCB) plays the key role as the State Nodal Agency (SNA) to implement the National Green Cops (NGC) programme funded by the Ministry of Environment, Forest and Climate Change (MoEF&CC), Govt. of India in our State in an effective and impressive manner;
- To evolve economical and reliable methods of treatment of sewage and trade effluents, having regard to the peculiar conditions of soils, climate and water resources of different regions and more specially the prevailing flow characteristics of water in streams and wells which render it impossible to attain even the minimum degree of dilution;
- To evolve methods of utilization of sewage and suitable trade effluents in agriculture;
- To evolve efficient methods of disposal of sewage and trade effluents on land, as are necessary on account of the predominant conditions of scant stream flows that do not provide for major part of the year the minimum degree of dilution;
- To make, vary or revoke any order for the prevention, control or abatement of discharge of waste into streams or wells and requiring any person concerned to construct new systems for the disposal of sewage and trade effluents or to modify, alter or extend any such existing system or to adopt such remedial measures as are necessary to prevent control or abate water pollution;
- To advise the State Government in respect of the location of any industry the carrying on of which is likely to pollute a stream or well and with respect to the suitability of any premises or location for carrying on any industry which is likely to cause air pollution;
- To perform such other functions as may be prescribed or as may, from time to time, be entrusted to it by the Central Board or the State Government

Besides implementing its mandated activities, the State Board can go beyond its regulatory role and act as a facilitator to solve various long standing environmental problems by judicious mix of command and control mechanism with economic instruments.

#### 1.4 Infrastructure of the Board

Presently, the State Board functions from its Head Office-cum-Central Laboratory at Kolkata, eleven(11) Regional Offices and five(5) Regional Laboratories spread over different locations within the state. Most of the Regional Laboratories (R.Lab.) are located along with the Regional Offices (R.O.).

The details of different offices and laboratories of the Board are given in Table 1.1.

**Table 1.1: Location of Offices and Laboratories of the Board**

<b>Offices</b>	
<p><b>Head Office</b> Paribesh Bhawan, 10A, Block LA, Sector III, Bidhannagar, Kolkata – 700 106 Tel: (033) 2335-0261, 2335-0663, 2335-6731, 2335-7428, 2335-8211, 2335-8861, 2335-9088 Fax.: (033) 2335-8073, 2335-2813, 2335-5272 Office of the Chairman; Office of the Member Secretary; Planning Cell, Operation &amp; Execution Cell; Environment Impact Management Cell; Building, Operation &amp; Maintenance Cell; Waste Management Cell; RTI Cell; Public Relation Cell; Publicity and Awareness Cell; National Green Corps Cell; Legal Cell; Administration and Establishment Cell; Accounts Cell; Computer Cell; Central Library and Central Laboratory.</p>	
<p><b>Public Grievance Cell &amp; Air Quality, Noise Automobile and Training Cell</b> Mani Square, Block No.8IT, Western Side, 8<sup>th</sup> floor, 164/1, Maniktala Main Road Kolkata-700054 Tel:23200042</p>	
<p><b>Alipore Regional Office</b> 'Minority Bhawan', 5<sup>th</sup> Floor, Alipore, Kolkata- 700027. Tel.: (033) 2248 5554 Telefax: (033) 2248 5553</p>	<p><b>Salt Lake Regional Office</b> Mani Square, Block No.8IT, Western Side, 8<sup>th</sup> floor, 164/1, Maniktala Main Road Kolkata-700054 Tel:23200097</p>
<p><b>Kolkata Regional Office</b> Mani Square, Block No.8IT, Western Side, 8<sup>th</sup> floor, 164/1, Maniktala Main Road Kolkata-700054 Tel:23200059</p>	<p><b>Howrah Regional Office</b> 'Minority Bhawan', 5<sup>th</sup> Floor, Alipore, Kolkata- 700027. Tel.: (033) 2448-2219, 2220</p>
<p><b>Barrackpore Regional Office</b> Panpore More, Kalyani Expressway, Vill. Panpur, P.O. Narayanpur, 24-Parganas (N) – 743 126. Telefax: (033) 2580-0573</p>	<p><b>Hooghly Regional Office</b> Himalaya Bhawan, Delhi Road, Dankuni, Hooghly – 711 311. Telefax: (033) 2659- 0957</p>
<p><b>Durgapur Regional Office</b> Sahid Kshudiram Sarani, City Centre, Durgapur, Paschim Bardhaman – 713 216. Tel.: (0343) 254-6708 Telefax: (0343) 254-4915</p>	<p><b>Asansol Regional Office</b> ADDA Commercial Market, 2<sup>nd</sup> Floor, Opposite Asansol Fire Station, G. T. Road, Asansol, Paschim Bardhaman – 713 301. Telefax: (0341) 230-5407</p>
<p><b>Haldia Regional Office</b> Super Market Building, 3<sup>rd</sup> Floor, Durgachak, Haldia, Purba Medinipur – 721 602. Telefax: (03224) 274-190</p>	<p><b>Malda Regional Office</b> Paribesh Bhaban, Vill. – Abhirampur, P.O.–Mokdumpur, P.S.–English Bazar, Malda – 732 103. Tel.: (03512) 223-449</p>

<b>Offices</b>	
<p><b>Siliguri Regional Office</b> Paribesh Bhaban, Paribahan Nagar, P.O. - Matigara, Siliguri, Darjeeling – 734 010. Tel.: (0353) 257-1115 Telefax: (0353) 257-1113</p>	<p><b>Central Laboratory</b> Paribesh Bhawan, 10A, Block LA, Sector III, Bidhannagar, Kolkata – 700 098. Tel.: (033) 2335-5953</p>
<p><b>Barrackpore Regional Laboratory</b> Panpore More, Kalyani Expressway, Vill. Panpur, P.O. Narayanpur, 24-Parganas (N) – 743 126. Telefax No. (033) 2580- 1189</p>	<p><b>Hooghly Regional Laboratory</b> Himalaya Bhawan, Delhi Road, Dankuni, Hooghly – 712 311. Telefax No. (033) 2659- 0957 Presently functioning from Barrackpore Regional Lab.</p>
<p><b>Durgapur Regional Laboratory</b> Sahid Kshudiram Sarani, City Centre, Durgapur, Burdwan – 713 216. Telefax No. (0343) 254-3525</p>	<p><b>Haldia Regional Laboratory</b> Block-05 at 40 Flats Complex, Adjacent to Priyambada Housing Complex, Basudevpur, P.O. – Khanjanchak, Haldia, Purba Medinipur – 721 602. Telefax No. (03224) 276- 847</p>
<p><b>Siliguri Regional Laboratory</b> Paribesh Bhaban, Paribahan Nagar, P.O. Matigara, Siliguri, Darjeeling – 734 010. Tel.: (0353) 257-1115 Telefax No. (0353)257-1113</p>	

**Table- 1.2: District/ Area of jurisdiction of different Regional Offices of the Board**

<b>Regional Offices</b>	<b>District/Area of Jurisdiction</b>
<p><b>Kolkata Regional Office</b> Mani Square, Block No.8IT, Western Side, 8<sup>th</sup> floor, 164/1, Maniktala Main Road Kolkata-700054.</p>	<p>KMC (Ward no. 21-28, 36-88, 90-93, 105-107, 133-141), Areas under Kolkata Port Trust and Fort William.</p>
<p><b>Salt Lake Regional Office</b> Mani Square, Block No.8IT, Western Side, 8<sup>th</sup> floor, 164/1, Maniktala Main Road, Kolkata-700054.</p>	<p>KMC (Ward no. 1-20, 29-35, 56-58, 108-109) Parts of South 24 Parganas district (Police Station: Sonarpur, Baruipur, Bhangar)</p>
<p><b>Alipore Regional Office</b> 'Minority Bhawan', 5<sup>th</sup> Floor, Alipore, Kolkata- 700027.</p>	<p>KMC (Ward no. 89, 94-104, 110-132) Parts of South 24 Parganas district (Police Station: Thakurpukur, Metiaburuz, Regent Park, Mahestala , Budge Budge, Bishnupur, Canning Gosaba, Basanti, Joynagar, Kultali), Police Stations under Diamond Harbour Sub Division.</p>

Regional Offices	District/Area of Jurisdiction
<b>Howrah Regional Office</b> ‘Minority Bhawan’, 5 <sup>th</sup> Floor, Alipore, Kolkata- 700027.	Howrah District
<b>Haldia Regional Office</b> Super Market Building, 3 <sup>rd</sup> Floor, Durgachak Haldia , Purba Medinipur – 721 602.	Purba Medinipur District, Paschim Medinipur District.
<b>Barrackpore Regional Office</b> Panpur More, Kalyani Expressway, Vill. Panpur, P.O. Narrayanpur, Dist. 24 PGS (N), PIN- 743 126.	Nadia District, Parts of North 24 Parganas District [excepting areas of all the Police Station of Bidhannagar, Lake Town, Baranagar, Airport, Dum Dum, Rajarhat, Nimta and Minakha – I & II blocks]
<b>Hooghly Regional Office</b> Himalaya Bhawan, Delhi Road, Dankuni, Hooghly, PIN- 712311	Hooghly District.
<b>Durgapur Regional Office</b> Paribesh Bhawan Sahid Kshudiram Sarani, City Centre Durgapur, Paschim Bardhaman – 713 216.	Purba Bardhaman District, Paschim Bardhaman (except Asansol subdivision) District, Birbhum District, Bankura District.
<b>Asansol Regional Office</b> ADDA, Commercial Market, 2 <sup>nd</sup> Floor, G.T. Road, Opp. to Asansol Fire Station, Asansol, Paschim Bardhaman. PIN-713 301	Asansol subdivision in Paschim Bardhaman District, Purulia District, Jhargram District.
<b>Malda Regional Office</b> Paribesh Bhawan, Vill.- Abhirampur, P.O.- Mokdumpur, P.S. English Bazar, Malda – 732 103	Uttar Dinajpur District, Dakshin Dinajpur District, Murshidabad District, Malda District.
<b>Siliguri Regional Office</b> Paribesh Bhawan Paribahan Nagar, P.O. Matigara, Siiliguri, Dist.-Darjeeling, Pin – 734 010.	Darjeeling District, Jalpaiguri District, Alipurduar District, Coochbehar District, Kalimpong District.



# Chapter 2

# EIA NOTIFICATION, 2006 AND ENVIRONMENTAL CLEARANCE PROCEDURE – ROLE OF WEST BENGAL POLLUTION CONTROL BOARD

## 2.1 Introduction

The Environmental Impact Assessment procedure for large industrial / developmental projects was thoroughly restructured in 2006 through issuance of Notification S.O. 1533 (E) on 14<sup>th</sup> September, 2006 by the Ministry of Environment & Forests (MoEF), New Delhi. Principal objective of this restructuring of EIA procedure was to decentralize the process from National level to State level and also to bring transparency and speed in the mode of disposal of Environmental Clearance applications. The Ministry has amended the original notification from time to time to streamline and upgrade the process of issuance of Environmental Clearance.

As per EIA Notification, 2006 and its amendments, the West Bengal Pollution Control Board (WBPCB) has been playing a very important role in conducting Public Hearings and also in the functioning of SEIAA-SEAC for State Level Environmental Clearance procedure which is elaborated in the following two sections of this chapter:

## 2.2 Public Consultation Procedure

### ❖ *The procedure followed in West Bengal between April, 2020 – March, 2021*

The West Bengal Pollution Control Board conducted twenty-three (23) numbers of public hearings during April, 2020 to March, 2021. Out of 23 no. of projects, 15 no. of projects are Category ‘A’ projects and 8 no. of projects are Category ‘B’ projects. The sector wise break-up is provided in the following table.

**Table- 2.1: Public Hearing conducted by the WBPCB during the period from 01<sup>st</sup> April, 2020 to 31<sup>st</sup> March, 2021**

Sl. No.	Name of the Unit	Category	Proposed project for which public hearing to be conducted	PH held on
1.	Rashmi Metaliks Limited	A	Proposed expansion of integrated Steel Plant, Mini Blast Furnace at Vill – Gokulpur, PO –Shyamraipur, PS – Kharagpur (L), Dist. – Paschim Medinipur, West Bengal	08.10.2020

Sl. No.	Name of the Unit	Category	Proposed project for which public hearing to be conducted	PH held on
2.	Indian Oil Corporation Limited	A	Proposed installation of 2nd Catalytic Dewaxing Unit at Haldia Refinery of Indian Oil Corporation Limited, Haldia, District – Purba Medinipur, West Bengal.	12.10.2020
3.	Giridhan Metal Private Limited	A	Proposed expansion of Steel Plant at Jamuria Industrial Estate, Vill – Ikra & Damodarpur, Tehsil – Jamuria, Dist – Paschim Bardhaman, West Bengal	15.10.2020
4.	Spintech Tubes Private Limited	A	Proposed setting up of a Greenfield Integrated Steel Plant of 0.7 MTPA with Captive Power Plant of 70 MW at Village – Dhasal, Mamudpur & Bahadurpur, Block – Jamuria, Dist – Paschim Bardhaman, West Bengal.	04.11.2020
5.	Gajanan Iron Private Limited	B	Proposed expansion of Steel Plant at Jamuria Industrial Estate, Mandalpur, PO & PS – Jamuria, Dist – Paschim Bardhaman, West Bengal.	05.11.2020
6.	Eastern Coalfields Ltd.	A	Proposed expansion of Mohanpur OCP at Salanpur Area, Phase II, Raniganj Coalfields.	11.11.2020
7.	Globus Spirits Limited	A	Proposed expansion of Grain based Distillery from 120 KLPD to 240 KLPD and Co-generation Power Plant from 3.5 MW to 8.0 MW at Plot No. B7, Panagarh Industrial Park, Panagarh, Dist – Purba Bardhaman, West Bengal.	12.11.2020
8.	Surya Alloy Industries Ltd.	B	Proposed expansion project by installation of 1x8T Induction Furnace at JL No. 22, WBIDC Plasto Steel Park, Vill – Kadasole, PO – Ghutgoria, PS – Barjora, Dist – Bankura, West Bengal.	15.12.2020
9.	GreenTech Environ Management Pvt. Ltd.	B	proposed for establishment of Common Biomedical Waste Treatment Facility (CBWTF) at JL No. 142, Plot No. 4 & 6, Mouza – Radharamanpur, Block – Barjora, Dist – Bankura, West Bengal.	18.12.2020
10.	Satyam Iron & Steel Co. Pvt. Ltd.	A	proposed expansion project of installation of 3x15 MT Induction Furnace with Continuous Caster and 60,000 TPA Re-Rolling Mill at G-7,	05.01.2021

Sl. No.	Name of the Unit	Category	Proposed project for which public hearing to be conducted	PH held on
			Mangalpur Industrial Estate, Raniganj, Dist – Paschim Bardhaman, West Bengal	
11.	Adhunik Industries Limited	A	Proposed expansion of the existing Steel Plant at Vill – Angadpur, Raturia, Durgapur, Dist – Paschim Bardhaman, West Bengal .	06.01.2021
12.	Electrosteel Castings Limited	A	proposed expansion and modernisation of Blast Furnace and Ductile Iron Pipe Plant at 30, B. T. Road, PO – Sukhchar, Dist – North 24 Parganas, West Bengal	07.01.2021
13.	Calstar Sponge Limited	A	Proposed for expansion of existing Steel Plant at Jamuria, Mouza – Ikra, Jamuria Industrial Estate, Dist – Paschim Bardhaman, West Bengal.	13.01.2021
14.	H R Ispat Private Limited.	B	proposed expansion project of MS Billets/Ingot and TMT Bar from 92160 MTPA to 2,00,160 MTPA by installing 3x12 MT Induction Furnace, 1x6/11m radius 4 strand of Continuous Casting Machine at Vill & PO – Bamunara, Mouza – Bamunara, Durgapur, Dist – Paschim Bardhaman, West Bengal	22.01.2021
15.	RVD Waste Tech Pvt. Ltd.	B	proposed establishment of Common Bio-medical Waste Treatment Facility (CBWTF) at Plot No. L.R.184 & R.S. 141, Mouza – Rahimpur, PS – Gazole, Dist – Malda, West Bengal.	27.01.2021
16.	Aryavarta Khanija Private Limited	A	Proposed Ferro Alloy Plant at Vill & PO – Hat Ashuria, Mouza – Basudevpur, PS – Barjora, Dist – Bankura, West Bengal.	27.01.2021
17.	AIC Metaliks Private Limited	A	Proposed installation of Pellet Plant (0.6 MTPA), Sponge Iron Plant (2x350 TPD DRI Kilns), Induction Furnaces (4x20 T) with matching LRF & CCM, Rolling Mill (0.25 MTPA) along with 26 MW capacity CPP at Jamuria Industrial Estate, Jamuria, Dist – Paschim Bardhaman, West Bengal.	10.02.2021
18.	AIC Iron Industries Pvt. Ltd.	A	Proposed expansion of existing Steel Plant at Vill – Benipur, PO – Saltor, PS – Neturia, Dist – Purulia, West Bengal .	15.02.2021

Sl. No.	Name of the Unit	Category	Proposed project for which public hearing to be conducted	PH held on
19.	Shreesatya Steel & Power Pvt. Ltd.	B	Proposed expansion project by installation of 6x10 T Induction Furnaces along with Ladle and Continuous Caster and 1,92,000 TPA capacity Rolling Mill at JL No. 66, Via – Dewandighi, PO & Mouza – Mirzapur, PS & Dist – Purba Bardhaman, West Bengal.	15.02.2021
20.	North East Ferro Alloys' Co. Pvt. Ltd.,	B	Proposed expansion of MS Ingot/Billet production by installing 2x15 MT Induction Furnace at Vill – Suboljote, PO – Nemaï, Via Matigara, PS – Matigara, Dist – Darjeeling, PIN – 734010, West Bengal.	22.02.2021
21.	C. P. Re-Rollers Limited.	B	Proposed expansion project of installation of 2x10 Tonnes Induction Furnaces at JL No.90, Raturia, Angadpur Industrial Area, Durgapur – 713215, Dist – Paschim Bardhaman, West Bengal.	23.02.2021
22.	Jai Balaji Industries Limited	A	proposed expansion of existing Steel Plant at G-I, Mangalpur Industrial Complex, PO – Baktarnagar, PS – Raniganj, Dist – Paschim Bardhaman, West Bengal	05.03.2021
23.	Shyam Sel & Power Limited	A	Proposed expansion cum modification of existing Integrated Steel Plant at Vill – Dhasna, Jamuria, PO – Bahadurpur, Dist – Paschim Bardhaman, West Bengal	09.03.2021

#### ❖ Methodology followed in Public Consultation process

In the present system the project proponent prepares the draft EIA / EMP report as per the Terms of Reference (ToR) issued by the Ministry of Environment, Forests & Climate Change (MoEF & CC), New Delhi or the State Environment Impact Assessment Authority (SEIAA), West Bengal and submits the report to the WBPCB. The WBPCB organizes the public hearing after due consultation and confirmation about the date, time and venue of public hearing from the District Magistrate. The date of public hearing is notified in three leading newspapers (one in English, one in Hindi and one in Bengali) at least thirty days before the scheduled date of public hearing. The details are also uploaded in the WBPCB website. The draft EIA is placed in the public domain in strategic locations as per the provisions laid down in EIA notification. In case the project site covers more than one Panchayat, the draft EIA / EMP report is usually kept in all the concerned Panchayat offices for easy access of the local people. The project proponents are encouraged and pursued for disseminating information about the project proposal among the local community who reside in the vicinity of project site and who are also the stakeholders for the project. The entire public hearing is videographed. The minutes of the public hearing are finalized immediately after

the public hearing and are uploaded in the website of the WBPCB. After observing all due formalities as mentioned in the 14<sup>th</sup> September, 2006 EIA notification and its amendments, the minutes of the public hearing is also forwarded to the MoEF&CC, New Delhi or the SEAC, West Bengal as the case may be.

The communication which are received till date of public hearing and CDs of unedited videography and the attendances are also forwarded along with the minutes of public hearing to the respective authority.

#### ❖ **Social Outcome of this process**

The public consultation procedure is a major tool of social engineering process in which the project proponent, the district authority, the neighborhood residents and the environmental regulators can participate together to identify the threat, opportunities and stakes involved in a particular project proposal. The local residents can express their reservations, apprehensions, or expectations about a particular project activity which the project proponent is required to either accept or deny with due clarifications in front of the district authorities and the environmental regulators. This 'open house' discussion frequently acts as a social engineering tool for venting out the grievances about pollution, raising the local environmental concern in right forum, evading confusion or apprehension about any particular industrial activity, understanding the scope of any project, compelling the project proponent to commit realistic financial commitment under **Environment Management Plan (EMP)** programs as per the Office Memorandum of the Ministry of Environment, Forest & Climate Change (MoEF & CC) vide F. No.- 22-65/2017-IA. III, dated: 30.09.2020. The EMP is expected to boost the local development process. As the environment management scheme is presented before the District Administration as well as before the WBPCB, who are entrusted as environmental watchdog, a democratic platform is formed where different stakeholders can participate and arrive at logical conclusions in a democratic, open and transparent manner.

The common views which have been echoed from different parts of Bengal are:

- People of West Bengal want industrial growth but not at the cost of environmental destruction
- The industrialization must improve the scope of employment for the neighborhood youth in a perceivable and sustainable manner.
- The new industries would access basic infrastructure and would consume a major share of natural resources, which earlier was primarily used and enjoyed by the local people only, so these industrial groups should come forward with good EMP programs for taking part in local developmental programs for augmenting the infrastructure capacity and also replenishing the natural resources.

The detailed study of minutes available in the website of the West Bengal Pollution Control Board shall substantiate the fact. Ensuring conducive environment for public hearing is a challenging task for district administration and the WBPCB. The minutes of public hearings conducted can be used a social document for understanding the response of people towards industrial development in their own of the neighborhood area.

### **2.3 Introduction of Environmental Clearance procedure at State Level in West Bengal and its social impact**

The state of West Bengal is the first state in the country to constitute the State Environment Impact Assessment Authority (SEIAA) and State Level Expert Appraisal Committee (SEAC) under the EIA restructuring Notification S.O. 1533 (E) dated 14<sup>th</sup> September, 2006 and its amendments.

In West Bengal, the Department of Environment, Government of West Bengal is functioning as Secretariat of SEIAA and the WBPCB is entrusted for working as Secretariat of the SEAC. This has enabled the SEIAA

and the SEAC to avail the already existing infrastructure for environment protection in the state and also to access to the existing environment information base as and when required. The SEIAA and the SEAC are functioning in co-coordinated and complementary manner with the existing command and control regime of State Pollution Control Board and no administrative complexities has cropped up during this period.

As the WBPCB has closely worked with the SEIAA and the SEAC, WB in past years, the views and experience of the WBPCB with this new Environmental Clearance mechanism at state level is summarized below :

#### ❖ **Appraisal by SEAC – SEIAA, West Bengal**

The SEIAA and the SEAC, West Bengal are functioning as per the procedure laid down in the 14<sup>th</sup> September, 2006 Notification and its amendments. The committee and authority have been constituted with experts and academicians of various related fields. As per the provisions of EIA notification each term of SEAC – SEIAA shall be of three years. After successful completion of the full term (2007 – 2010) of first SEAC – SEIAA, the committee and authority was reconstituted in June, 2010. After successful completion of the full term (2010 – 2013) of second SEAC – SEIAA, the committee and authority was reconstituted in December, 2013. After successful completion of the full term (2013 – 2016) of third SEAC – SEIAA, the committee and authority was reconstituted in March, 2017 and finally after successful completion of the full term (2017 – 2020) of fourth SEAC – SEIAA, the committee and authority was reconstituted in April, 2020. There is sufficient competency and experience in the state level experts for appraisal and issuance of Environmental Clearance for the projects with due consideration of environmental impact and examination of Environment Management Plan.

As per this system, the project proponents should upload FORM – I and Project Feasibility Report (PFR) along with all the mandatory documents in the “PARIVESH” portal of MoEF&CC. The projects are categorized as ‘A’ category and ‘B’ category projects. A category projects are appraised at MoEF&CC, New Delhi and the B category projects are appraised at the SEIAA, West Bengal. The B category projects are also sub categorized into B1 and B2 category depending upon environment impact potential. Public hearing is mandatory for A category and B1 category projects. The SEAC, West Bengal categorizes projects in B1 or B2 category depending upon its environmental impact potential. B1 category projects require full-fledged EIA study. The project proponents are requested to present their proposals through power point presentation before the SEAC. On the basis of their uploaded documents in the portal along with power point presentation and technical discussion, the SEAC frames decisions about any project.

As per the procedure laid down in the EIA Notification 2006, no separate meetings are organized between the project proponent and the SEIAA. The SEAC meetings are organized on regular basis for direct interaction and technical discussion between the project proponent and the SEAC.

The procedure for obtaining Environmental Clearance for at state level in West Bengal is as follows:

#### **Procedure for obtaining Environmental Clearance for Building & Construction Sector (Category B2) at state level in West Bengal**

STEP	PROCEDURE	REMARKS
1	On-line entry of Form 1 along with sanction plan and related documents on “PARIVESH” portal. Application no. will be generated after successful completion.	Application no. & password to be kept secured for future communication
2	Wait for feedback to be sent by the SEIAA	Regularly check the website for update

STEP	PROCEDURE	REMARKS
3	Modify the application form, if required.	
4	Complete application will be forwarded by SEIAA to SEAC for appraisal.	Necessary intimation will be sent to the applicant
5	After scrutiny of the application, Project proponent will be called for presentation before SEAC.	Necessary intimation will be sent to the applicant.
6	SEAC will forward its recommendation regarding grant or rejection of Environmental Clearance to the SEIAA	Decision with reasons shall be communicated to the applicant.
7	SEIAA shall consider the recommendations of the SEAC and convey its decision to the applicant.	

**Procedure for obtaining Environmental Clearance for Industry Sector at state level  
(Category B1) in West Bengal**

STEP	PROCEDURE	REMARKS
1	On-line entry of Form 1 along with Project Feasibility Report (PFR) and other related documents for grant of Terms of Reference (ToR) on “PARIVESH” portal. Application no. will be generated after successful completion.	Application no. & password to be kept secured for future communication. Detailed guidelines for categorization of B1 & B2 and model Terms of Reference are available in the website
2	Wait for feedback to be sent by the SEIAA	Regularly check the website for update
3	Modify the application form, if required.	
4	Complete application will be forwarded by SEIAA to SEAC for appraisal.	Necessary intimation will be sent to the applicant
5	After scrutiny of the application, Project proponent will be called for presentation before SEAC.	Necessary intimation will be sent to the applicant
6	Term of Reference with or without public hearing or rejection of the application shall be recommended to the SEIAA	Necessary intimation will be sent to the applicant.
7	Final Terms of Reference with or without public hearing shall be conveyed or application may be rejected at this stage by the SEIAA.	Issuance of ToR or reason for rejection of application shall be communicated to the applicant.
8	Public hearing at or in close proximity to the site shall be conducted by the WBPCB on submission of draft EIA/EMP reports.	WBPCB will forward the proceedings within 45 days of a request from the applicant for conducting public hearing
9	After completion of public consultation, the applicant shall address all the issues expressed during this process and make appropriate changes in the draft EIA/EMP reports.	The final EIA report, so prepared shall be uploaded to the website along-with application for Environmental Clearance.



STEP	PROCEDURE	REMARKS
10	On-line entry of Form 2 along with granted Terms of Reference (ToR), Project Feasibility Report (PFR), Final EIA/EMP reports and other related documents on “PARIVESH” portal. Application no. will be generated after successful completion.	Application no. & password to be kept secured for future communication.
11	Wait for feedback to be sent by the SEIAA	Regularly check the website for update
12	Modify the application form, if required.	
13	Complete Application will be forwarded by the SEIAA to the SEAC for Appraisal.	Necessary information will be sent to the project proponent.
14	Appraisal of final EIA/EMP reports shall be undertaken by SEAC. Appraisal of projects which are not required to undergo public consultation shall submit EIA/EMP reports based on the ToR prescribed.	Applicant shall be invited to furnish necessary information related to Final EIA/EMP report.
15	SEAC will forward its recommendation regarding grant or rejection of Environmental Clearance to the SEIAA	
16	SEIAA shall consider the recommendations of the SEAC and convey its decision to the applicant.	SEIAA shall convey its decision to the applicant.

**Procedure for obtaining Environmental Clearance for Industry Sector at State Level  
(Category B2)**

STEP	PROCEDURE	REMARKS
1	On-line entry of Form 1 along with Project Feasibility Report (PFR) and other related documents on “PARIVESH” portal. Application no. will be generated after successful completion.	Application no. & password to be kept secured for future communication Detailed guidelines for categorization of B1 & B2 are available in the website
2	Wait for feedback to be sent by the SEIAA	Regularly check the website for update
3	Modify the application form, if required.	
4	Complete application will be forwarded by SEIAA to SEAC for appraisal.	Necessary intimation will be sent to the applicant
5	After scrutiny of the application, Project proponent will be called for presentation before SEAC.	Necessary intimation will be sent to the applicant.
6	SEAC will forward its recommendation regarding grant or rejection of Environmental Clearance to the SEIAA	Decision with reasons shall be communicated to the applicant.
7	SEIAA shall consider the recommendations of the SEAC and convey its decision to the applicant.	SEIAA shall convey its decision to the applicant.

❖ **Emerging scope of this new State Level Environmental Clearance System**

**The SEAC is strongly pursuing the developers and industrial project proponents for:**

1. Reuse and recycling of wastewater
2. Introducing energy efficient fixtures
3. Reducing paved surfaces to control heat island effect and encourage natural recharge
4. Green belt plantation
5. Rain Water Harvesting
6. Generation and utilization of solar power
7. Introducing climate friendly features
8. Use of fly-ash based materials
9. Implementation of EMP.
10. Organic composting of biodegradable portions of Municipal Solid Wastes

**Scope of assessment of cumulative impact through this procedure:**

As considerable number of projects have been already proposed / cleared in certain areas of state of West Bengal, work has been already initiated for understanding the cumulative impact and assessment of carrying capacity of a particular area.

**Ensuing infrastructure capacity:**

The SEAC also ensures the availability of adequate infrastructural facility through obtaining assurance from local urban/ municipal bodies to provide necessary facilities to the unit before stipulating conditions for incorporation in Environmental Clearance to any building/ construction project.

**Opening new avenues:**

Entrepreneurs/ developers are provided with ample scope for improving the Environment Management Plan of their business proposals and cases are cleared only when satisfactory commitments are obtained from industrialists for protection of environment. These persuasive efforts amount to higher rate of approval of industrial proposals with adequate environment management program.

❖ **Status of processing of Environmental Clearance applications at State Level Expert Appraisal Committee (SEAC), West Bengal, during the period of April 2020 to March 2021:**

The SEAC has received 89 applications during April, 2020 to March, 2021. The detailed status of such applications is given below:

Total no. of applications received – 89 (Construction – 23 and Industry – 66)

**Table- 2.2: Disposal of Environmental Clearance applications by State Expert Appraisal Committee during April, 2020 – March, 2021**

Recommended for Environmental Clearance by SEAC (Nos.)		Recommended for Terms of Reference (ToR) for EIA Study		Recommended Stipulated conditions for Environmental Clearance
Industry	Construction	Industry	Construction	Construction
7	22	6	5	1

**Table- 2.3: List of Industries for which Environmental Clearance (EC) recommended by SEAC during the period from April, 2020 to March, 2021**

Sl. No.	Name of the proponent	Types of Industry	Project Address	REC issued on
<b>Industry Sector</b>				
1.	West Bengal Mineral Development & Trading Corporation Ltd.	Palsara Black Stone Mine	Mouza & Vill – Palsara, PS – Kashipur, under Kashipur Block of Dist – Purulia.	28.05.2020
2.	RVD Waste Tech Pvt. Ltd.	Common Biomedical Waste Treatment Facility	Plot No. 125 and 128, Mouza - Khirgram, Block – Mongalkote, Sub-division: Katwa, District: Purba Bardhaman.	23.09.2020
3.	Shree Ramdoot Rollers Pvt. Ltd.	expansion project for installation of 2x20 Tonnes Induction Furnaces with Continuous Caster and 1,48,800 MT/Annum Rolling Mill	Vill & Mouza – Nidhirampur, PS – Gangajalghati, JL No. 034, Khatian No. 1196, PIN – 722 133, Dist – Bankura, West Bengal.	08.12.2020
4.	Ankooor Distilleries Private Limited	200 KLPD Grain Based Distillery along with 5.0 MW Co Generation Power Plant	Vill – Jorsha & Teghoria, Tehsil – Mejhia, Dist – Bankura, West Bengal.	29.12.2020
5.	Ruhr Ispat Pvt. Ltd.	expansion project of installation of 2x10 Tonnes Induction Furnaces with Ladle Refining Furnace, Continuous Caster and 3000 MT/Month Rolling Mill	JL No. 65, Bamunara Industrial Area, Vill, PO & Mouza – Gopalpur, PS – Kanksa, Dist – Paschim Bardhaman, Durgapur – 713212, West Bengal.	18.01.2021
6.	R. S. Concast Limited	expansion of billet from 48,000 TPA to 1,40,000 TPA by additional installation of 2x15 Tons Induction Furnace, Slag Crusher (iron recovery) from 4950 TPA to 13200 TPA and 1,40,000 TPA rolled out material	Bamunara Industrial Estate, PO – Bamunara, Kanksa, Dist – Paschim Bardhaman, West Bengal.	24.02.2021

Sl. No.	Name of the proponent	Types of Industry	Project Address	REC issued on
7.	Todi Minerals Pvt. Ltd.	Granite Stone Quarry Mining project	Plot No. 2974, Upardanga North Block under Mouza – Talsankra, PS – Raghunathpur, Dist – Purulia, West Bengal.	09.03.2021
<b>Construction Sector</b>				
1)	Rosedale Developers Pvt. Ltd.	Residential Project “Rosedale Garden Housing Complex”	Plot No. AA-III/BLK-3, Action Area – III, New Town, Kolkata – 700 156, West Bengal.	28.05.2020
2)	Hastera Credit Pvt. Ltd.	Shopping Complex “Genexx Square”	Diamond Harbour Road, JL No. 21, Mouza – Joka, PS – Haridevpur (formerly Thakurpukur), Kolkata – 700104.	27.07.2020
3)	Eastern India Healthcare Foundation	modification and expansion of Medica Super specialty Hospital	Premises No. 324, Barakhola, 127, Mukundapur, PS – Purba Jadavpur under KMC Ward No. 109, Kolkata – 700 099, Dist – South 24 Parganas	28.08.2020
4)	Ambey Realtors LLP	Residential Complex	Mouza Atghara, JL No. 10, Biswa Bangla Sarani, Chinar Park, Kolkata 700136, Bidhannagar Municipal Corporation Ward No. 12, PO – Rajarhat Gopalpur, PS – Baguihati	28.08.2020
5)	Merlin Projects Limited Mahisbathan	Residential Complex	Mouza – Mahisbathan, JL No. 18, PS – Electronic Complex, PO – Rajarhat, Dist – 24 Parganas (North), West Bengal.	23.09.2020
6)	ASPS Developers LLP	expansion of Residential Complex ‘Flora Fountain’	45, Christopher Road, Kolkata – 700 046, West Bengal.	12.10.2020

Sl. No.	Name of the proponent	Types of Industry	Project Address	REC issued on
7)	Chowringhee Residency Pvt. Ltd.	expansion of Residential Complex “THE 42”	42B, Chowringhee Road, under KMC Ward No. 63, PS – Shakespeare Sarani, Kolkata – 700 071, West Bengal.	12.10.2020
8)	Tivoli Park Apartments Pvt. Ltd.	expansion of Residential project ‘The Reserve’	225, A. J. C. Bose, Kolkata – 700 020, West Bengal.	12.10.2020
9)	Motijug Agencies Ltd.,	Residential Building “Alpine Heights”	Premises No. 10/4A, Gobinda Chandra Khatik Road, KMC Ward No. 58, Borough VII, PS – Tangra, Kolkata – 700 046, West Bengal.	18.11.2020
10)	PGE Info Solutions Pvt. Ltd	expansion of Residential Complex	Mouza – Mankundu, Holding No. 183/1, Khan Road, PO & PS – Bhadreswar, Bhadreswar Municipality Ward No.1, JL No.9, Pin – 712139, Dist – Hooghly.	18.11.2020
11)	Executive Engineer, New Town Construction Division No. – II, Housing Directorate	Multistoried Housing Complex ‘Akanksha’	Plot No. DB-2, Premises No. 07-0030, Action Area – ID, New Town, Rajarhat, Kolkata, West Bengal.	02.12.2020
12)	A & J Main & Co. (Engineers) Private Limited	residential complex	Premises No. 151, Andul Road, Howrah, Mouza – Shibpur, Ward No. 38, PS – Shibpur, Dist – Howrah, West Bengal.	08.12.2020
13)	Riverbank Developers Pvt. Ltd.	expansion of Calcutta Riverside Township project	Batanagar, Maheshtala, Kolkata – 700 140, West Bengal.	29.12.2020
14)	Exult Realty Pvt. Ltd.	expansion of Residential Complex “Ideal Aurum”	Mouza – Kumrakhali, JL no. 48, PS – Sonarpur, Ward No. 27 of Rajpur-Sonarpur Municipality, Dist - South 24 Parganas, West Bengal.	29.12.2020

Sl. No.	Name of the proponent	Types of Industry	Project Address	REC issued on
15)	Ideal Unique Realtors Pvt. Ltd.	expansion of Commercial Complex 'Ideal Unique Centre'	10, East Topsia Road, PS – Tiljala, KMC Ward No. 66, Opp. P. C. Chandra Garden behind Science City, Kolkata – 700 046, West Bengal.	15.01.2021
16)	Southwinds Projects LLP	expansion of Residential cum Commercial Complex 'South Winds'	Mouza – Manikpur, JL No. 77, Sonarpur Rajpur Municipality Ward No. 23, Dist – 24 Parganas (South), West Bengal	18.01.2021
17)	Merlin Projects Limited	Residential Complex	Mouza – Mahisbathan, JL No. 18, PS – Electronic Complex, PO – Rajarhat, Dist – 24 Parganas (North), West Bengal	15.01.2021
18)	Mangalbela Real Estates Pvt. Ltd.	expansion of Housing Complex	Holding No. 1499, JL No. 71, Dwarir Road, Mouza – Jagaddal, PS – Sonarpur, Dist – South 24 Parganas, Kolkata – 700 054, West Bengal	18.01.2021
19)	Leisure Stockist Pvt. Ltd. & Others	Residential cum Commercial Complex	Rekjoani, Indra Nagar, Rajarhat Main Road, 211 Bus Route, P.O. & P.S. Rajarhat, Kolkata – 700 135.	28.01.2021
20)	Ajna Commercial Pvt. Ltd. & 29 Others	Residential Complex	Mouza – Raigachi, JL No. 12, PO & PS – Rajarhat, Rajarhat-Bishnupur No. 1 Gram Panchayet, PIN – 700 135, Dist – North 24 Parganas, West Bengal.	28.01.2021
21)	Central Govt. Employees Welfare Housing Organization	residential complex CGEWHO	Joka, D. H. Road, Opp. Bharat Seva Ashram Hospital, Kolkata – 700 104, West Bengal.	09.03.2021

Sl. No.	Name of the proponent	Types of Industry	Project Address	REC issued on
22)	PS Vinayak Complex LLP	housing complex “The 102”	Mouza Daulatpur & Sarmestarchak, PS – Bishnupur under Kulerdari Gram Panchayat (Joka), Kolkata, West Bengal.	09.03.2021

**Table- 2.4: List of Industries for which Terms of Reference (ToR) recommended by SEAC during the period from April, 2020 to March, 2021**

Sl. No.	Name of the proponent	Types of Industry	Project Address	ToR recommended by SEAC on
<b>Industry sector</b>				
1.	Medicare Environmental Management Pvt. Ltd. Nadia	expansion project of existing Common Bio-Medical Waste Treatment Facility	K-26, Phase – III, Kalyani Industrial Growth Centre, PS & PO – Kalyani, Dist – Nadia.	12.10.2020
2.	Medicare Environmental Management Pvt. Ltd. Howrah	expansion project of existing Common Bio-Medical Waste Treatment Facility	41, F-Road, Belgachia, PS – Liluah, PO & Dist – Howrah, West Bengal.	12.10.2020
3.	Medicare Environmental Management Pvt. Ltd. Paschim Bardhaman	expansion project of existing Common Bio-Medical Waste Treatment Facility	Mouza – Mangalpur, Touzi No. 19, Manbhum, Dag No. 457(P), 458(P), JL No. 22, PO & PS – Raniganj, Dist – Paschim Bardhaman, West Bengal.	12.10.2020
4.	SNG Envirosolutions Pvt. Ltd.	Common Bio-Medical Waste Treatment Facility	Plot No. 9571, Mouza – Saharjora, JL No. 26, PS – Barjora, Dist – Bankura, PIN – 722 202, West Bengal.	04.01.2021
5.	InTim Laminates Private Limited	Synthetic Resin Production Plant for Laminate Manufacturing Unit	Vill – Serpur, PO – Panpur, PS – Amta, Dist – Howrah, West Bengal, PIN – 711 401.	14.01.2021
6.	Pacific Plywoods Pvt. Ltd.	Synthetic Resin Manufacturing unit of 18000 TPA	Vill – Kanchowki, Bishnupur, Dist – 24 Parganas (South), Kolkata – 743503, West Bengal	05.03.2021

Sl. No.	Name of the proponent	Types of Industry	Project Address	ToR recommended by SEAC on
<b>Construction sector</b>				
1.	Paharpur Cooling Towers Ltd.,	construction of Residential cum Commercial project 'Genexx Exotica'	JL No. 9, Mouza – Kalikapur (Narasamuda), Pargana – Shergarh, Dist – Burdwan	28.08.2020
2.	Shree Bishnu Nirman Pvt. Ltd.	expansion of Residential cum Commercial Complex 'Saltee Spacio'	1, Khudiram Bose Sarani, South Dum Dum Municipality Ward No. 21, PS – Dum Dum, Kolkata – 700 028, West Bengal.	21.09.2020
3.	Bengal Shristi Infrastructure Development Limited	residential project 'Tarang'	Mouza-Ganrui, Gobindapur, Kumarpur, Gopalpur, PS-Kanyapur, Asansol Municipal Corporation, Ward no.2, 30 & 31, Dist-Burdwan, West Bengal.	13.11.2020
4.	Bengal Shristi Infrastructure Development Limited	residential project 'Town House'	Mouza – Ganrui, Gobindapur, Kumarpur, Gopalpur, PS – Kanyapur, Asansol Municipal Corporation Ward No. 2, 30 & 31, Dist – Burdwan, West Bengal.	13.11.2020
5.	RDB Realty & Infrastructure Limited	expansion of residential complex	Mouza – Goda, JL No. 41, PS – Burdwan under Burdwan Municipality, West Bengal.	24.12.2020

**Table-2.5: List of Industries (construction sectors) for which Stipulated Conditions for Environmental Clearance (SCEC) recommended by SEAC during the period from April, 2020 to March, 2021**

Sl. No.	Name of the proponent	Types of Industry	Project Address	SCEC recommended on
1.	IABA Housing Private Limited	housing project for economically weaker section (EWS)	JL No. 52, Mouza & PS – Andal, Village Andal, Dist – Paschim Bardhaman, West Bengal	28.05.2020



❖ **Status of processing Consent to Establish applications of EC attracting units by West Bengal Pollution Control Board, during the period of April, 2020 to March, 2021**

The WBPCB has received 48 applications of Consent to Establish applications from EC attracting units during April, 2020 to March, 2021. The detailed status of such applications is given below:

**Table-2.6: Status of Consent to Establish applications received by the Board**

Sl. No.	Name of the unit	Address of the unit	Type of Industry	Category	NOC issue date
<b>Industry</b>					
1.	Rattan Ispat Pvt. Ltd.	Plasto Steel Park, Phase II, PS - Barjora, Ghutgoria, Dist Bankura.	expansion project for installation of 4 nos. 15 MT induction furnace	B	02/06/2020
2.	Eastern Coalfields Ltd.	Bankola Area, Dist Paschim bardhaman	Kumardihi 'A' UG Cluster -12	A	02/06/2020
3.	Eastern Coalfields Ltd.	Bankola Area, Dist Paschim bardhaman	Tilaboni UG Cluster -12	A	02/06/2020
4.	Eastern Coalfields Ltd.	Bankola Area, Dist Paschim bardhaman	Shankarpur UG Cluster -11	A	18/06/2020
5.	Eastern Coalfields Ltd.	Salanpur Area, CLUSTER-4.	Gaurandih and Gaurandih Begunia OC cluster 4	A	24/06/2020
6.	West Bengal Mineral Development & Trading Corporation Ltd.	Vill Hatgacha, PS - Md. Bazar, Dist Birbhum.	0.8 MTPA (ROM) of Black stone from Hatgacha-Jethia Black stone Mine	A	22/07/2020
7.	West Bengal Power Development Corporation Ltd.		Tara (East) & Tara(West) coal mine project	A	17/08/2020
8.	Jai Ambey Metals Pvt. Ltd.	Barjora Plasto Steel Park, JL No. 24, Vill Ghutgoria, Barjora, Bankura	expansion of existing steel plant by installation of induction furnaces CCM & Hot rolling mill		31/07/2020

Sl. No.	Name of the unit	Address of the unit	Type of Industry	Category	NOC issue date
9.	Giridhan Metal Pvt. Ltd.		Transfer of NOC in the name change from Damodar Ispat Ltd. To Giridhan Metals Pvt. Ltd.	A	04/08/2020
10.	Shakambhari Ispat & Power Ltd.	Vill Nadandih, PO - Bortoria, PS - Neturia, Dist Purulia 723121	amendment of NOC for expansion project	A	14/09/2020
11.	Ashhad Paints & Resin Mfg.	Vill Narayanpur, PO B Narayanpur, PS - Bhangar, Dist 24 parganas South	Manufacturing of Synthetic Resin	B	14/09/2020
12.	Sarara Chemicals	Bhajanpur, Kaukandar, Khoribari, Dist - Darjeeling	Synthetic Resin Manufacturing unit	A	06/11/ 2020
13.	Bravo Sponge Iron Pvt. Ltd.	vill Mahuda, PO - Rukni, PS - Para, Dist Purulia.	expansion of steel plant	A	10/11/2020
14.	NU Vista Limited ( earlier Emami Cement Ltd.)	Panagarh Industrial Park. Aushgram II, Dist Purba Bardhaman	Change or ownership change in name and style	B	03/12/2020
15.	Eastern Coalfields Ltd.	Bonbahal, Haripur, Andal, Paschim Bardhaman	CL Jambad OC & UG	A	10/12/2020
16.	Eastern Coalfields Ltd.	Bahula, Andal, Paschim Bardhaman	Bonbahal OC Patch	A	10/12/2020
17.	V H Polymers	Ganesh Complex, PO & Mouza - Raghudvpur,, PS - Ulubrria, Dist - Howrah.	Synthetic Resin Manufacturing unit	B	11/12/2020
18.	Sha Polychem Pvt. Ltd.	Diamond Harbour Road, Plot No. 280, Vill & PO Chandi, Ps - Bishnupur, Dist - 24 Parganas south	Unsaruated Polyester Resin 238 MT/Month	B	15/12/2020

Sl. No.	Name of the unit	Address of the unit	Type of Industry	Category	NOC issue date
19.	Eastern Coalfields Ltd.	Satgram area, Devchandnagar, Raniganj, Paschim Bardhaman	Satgram UG (0.032 MTPA)	A	15/12/2020
20.	Eastern Coalfields Ltd.	Jhanjra , Faridpur, Paschim Bardhaman	Cluster - 8 Jhanjra UG additional capacity 1.5 MTPA	A	17/12/2020
21.	West Bengal Mineral Development & Trading Corporation Ltd.	Hatgacha, Bharkata, Birbhum	Hatgacha Black stone mine	A	21/12/2020
22.	Eastern Coalfields Ltd.	Pandavashwar, Faridpur, Paschim Bardhaman	Manderboni-South SamlaUG (amalgamated) (0.28 MTPA)	A	23/12/2020
23.	Eastern Coalfields Ltd.	Pandebeshwar , Faridpur, Paschim Bardhaman	Madhaipur OC & UG (0.6 MTPA)	A	23/12/2020
24.	Bharat Petroleum Corporation Ltd.	Rajbandh TOP Rajbandh Chetty Durgapur, Paschim Bardhaman	Additional 2x858 KL Capacity bio diesel storage tank	B	23/12/2020
25.	IFB Agro Industries Ltd.	Durgapur, Block DH-II, Dist 24 Pgnos (S)	expansion of grain based distillery	A	20/01/2021
26.	West Bengal Mineral Development & Trading Corporation Ltd.	Plot No. 3547, JL No. 121, Mouza & Vill Palsara, PS - Kashipur, Dist Purulia	Palsara Black Stone Mine	A	09/02/2021
27.	SKG Cement Pvt. Ltd.	Vill & PO - Orgram, PS - Bhatar, Dist - Purba Bardhaman	Amendment of NOC		23/02/2021
28.	RVD Waste Tech Pvt. Ltd.	Mongalkote, Katwa, dist - Purba Bardhaman	Common Biomedical Waste Treatment facility	B	23/02/2021

Sl. No.	Name of the unit	Address of the unit	Type of Industry	Category	NOC issue date
29.	The Micro, Small & Medium Enterprises & Textile Department, Govt. of West Bengal	Calcutta Leather Complex, bantala	Effluent Treatment Plant - Module 7 & 8	B	06/03/2021
30.	Bharat Coking Coal Ltd.	PO - Kalyaneshwari, PS - Kulti, Dist - Paschim Bardhaman, W.B	Cluster XVII including Kalyaneshwari OCP 4.0 MTPA in ML area 1397.18 ha	A	10/03/2021
31.	Rashmi Cement Ltd.	Mouza Jitsole, Junglekhas &* Baghmundi, Vill Jitsole, PS & Dist - Jhargram	expansion of sponge iron plant	A	16/03/2021
32.	Supershakti Metaliks Ltd.	Mouza - Gopinathpur, Tehsil - Durgapur, Dist - Paschim Bardhaman	project for enhancing production from 90,000 TPA etc.	A	24/03/2021
Construction					
1)	Mahakosh Property Developers	54/10 D.C. Dey Road Kolkata 700045	Residential cum SME Complex	B	27/07/2020
2)	Allworth Tradecom Pvt. Ltd. & Others	48, Manmohan Banerjee Road, Ward No. 118 Kolkata 700 038	residential complex VYOM-II	B	31/07/2020
3)	Shah Projects Pvt. Ltd. & Ors.	37, Chanditala Main Road, KMC Ward No. 116, PS- Behala, Kolkata 700053	Residential complex	B	04/08/2020
4)	Airports Authority of India	NSCBI Airport, Kolkata	relocation of air traffic control tower and technical block		26/08/2020

Sl. No.	Name of the unit	Address of the unit	Type of Industry	Category	NOC issue date
5)	Muskan Highrise Pvt. Ltd.	11, Deshpran Sasmal Road, KMC Ward No. 89, PO - Tollygunge, PS - Charumarket, Kolkata - 700 033.	Residential complex	B	02./09/2020
6)	Bandhan Bank Ltd.	Premises No. 08-0382, Plot No.; CBD/83 AA-CBD, New Town Kolkata	Business Building	B	13/10/2020
7)	Sylvan Estate Developers	Mouza - Bandra/ Sultanpur, Ps - dumdum PO - Italgachia, Birati, North Dumdum Municipality, Kolkata - 700005	residential complex “Kendria Vihar Phase II’	B	04/01/2021
8)	Godrej Properties Ltd.	187, F/1, B T Road, Ward No. 14, Under Panihati Municipality, Mouza Rambhadrabati, & Sukhchar, PS - Khardah, Dist - North 24 Parganas	residential complex ‘Godrej Prakriti’	B	18/01/2021
9)	Happy Niketan Pvt. Ltd.	Mouza Mahesh, Serampore, Dist Hooghly	residential complex at Lot 2,	B	18/01/2021
10)	Unimark Mirania Projects LLP	Garagachha, Rajpur-Sonarapur , Mouza -Garagachha, PS - Sonarapur, Dist - 24 pgns (S)	expansion of residential complex	B	20/01/2021
11)	Tivoli Park Apartment Pvt. Ltd.	225B, AJC Bose Road, Karaya, Kolkata - 700020	Residential complex The Reserve	B	28/01/2021
12)	ASPS Developers LLP	45, Cristopher road, PS Tangra, Kolkata 700 046.	Residential Complex “Flora Fountain”	B	02/02/2021

Sl. No.	Name of the unit	Address of the unit	Type of Industry	Category	NOC issue date
13)	Motijug Agencies Ltd. & Others Modern Gears Pvt. Ltd. Machine Works (International) Ltd. & Motijug Charitable Trust	10/4A, Govinda Ch. Khatick Rd., Ward no. - 58 of KMC, Borough no. - VII, Tangra, Kolkata - 700 046	“Alpine Heights”	B	25/02/2021
14)	PGE Infosolutions Pvt. Ltd. & Ors.	JL no. - 9, Mouza - Mankundu, PO & PS- Bhadreshwar, Dist - Hooghly, Pin - 712 139	expansion of Residential Complex	B	25/02/2021
15)	Kolkata Height Pvt. Ltd.	761, Madurdaha, Ward no. 108 of KMC, Borough - XII, Kolkata - 700 099	housing complex	B	15/03/2021
16)	Exult Realty Pvt. Ltd.	Mouza - Kumrakhali, PS - Sonarpur, Sonarpur-Rajpur Municipality, Dist - 24 PGS(South)	expansion of residential complex “Ideal Aurum”	B	15/03/2021

#### ❖ **Ensuring transparency in the process**

The proceedings of all SEAC and SEIAA meetings are uploaded in the “PARIBESH” portal for the sake of transparency. All the environmental Clearance granted by the SEIAA, are uploaded in the “PARIBESH” portal and also in the website of the Department of Environment, Government of West Bengal at [www.environmentwb.gov.in](http://www.environmentwb.gov.in).

Since May 2007 the project proponents are mandatorily required to notify in two newspapers about obtaining Environmental Clearance from central as well as state authority.

The description of project proposals and schedules of Public Hearing are uploaded in the website of West Bengal Pollution Control Board: [www.wbpcb.gov.in](http://www.wbpcb.gov.in). The proceedings of Public Hearing of Category A as well as Category B projects are also uploaded in the same website immediately after the Public Hearing. Anyone can visit the website of the WBPCB and also access those proceedings.

#### ❖ **Monitoring compliances and scope of follow up actions**

WBPCB keeps strict vigil on compliance of any unit with conditions imposed in Environmental Clearance conditions as well as conditions imposed in Consent to Establish. As per the provision of EIA Notification 2006 and its amendment project proponent are requested to submit six monthly compliance reports to Regional Office of the MoEF&CC with a copy to the SEIAA and the WBPCB. Monitoring of EC conditions are carried out by Regional Offices of MoEF&CC.

In case of violation of Environmental Clearance as per the Section 5 of Environment Protection Act, actions will be initiated against any errant unit.

❖ ***The social outcome of this new State Level Environmental Clearance System***

In this two tier system of SEAC – SEIAA, West Bengal, the SEAC directly interacts with the project proponent and pursues the project proponent for expanding the business and accelerating growth without compromising the environmental protection requirement. As a good number of the project proponents have submitted more than one project proposal, the regular and repeated persuasion from the expert members of the SEAC for integrating environmental management plan in the business model is now re-orienting the entire business perspectives of the owners and top level management of different corporate houses. The developers and architects over the time have started to appreciate the need for energy conservation, water recycling, ensuring natural recharge through limiting of the paved area, keeping mandatory green belt zones and other pro-environment initiatives. The power point presentation before the SEAC followed by the detailed technical discussion have ample scope of understanding the difficulties usually faced by the project proponent to design proper environment management program and to find out the remedial measures. This system is expected to bring about a significant change in the approach of developers towards large building projects. However, a more detailed study on SEAC interaction and its follow-up impact on developers / industrialists may be required to assess potential of this “niche” movement for creating positive social and environmental impacts, through implementing a-multi pronged strategy using different mechanism like relentless persuasion, imposing environmental conditions and also creating regulatory pressure, pointing out the scope of financial benefit in environment friendly venture at the conceptual stage of any large project.

# Chapter 3



# INDUSTRIAL POLLUTION CONTROL

## 3.1 Industrial scenario of West Bengal

The large scale urbanization and industrialization has led to deterioration of environmental quality posing a threat to human existence and the ecological functions in recent years. This is a transition period for many developing economies like India, so there is a strong need to strike a balance between industrial development and natural environment to reduce the intensity of pollution. Realising the rapid deterioration in the Water and Air quality, the government of India introduced relevant acts which are administered by the Central Pollution Control Board and State Pollution Control Boards with the primary objective of prevention and control of pollution.

West Bengal has abundant natural resources of minerals and suitable agro-climatic conditions for agriculture, horticulture and fisheries. Moreover, the mineral rich states like Jharkhand, Bihar and Odisha are located in close proximity of West Bengal. The state is also the gateway for eastern India, the Northeast, Nepal and Bhutan because of its location advantage. It is also a strategic entry point for markets in Southeast Asia. West Bengal is home to many industrial sectors such as iron and steel, petroleum and petrochemicals, power, coal, leather, jute products, tea, fisheries, IT, automobile and auto components, gems and jewelry. West Bengal is also a leading exporter of leather and about 22-25 per cent of India's tanning activity is undertaken in South 24 Parganas District at Bantala area near to Kolkata.

Major industrial activities have been agglomerated in various districts of West Bengal like Howrah, Hooghly, North 24 Parganas, South 24 Parganas, Nadia, Purba Bardhaman, Paschim Bardhaman, Purba Medinipur, Paschim Medinipur and Jhargram. Also a number of different Industrial Parks have been set up and a few of them are in progress at Bankura, Burdwan, Purulia, Howrah, Kolkata, Paschim Medinipur, Purba Medinipur, Maldah, Siliguri and North 24 Parganas for different sectors of industries. There are exclusive growth centres in the state for electronics, software technology and export processing and it was mainly developed in Salt Lake, Sector V area in Kolkata. In this connection, the Naba Diganta industrial township was set up in 2006, in Salt Lake, Bidhannagar to encourage IT and related industries.

Industrial activities should comply with the regulatory norms for prevention and control of pollution. Alongside it is desirable to go beyond compliance through adoption of cleaner technologies and improvement in management practices. Commitment to regulatory compliance together with voluntary initiatives of industry for responsible care of the environment will pave the way for sustainable development. As per the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, any industry, operation or process or an extension and addition thereto, which is likely to discharge sewerage or trade effluent into the environment or likely to emit any air pollution into the atmosphere will have to obtain consent from the State Pollution Control Board. The West Bengal Pollution Control Board aims to reduce industrial emission or effluent generation or any other form of pollution, and to control the quality of the same within safe limits. The WBPCB issues two types of consent as mentioned hereunder.

- **Consent to Establish:** All the industries and activities requiring consent must obtain ‘Consent to Establish’ before establishing the industry/activity.
- **Consent to Operate:** This consent, which is valid for certain duration of time needs to be taken before actual commencement of production. The ‘Consent to Operate’ is renewed after a certain period.

### 3.2 Industrial categorisation

The Central Pollution Control Board (CPCB), had under section 18(1)(b) of the Water (Prevention and Control of Pollution) Act 1974 has developed a uniform categorisation of industries for consent administration. The West Bengal Pollution Control Board (WBPCB) in suppression of all previous orders adopted new categorisation along with siting policy of industries with effect from 30.06.2016. Depending upon the pollution potential, the industrial units are classified into the following different categories.

- i) Red category units have maximum pollution potential
- ii) Orange category units have moderate pollution potential
- iii) Green units have the low pollution potential
- iv) White category units have least pollution potential. \*
- v) A few units with no pollution potential are classified as ‘Exempted’ category units. \*

\* ‘White Category’ and ‘Exempted Category’ industries do not require to obtain consent from the WBPCB. However, ‘White Category’ industries are required to inform the WBPCB.

**Annexure- I-** shows the different categories of industries.

**Table 3.1: Validity periods for Consent Applications**

Item	Revised maximum validity Period (in years)
<b>Consent to Establish</b>	
New Project	7
Expansion of the existing units	7
<b>Consent to Operate</b>	
Red Category Units	5
Orange Category Units	5
Green Category Units	7

### 3.3 Siting policy

The WBPCB ensures that compliance to environmental standards is attained through negotiated agreements and technical guidance. Under the current siting policy of the Board, the Red industries are not permitted in Kolkata Metropolitan Area (KMA) areas, and Orange industries are not permitted in Kolkata Municipal Corporation (KMC) and Howrah Municipal Corporation (HMC) areas, excepting the industrial estates of KMC and HMC. The Board also do not give permission to any new or expansion/diversification of the existing Red Category units in the areas falling under the Asansol Durgapur Development Authority (ADDA). The siting policy of the Board does not permit a few water-intensive and highly polluting industrial units having high water consumption within 10-km radius of the Calcutta Leather Complex at Bantala. **Annexure- II** contains the industrial siting policy of the WBPCB for combating industrial pollution in West Bengal.

## 3.4 Consent administration

### A. Environmental Clearance

The Ministry of Environment, and Forests & Climate Change (MoEF & CC), Government of India re-engineered the EIA (Environmental Impact Assessment) notification (vide S.O. 1533 on September 14, 2006) by superseding the earlier notification vide S.O. 60(E) dated January 27, 1994. As per the new notification, the activities requiring EIA clearance have been grouped as A or B, depending on its potential impacts on human health and natural and man-made resources to be processed for environmental clearance by Environmental Impact Assessment Authority of the Government of India and the Government of West Bengal respectively. For constitution of the State Environment Impact Assessment Authority (SEIAA) and the State Level Expert Appraisal Committee (SEAC), the Department of Environment, Government of West Bengal shall forward the names to the Ministry of Environment, Forests & Climate Change (MoEF & CC), Government of India. The SEIAA shall base its decision on the recommendations of the SEAC constituted for West Bengal. The Government of West Bengal would have to notify the SEAC to provide all support and act as the Secretariat for the Authority.

For the Group B projects to be cleared by State Environment Impact Assessment Authority (SEIAA) would be screened for sub-categorisation either as B1 or B2 after the screening process of the environmental information submitted by the project proponent in Form 1 annexed with the said notification. Such sub-categorisation, however, will be made following the guidelines to be published by the MoEF & CC, Government of India time to time. The following sequential process would be followed by the Environment Impact Assessment Authority for environmental clearance of the project activities specified in the notification.

**Screening (Stage 1):** The screening process required for category B projects or activities will be aimed to ascertain whether further environmental studies will be required for preparation of Environment Impact Assessment Report in addition to that submitted in Form 1 by the applicant requiring further processing through public consultation terming it as B1 category project. Otherwise, the project will be termed as B2 not requiring to prepare full-fledged Environment Impact Assessment Report and public consultation through Environmental Public Hearing.

**Scoping (Stage 2):** The Expert Appraisal Committee is required to scope the project or activity requiring environmental clearance to determine the detailed Terms of Reference for the preparation of Environment Impact Assessment Report by assessing the information submitted by the applicant in Form 1.

**Public Consultation (Stage 3):** This is the process by which the concerns of people likely to be affected by the project activity and others who have plausible stake in the environmental aspects of the project are ascertained. This stage of the EIA process is to comprise of two aspects: a public hearing process, in which only local affected people can participate, and a process for obtaining written comments from others who are concerned citizens. However, there are six sets of activities which have been exempted from the process of public consultation.

**Appraisal (Stage 4):** Appraisal means the detailed scrutiny of the application and other documents like the Final EIA Report and outcome of public consultations. The Expert Appraisal Committee or the State Level Expert Appraisal Committee concerned shall made categorical recommendation to the regulatory authority on whether or not the environmental clearance is recommended for granting. However, the projects which do not need to conduct EIA studies or go through public consultation will be appraised on the basis of information provided in the application form and site visits.

## B. Consent administration of the Board

Earlier, for obtaining Consent and Authorization, the applicants (Project Proponent/ Entrepreneur/ Local Body etc.) the applicants required to file their applications through the State Board's Environment Management Information System (EMIS). Now, the State Board has implemented the online Consent Management & Monitoring System (WBOCMMS) by engaging NIC, New Delhi.

The fees required for granting consent are collected through online payment system (net banking). The revised consent fee structure of the Board is given in **Annexure-III**.

The number of 'Consent to Establish', 'Consent to Operate' and 'Bio-medical Waste Authorisation' granted by the Board during the Financial Year 2020-21 are given in **Table- 3.2**.

**Table 3.2: Consent to Establish, Consent to Operate and Biomedical Waste Authorisation granted in Financial Year 2020 – 2021**

Month	Consent to Operate			Consent to Establish (NOC)			Bio-Medical
	Red Units	Orange Units	Green Units	Red Units	Orange Units	Green Units	
May, 2020	0	0	108	0	60	105	165
June, 2020	61	104	91	20	99	117	54
July, 2020	28	106	75	9	99	97	26
August, 2020	25	62	79	36	130	118	31
September, 2020	24	92	130	23	183	143	42
October, 2020	15	83	104	13	159	130	18
November, 2020	26	137	85	15	175	114	51
December, 2020	27	195	152	22	220	197	51
January, 2021	30	104	93	16	184	176	74
February, 2021	23	152	144	19	274	243	47
March, 2021	26	165	150	33	281	285	68
<b>TOTAL</b>	<b>285</b>	<b>1200</b>	<b>1211</b>	<b>206</b>	<b>1864</b>	<b>1725</b>	<b>429</b>

\* The consent figure shown are not exhaustive, since the power of consent administration for green category industries and Consent to Establish for a certain type of Orange category industries has been delegated to respective District Industries Centres (DIC). Furthermore, Consent administration of brick fields have been delegated to the respective DL & LROs.

## 3.5 Surveillance on industries

The Board has identified the grossly polluting industries based on the pollution potential. These units are inspected and monitored monthly. In addition, Board has also identified 17 categories of polluting industries which are monitored in a fixed schedule. Apart from GPIs and 17 categories industries, there are approximately 376 number of Severely Polluted (SPI) industries located in the Ganga basin. These industries are mostly water polluting and are monitored as per fixed schedule.

The list of 17 category industries and list of grossly polluting industries are given in **Annexure-IV and V**.

The number of inspections conducted during the year 2020-2021 are given in **Table - 3.3**.

Table 3.3: Inspections conducted during the year 2020-2021

Month	GPI / 17 Category / Major Air / Water Polluting	RED Category (Except GPI)	NOC / CFE cases	ORANGE Category	GREEN Category of industries	Complaint cases	Supreme Court / High Court cases	Other Purposes
April, 2020	0	0	0	0	0	0	0	0
May, 2020	0	0	0	0	0	0	0	0
June, 2020	42	4	0	0	0	9	7	12
July, 2020	53	10	1	10	2	15	3	35
August, 2020	55	19	1	5	0	6	3	20
September, 2020	84	21	1	20	1	20	5	16
October, 2020	49	27	1	7	0	11	2	16
November, 2020	78	26	0	17	4	21	2	29
December, 2020	114	58	10	24	3	33	7	46
January, 2021	71	46	4	60	0	41	8	42
February, 2021	83	66	3	74	1	46	2	38
March, 2021	106	70	10	85	1	43	2	24
<b>TOTAL</b>	<b>735</b>	<b>347</b>	<b>31</b>	<b>302</b>	<b>12</b>	<b>245</b>	<b>41</b>	<b>278</b>

### 3.5.1 Installation of Online Continuous Effluent Monitoring system by GPIs

As per Direction of CPCB No. B-190019/NGRBA/CPCB/2011-12/5445 dt. 05.02.2014, 48 numbers of Grossly Polluting Industries (GPI) located in the Ganga River Basin were directed by the State Board to install online continuous effluent monitoring system. The said industries were issued this direction under section 33A of the Water (Prevention and Control of Pollution) Act, 1974 in order to strengthen the monitoring of industrial effluent for effective compliance through self-regulatory mechanism.

48 numbers of GPIs have already installed the online effluent monitoring system.

### 3.6 Regulatory role

As a part of its regulatory role, Board officials conduct regular inspections of the industries. In case of any non-compliance noticed, the industries are allowed reasonable time to comply with the environmental statutes. On repetitive violation of environmental norms, the defaulting units are served with show-cause notices, followed by technical hearing, imposition of bank guarantee for ensuring time-bound compliance and imposition of pollution fines. Repeated non-compliance leads to closure of the units along with disconnection of electricity under extreme circumstances. After adoption of adequate pollution control measures, the closure order is suspended with restoration of electricity and the industry is allowed to resume operation. Often the non-complying industries are required to pay Bank Guarantees to comply with the directives within a specified time frame. **Annexure VI, VII and VIII** respectively gives the details of Hearings conducted, Bank Guarantee imposed and Closure order issued to the industries during the financial year 2020-2021.

# Chapter 4

# MANAGEMENT OF CLASSIFIED WASTES

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## 4.1 Introduction

The Ministry of Environment, Forest and Climate Change notified six new waste management rules under the Environment (Protection) Act, 1986 in 2016 for Hazardous & Other Waste, Solid Waste, Biomedical Waste, Plastic Waste, E-Waste and Construction & Demolition (C&D)Waste. Each rule specifies the waste segregation, storage, treatment and disposal norms for the specific waste types and also the roles and responsibilities of various local, district, state and central authorities. The West Bengal Pollution Control Board is one such authority empowered under these Rules to enforce certain provisions of the rules in the state of West Bengal.

The Board grants authorization to hazardous waste generating and recycling industries, healthcare units generating bio-medical wastes, municipal authorities for solid waste management, e-waste refurbishing, dismantling and recycling units and common waste treatment and disposal facilities. One time Authorisation is granted to importer/trader for the Hazardous and Other Wastes and registration is also granted to plastic waste recyclers and plastic carry bag manufacturers. As mandated in the rules, all such units are required to submit annual reports to the Board and these are compiled by the Board to prepare state level reports (Annual Inventory) that are sent to the Central Pollution Control Board. Such reports on hazardous waste management, E-waste management, bio-medical wastes management, C & D waste management, solid waste management, plastic waste management for the year 2019-20 have already been sent to the CPCB. It will be available in our website, [www.wbpcb.gov.in](http://www.wbpcb.gov.in) shortly.

Other than granting clearances under the prescribed rules, the Board interacts regularly with concerned state level and local authorities to ensure coordination and smooth implementation of the rules. Through such interaction and participation, the Board has been able to ensure the following developments in the state :

## 4.2 Biomedical Waste Management

- West Bengal Pollution Control Board plays its duty as a regulator. It issues 'Authorization' and 'Consent to Operate' to the Occupiers and the Operators., monitors the compliance of various provisions and conditions of 'Authorization', 'Consent to Operate' through physical inspection, monitoring of air and water quality at both occupiers' and operators' facilities. Defaulting units are issued notices, hearings are conducted, Environmental Compensation & Bank Guarantees imposed, and court cases are filed.
- For implementation of the Bio-medical Waste Management Rules, 2016 and amendments thereafter, the Board works closely with the Department of Health and Family Welfare Department, Govt. of West Bengal. The said department has :

- Constituted the State Level Advisory Committee on Bio-medical Waste as mandated in Rule 11 (1) of the rules. The representative of the Board is a member of this Committee.
- Constituted District level Monitoring Committees for Bio-medical Waste Management in all districts as mandated in Section 12(4) of the rules. The regional officers of the WBPCB are members of these committees.
- The Board has developed online application portal (<http://wbocmms.nic.in>) for receiving application for Consent to Establish, Consent to Operate and Bio-medical Waste Authorisation. The Board is trying to ensure that all healthcare units shall obtain Authorisation from the Board. The Health Department has also given due priority to the issue and because of such sustained efforts, the compliance status is gradually improving.
- The Board conducted a good number of awareness programs throughout the State and also carried out inventorisation of HCFs with assessment of Bio-medical waste generation engaging National Productivity Council (NPC).
- The Board has conducted third party audit to the CBWTFs engaging CSRI-NEERI.
- **Present scenario of BMW Management in West Bengal:**

Total No. health care units in the State: 8525
Total bedded units: 2769
Total non-Bedded unit: 5756
Total no. of beds: 128825
Total BMW generated, collected, treated & disposed in 2019: 43513.39 kg/day
BMW generation per bed per day: 330 gm
Total number of CBWTFs: 06
Total Treatment capacity of the CBWTF: equivalent to BMW generation from 140000 beds

*[Source: Biomedical Annual Report, 2020 and Inventorisation of biomedical waste in West Bengal conducted by WBPCB engaging National Productivity Council (NPC) in 2019-20. ]*

### **Covid Waste Management :**

Historic Covid 19 pandemic has struck India badly since March; 2020. Covid 19 pandemic was an unknown threat to the environment. Effective covid 19 waste management was utmost important because of the infectious nature of Covid 19 waste. The greatest challenge ever faced by WBPCB is the Collection, Segregation, Transportation and Disposal of highly infectious Covid 19 waste. The Board is dedicated to play its role as a regulator. In order to achieve the Goal of providing safe handling of Covid 19 waste, WBPCB left no stone unturned. During the process, in the service of the people of State, many of the officials of WBPCB got infected but the journey continues. Covid Waste Management has been carried out as per order of Hon'ble NGT followed by guidelines of CPCB & BMW Rules, 2016 & its amendments.

Role played by WBPCB
• Circulated Guidelines of Hon' NGT, CPCB
• Meeting with Stakeholders
• Awareness Generation through Posters, Pamphlets & Media



• Worked as a Coordinating Agency involving the Civil Society Experts
• Monitoring & Surveillance using digital platform, physical inspections
• Regulatory Actions, Imposing Environmental Compensation on non-compliant HCF
• Providing technical guidance & training to personnel engaged in Covid 19 Waste Management through digital mode, physical meeting
• Regular tracking of covid 19 waste online from generators, waste handlers/ collectors to CBWTFs by CPCB_Covid_Tracking_App
• Bridging the gaps quickly through phone calls, Video Conference & Whatsapp message & emails
• Monitoring of water quality in the major rivers including the Ganga & Monitoring Air Quality
• Compliance to orders of Hon'ble NGT & directions of the CPCB

#### **Covid 19 waste data maintenance & Reporting:**

Covid 19 waste is being tracked from the generators end to CBWTF end under surveillance of WBPCB & CPCB. Generators of covid 19 waste upload waste data on COVID19BWM App after handing over the waste to the waste handlers. The waste collectors/handlers upload the waste data after accepting the waste from the generators, the waste handlers then handed over the waste to the CBWTFs who upload the data after accepting the waste from the waste handlers. West Bengal Pollution Control Board then approves the waste data for perusal of CPCB.

**Total Covid 19 waste generated, collected & treated in the State from 15.03.2020 to 31.07.2021 is = 4292.76 MT**

### **4.3 Solid Waste Management**

- For implementation of the Solid Waste Management Rules, 2016 in different Urban Local Bodies, the Board extends its support to State Urban Development Agency, (SUDA) and Department of Panchayat & Rural Development, Govt. of West Bengal.
- In compliance with the Hon'ble National Green Tribunal vide its order dated 17.01.2020 in O.A. No. 606/2018, the State Board imposed Environmental Compensation to urban local bodies through State Urban Development Agency for non-compliance of Rule, 22 of Solid Waste Management Rules, 2016 (Sl. No. 1-10) in connection with Fresh Waste Management.
- Similarly, in compliance with the Hon'ble National Green Tribunal vide its order dated 17.01.2020 in O.A. No. 519/2019, the State Board imposed Environmental Compensation to urban local bodies through State Urban Development Agency for non-compliance of Rule, 22 of SWM Rules, 2016 (Sl. No. 11) in connection with Legacy Waste Management respectively.
- To encourage the disposal of solid waste, the State Board provided financial assistance to Kolkata Police at Alipore Body Guard Line for setting up one Organic Waste Composter (OWC) for disposal of municipal solid waste.
- In compliance with the orders from Hon'ble National Green Tribunal in O.A. No. 32/2019/EZ and 43/2017/EZ, the State Board has estimated environmental damage surrounding the dumpsite at Moller Bheri and Promad Nagar on different components like surface water, soil, air & ground water and subsequent Environmental Compensation was imposed by Hon'ble National Green Tribunal on KMC.

- The State Board Provided financial Support for installation of Bio-gas generation plant by using kitchen waste and cow dung at Ramkrishna Mission, Narendrapur, Kolkata. The WBPCB has also provided financial support for installation of Organic Waste Converter (OWC) at Alipore Bodyguard Line, Kolkata.
- The Board has compiled the annual reports of 125 urban local bodies forwarded by SUDA and submitted the Annual Inventory on Solid Waste Management to CPCB within time as per Solid Waste Management Rules, 2016 for the financial year 2020-21. The report will be available in Board's website: [www.wbpcb.gov.in](http://www.wbpcb.gov.in).
- The State Board has conducted a good numbers of awareness programs throughout the State involving different stakeholders with assistance of National Productivity Council (NPC).

#### 4.4 Plastic Waste Management

- For implementation of the Plastic Waste Management Rules, 2016 in different Urban Local Bodies, the Board extends its technical support to State Urban Development Agency, Govt. of West Bengal.
- The Board has compiled the annual reports of 125 urban local bodies forwarded by SUDA and submitted the Annual Inventory on Plastic Waste Management to CPCB within time as per Plastic Waste Management Rules, 2016 for the financial year 2020-21. The report will be available in our website: [wbpcb.gov.in](http://wbpcb.gov.in)
- WBPCB has conducted survey on "Inventorisation of Plastic Product Manufacturing in West Bengal" in 2020 by engaging Jadavpur University. The final report has been completed.
- WBPCB has been Coordinating with CPCB on policy matters and implementation of Direction/Guidelines/Orders as and when issued.
- The State Board has issued notice for Registration of Producers, Importers & Brand-owners under provision of Plastic Waste Management (PWM) rules

(As per provisions 9 (1& 2) & 12(2) of PWM Rules, 2016, as amended) to the Brand owners/ Producers / Recyclers who has not obtained registration from the WBPCB.

#### 4.5 E-Waste Management

- For effective implementation of of the E-waste Management Rules, 2016, the Board is in regular contact with the Department of Information Technology & Electronic, Govt. of West Bengal and West Bengal Electronics Industry Development Corporation Limited (WEBEL).
- A model e-waste Management Facility will be set up by WEBEL with financial assistance from WBPCB for collection-segregation-dismantling and recycling of e-waste in West Bengal.
- The Board has also conducted the project "Audit on e-waste Material Flow and Value Chain in the State of West Bengal in 2020 with assistance from National Institute of Electronics and Information Technology (NIELIT).
- The Board has submitted the Annual Inventory on e-Waste Management to CPCB within time as per E-waste Waste Management Rules, 2016 for the financial year 2020-21. The report will be available in our website: [www.wbpcb.gov.in](http://www.wbpcb.gov.in).

- The Board monitors the Producers/ Producers Responsibility Organization (PRO), authorized by CPCB and also submits the quarterly report to CPCB.

**Total No. of Dismantler/Refurbisher/Recycler : 04.**

- Lubrina Recycling (P) Ltd P.O Joychandipur, P.SBishnupur, 24 Pgs(S)
- J.S Pigments Pvt Ltd. Vill +P.O Jarua, P.S Polba, Delhi Road, Hooghly
- P U Steel & Electro Process Pvt Ltd. Ruiya Industrial Complex, P.OPatulia, 24 Pgs(N)
- M/s Old N Furniture 323, K.P. Mondal Road, PO & PS: Budge Budge, Dist-24 PGS(S), Pin-700137

#### 4.6 C&D Waste Management

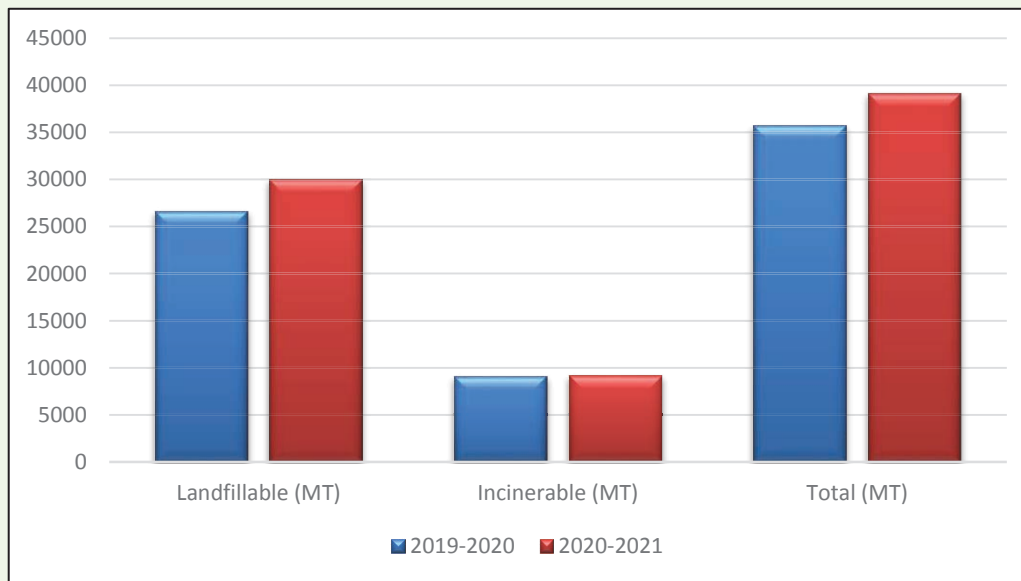
- For implementation of the C&D Waste Management Rules, 2016 in different Urban Local Bodies, the Board extends its technical support to State Urban Development Agency, Govt. of West Bengal.
- A model C&D Waste Management Facility will be set up shortly by Kolkata Municipal Corporation with technical guidance from WBPCB.
- WBPCB has prepared and submitted the Annual Inventory on C&D Waste Management to CPCB for the year 2020-21 in time.

#### 4.7 Hazardous Wastes Management

- West Bengal Pollution Control Board engaged Indian Institute of Social Welfare and Business Management (IISWBM) Kolkata to conduct an audit on CHWTSDF, Haldia as per CPCB guidelines for *Conducting Environmental Audit of Common/Captive Treatment, Storage and Disposal Facilities (TSDFs), April 2021*. IISWBM has conducted the audit at the end of July 2021 and the report has been submitted.
- WBPCB has engaged IISWBM also for study on development of environmental benchmarks, formulating action for hazardous waste management of West Bengal & evolution of software programs for hazardous & other wastes inventory as per guidelines of CPCB and direction of Hon'ble National Green Tribunal.
- M/s West Bengal Waste Management Ltd. (CHWTSDF) located at Mouza-Pabayan, P.S. Bankura, Saltora Tehsil, Dist: Bankura, Pin: 722158 obtained 1<sup>st</sup> time Consent to Operate for Secured Land fill-100000 TPA and Treatment /Stabilization-60000 TPA and already started its operation from April, 2021.
- In the current financial year 2020-2021, the CHWTSDF, Haldia has disposed 39155.58 MT hazardous waste (Landfill-30018.07 MT and incineration-9137.51 MT). Comparative status of disposed quantity of hazardous waste in FY 2020-2021 w.r.t. that of in FY 2019-2020 are represented below:

Type of Hazardous waste	FY 2019-2020	FY 2020-2021
Landfillable (MT)	26614.849	30018.07
Incinerable (MT)	9069.633	9137.51
Total (MT)	35684.482	39155.58

**Fig. 4.1: Comparative Status of Quantity of Hazardous Waste Disposed to CHWTSDF, Haldia in the FY 2019-2020 and FY 2020-2021**



- Sikkim State Pollution Control Board sends incinerable hazardous waste generated in Sikkim to the CHWTSDF at Haldia. During the Financial Year 2020-21, 1455.919 MT incinerable waste has been received by M/S WBWML from Sikkim.

# Chapter 5

# AUTOMOBILE POLLUTION CONTROL

## 5.1 Introduction

The principal air-quality pollutant emissions from petrol, diesel, and alternative-fuel engines are carbon monoxide, oxides of nitrogen, un-burnt hydrocarbons and particulate matter. It is emissions of these pollutants that are regulated by the Bharat Stage emissions standards. Modern cars, if kept in good condition, produce only small quantities of the air quality pollutants, but the emissions from large numbers of cars add to a significant air quality problem. Carbon monoxide, oxides of nitrogen, and un-burnt hydrocarbons are gases, and are generally invisible. Particulate matter is usually invisible although under certain operating conditions diesel engines will produce visible particles, appearing as smoke. Petrol engines will also produce visible particles if they are burning engine oil or running “rich”, for example, following a cold start. Fine particles can also be produced by tyre and brake wear. Pollutant emission levels depend more on vehicle technology and the state of maintenance of the vehicle.

The growth of vehicular traffic on roads has been far greater than the growth in road network; as a result the main arteries face capacity saturation. The slow growth of road infrastructure and high growth of vehicles imply that Indian roads are reaching a saturation point in utilising the existing capacities, hence, leading to congestion and further contributing to air pollution load. A drastic increase in the number of vehicles has resulted in a significant increase in the emission load of various pollutants. In recent years, air pollution has acquired critical dimensions and the air quality in most Indian cities that monitor outdoor air pollution fail to meet WHO guidelines for safe levels. The levels of  $PM_{2.5}$  and  $PM_{10}$  (Airborne particles smaller than 2.5 micrometres in diameter and 10 micrometres in diameter) as well as concentration of substances such as Sulphur Dioxide ( $SO_2$ ) and Nitrogen Dioxide ( $NO_2$ ) have reached alarming proportions in most Indian cities, putting people at additional risk of respiratory diseases and other health problems. Motor vehicle pollution also contributes to the formation of acid rain and adds to the greenhouse gases that cause climate change. Pollutants emitted directly from vehicles are not the only cause for concern. On warm, sunny days, hydrocarbons react with oxides of nitrogen to create a secondary pollutant, ozone. In many urban areas, motor vehicles are the single largest contributor to ground-level ozone which is a common component of smog. Ozone causes coughing, wheezing and shortness of breath, and can bring on permanent lung damage, making it a cause of crucial public health problems.

In order to control emissions from automobile exhausts, the West Bengal Pollution Control Board (WBPCB) with active support from the State Government, has undertaken a number of actions.

## 5.2 Auto Emission Testing Centres (AETCs) in West Bengal

In association with the Transport Department, Govt. of West Bengal, the WBPCB has facilitated the setting up of computerised and upgraded Auto Emission Testing Centres (AETCs) in West Bengal. The AETCs have upgraded their testing facilities with opacity meter (for smoke density testing of diesel driven vehicles), four gas analysers (for testing of exhaust emission of petrol driven vehicles), web camera and

compatible software. The AETCs are also equipped with engine revolution per minute (RPM) sensor and engine oil temperature sensor. The AETCs provide PUC (Pollution Under Control) certificates to the in-use vehicles.

The emission standards for the in-use vehicles, under Sub-Rule 2 of Rule 115 of the Central Motor Vehicles Rules 1989 has been amended vide GSR 111 (E) dated 10.02.2004.

### 5.3 Tail Pipe Emission Standard of in-use Vehicles

**Table- 5.1: Petrol / CNG / LPG driven vehicles shall comply with the idling emission standards for Carbon Monoxide (CO) and Hydro Carbon (HC)**

Sl. No.	Vehicle Type and Applicability	CO%	*HC (n-hexane equivalent) ppm
1.	Two Wheelers (2/4 – Stroke) (Vehicles manufactured on and before 31 <sup>st</sup> March, 2000)	4.5	9,000
2.	Two Wheelers (2 – Stroke) (Vehicles manufactured between 31 <sup>st</sup> March, 2000 and 31 <sup>st</sup> March 2010)	3.5	6,000
3.	Two Wheelers (4 – Stroke) (Vehicles manufactured between 31 <sup>st</sup> March, 2000 and 31 <sup>st</sup> March 2010)	3.5	4,500
4.	Two Wheelers (2 – Stroke) (Vehicles manufactured after 31 <sup>st</sup> March, 2010)	3.0	4,000
5.	Two Wheelers (4 – Stroke) (Vehicles manufactured after 31 <sup>st</sup> March, 2010)	3.0	3,000
6.	Three Wheelers (2/4 – Stroke) (Vehicles manufactured on and before 31 <sup>st</sup> March, 2000)	4.5	9,000
7.	Three Wheelers (2 – Stroke) (Vehicles manufactured after 31 <sup>st</sup> March, 2000)	3.5	6,000
8.	Three Wheelers (4 – Stroke) (Vehicles manufactured after 31 <sup>st</sup> March, 2000)	3.5	4,500
9.	Four Wheelers manufactured as per pre-Bharat Stage II emission norms	3.0	1,500
10.	Four Wheelers manufactured as per Bharat Stage II or Bharat Stage-III emission norms	0.5	750

\*For CNG: NMHC= 0.3×HC and for LPG: RHC=0.5×HC

**Table- 5.2: Petrol / Compressed Natural Gas / Liquefied Petroleum Gas driven vehicles, manufactured as per Bharat Stage-IV norms**

Sl. No.	Type of vehicle	Idle Emission Limits		High Idle Emission Limits	
		(1)	(2)	(3)	(4)
		CO%	HC (n hexane equivalent) ppm	CO%	Lambda ( $\lambda$ ) (RPM – 2500 $\pm$ 200)
1.	Compressed Natural Gas / Liquefied Petroleum Gas driven 4-wheelers, manufactured as per Bharat Stage-IV norms.	0.3	200 ppm	-	
2.	Petrol driven 4-wheelers manufactured as per Bharat Stage-IV norms	0.3	200 ppm	0.2	1 $\pm$ 0.03

**Note:**

1. Test shall be carried out by using type approved instrument.
2. The sampling probe shall be inserted into the vehicle exhaust system to a depth not less than 300 mm.

**Table-5.3 : Smoke density for all diesel driven vehicles**

Method of Test	Maximum Smoke Density	
	Light absorption coefficient (1 / m)	Hartidge units
Free acceleration test for turbo charged engine and naturally aspirated engine complying BS III and below norms.	2.45	65
Free acceleration test for turbo charged engine and naturally aspirated engine complying BS IV norms.	1.62	50

The vehicle gear change control shall be set in the neutral position and the drive between engine and gearbox engaged. With the engine idling, the accelerator control shall be operated quickly, but not violently, so as to obtain maximum delivery from the injection pump. This position shall be maintained until maximum engine speed is reached and the governor comes into action. For vehicles with automatic transmission, the engine speed specified by the vehicle manufacturer shall be achieved. As soon as this speed is reached the accelerator shall be released until the engine resumes its idling speed and the opacity meter reverts to the corresponding conditions. Typically the maximum time for acceleration shall be 5s and for the stabilization at maximum no load speed shall be 2s. The time duration between the two free accelerations shall be between 5-20s.

After the expiry of a period of one year from the date on which the motor vehicle was first registered, every such vehicle shall carry a valid 'pollution under control' certificate issued by an agency authorized for this purpose by the State Government. The validity of the certificate shall be for six months for vehicles complying BS III and below norms and one year for vehicles complying BS IV norms. The certificate shall always be carried in the vehicle and produced on demand by the officers referred to in sub-rule (1) of rule 116.



**Table- 5.4 : Technical recommendation issued to the AETCs during 2020-21 for renewal of license by the ANA&T Cell of the State Board**

Sl. No.	Name of the District	Number of AETCs recommended for renewal of license
1.	Kolkata	0
2.	Howrah	0
3.	North 24 Parganas	04
4.	South 24 Parganas	01
5.	Hooghly	07
6.	Nadia	01

**Table- 5.5 : Recommendation issued by the State Board for new license of Auto Emission Testing Centre's during the period from April, 2020 – March, 2021**

Sl. No.	Name of the AETCs	Address of the AETCs	Date of issue of Technical Evaluation Letter
<b>Kolkata</b>			
01	M/s. Balaji Auto Emission Testing Centre	61, Eden hospital Road, P.O- Central, Kolkata- 700073	10.08.2020
02	M/s. The India Trading Co.	Ultadanga Road, P.O & P.S - Ultadanga, Kolkata- 700004	10.09.2020 (Diesel)
03	M/s. Jagannath Enterprise	29/1, Harish Chatterjee Street, Kolkata-700026	21.09.2020
04	M/s. Vijay Service Station	19, Ballygunge Circular Road, P.O. & P.S. Ballygunge, Kolkata- 700019	28.10.2020
05	M/s. Gopal Auto Service	38B,Belgachia Road, Kolkata-700 037	14.12.2020
06	M/s. Debi Service Station	362A, N.S.C. Bose Road, Kolkata- 700047	19.12.2020
<b>Howrah</b>			
07	M/s. Udaynarayanpur Thana L.S Pry. Co. Op. Agril Marketing Society Ltd.	Vill-Jangalpara,P.O.&P.S.Udaynarayanpur, Dist- Howrah, Pin- 711226	11.02.2021
<b>North 24 Parganas</b>			
08	M/s. Neoti Highway Service	27/1/1, Jessore Road, P.O- Dum Dum, P.S- Airport, Dist- North 24 Parganas, Pin- 700052	15.10.2020
09	M/s. Murliwala Filling Station	Jessore Road, Airport No. 1 Gate, P.O & P.S – Airport, Dist- North 24 Parganas, Pin- 700052	15.10.2020

Sl. No.	Name of the AETCs	Address of the AETCs	Date of issue of Technical Evaluation Letter
10	M/s. Mabilia Auto Emission Testing Centre	GheedahaMudibari, Barrackpore- Barasat Road, P.O- Nilgunj, P.S- Titagarh, Dist-North 24 Parganas, Pin- 700121	14.12.2020
11	M/s. Belgharia Service Station	38, B.T. Road, P.O & P.S – Belgharia, dist-North 24 Parganas, Pin- 700056	14.01.2021
12	M/s. Dum Dum Service Station	556, Jessore Road, Dist- North 24 Parganas, Kolkata- 700028	14.01.2021
13	M/s. Auto Sales Corporation	207/3, B.T Road, P.O & P.S- Baranagar, Dist- 24 Pgs (N), Kolkata- 700036	14.01.2021
14	M/s. Nandeshwar Prasad Dharamraj	7, East Ghosh Para Road, P.O- Kankinara, Diat- North 24 Parganas, Pin- 743126	22.01.2021
15	M/s. Maa Laksmi Auto Emission Testing Center	VillChilkanpara, Thakurnagar- Chandpara Road, P.O- Thakurnagar, P.S- Gaighata, Dist- North 24 Parganas, Pin- 743287	31.03.2021
16	M/s. Aleef Enterprise	Bishnupur, P.S- Rajarhat, Dist- North 24 Parganas, Pin- 700135	31.03.2021
<b>South 24 Parganas</b>			
17	M/s. Balaji Auto Emission Testing Centre	P.O- Narendrapur, Dist- South 24 Parganas, in- 743508	04.09.2020
18	M/s. Kanungo Car Fill,	140, Sonarpur Station Road, P.O- Narendrapur, P.S- Sonarpur, Dist- South 24 Parganas, Pin- 700103	08.09.2020
19	M/s. UsthiKishanSeva	Vill- Jagadish Nagar, P.O & P.S – Usthi, Dist – South 24 Parganas, Pin- 743375	07.10.2020
20	M/s. Bhowmik Motors	Vill- Ulkimari, P.O – Paschim Gopalnagara P.S- Kulpi, Dist- South 24 Parganas, Pin- 743351	07.10.2020
21	M/s. MatuHazra Pollution Centre	Vill – Beliachandi, P. S- Gocharan, Dist- South 24 Pargans, Pin- 743391	18.01.2021
22	M/s. Mukherjee Pollution Centre	P.O & P.S – Mathurapur, Dist- South 24 Parganas, Pin- 743354	23.02.2021
<b>Hooghly</b>			
23	M/s. Aqurate Auto Centre	Khadina More, P.O & P.S- Chinsurah, Dist- Hooghly, Pin- 712101	03.08.2020
24	M/s. Shri Durga Flour Mill	Nalikul Station Road, P.O- Nalikul, Dist- Hooghly, Pin- 712407	14.09.2020
<b>Durgapur Regional Office</b>			
25	M/s. Swapan Auto Emission Testing Centre	Panchbagan By Pass Road, P.O & P.S- Bankura, Dist- Bankura, Pin- 722101	18.06.2020

Sl. No.	Name of the AETCs	Address of the AETCs	Date of issue of Technical Evaluation Letter
26	M/s. Maa Auto Emission Testing Centre	Khatra Bankura Road, P.O & P.S- Khatra, Dist- Bankura, Pin- 722140	18.06.2020
27	M/s. Happy Auto Emission Testing Centre	Heavy more, Keshiakole, P.S & Dist- Bankura, Pin- 722155	27.07.2020
28	M/s. Shivam Auto Emission Testing Centre	P.O- Sadhana Rangamati, Pabar More, P.S- Saltora, Dist- Bankura, Pin- 722143	27.07.2020
29	M/s. Sarmin Pollution Centre	Vill- Fazalpur, P.O- Katsihi, P.S- Monteswar, Dist- PurbaBardhaman, Pin- 713422	27.07.2020
30	M/s. B.M. Filling Station	Vill- Math Baidyapur, P.O- baidyapur, P.S- Madhabdihi, Dist- PurbaBardhaman, Pin- 712410	04.09.2020
31	M/s. Sahid Pollution Centre	Vill- Memari, Tarakeswar Road, P.O & P.S- Jamalpur, Dist- PurbaBardhaman	04.09.2020
32	M/s. World Touch	Vill- Berhamore, 2 No. National Highway, P.O- Sripally, P.S- Burdwan, Dist- PurbaBardhaman, Pin- 713103	15.09.2020
33	M/s. Sri Krishna Auto Emission Testing Center	Vill- Baghason P.O- Maldanga, P.S- Monteswar, Dist- PurbaBardhaman, Pin- 713145	18.12.2020
34	M/s. Bengal Pollution Centre	Vill- Jaugram, P.O- Abujhat, P.S- Jamalpur, Dist- PurbaBardhaman-	18.12.2020
35	M/s. Mishra Auto Emission Testing Centre	Stall no. ER-36, Harshbardhan Road, P.O- A-Zone, P.S- Aurobinda, Dist- Paschim Bardhaman, Pin- 713204	04.-1.2021
36	M/s. S.R. Computer Weigh Bridge & Pollution Check Centre	P.O- Agradweep, P.S- katwa, Dist- PurbaBardhaman, Pin- 713502	02.02.2021
<b>Malda Regional Office</b>			
37	M/s. S.K. Chakraborty	Vill- Chanchal, N.H. 81, P.O & P.S – Malda, Dist- Malda, Pin- 732123	29.06.2020
38	M/s. Seth Auto Emission Testing Centre	Vill-Niyamatpur, P.O- Malda, P.S- Englishbazar, Dist- Malda,	29.06.2020
39	M/s. Manjulika Filling Point	Vill- Jote, P.O- Arapur, P.S- Englishbazar, Dist- Malda, Pin- 732143	29.06.2020
40	M/s. Goyel Auto Emission Testing Centre	Vill& P.O- Samsi, P.S- Ratua, Dist- Malda, Pin- 732139	29.06.2020
41	M/s. Pramanik Pollution Testing Centre	Vill- Narayanpur, P.O- Narayanpur, P.S- Malda, Pin- 732141	29.06.2020
42	M/s. Chakraborty Auto Emission Testing Centre	Vill- Chanchal, NH-81, P.O & P.S- Malda, Dist- Malda, Pin- 732123	29.06.2020

Sl. No.	Name of the AETCs	Address of the AETCs	Date of issue of Technical Evaluation Letter
43	M/s. Malda Auto Emission Testing Centre	Vill- NH-34, South Jadupur, P.O- Jadupur, P.S- Englishbazar, Dist- Malda, Pin- 732128	30.06.2020
44	M/s. D.R.S. Auto Emission Testing Centre	Vill, P.O & P.S- Manikchak, Dist- Malda, Pin- 732202	30.06.2020
45	M/s. Mahesh Motors Auto Smoke Testing Centre	Moktarpur Road, P.O & P.S – Balurghat, Dist- Dakshin Dinajpur, Pin- 733101	30.06.2020
46	M/s. Krishna Motors Auto Smoke Centre	Bagihatit, P.O & P.S–Tapan, Dist- Dakshin Dinajpur, Pin- 733127	30.06.2020
47	M/s. Balurghat Diesels	Jamini Majumdar Sarani, P.O & P.S- Balurghat, Dist- Dakshin Dinajpur, Pin- 733101	30.06.2020
48	M/s. Sachir Nandan Auto Smoke Testing Centre	Patiram Tinkona More, P.O- Patiram, P.S- Balurghat, Dakshin Dinajpur, Pin- 733133	04.09.2020
49	M/s. Ashtha Smoke Testing Centre	NH-34, Vill& P.O – Bilashpur, P.S- Karandighi, Dist- Uttar Dinajpur, Pin- 733134	04.09.2020
50	M/s. Maa Burima Smoke Emission Testing Centre	Vill- Shibnagar, P.o -Gopinathpur, P.S- Beldanga, Dist- Murshidabad, Pin- 742134	04.09.2020
51	M/s. Hrittik PUC testing Centre	Vill – Khanpur, P.O – Madhupur, P.S- Nowda, Dist- Murshidabad, Pin- 742121	04.09.2020
52	M/s.Karabi Pollution Testing Centre	Dayanagar Road, P.O- Cossimbazar, Dist- Murshidabad, P.S- Berhampur, Dist- Murshidabad, Pin- 742103	04.09.2020
53	M/s. Korial Auto Emission Testing Centre	Churipatti, P.S- Harishchandrapur, Dist- Malda	10.09.2020
54	M/s. Bengal Oil Company	Gour Road Petrol Pump, P.S- English Bazar, Dist- Malda,	10.09.2020
55	M/s. Ganga Vally Auto Emission Testing Centre	Vill& P.O – J. Kagmari, P.S- Englishbzar, Dist- Malda , Pin- 732207	10.09.2020
56	M/s. Sreema Auto Emission Testing Centre	Vill- karlavita, P.O & P.S- Gazole, Dist- Malda, Pin- 732124	10.09.2020
57	M/s. Maa Tara Pollution Centre	Vill- NH-34, Paul Para, P.O- Kadubari, P.S- Gazole, Dist- Malda, Pin- 732124	10.09.2020
58	M/s. Amit Auto Emission Testing Centre	Rabindra Avenue, p.O – Malda, P.S- Englishbazar, Dist- Malda, Pin- 732101	10.09.2020
59	M/s. Sachimata Auto Emission Testing Centre	Mangalbari, NH-34, P.O- Mangalbari, P.S- Malda, Dist- Malda,	10.09.2020
60	M/s. Konika Auto Emission Testing Centre	Lolabag Station Road, Old Malda, Dist- Malda	10.09.2020

Sl. No.	Name of the AETCs	Address of the AETCs	Date of issue of Technical Evaluation Letter
61	M/s. Nowapara Pollution Testing Centre	P.O- Khopakati, P.S- H,C,Pur, dist- Malda, Pin- 732125	10.09.2020
62	M/s. Sankar PUC testing Centre,	Vill- Narasinghapur, P.O & P.S- Sagarpara, Dist- Murshidabad, Pin- 742306	25.09.2020
63	M/s. Eureka PUC Testing Centre	Vill- bagdanga, P.O- Madhurkul, P.S- Domkal, Dist- Murshidabad, Pin- 742406	28.09.2020
64	M/s. Lipika PUC Testing Centre	Vill& P.O- Kalitala, P.S- Beldanga, Dist- Murshidabad, Pin- 742133	28.09.2020
65	M/s. Itahar Smoke Testing centre	Mirjatpur, P.O- Itahar, Dist- uttar Dinajpur, Pin- 733128	29.09.2020
66	M/s. S.R.S Enterprise PUC Testing Centre	Gokaran, Bayenpara, P.O- Gokarna, P.S- Kandi, Murshidabad, Pin- 742136	01.10.2020
67	M/s. Joyguru Pollution Testing Centre	Vill- Ghorapir, P.O- Rathbari, P.S- Englishbazar, Dist- Malda, Pin- 732101	12.11.2020
68	M/s. Babu Pollution Testing Checking centre	Vill& P.O- Baliadanga, P.S- Kaliachak, Dist- Malda, Pin- 732201	12.11.2020
69	M/s. New 18 mile pollution Checking Centre	NH-34, 18 mile Bus stand, P.O- Pubaran, P.S- Baishnabnagar, Dist- Malda, Pin- 732215	26.11.2020
70	M/s. Samrik PUC Testing Centre	66/2, kantanagar road, P.O- Khagra, P.S- Berhampur, Murshidabad, Pin- 742103	26.11.2020
71	M/s. M.R. PUC testing Centre	Vill& P.O- Gajnipur, P.S- Hariharpara, Murshidabad, Pin- 742166	26.11.2020
72	M/s. Saha Pollution Testing Centre	Aiho Bus stand, P.O- Aiho, P.S- habibpur, Dist- Malda, Pin- 732121	04.12.2020
73	M/s. Jyotsna Pollution Testing Centre	Kaliachak, Dist- Malda, Pin- 732201	04.12.2020
74	M/s. Sanjay Automobile Pollution Testing Centre	Chanchal, Hero Showroom, Chanchal H.C. Pur Road, Dist- Malda, Pin- 732123	04.12.2020
75	M/s. New Tara PUC Testing Centre	Indraprasta Road, P.O- Khagra, P.S- Berhampur, Dist- Murshidabad, Pin- 732103	10.12.2020
76	M/s. Saheb Auto Emission Testing Centre	Gantla Ghat Road, Vill& P.O- Sherpur, P.S- Khargram, Dist- Murshidabad, Pin- 742159	16.12.2020
77	M/s. Rani Pollution Testing Centre	Vill- Panditpur, P.O- Maiya, P.S- Lalgola, Dist- Murshidabad, Pin- 742148	16.12.2020
78	M/s. Aradhana PUC Testing Centre	Vill- Jortolla, P.O & P.S- Jalangi, Dist- Murshidabad, Pin- 742305	16.12.2020

Sl. No.	Name of the AETCs	Address of the AETCs	Date of issue of Technical Evaluation Letter
79	M/s. Maa Janani Auto Emission Testing Centre	Vill – MahipalChowrongi, P.O- Mahipal, P.S- Kushmandi, Dist- Dakshin Dinajpur, Pin- 733121	06.01.2021
80	M/s. K.G.N Pollution Testing Centre	P.O- Tulshihata, P.S- Harishchandrapur, Dist- Malda, Pin- 732140	06.01.2021
81	M/s. Rameswar Prasad Auto Emission Testing Centre	Bulbulchandi, P.S- Habibpur, Dist- Malda, Pin- 732122	06.01.2021
82	M/s. Kanika pollution Testing Centre	Vill- Bachamari, P.O- bachamari, P.S- Malda, Dist- Malda, Pin- 732142	06.01.2021
83	M/s. Joy Gopal PUC Testing Centre	M.N.K Road, P.O- Khagra, P.S- Berhanpore, Dist- Murshidabad, Pin- 742103	06.01.2021
84	M/s. S.S. PUC Testing Centre	Vill -Sargachi, P.O- Sargachi Ashram, P.S- Beldanga, Dist- Murshidabad, Pin – 742134	06.01.2021
85	M/s. Das Auto Emission Testing Centre	JiaganjLalgola Road, P.O & P.S- Jiaganj, Dist- Murshidabad, Pin- 742123	06.01.2021
86	M/s. Das Auto Emission Testing Centre	Lalgola Road, P.O- Jiaganj, P.S- LalgolaDist- Murshidabad, Pin- 742148	06.01.2021
87	M/s. Digitech Pollution Testing Centre	Vill& P.O- Gopinathpur, P.S- Beldanga, Dist- Murshidabad, Pin- 742134	08.01.2021
88	Ali Enterprise PPUC testing Centre	Vill& P.O- Sagardighi, P.S- Sagardighi, Dist- Murshidabad, pin- 742226	19.01.2021
89	M/s. Maa Taldanga PUC Testing Centre	Vill+P.O& P.S- Saktipur, Dist- Murshidabad, Pin- 742163	19.01.2021
90	Natural World Auto Emission Testing Centre	NH-34, P.O & P.S- Berhampore, Dist- Murshidabad, Pin- 742101	22.01.2021
91	M/s. Pathikrit pollution Testing Centre	Vill& P.O- Monigram, P.S- Sagardighi, Dist- Murshidabad, Pin- 742237	22.01.2021
92	M/s. Sairam Enterprise Auto Emission Testing Centre	Vill- Krishnamati, P.O- Balarampur, P.S- Berhampore, Dist- Murshidabad, Pin- 742165	04.02.2021
93	M/s. New B.M Traders	NH-34, paschingamini, Bokultala, P.O- Balarampur, P.S- Berhampore, Dist- Murshidabad, Pin- 742165	04.02.2021
94	M/s. Papu Enterprise PUC Testing Centre	Vill- Hareknagar, P.O & P.S- Beldanga, Dist- Murshidabad, Pin- 742133	04.02.2021
95	M/s. New Tarafda Auto Emission Testing Centre	P.O- Nalgola, P.S- Bamongola, Dist- Malda, Pin- 732124	08.02.2021

Sl. No.	Name of the AETCs	Address of the AETCs	Date of issue of Technical Evaluation Letter
96	M/s. Shanti Pollution Testing Center	P.O- Raipur, P.S- Englishbazar, Dist.- Malda, Pin- 732103	08.02.2021
97	M/s. kushida pollution Testing Centre	Kushida Road, P.O- Kushida, P.S- Harischandraapur, Dist.- Malda, Pin- 732140	08.02.2021
98	M/s. Bholo Auto Emission Testing Centre	Vill- Dehabanda, P.O- Dechbanda, P.S- Kushmandi, Dist.- Dakshin Dinajpur, Pin- 733132	10.02.2021
99	M/s. Joyti Auto Emission Testing Centre	Vill- Mahipal, P.O- Mahipal, P.S- Kushmandi, Dist.- Dakshin Dinajpur, Pin- 733132	10.02.2021
100	M/s. Das Pollution Testing Centre	Vill& P.O- Maiya, P.S- Lalgola, Dist- Murshidabad, Pin- 742148	22.02.2021
101	M/s. Mahamaya Auto Emission Testing Centre	Vill- Tapan, P.O & P.S- Tapan, Dist.- Dakshin Dinajpur, Pin- 733127	24.02.2021
102	M/s. Maa Maya Auto Emission Testing Centre	Vill& P.O- Buniadpur, P.S- Banshihari, Dist.- Dakshin Dinajpur, Pin- 733121	24.02.2021
103	M/s. Mira Auto Emission Testing Centre	Vill- Pakuahat Road, P.O & P.S- Gazole, Dist.- Malda, Pin- 732124	24.02.2021
104	M/s. Binodini Auto Emission Testing Centre	Vill& P.O- Dhumadighi, P.S- Malda, Dist.- Malda, Pin- 732128	24.02.2021
105	M/s. Kamala Auto Emission Testing Centre	Vill- pakua, P.O- Pakuahat, P.S- Bamongola, Dist.- Malda, Pin- 732138	24.02.2021
106	M/s. Debsharma Auto Emission Testing Centre	Vill& P.O- Fatepur Hat, P.S- Kaliaganj, Dist.-Uttar Dinajpur, Pin- 733129	25.02.2021
107	M/s. Maa Enterprise Auto Emission Testing Centre	Vill- UpparMahinagar, P.O- Azimganj, P.S- Jiaganj, Dist.- Murshidabad, Pin- 742122	25.02.2021
108	M/s. Baba Loknath PUC Testing Centre	Vill- 12 no. natunpara Road, P.O- Khagra, P.S- Berhampur, Dist.- Murshidabad, Pin- 742103	25.02.2021
109	M/s. L.H. Pollution Testing Centre	Jalangi Road, P.O- kaladanga, P.S- Daulatabad, Dist- Murshidabad, Pin- 742304	25.02.2021
110	M/s. Chowdhury PUC Testing Centre	Vill- Bhatpata, P.O- Cossimbazar, P.S- Berahampur, Dist.- Murshidabad, Pin- 742102	25.02.2021
111	M/s. Sarkar Pollution Testing Centre	Vii& P.O- Dhuliyon, P.S- Samserganj, Murshidabad, Pin- 742202	09.03.2021
112	M/s. bholebaba Pollution testing Centre	Chunakhali, P.O- Gopinathpur, P.S- Murshidabad, Murshidabad, Pin- 742212	15.03.2021

Sl. No.	Name of the AETCs	Address of the AETCs	Date of issue of Technical Evaluation Letter
113	M/s. Sudipta Auto Emission Testing Centre	Vill- Mahisbathan, P.O- Mahipal, P.S- Kushmandi, Dakshin Dinajpur, Pin- 733132	23.03.2021
114	M/s. Choudhury Auto Emission Testing Centre	Tapan Road, P.O & P.S- gangarampur, Dakshin Dinajpur, Pin- 733124	25.03.2021
115	M/s. Raj Trading Smoke Testing Centre	Rampur, P.O- Lohanda, P.S- Raiganj, Uttar Dinajpur, Pin- 733156	25.03.2021
<b>Siliguri Regional Office</b>			
116	M/s. Bharat Auto Emission Testing Centre	Mirik Road, P.O & P.S- Matigara, Dist.- Darjeeling, Pin- 734010	01.08.2020
117	M/s. Parvin Auto Emission Testing Centre	NH-31, P.O- Chalsa, P.S- Mtteli, Dist.- Jalpaiguri, Pin- 735206	13.08.2020
118	M/s. Sera Pollution Centre	Basu Bhawan Ghohala More, P.O- Danguajhar, P.S- Kotwali, Dist- Jalpaiguri, Pin- 735121	13.08.2020
119	M/s. Zarin Auto Emission Testing Centre	Basu, P.O & P.S- Malbazar, Dist- Jalpaiguri, Pin- 735221	13.08.2020
120	M/s. Milan Auto Emission Testing Centre	P.O- Champasari, P.S- Pradhannagar, Dist.- Darjeeling,	18.08.2020
121	M/s. Biswa Kiran Auto Emission Testing Centre	7 <sup>th</sup> Mile, Rishi Road, P.O- Kalimpong, Dist.- Kalimpong,	24.08.2020
122	M/s. Jay Kali Filling Station Auto Emission Testing Centre	P.O- Gosairhat, P.S- Sitalkuchi, Dist.- Coochbehar, Pin- 736172	26.08.2020
123	M/s. Mandal and Mandal PUC Centre	Eastern Bye Pass Road, P.O- baikunthapur, P.S- Bhaktinagar, Dist- Jalpaiguri, Pin- 734001	23.11.2020
124	M/s. Talukdar Auto Emission Testing Centre	Vill & P.O- BaroAtiabari, P.S- Dinjata, Dist.- Coochbehar, Pin- 736135	27.11.2020
125	M/s. Saha Enterprise,	Post Office Para Main Road, P.O & P.S- Boxirhat, Dist.- Coochbehar, Pin- 736131	27.11.2020
126	M/s. Dooars pollution Centre	P.O- Churabhandar, P.S- MaynaguriDist- Jalpaiguri, Pin- 735224	27.11.2020
127	M/s. Mahabir Pollution Centre	Vill- Fulbarihat P.O- Fulbari, P.S- New Jalpaiguri, Dist.- Jalpaiguri, Pin- 734015	27.11.2020
128	M/s. Gita Pollution Centre	Indar More, Vill- Uttar Madhab danga, P.O- & P.S- Mainaguri, Dist.- Jalpaiguri, Pin- 735224	27.11.2020
129	M/s. Shanjib Pollution Testing Centre	Vill- Baniakhari, P.O & P.S- Matigara, Dist.- Darjeeling, Pin- 734010	02.12.2020



Sl. No.	Name of the AETCs	Address of the AETCs	Date of issue of Technical Evaluation Letter
130	M/s. Panacea Auto Emission Testing Centre	Vill& P.O- Ghughumari, P.S- Kotwali, Dist.- Coochbehar, Pin- 736101	21.12.2020
131	M/s. Barman Auto Emission Testing Centre	Vill& P.O- Tapurhat, P.S- Kotwali, Dist.- Coochbehar, Pin- 736181	21.12.2020
132	M/s. Common Service Centre & Pollution Centre	P.O- Rampur, P.S- Boxirhat, Dist.- Coochbehar, Pin- 736207	01.02.2021
133	M/s. Maa Sarada Auto Emission Testing Centre	Vill& P.O- Khagrabari, P.S- Pundibari, Dist.- Coochbehar, Pin- 736179	01.02.2021

### Training Programmes organised by the State Board for In-Service Police Personnel

The West Bengal pollution Control Board organizes training-cum-awareness programme for the in-service Police Personnel of West Bengal Police Authority. There were 11 nos. of training programme organized by the State Board during 2020-21.

Beside fundamentals of air, water, noise and Auto- emission pollution control, a special training on exhaust emission testing of in use Petrol/LPG and diesel vehicles was also arranged for them during those programmes. A practical demonstration was arranged at the Board's Auto Emission Testing room. Machine manufacturers also shared their valuable suggestions on auto exhaust emission testing procedure.

#### **Course outlines of Training cum Awareness Programme for in-service police personnel:**

1. Fundamentals of air, water and noise pollution
2. Automobile Pollution with practical training for exhaust emission testing of in use vehicles.
3. Waste management
4. Sources of pollution and their effects on human
5. Instruments used for various pollution measurements
6. Environmental Laws and Legal provisions on pollution control

**Table- 5.6: Training programme organized by the State Board during April, 2020 to March, 2021 for in-Service Police personnel**

Sl. No.	Date of training	No. of persons have been trained.
01	25.02.2021	13

# Chapter 6

# ENVIRONMENTAL MONITORING

## 6A. Air Pollution Monitoring

### 6A.1 Introduction

Environmental considerations, at present, are gaining increasing significance due to rapid industrialization and urbanization throughout the world. Different pollutants released due to various industrial as well as other man-made activities including fast expanding vehicular traffic are causing deep concern to all kind of living organisms on the earth, adversely affecting their health.

Air pollutants are added in the atmosphere from variety of sources that change the composition of atmosphere and affect the biotic environment. The concentration of air pollutants depends not only on the quantities that are emitted from air pollution sources but also on the ability of the atmosphere to either absorb or disperse these emissions. The air pollution concentration varies spatially and temporarily causing the air pollution pattern to change with different locations and time due to changes in meteorological and topographical condition. The sources of air pollutants include vehicles, industries, domestic sources and natural sources. Because of the presence of high concentration of air pollutants in the ambient air, the health of the population and property is getting adversely affected. In order to arrest the deterioration in air quality, Govt. of India has enacted Air (Prevention and Control of Pollution) Act in 1981. The responsibility has been further emphasized under Environment (Protection) Act, 1986. It is necessary to assess the present and anticipated air pollution through continuous air quality survey/monitoring programs. Therefore, Central Pollution Control Board (CPCB), way back in 1984, initiated National Ambient Air Quality Monitoring (NAAQM) at national level to regularly monitor ambient air quality of selected major urban cities and industrial towns of the country. The objective of the NAAQM was to determine the present air quality status and trends, to assess the health hazards and damage to the property, to provide background air quality data as needed for industrial siting and town planning and to control and regulate pollution from industrial and other sources to meet the National Ambient Air Quality Standards (NAAQS). Although the NAAQM was started with 7 stations in Agra and Anpara, since then the number of monitoring stations has increased steadily, over the period covering all states and Union Territories. The programme was later renamed as National Air Monitoring Programme .

### 6A.2 National Ambient Air Quality Standards (NAAQS)

The Central Pollution Control Board had adopted first ambient air quality standards on November 11, 1982 as per section 16 (2) (h) of the Air (Prevention and Control of Pollution) Act, 1981. The air quality standards have been revised by the Central Pollution Control Board on April 11, 1994 for industrial, residential and sensitive areas for seven parameters i.e. Suspended Particulate Matter (SPM), Respirable Particulate Matter (RPM), Sulphur Dioxide ( $\text{SO}_2$ ), Oxides of Nitrogen ( $\text{NO}_x$ ), Carbon Monoxide (CO), Ammonia ( $\text{NH}_3$ ) & Lead (Pb), and were notified in Gazette of India, Extraordinary Part-II Section 3, sub section (ii), dated May 20, 1994. These standards were based on the land use and other factors of the area and provide the basis for protecting the public health from adverse effect of air pollution and limiting

those contaminants of air that are known or likely to be hazardous to human beings, vegetation, animals and national heritage monuments within the adequate margin of safety.

Following a gap of fifteen (15) years, the Ministry of Environment and Forest (MoEF) has notified fourth version of **National Ambient Air Quality Standards (NAAQS 2009)** on 16<sup>th</sup> November 2009 vide G.S.R. 826(E) dated 16.11.2009. This revised national standard aims to provide uniform air quality for all, irrespective of land use pattern, across the country. There are twelve (12) identified health-based parameters (**PM<sub>10</sub>**, **PM<sub>2.5</sub>**, **SO<sub>2</sub>**, **NO<sub>2</sub>**, **Ammonia**, **Ozone**, **Carbon monoxide**, **Benzene**, **Benzo (a) pyrene**, **Lead**, **Nickel**, **Arsenic**) for that purpose.

**Table- 6A.1: National Ambient Air Quality Standards (NAAQS)**

Pollutants	Time weighted average	NAAQS 16 <sup>th</sup> Nov 2009	
		Concentration in ambient air	
		Industrial, Residential, Rural & other areas	Ecologically sensitive area
Sulphur Dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	Annual*	50	20
	24 Hours**	80	80
Nitrogen Dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	Annual*	40	30
	24 Hours**	80	80
Suspended Particulate Matter (SPM) in µg/m <sup>3</sup>	Annual*	-	-
	24 Hours**	-	-
Particulate Matter (Size <10µm) or PM <sub>10</sub> in µg/m <sup>3</sup>	Annual*	60	60
	24 Hours**	100	100
Particulate Matter (Size <2.5 µm) or PM <sub>2.5</sub> in µg/m <sup>3</sup>	Annual*	40	40
	24 Hours**	60	60
Ozone (O <sub>3</sub> ), in µg/m <sup>3</sup>	8 Hours**	100	100
	1 Hour**	180	180
Lead (Pb) in µg/m <sup>3</sup>	Annual*	0.50	0.50
	24 Hours**	1.0	1.0
Carbon Monoxide (CO) in mg/m <sup>3</sup>	8 Hours**	2	2
	1 Hour**	4	4
Ammonia (NH <sub>3</sub> ) in µg/m <sup>3</sup>	Annual*	100	100
	24 Hours**	400	400
Benzene (C <sub>6</sub> H <sub>6</sub> ) in µg/m <sup>3</sup>	Annual*	05	05
Benzo(a)Pyrene (BaP) - particulate phase only in ng/m <sup>3</sup>	Annual*	1	1
Arsenic (As) in ng/m <sup>3</sup>	Annual*	6	6
Nickel (Ni) in ng/m <sup>3</sup>	Annual*	20	20

\*Annual Arithmetic mean of minimum 104 measurements in a year twice a week 24 hourly at uniform interval.

\*\* 24 hourly/8 hourly values should be met 98% of the time in a year. However, 2% of the time, it may exceed but not on two consecutive days.

### 6A.3 Ambient Air Quality Monitoring in West Bengal

Under Section 17(3) of the Air (Prevention and Control of Pollution) Act, 1981, one of the functions of the WBPCB is to collect and disseminate information relating to air pollution.

The Central Pollution Control Board (CPCB) in 1984, initiated regular monitoring of air quality of all major city centres of the country through a nationwide monitoring network known as National Ambient Air Quality Monitoring (NAAQM) Programme. Later the said programme was renamed as National Air Monitoring Programme (NAMP). During the initial years, Kolkata, Howrah and Haldia were covered under this network subsequently Durgapur and Asansol were included in the said network

In order to generate more data on ambient air quality of Kolkata and surrounding suburban industrial areas, the WBPCB, in 1992, initiated air quality monitoring at some of the towns in the state including Kolkata. Regular monitoring ambient air quality at major towns and industrial areas of the state through a large monitoring network was initiated in the year 2000.

After introduction of National Ambient Air Quality Standards (NAAQS), 2009, the ambient air quality monitoring programme in the state of West Bengal has been modified accordingly. The monitoring network is operated through seventy-nine (79) Semi-Automatic Ambient Air Quality Monitoring Stations (SAAQMS) and fourteen (14) Continuous Ambient Air Quality Monitoring Stations (CAAQMS) covering all the districts of the state. At least one SAAQMS is operating in each district. Three criteria pollutants (PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub>) are monitored at all the SAAQMS. Four parameters (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>2</sub>) are monitored at selected thirteen (13) SAAQMS. All eight (8) parameters (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>2</sub>, Pb, Ni, As, B(a)P) are monitored at selected four SAAQMS. However, the CAAQMS monitor eight parameters (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>2</sub>, CO, NH<sub>3</sub>, O<sub>3</sub> and C<sub>6</sub>H<sub>6</sub>). The detailed monitoring network of ambient air quality in West Bengal is given in Table-6.A.2.

During the year 2020-21, data were generated from these stations and are made available in website of the Board ([www.wbpcb.gov.in](http://www.wbpcb.gov.in)). These data are used for identifying the hot spots and also in preparation of both short-term long term strategic planning for control and abatement of air pollution in this state. Besides, air quality data are also accessed by the general public and also by the students and academicians for various studies and research activities related to air pollution and its impact. The air quality data of are regularly sent to CPCB for uploading the same in Environmental Data Bank. Details of the stations and parameters monitored in such stations are given below:

**Table- 6.A.2: District wise Semi-automated (Manual) Ambient Air Quality Monitoring Stations in West Bengal and its measuring Parameters**

District	Sl. No.	SAAQMS Location	Parameters monitored
Kolkata (including Salt Lake)	1.	Dunlop Bridge	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	2.	Picnic Garden	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	3.	Tollygunge	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	4.	Hyde Road	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	5.	Beliaghata	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	6.	Salt Lake	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	7.	Topsia	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	8.	Baishnabghata	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	9.	Ultadanga	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>

District	Sl. No.	SAAQMS Location	Parameters monitored
	10.	Mominpore	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	11.	Gariahat	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	12.	Paribesh Bhawan, Salt Lake	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	13.	Moulali	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	14.	Minto Park	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	15.	Shyambazar	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , Pb, Ni, As, B(a)P
	16.	Behala	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , Pb, Ni, As, B(a)P
24 Parganas (South)	1.	Amtala	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	2.	Baruipur	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
24 Parganas (North)	1.	Rajarhat	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	2.	Dum Dum	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	3.	Khardah	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	4.	Barasat	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	5.	Madhyamgram	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	6.	Barrackpore	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , Pb, Ni, As, B(a)P
Howrah	1.	Bandhaghat	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	2.	Ghusuri	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	3.	Dhulagarh	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	4.	Sankrail	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	5.	Bagnan	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	6.	Amta	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	7.	Uluberia	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	8.	Howrah Municipal Corporation	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	9.	Bator	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Hooghly	1.	Dankuni	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	2.	Rishra	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	3.	Chinsurah	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	4.	Tribeni	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	5.	Uttarpara	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Nadia	1.	Ranaghat	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	2.	Krishnanagar	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	3.	Kalyani	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Murshidabad	1.	Baharampur	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Purba Medinipur	1.	WBIIDC	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	2.	Bhabanipur	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	3.	Bhunia Raichak	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	4.	Supermarket	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub>

District	Sl. No.	SAAQMS Location	Parameters monitored
Paschim Medinipur	1.	Kharagpur	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	2.	Medinipur Town	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	3.	Ghatal	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	4.	Tamluk	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Jhargram	1.	Jhargram	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Purba Bardhaman	1.	Bardhaman Town	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Paschim Bardhaman	1.	Benachity	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	2.	PCBL More	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	3.	Angadpur	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	4.	Mangalpur	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	5.	Jamuraia	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	6.	Raniganj	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	7.	Burnpur	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	8.	Asansol	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	9.	Bidhannagar	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , Pb, Ni, As, B(a)P
Bankura	1.	Bankura Town	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	2.	Barjora	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Birbhum	1.	Suri Town	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	2.	Rampurhat Town	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	3.	Bolpur Town	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Purulia	1.	Purulia Town	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Malda	1.	Malda Town	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Dakshin Dinajpur	1.	Balurghat College	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Uttar Dinajpur	1.	Raigunj College	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Coochbehar	1.	Coochbihar B.M. Seal College	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	2.	Uttarbanga Krishi Vishvavidyalaya	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Jalpaiguri	1.	Jalpaiguri Ramnagar, WBIIDC	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Alipurduar	1.	Rabikanta High School	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	2.	Birpara	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	3.	Jaigaon	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Kalimpong	1.	Kalipgpong Municipality	PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Darjeeling	1.	Siliguri	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub>
	2.	Darjeeling	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub>

Besides these manual (semi-automatic) stations, the Board also monitors air quality round the clock through 14(fourteen) air quality monitoring stations (CAAQM) at the following stations. These automatic stations continuously monitor air quality parameters like PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>2</sub>, NH<sub>3</sub>, O<sub>3</sub>, CO, C<sub>6</sub>H<sub>6</sub> and meteorological parameters like wind speed, wind direction, relative humidity, temperature etc.

**Table- 6.A.3: District wise Continuous (Automated) Stations (CAAQM)**

District	Sl. No.	CAAQMS Name	Parameters monitored
Kolkata	1.	Victoria Memorial Hall	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , NH <sub>3</sub> , O <sub>3</sub> , CO, C <sub>6</sub> H <sub>6</sub>
	2.	Rabindra Bharati University, Cossipore	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , NH <sub>3</sub> , O <sub>3</sub> , CO, C <sub>6</sub> H <sub>6</sub>
	3.	Indian Association for the Cultivation of Science, Jadavpur	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , NH <sub>3</sub> , O <sub>3</sub> , CO, C <sub>6</sub> H <sub>6</sub>
	4.	Rabindra Sarobar, Dhakuria	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , NH <sub>3</sub> , O <sub>3</sub> , CO, C <sub>6</sub> H <sub>6</sub>
	5.	Birla Industrial & Technological Museum, Ballygunge	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , NH <sub>3</sub> , O <sub>3</sub> , CO, C <sub>6</sub> H <sub>6</sub>
	6.	Fort William, Park Street	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , NH <sub>3</sub> , O <sub>3</sub> , CO, C <sub>6</sub> H <sub>6</sub>
24 Parganas (North)	1.	Administrative Training Institute, Salt Lake	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , NH <sub>3</sub> , O <sub>3</sub> , CO, C <sub>6</sub> H <sub>6</sub>
Howrah	1.	Ghusuri Pumping Station	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , NH <sub>3</sub> , O <sub>3</sub> , CO, C <sub>6</sub> H <sub>6</sub>
	2.	Padma Pukur Water Works	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , NH <sub>3</sub> , O <sub>3</sub> , CO, C <sub>6</sub> H <sub>6</sub>
	3.	Ramakrishna Mission Vivekananda Educational and Research Institute, Belur	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , NH <sub>3</sub> , O <sub>3</sub> , CO, C <sub>6</sub> H <sub>6</sub>
Purba Medinipur	1.	Priyambada Housing Estate, Haldia	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , NH <sub>3</sub> , O <sub>3</sub> , CO, C <sub>6</sub> H <sub>6</sub>
Paschim Bardhaman	1.	City Centre, Sidhu Kanu Dahar Stadium, Durgapur	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , NH <sub>3</sub> , O <sub>3</sub> , CO, C <sub>6</sub> H <sub>6</sub>
	2.	SDO Bunglow, Asansol	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , NH <sub>3</sub> , O <sub>3</sub> , CO, C <sub>6</sub> H <sub>6</sub>
Darjeeling	1.	Tinbatti More, Siliguri	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , NH <sub>3</sub> , O <sub>3</sub> , CO, C <sub>6</sub> H <sub>6</sub>

**(A) Air Quality of Kolkata**

Air Quality of different regions, in the city of Kolkata needs immediate attention from every quarter of the society to contain the release of various pollutants to the desired level, through the adoption of both technological measures and the legislative imposition.

Hence, Air Quality Monitoring assumes a significant dimension to arrive at any meaningful conclusion to take any decision in this regard. Air quality of Kolkata was monitored through seventeen (17) semi automated (manual) stations for obtaining representative air quality information. Parameters monitored in these seventeen stations during April 2020 – March 2021 are shown in Table 6.A.4 (a) – 6.A.4 (q) and in Figures 6.A.1 (a) – 6.A.1(d).



Table- 6.A.4: Ambient air quality of Kolkata during 2020-2021

Shyambazar (a)								
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
*Apr'20	-	-	-	-	-	-	-	-
*May'20	-	-	-	-	-	-	-	-
June'20	53.23	27.54	4.91	48.43	0.15	1.74	0.12	9.11
July'20	74.34	36.04	8.23	56.46	0.15	3.06	0.16	12.26
Aug'20	70.14	30.52	6.05	48.82	0.15	2.87	0.14	11.52
Sep'20	75.44	32.07	6.10	44.55	0.15	2.56	0.13	12.55
Oct'20	86.07	33.35	6.51	46.05	0.15	2.59	0.13	12.37
Nov'20	103.04	39.71	7.99	49.04	0.23	2.80	0.16	16.87
Dec'20	177.73	73.77	11.25	55.58	0.32	4.25	0.20	18.35
Jan'21	174.13	77.16	9.54	48.85	0.23	3.13	0.17	17.03
Feb'21	209.51	86.02	8.64	46.82	0.25	3.62	0.21	20.93
March'21	155.19	64.46	8.07	46.21	0.17	2.69	0.15	15.50

Beliaghata (b)								
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	-	-	-	-	-	-	-	-
July'20	69.01	-	7.08	55.25	-	-	-	-
Aug'20	57.43	-	4.50	46.02	-	-	-	-
Sep'20	61.60	-	3.89	43.42	-	-	-	-
Oct'20	68.26	-	4.24	43.58	-	-	-	-
Nov'20	71.74	-	4.05	45.50	-	-	-	-
Dec'20	170.95	-	10.66	54.57	-	-	-	-
Jan'21	182.84	-	9.06	48.38	-	-	-	-
Feb'21	190.19	-	8.46	45.94	-	-	-	-
March'21	125.94	-	6.09	40.49	-	-	-	-

\*April, 2020 & May, 2020 - Date not available due to Lockdown.

Hyde Road					(c)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	76.15	-	6.32	55.43	-	-	-	-
July'20	108.33	-	11.28	66.22	-	-	-	-
Aug'20	90.63	-	10.05	57.40	-	-	-	-
Sep'20	90.09	-	9.08	49.69	-	-	-	-
Oct'20	99.98	-	9.15	49.59	-	-	-	-
Nov'20	120.37	-	9.73	51.13	-	-	-	-
Dec'20	157.67	-	11.31	55.83	-	-	-	-
Jan'21	249.38	-	10.74	52.88	-	-	-	-
Feb'21	234.42	-	9.22	49.09	-	-	-	-
March'21	241.44	-	10.24	53.28	-	-	-	-

Tollygunge					(d)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	49.58	-	4.11	46.24	-	-	-	-
July'20	54.08	-	4.06	46.19	-	-	-	-
Aug'20	48.87	-	3.50	41.04	-	-	-	-
Sep'20	64.06	-	3.50	40.98	-	-	-	-
Oct'20	62.16	-	3.57	42.20	-	-	-	-
Nov'20	70.44	-	4.02	45.04	-	-	-	-
Dec'20	85.24	-	5.42	48.71	-	-	-	-
Jan'21	101.58	-	5.87	41.82	-	-	-	-
Feb'21	98.54	-	4.08	35.35	-	-	-	-
March'21	78.72	-	3.50	34.06	-	-	-	-

Behala					(e)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	59.21	27.98	4.73	48.10	0.15	1.53	0.09	9.49
July'20	82.46	35.35	9.02	60.08	0.15	3.25	0.16	12.44
Aug'20	68.98	29.03	5.55	46.89	0.15	2.34	0.13	10.31
Sep'20	78.35	32.42	5.79	44.60	0.15	2.47	0.13	12.31
Oct'20	88.98	32.73	6.77	45.46	0.15	2.37	0.12	12.16
Nov'20	97.71	37.23	7.23	48.02	0.15	2.35	0.14	14.77
Dec'20	129.77	55.77	9.60	52.23	0.18	3.30	0.17	14.86
Jan'21	156.71	65.99	8.65	45.62	0.23	2.82	0.15	14.48
Feb'21	141.48	57.55	6.58	41.10	0.15	2.45	0.16	14.57
March'21	129.01	53.09	6.68	41.42	0.15	1.79	0.11	11.65

Saltlake					(f)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	49.58	-	3.98	44.74	-	-	-	-
July'20	69.32	-	6.85	53.17	-	-	-	-
Aug'20	62.00	-	4.37	43.36	-	-	-	-
Sep'20	70.78	-	3.74	39.49	-	-	-	-
Oct'20	80.76	-	4.98	42.47	-	-	-	-
Nov'20	91.46	-	5.91	45.74	-	-	-	-
Dec'20	124.78	-	9.19	51.27	-	-	-	-
Jan'21	137.74	-	7.66	42.64	-	-	-	-
Feb'21	111.99	-	5.20	37.09	-	-	-	-
March'21	113.14	-	5.52	38.50	-	-	-	-

Topsia					(g)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	57.63	-	5.38	53.57	-	-	-	-
July'20	62.05	-	6.31	56.30	-	-	-	-
Aug'20	64.29	-	4.99	48.66	-	-	-	-
Sep'20	73.21	-	4.36	47.09	-	-	-	-
Oct'20	92.27	-	7.03	50.12	-	-	-	-
Nov'20	102.07	-	8.51	53.15	-	-	-	-
Dec'20	162.40	-	11.50	60.54	-	-	-	-
Jan'21	168.12	-	8.98	50.26	-	-	-	-
Feb'21	153.21	-	6.99	45.47	-	-	-	-
March'21	130.59	-	6.60	43.09	-	-	-	-

Mominpur					(h)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	49.34	-	4.19	45.01	-	-	-	-
July'20	55.70	-	4.48	48.53	-	-	-	-
Aug'20	54.54	-	3.85	42.15	-	-	-	-
Sep'20	52.22	-	3.50	42.29	-	-	-	-
Oct'20	65.89	-	4.45	44.40	-	-	-	-
Nov'20	72.47	-	5.35	46.17	-	-	-	-
Dec'20	67.43	-	4.40	47.49	-	-	-	-
Jan'21	83.86	-	4.07	38.18	-	-	-	-
Feb'21	67.14	-	3.50	32.90	-	-	-	-
March'21	62.85	-	3.50	30.19	-	-	-	-

Minto Park					(i)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	56.82	25.67	4.96	49.20	-	-	-	-
July'20	76.03	33.25	7.66	56.38	-	-	-	-
Aug'20	73.53	28.41	6.75	49.60	-	-	-	-
Sep'20	77.15	29.64	5.95	45.87	-	-	-	-
Oct'20	95.40	30.22	6.86	47.48	-	-	-	-
Nov'20	102.18	37.46	8.10	48.86	-	-	-	-
Dec'20	137.87	56.31	9.86	53.11	-	-	-	-
Jan'21	127.67	61.60	8.34	45.35	-	-	-	-
Feb'21	198.25	94.15	8.79	47.44	-	-	-	-
March'21	164.17	71.13	7.61	44.57	-	-	-	-

Dunlop Bridge					(j)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	55.45	-	4.44	49.09	-	-	-	-
July'20	86.21	-	8.91	60.11	-	-	-	-
Aug'20	88.28	-	7.47	51.17	-	-	-	-
Sep'20	84.39	-	7.13	45.70	-	-	-	-
Oct'20	103.61	-	8.22	48.57	-	-	-	-
Nov'20	115.84	-	9.50	51.76	-	-	-	-
Dec'20	223.69	-	13.11	61.61	-	-	-	-
Jan'21	200.75	-	10.89	52.41	-	-	-	-
Feb'21	136.41	-	7.92	45.36	-	-	-	-
March'21	152.30	-	7.96	44.93	-	-	-	-

Paribesh Bhaban, Salt lake					(k)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	50.45	-	3.62	48.82	-	-	-	-
July'20	61.18	-	5.24	54.10	-	-	-	-
Aug'20	54.78	-	3.44	37.08	-	-	-	-
Sep'20	50.60	-	3.50	36.77	-	-	-	-
Oct'20	46.64	-	3.64	38.39	-	-	-	-
Nov'20	103.95	-	5.63	44.90	-	-	-	-
Dec'20	127.01	-	7.84	50.16	-	-	-	-
Jan'21	158.02	-	8.25	45.91	-	-	-	-
Feb'21	172.55	-	7.64	43.46	-	-	-	-
March'21	124.22	-	6.09	40.31	-	-	-	-

Ultadanga					(l)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	56.00	-	4.78	51.25	-	-	-	-
July'20	82.33	-	9.09	61.84	-	-	-	-
Aug'20	73.81	-	6.61	50.19	-	-	-	-
Sep'20	79.06	-	6.74	46.75	-	-	-	-
Oct'20	88.55	-	7.40	48.13	-	-	-	-
Nov'20	109.71	-	9.02	51.44	-	-	-	-
Dec'20	169.37	-	11.13	58.05	-	-	-	-
Jan'21	195.86	-	10.47	51.67	-	-	-	-
Feb'21	177.31	-	8.80	47.92	-	-	-	-
March'21	126.83	-	6.21	41.37	-	-	-	-

Moulali					(m)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	58.93	28.45	4.68	48.65	-	-	-	-
July'20	85.26	32.95	9.26	61.88	-	-	-	-
Aug'20	72.86	27.46	6.45	48.34	-	-	-	-
Sep'20	89.51	33.59	6.38	46.88	-	-	-	-
Oct'20	98.68	36.34	6.82	47.09	-	-	-	-
Nov'20	108.11	43.59	8.15	48.24	-	-	-	-
Dec'20	176.16	73.84	11.50	56.80	-	-	-	-
Jan'21	176.57	77.09	9.41	49.18	-	-	-	-
Feb'21	146.09	78.87	6.99	40.67	-	-	-	-
March'21	134.57	58.49	6.83	44.10	-	-	-	-

Gariahat					(n)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	49.86	-	4.16	45.47	-	-	-	-
July'20	57.29	-	4.30	48.63	-	-	-	-
Aug'20	49.67	-	3.50	39.70	-	-	-	-
Sep'20	50.69	-	3.50	41.48	-	-	-	-
Oct'20	56.89	-	3.50	44.31	-	-	-	-
Nov'20	62.13	-	3.80	44.73	-	-	-	-
Dec'20	79.05	-	5.14	50.07	-	-	-	-
Jan'21	91.86	-	4.43	39.70	-	-	-	-
Feb'21	72.97	-	3.50	31.03	-	-	-	-
March'21	73.06	-	3.50	31.99	-	-	-	-

Picnic Garden					(o)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	58.15	-	5.87	57.69	-	-	-	-
July'20	65.39	-	7.88	58.89	-	-	-	-
Aug'20	58.32	-	5.66	49.76	-	-	-	-
Sep'20	70.84	-	6.10	51.19	-	-	-	-
Oct'20	78.01	-	6.99	52.86	-	-	-	-
Nov'20	80.17	-	6.46	52.08	-	-	-	-
Dec'20	98.23	-	9.94	56.13	-	-	-	-
Jan'21	128.75	-	8.86	49.16	-	-	-	-
Feb'21	98.29	-	5.36	42.14	-	-	-	-
March'21	84.47	-	3.73	34.21	-	-	-	-

Baishnabghata					(p)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	57.54	-	4.89	48.55	-	-	-	-
July'20	77.53	-	8.16	57.22	-	-	-	-
Aug'20	69.27	-	5.29	44.20	-	-	-	-
Sep'20	89.58	-	5.37	44.12	-	-	-	-
Oct'20	100.44	-	7.12	46.46	-	-	-	-
Nov'20	112.76	-	8.67	49.66	-	-	-	-
Dec'20	215.19	-	12.39	59.23	-	-	-	-
Jan'21	223.56	-	9.81	50.25	-	-	-	-
Feb'21	192.91	-	8.66	46.01	-	-	-	-
March'21	185.11	-	8.92	48.96	-	-	-	-



Rajarhat					(q)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	54.21	-	4.15	46.51	-	-	-	-
July'20	75.89	-	8.09	58.73	-	-	-	-
Aug'20	55.27	-	3.67	42.89	-	-	-	-
Sep'20	72.66	-	4.36	44.56	-	-	-	-
Oct'20	85.34	-	5.50	46.58	-	-	-	-
Nov'20	105.03	-	7.78	48.30	-	-	-	-
Dec'20	177.96	-	11.63	57.73	-	-	-	-
Jan'21	203.72	-	10.03	49.99	-	-	-	-
Feb'21	203.44	-	8.36	45.54	-	-	-	-
March'21	152.60	-	7.74	45.32	-	-	-	-

Figure – 6.A.1 (a)

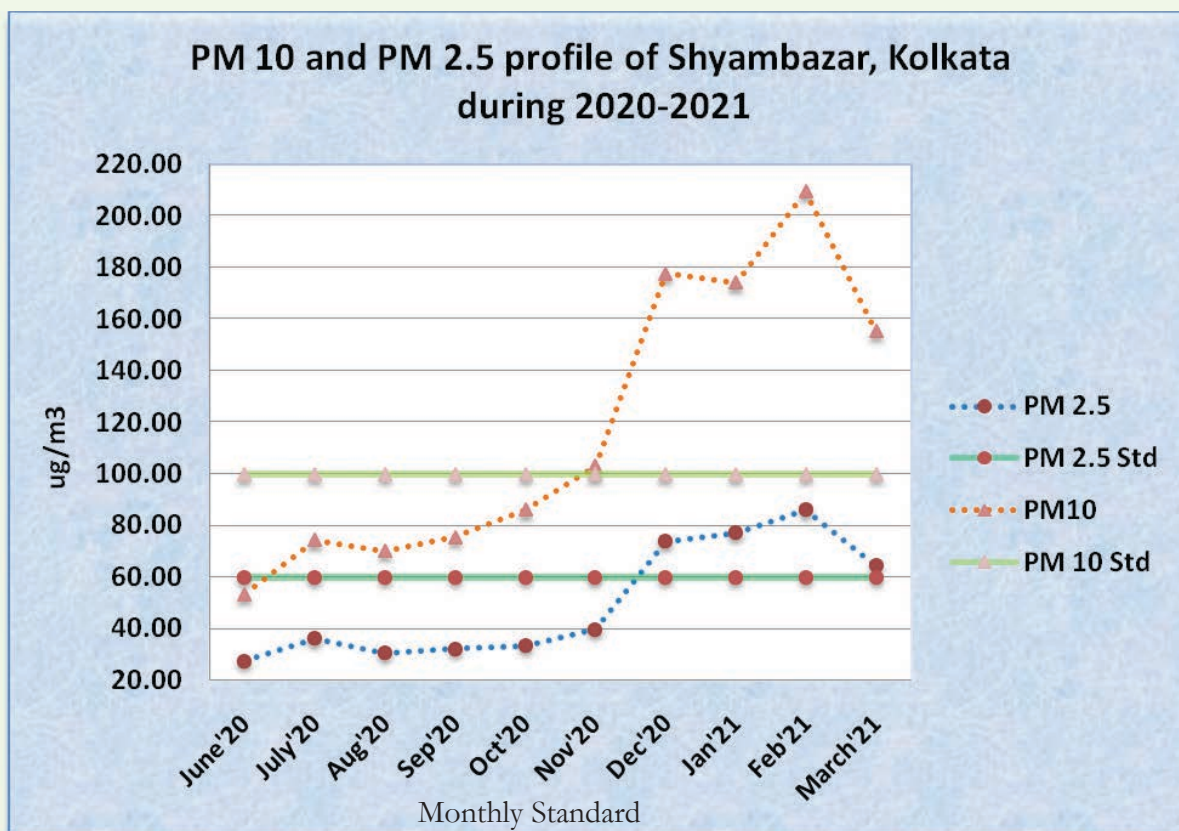


Figure – 6.A.1 (b)

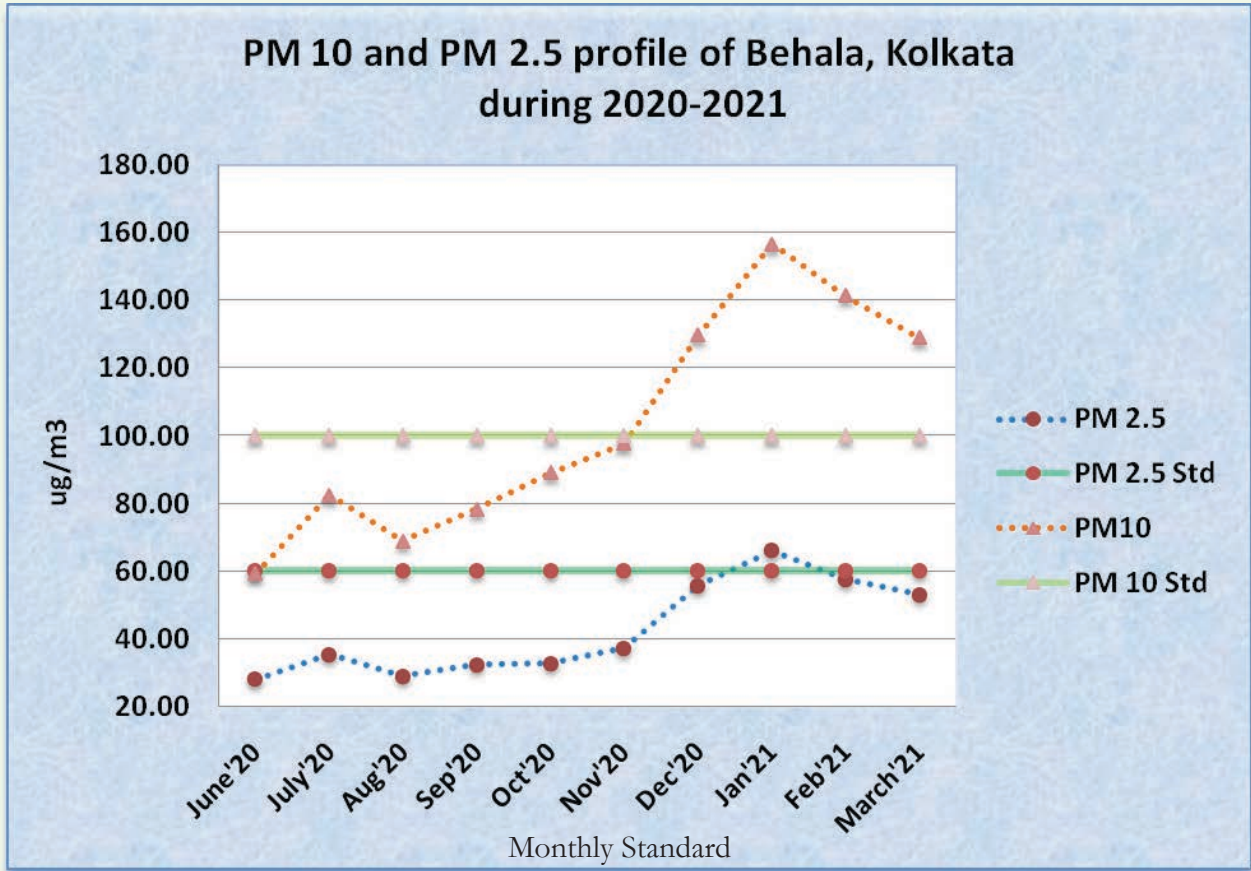


Figure - 6.A.1 (c)

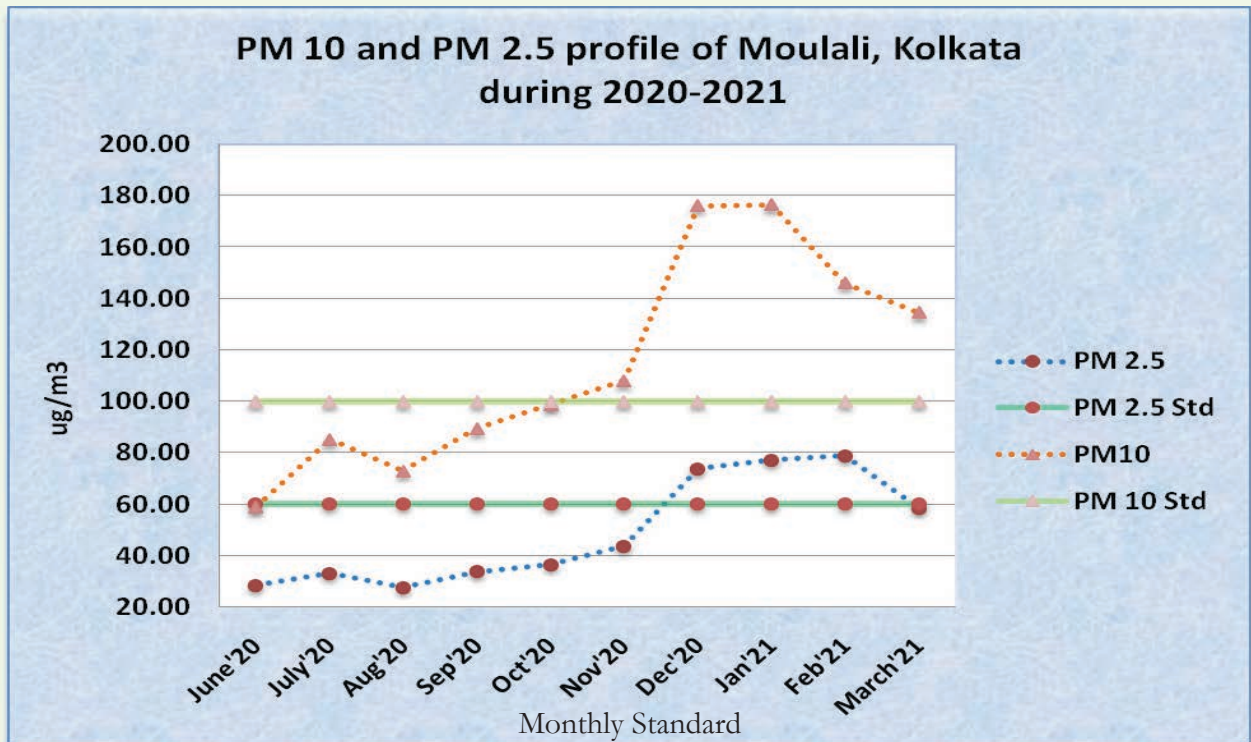
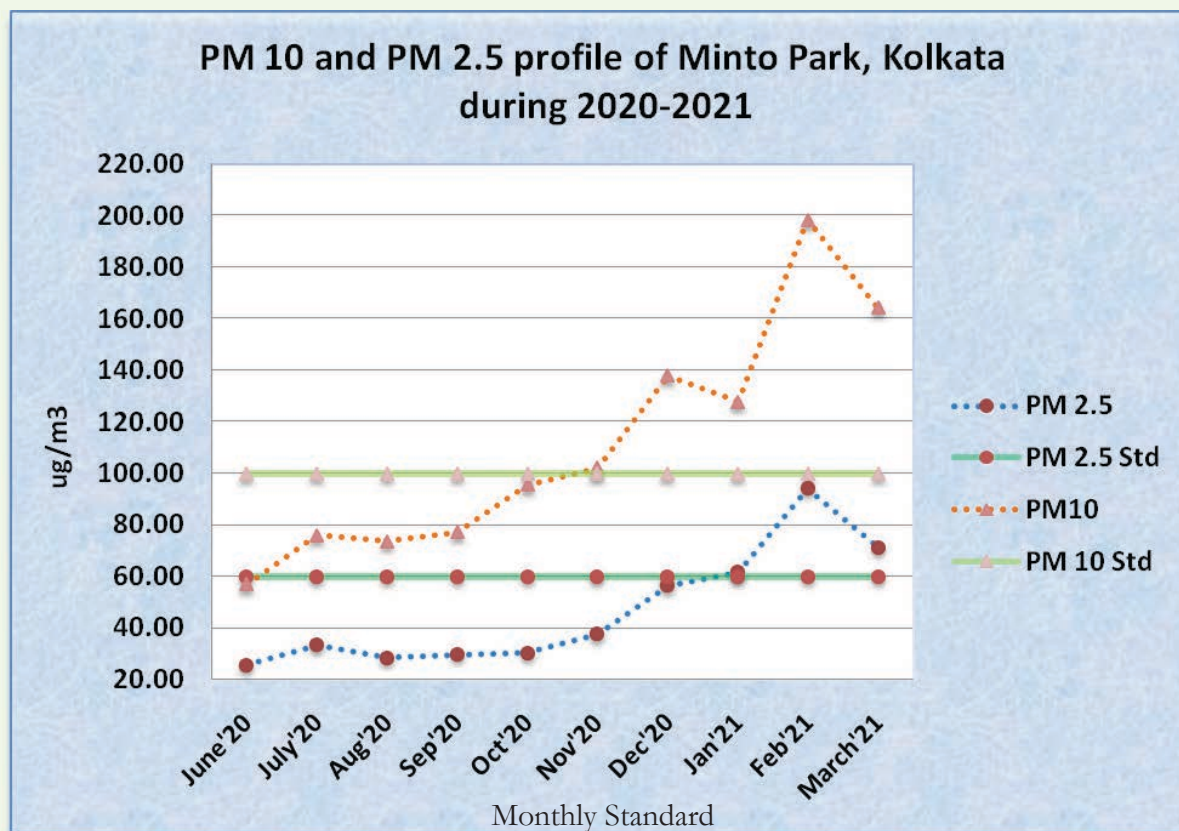


Figure - 6.A.1 (d)

**(B) Air quality of Howrah district**

During April 2020 – March 2021, air quality of Howrah district was monitored through nine (9) semi-automated (manual) & 3 (Three) continuous (automated) station. Parameters monitored in these stations are shown in 6.A.5 (a) – 6.A.5 (i) and in Figures 6.A.2 (a) – 6.A.2(b).

Amta					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	54	-	9.7	32.5	-	-	-	-
July'20	52	-	9.3	39.0	-	-	-	-
Aug'20	47	-	8.4	36.7	-	-	-	-
Sep'20	53	-	7.9	34.8	-	-	-	-
Oct'20	60	-	7.8	32.9	-	-	-	-
Nov'20	140	-	12.0	37.3	-	-	-	-

Dec'20	183	-	11.8	40.6	-	-	-	-
Jan'21	181	-	21.0	57.5	-	-	-	-
Feb'21	185	-	23.6	62.7	-	-	-	-
March'21	177	-	20.7	54.6	-	-	-	-

Bandhaghat					(b)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	60	-	10.2	31.4	-	-	-	-
July'20	59	-	9.8	39.6	-	-	-	-
Aug'20	61	-	10.0	38.3	-	-	-	-
Sep'20	67	-	8.5	35.5	-	-	-	-
Oct'20	71	-	8.4	34.9	-	-	-	-
Nov'20	159	-	13.0	38.4	-	-	-	-
Dec'20	196	-	12.0	41.3	-	-	-	-
Jan'21	215	-	23.0	59.2	-	-	-	-
Feb'21	213	-	24.4	61.4	-	-	-	-
March'21	202	-	23.0	54.8	-	-	-	-

Bagnan					(c)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	62	-	12.2	33.1	-	-	-	-
July'20	57	-	9.8	40.1	-	-	-	-
Aug'20	60	-	8.9	38.6	-	-	-	-
Sep'20	61	-	8.3	35.1	-	-	-	-
Oct'20	63	-	8.0	33.9	-	-	-	-
Nov'20	145	-	13.1	38.2	-	-	-	-
Dec'20	180	-	11.3	39.9	-	-	-	-
Jan'21	182	-	22.3	58.8	-	-	-	-
Feb'21	190	-	23.0	61.4	-	-	-	-
March'21	185	-	21.4	54.5	-	-	-	-

Bator					(d)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	65	34.80	11.5	37.8	-	-	-	-
July'20	54	29.60	9.8	39.7	-	-	-	-
Aug'20	55	29.70	9.5	37.8	-	-	-	-
Sep'20	65	35.30	8.3	36.2	-	-	-	-
Oct'20	74	41.00	8.4	34.3	-	-	-	-
Nov'20	154	86.50	14.0	38.0	-	-	-	-
Dec'20	197	113.30	12.5	41.1	-	-	-	-
Jan'21	212	120.40	24.8	61.9	-	-	-	-
Feb'21	218	126.10	24.5	62.2	-	-	-	-
March'21	209	120.20	23.5	57.2	-	-	-	-

HMC					(e)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	62	34.50	10.0	31.8	-	-	-	-
July'20	61	33.20	10.0	40.3	-	-	-	-
Aug'20	67	37.20	10.7	39.1	-	-	-	-
Sep'20	71	38.40	8.9	36.9	-	-	-	-
Oct'20	80	45.50	8.5	36.1	-	-	-	-
Nov'20	162	93.60	15.0	38.9	-	-	-	-
Dec'20	201	115.30	11.8	41.1	-	-	-	-
Jan'21	208	119.10	26.2	62.3	-	-	-	-
Feb'21	220	125.30	27.6	63.2	-	-	-	-
March'21	204	116.30	23.6	56.4	-	-	-	-

Dhulagarh					(f)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	56	-	9.7	31.7	-	-	-	-
July'20	58	-	9.8	39.6	-	-	-	-
Aug'20	68	-	10.4	40.3	-	-	-	-
Sep'20	69	-	8.4	36.6	-	-	-	-
Oct'20	79	-	8.5	35.7	-	-	-	-
Nov'20	167	-	13.4	38.8	-	-	-	-
Dec'20	195	-	11.9	40.9	-	-	-	-
Jan'21	200	-	24.0	60.9	-	-	-	-
Feb'21	207	-	25.8	66.7	-	-	-	-
March'21	200	-	23.6	57.5	-	-	-	-

Ghusuri					(g)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	54	-	10.6	30.8	-	-	-	-
July'20	53	-	9.8	39.6	-	-	-	-
Aug'20	53	-	8.9	38.6	-	-	-	-
Sep'20	60	-	7.9	35.5	-	-	-	-
Oct'20	62	-	8.2	34.0	-	-	-	-
Nov'20	148	-	13.1	38.3	-	-	-	-
Dec'20	180	-	11.6	41.3	-	-	-	-
Jan'21	205	-	28.4	64.5	-	-	-	-
Feb'21	222	-	29.1	66.7	-	-	-	-
March'21	200	-	23.7	58.0	-	-	-	-

Sankrail					(h)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	53	-	10.4	34.6	-	-	-	-
July'20	52	-	9.6	39.8	-	-	-	-
Aug'20	51	-	8.7	38.0	-	-	-	-
Sep'20	60	-	8.2	35.2	-	-	-	-
Oct'20	63	-	8.2	33.7	-	-	-	-
Nov'20	140	-	11.7	37.0	-	-	-	-
Dec'20	132	-	10.7	40.1	-	-	-	-
Jan'21	136	-	20.6	56.5	-	-	-	-
Feb'21	144	-	20.9	57.7	-	-	-	-
March'21	149	-	19.2	50.2	-	-	-	-

Uluberia					(i)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	-	-	-	-	-	-	-	-
July'20	-	-	-	-	-	-	-	-
Aug'20	54	-	8.6	38.0	-	-	-	-
Sep'20	60	-	8.0	35.4	-	-	-	-
Oct'20	63	-	8.2	34.2	-	-	-	-
Nov'20	144	-	11.5	37.5	-	-	-	-
Dec'20	132	-	11.3	40.1	-	-	-	-
Jan'21	133	-	19.2	56.2	-	-	-	-
Feb'21	140	-	22.2	60.9	-	-	-	-
March'21	147	-	20.4	53.5	-	-	-	-

Figure – 6.A.2 (a)

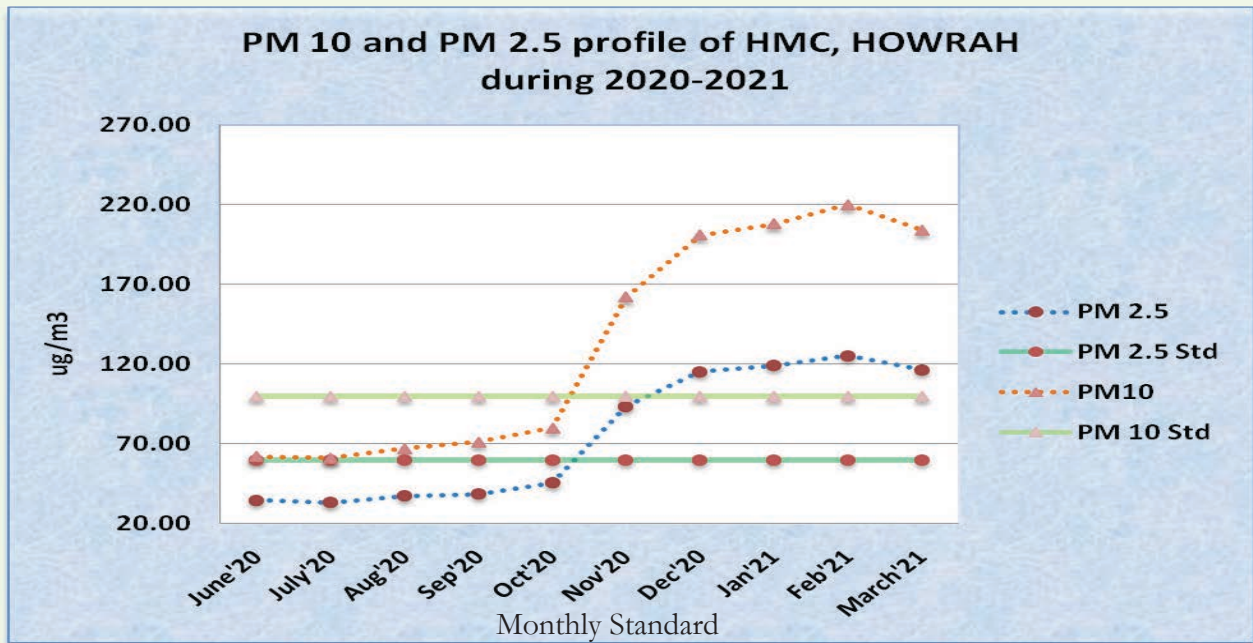
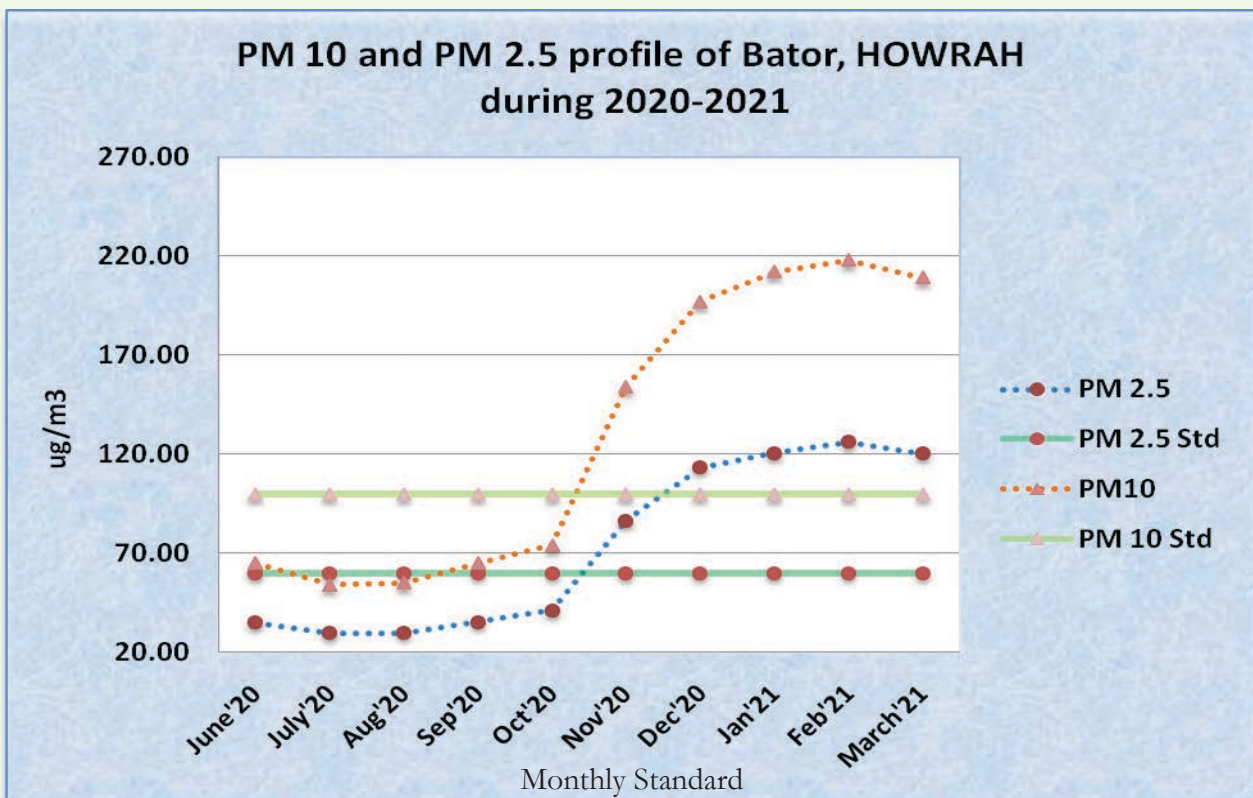


Figure – 6.A.2 (b)



**(C) Air quality of 24 Parganas (South) district**

The Board monitored air quality at two (2) stations in the 24 Parganas (South) district during April 2020 – March 2021 for parameters like PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>2</sub>. The monitoring results are shown in Tables 6.A.6 (a) – 6.A.6 (b).



Amtala					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	51.75	-	4.47	48.61	-	-	-	-
July'20	61.24	-	5.60	51.34	-	-	-	-
Aug'20	50.84	-	3.97	43.87	-	-	-	-
Sep'20	62.25	-	3.87	45.64	-	-	-	-
Oct'20	61.95	-	3.93	46.02	-	-	-	-
Nov'20	69.20	-	4.29	47.21	-	-	-	-
Dec'20	142.38	-	10.46	55.28	-	-	-	-
Jan'21	132.64	-	8.14	48.01	-	-	-	-
Feb'21	132.30	-	6.04	42.98	-	-	-	-
March'21	154.75	-	7.65	45.21	-	-	-	-

Baruipur					(b)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	59.60	-	5.08	51.58	-	-	-	-
July'20	97.16	-	10.51	65.74	-	-	-	-
Aug'20	88.54	-	7.28	48.96	-	-	-	-
Sep'20	84.21	-	6.64	46.78	-	-	-	-
Oct'20	96.08	-	7.30	47.57	-	-	-	-
Nov'20	108.45	-	8.11	51.11	-	-	-	-
Dec'20	150.71	-	10.96	57.16	-	-	-	-
Jan'21	193.81	-	10.15	51.47	-	-	-	-
Feb'21	152.51	-	8.24	45.19	-	-	-	-
March'21	143.56	-	7.11	42.77	-	-	-	-

**(D) Air quality of 24 Parganas (North) district**

During April 2020 – March 2021, air quality of 24 Parganas (North) district was monitored through 5 stations. The monitoring results are shown in Table 6A.7(a) to 6A.7(d) and Figure 6A 3(a)

Dum Dum					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	59.46	--	*2.00	15.24	--	--	--	--
July'20	62.37	--	2.00	14.07	--	--	--	--
Aug'20	61.43	--	2.00	12.64	--	--	--	--
Sep'20	64.76	--	2.00	13.82	--	--	--	--
Oct'20	65.70	--	2.00	16.50	--	--	--	--
Nov'20	77.41	--	2.00	21.29	--	--	--	--
Dec'20	79.70	--	2.00	23.75	--	--	--	--
Jan'21	92.51	--	2.00	19.69	--	--	--	--
Feb'21	94.96	--	2.00	21.61	--	--	--	--
March'21	91.09	--	2.00	21.29	--	--	--	--

Barrackpore					(b)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	72.72	44.17	*2.00	17.91	0.18	0.01	0.01	0.01
July'20	65.31	39.24	2.00	13.16	0.18	0.01	0.01	0.01
Aug'20	65.61	33.70	2.00	15.42	0.18	0.01	0.01	0.01
Sep'20	67.10	47.81	2.00	17.91	0.18	0.01	0.01	0.01
Oct'20	73.47	40.82	*2.00	21.70	0.18	0.01	0.01	0.01
Nov'20	80.61	47.59	2.00	22.87	0.18	0.01	0.01	0.01
Dec'20	102.42	54.91	5.93	26.27	0.18	0.01	0.01	0.01
Jan'21	95.62	59.35	6.52	25.47	0.18	0.01	0.01	0.01
Feb'21	105.01	63.42	6.87	24.19	0.18	0.01	0.01	0.01
March'21	101.56	58.56	8.94	24.37	0.18	0.01	0.01	0.01

\*SO<sub>2</sub> - LDL - 4.00 µg/m<sup>3</sup>. As per the CPCB guidelines, for Calculating 24 hourly average of various Parameters, BDL is Considered as half of the Lower Detection limit, i.e. - 2.00 µg/m<sup>3</sup>.

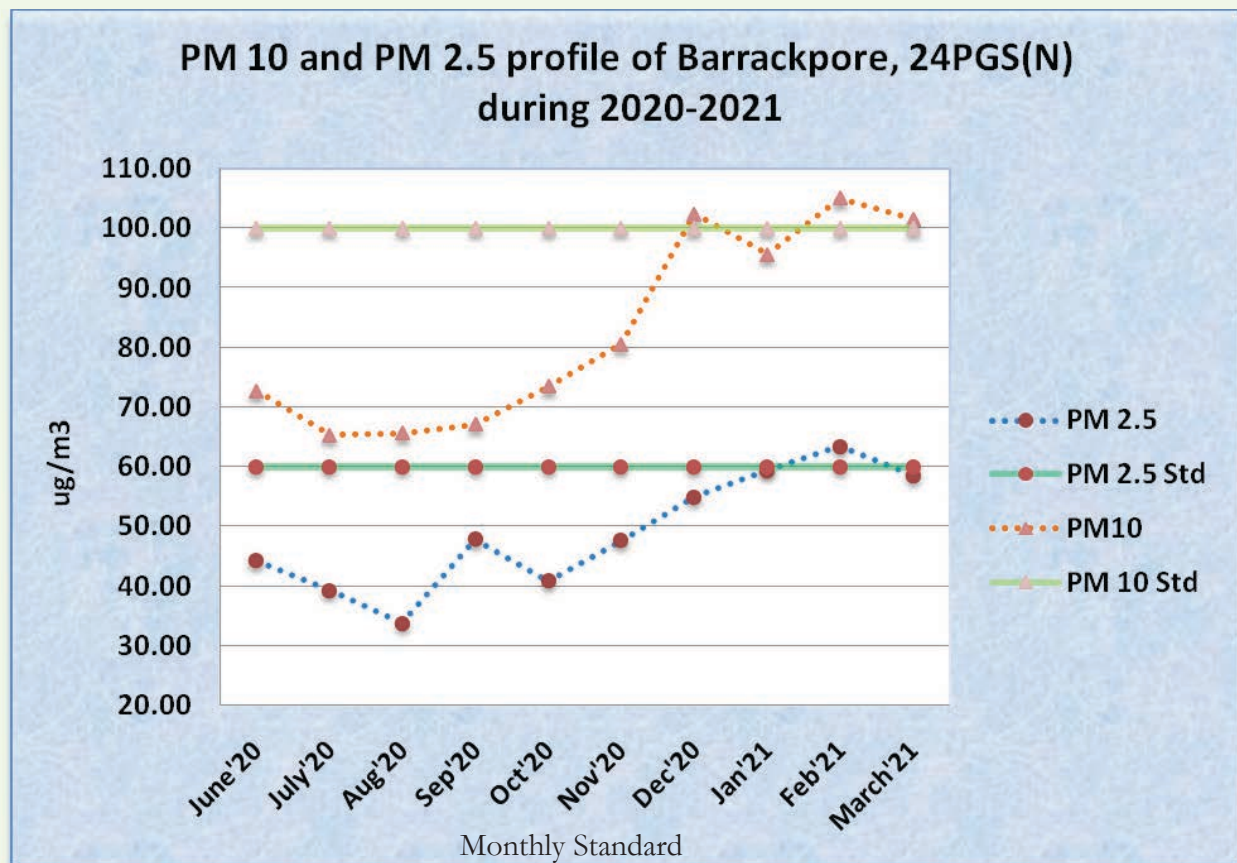
Khardah					(c)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	58.52	--	2.00	13.70	--	--	--	--
July'20	55.00	--	2.00	11.31	--	--	--	--
Aug'20	66.20	--	2.00	15.42	--	--	--	--
Sep'20	68.97	--	2.00	16.37	--	--	--	--
Oct'20	71.48	--	2.00	19.29	--	--	--	--
Nov'20	79.18	--	2.00	21.73	--	--	--	--
Dec'20	85.11	--	4.59	25.59	--	--	--	--
Jan'21	92.46	--	2.00	21.52	--	--	--	--
Feb'21	94.54	--	2.00	20.24	--	--	--	--
March'21	103.86	--	4.58	26.73	--	--	--	--

Barasat					(d)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	62.33	--	2.00	15.68	--	--	--	--
July'20	59.28	--	2.00	15.83	--	--	--	--
Aug'20	65.86	--	2.00	16.62	--	--	--	--
Sep'20	70.27	--	2.00	18.12	--	--	--	--
Oct'20	69.64	--	2.00	18.14	--	--	--	--
Nov'20	82.60	--	2.00	22.38	--	--	--	--
Dec'20	82.23	--	4.19	24.29	--	--	--	--
Jan'21	107.99	--	2.00	20.97	--	--	--	--
Feb'21	107.31	--	5.55	26.32	--	--	--	--
March'21	106.51	--	2.00	26.18	--	--	--	--

\*SO<sub>2</sub> - LDL - 4.00 µg/m<sup>3</sup>. As per CPCB guidelines, for Calculating 24 hourly average of Various Parameters, BDL is Considered as half of the Lower Detection limit, i.e. - 2.00 µg/m<sup>3</sup>.

Madhyamgram					(e)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	B(a) P (ng/ $\text{m}^3$ )	As (ng/ $\text{m}^3$ )	Pb ( $\mu\text{g}/\text{m}^3$ )	Ni (ng/ $\text{m}^3$ )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	67.82	--	2.00	11.13	--	--	--	--
July'20	58.82	--	2.00	13.09	--	--	--	--
Aug'20	63.25	--	2.00	13.68	--	--	--	--
Sep'20	65.50	--	2.00	16.81	--	--	--	--
Oct'20	70.11	--	2.00	19.36	--	--	--	--
Nov'20	79.97	--	2.00	21.36	--	--	--	--
Dec'20	86.40	--	2.00	23.34	--	--	--	--
Jan'21	95.29	--	2.00	24.99	--	--	--	--
Feb'21	107.79	--	5.50	26.76	--	--	--	--
March'21	100.38	--	2.00	24.51	--	--	--	--

Figure 6A. 3(a)



\*SO<sub>2</sub> - LDL - 4.00  $\mu\text{g}/\text{m}^3$ . As per CPCB guidelines, for Calculating 24 hourly average of Various Parameters, BDL is Considered as half of the Lower Detection limit, i.e. - 2.00  $\mu\text{g}/\text{m}^3$ .

**(E) Air quality of Paschim Bardhaman district**

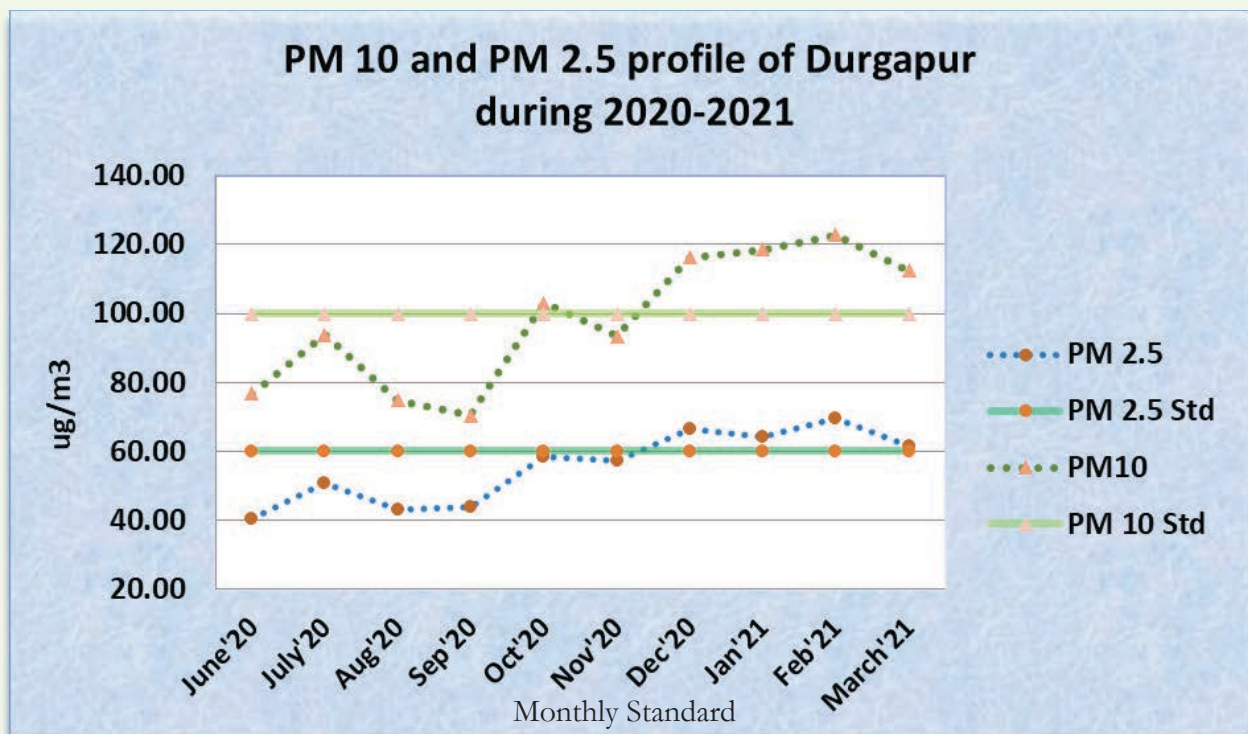
During April 2020 – March 2021, air quality of Paschim Bardhaman district was monitored 09(Nine) stations. Parameters monitored in these stations are shown in Tables 6.A.8(a) – 6.A.8(j) and Figure 6A.4(a) -6A.4(b)

Benachity, Durgapur					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	79.74	--	14.33	26.43	--	--	--	--
July'20	93.25	--	13.52	28.48	--	--	--	--
Aug'20	81.77	--	11.01	26.58	--	--	--	--
Sep'20	81.10	--	11.53	27.17	--	--	--	--
Oct'20	88.68	--	12.72	29.32	--	--	--	--
Nov'20	107.67	--	13.43	31.28	--	--	--	--
Dec'20	115.99	--	12.32	28.74	--	--	--	--
Jan'21	130.08	--	13.09	30.51	--	--	--	--
Feb'21	135.48	--	13.52	32.26	--	--	--	--
March'21	142.90	--	13.55	31.85	--	--	--	--

PCBL More,Durgapur					(b)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	87.40	--	13.31	26.28	--	--	--	--
July'20	91.05	--	13.36	27.20	--	--	--	--
Aug'20	83.15	--	11.39	26.98	--	--	--	--
Sep'20	78.02	--	10.67	26.01	--	--	--	--
Oct'20	87.85	--	12.52	28.28	--	--	--	--
Nov'20	101.99	--	12.77	29.92	--	--	--	--
Dec'20	111.68	--	12.31	28.80	--	--	--	--
Jan'21	122.84	--	12.88	30.45	--	--	--	--
Feb'21	126.24	--	12.94	31.35	--	--	--	--
March'21	130.05	--	13.56	31.69	--	--	--	--

Bidhannagar,Durgapur					(i)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	B(a)P ( $\text{ng}/\text{m}^3$ )	As ( $\text{ng}/\text{m}^3$ )	Pb ( $\mu\text{g}/\text{m}^3$ )	Ni ( $\text{ng}/\text{m}^3$ )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	76.66	40.25	6.47	20.12	--	0.18	0.01	0.01
July'20	93.83	50.71	7.55	23.72	--	0.18	0.01	0.01
Aug'20	74.74	43.00	4.28	18.28	--	0.18	0.01	0.01
Sep'20	70.34	43.98	4.25	18.55	--	0.18	0.01	0.01
Oct'20	103.09	58.53	10.07	25.90	--	0.18	0.01	0.01
Nov'20	93.44	57.26	6.81	24.75	--	0.18	0.01	0.01
Dec'20	116.17	66.40	11.64	23.66	--	0.18	0.01	0.01
Jan'21	118.49	64.16	12.00	26.74	--	0.18	0.01	0.01
Feb'21	122.74	69.44	12.70	27.87	--	0.18	0.01	0.01
March'21	112.39	61.59	10.85	26.03	--	0.40	0.01	0.42

Figure 6A. 4(a)



Angadpur					(c)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	85.26	--	14.29	28.17	--	--	--	--
July'20	91.66	--	13.17	28.28	--	--	--	--
Aug'20	81.94	--	11.41	27.09	--	--	--	--
Sep'20	81.07	--	10.72	26.83	--	--	--	--
Oct'20	94.46	--	13.03	29.56	--	--	--	--
Nov'20	107.96	--	13.32	31.36	--	--	--	--
Dec'20	115.17	--	12.47	29.50	--	--	--	--
Jan'21	128.90	--	13.71	32.19	--	--	--	--
Feb'21	135.27	--	13.59	31.67	--	--	--	--
March'21	143.80	--	14.19	32.75	--	--	--	--

Mangalpur					(d)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	85.11	--	14.37	28.20	--	--	--	--
July'20	92.59	--	12.98	28.39	--	--	--	--
Aug'20	80.57	--	11.72	27.41	--	--	--	--
Sep'20	85.68	--	11.88	28.16	--	--	--	--
Oct'20	94.18	--	12.76	29.32	--	--	--	--
Nov'20	116.73	--	13.69	31.74	--	--	--	--
Dec'20	118.55	--	12.70	28.51	--	--	--	--
Jan'21	133.90	--	13.48	31.94	--	--	--	--
Feb'21	142.00	--	13.95	32.72	--	--	--	--
March'21	147.26	--	13.90	32.48	--	--	--	--

Raniganj					(e)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	86.89	--	13.75	25.78	--	--	--	--
July'20	95.98	--	13.50	28.30	--	--	--	--
Aug'20	86.46	--	11.77	27.73	--	--	--	--
Sep'20	81.90	--	10.72	25.91	--	--	--	--
Oct'20	97.19	--	12.98	29.69	--	--	--	--
Nov'20	111.87	--	12.74	30.70	--	--	--	--
Dec'20	116.52	--	12.41	29.24	--	--	--	--
Jan'21	133.71	--	13.51	31.76	--	--	--	--
Feb'21	139.74	--	14.01	32.54	--	--	--	--
March'21	145.37	--	13.85	32.22	--	--	--	--

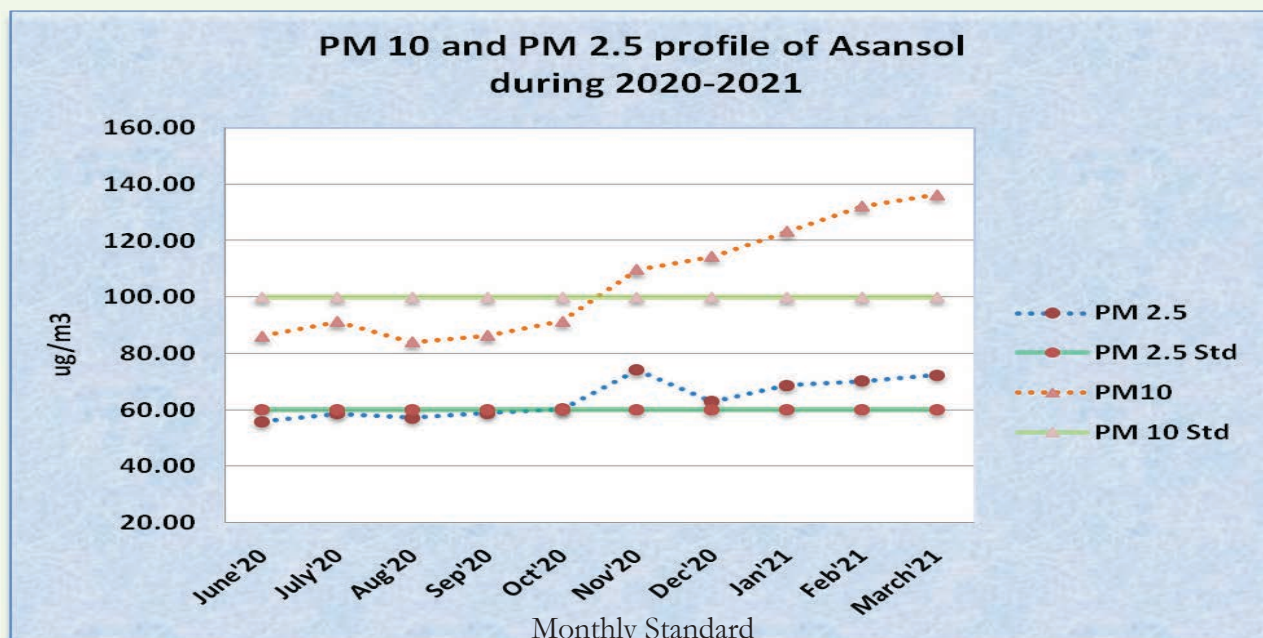
Jamuria					(f)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	87.00	--	13.98	26.29	--	--	--	--
July'20	95.19	--	13.26	28.04	--	--	--	--
Aug'20	85.59	--	11.17	26.92	--	--	--	--
Sep'20	78.90	--	10.46	25.95	--	--	--	--
Oct'20	96.02	--	12.57	29.19	--	--	--	--
Nov'20	114.74	--	13.95	32.26	--	--	--	--
Dec'20	115.01	--	12.45	28.92	--	--	--	--
Jan'21	128.08	--	13.48	31.07	--	--	--	--
Feb'21	135.20	--	13.64	31.60	--	--	--	--
March'21	145.06	--	13.74	31.97	--	--	--	--



Burnpur					(g)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	82.54	--	14.46	27.27	--	--	--	--
July'20	96.17	--	13.52	28.12	--	--	--	--
Aug'20	88.47	--	11.97	28.74	--	--	--	--
Sep'20	89.77	--	12.21	28.66	--	--	--	--
Oct'20	98.83	--	13.04	30.06	--	--	--	--
Nov'20	113.54	--	13.70	31.94	--	--	--	--
Dec'20	117.11	--	12.63	28.96	--	--	--	--
Jan'21	132.28	--	13.86	33.09	--	--	--	--
Feb'21	141.99	--	14.04	32.47	--	--	--	--
March'21	148.35	--	13.94	32.07	--	--	--	--

Asansol					(j)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	86.20	55.90	13.96	27.39	--	--	--	--
July'20	91.27	58.61	13.29	28.14	--	--	--	--
Aug'20	84.12	57.11	11.75	27.65	--	--	--	--
Sep'20	86.30	58.82	11.98	27.93	--	--	--	--
Oct'20	91.52	60.35	12.88	29.29	--	--	--	--
Nov'20	109.77	74.18	12.68	30.39	--	--	--	--
Dec'20	114.43	62.98	12.61	28.98	--	--	--	--
Jan'21	123.23	68.66	12.73	30.48	--	--	--	--
Feb'21	132.17	70.28	13.47	31.77	--	--	--	--
March'21	136.22	72.29	13.95	31.95	--	--	--	--

Figure 6A. 4(b)

**(F) Air quality of Purba Bardhaman district**

During April 2020 – March 2021, air quality of Purba Bardhaman district was monitored through single stations. Parameters measured in these stations are shown in Table 6.A.9(a)

Bardhaman Town					(h)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	66.50	--	2.00	14.19	--	--	--	--
July'20	77.21	--	2.00	13.67	--	--	--	--
Aug'20	69.23	--	2.00	12.40	--	--	--	--
Sep'20	68.84	--	2.00	14.01	--	--	--	--
Oct'20	76.82	--	2.00	15.30	--	--	--	--
Nov'20	89.42	--	2.00	17.43	--	--	--	--
Dec'20	85.35	--	2.00	15.39	--	--	--	--
Jan'21	87.33	--	2.00	15.77	--	--	--	--
Feb'21	88.64	--	2.00	16.38	--	--	--	--
March'21	90.35	--	2.00	16.47	--	--	--	--

\*SO<sub>2</sub> - LDL - 4.00 µg/m<sup>3</sup>. As per CPCB guidelines, for Calculating 24 hourly average of Various Parameters, BDL is Considered as half of the Lower Detection limit, i.e. - 2.00 µg/m<sup>3</sup>.

**(G) Air quality of Bankura district**

During April 2020 – March 2021, air quality of Bankura district was monitored through 2 stations. Parameters measured in these stations are shown in Table 6.A.10(a)- 6.A.10(b)

Barjora					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	89.23	--	14.31	27.32	--	--	--	--
July'20	96.34	--	13.95	28.97	--	--	--	--
Aug'20	88.72	--	11.75	26.74	--	--	--	--
Sep'20	86.39	--	12.36	28.17	--	--	--	--
Oct'20	102.06	--	12.97	30.41	--	--	--	--
Nov'20	117.09	--	13.75	31.19	--	--	--	--
Dec'20	119.95	--	12.69	29.80	--	--	--	--
Jan'21	133.36	--	13.52	31.79	--	--	--	--
Feb'21	141.97	--	13.73	31.95	--	--	--	--
March'21	149.41	--	14.06	32.28	--	--	--	--

Bankura Town					(b)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	67.03	--	2.00	13.73	--	--	--	--
July'20	76.68	--	2.00	14.16	--	--	--	--
Aug'20	68.17	--	2.00	12.82	--	--	--	--
Sep'20	69.86	--	2.00	14.26	--	--	--	--
Oct'20	74.62	--	2.00	14.90	--	--	--	--
Nov'20	88.38	--	2.00	18.34	--	--	--	--
Dec'20	84.68	--	2.00	15.19	--	--	--	--
Jan'21	88.40	--	2.00	16.32	--	--	--	--
Feb'21	90.49	--	2.00	16.27	--	--	--	--
March'21	92.09	--	2.00	16.55	--	--	--	--

\*SO<sub>2</sub> - LDL - 4.00 µg/m<sup>3</sup>. As per CPCB guidelines, for Calculating 24 hourly average of Various Parameters, BDL is Considered as half of the Lower Detection limit, i.e. - 2.00 µg/m<sup>3</sup>.

**(H) Air quality of Birbhum district**

During April 2020 – March 2021, air quality of Birbhum district was monitored through three (3) semi-automated (manual) station. Parameters measured in these stations are shown in Table 6.A.11(a)- 6.A.11(c).

Suri Town					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	65.62	--	2.00	14.05	--	--	--	--
July'20	74.48	--	2.00	14.00	--	--	--	--
Aug'20	65.83	--	2.00	12.54	--	--	--	--
Sep'20	69.84	--	2.00	13.39	--	--	--	--
Oct'20	73.41	--	2.00	14.93	--	--	--	--
Nov'20	85.48	--	2.00	17.17	--	--	--	--
Dec'20	83.40	--	2.00	15.19	--	--	--	--
Jan'21	87.63	--	2.00	16.02	--	--	--	--
Feb'21	88.20	--	2.00	16.20	--	--	--	--
March'21	90.78	--	2.00	16.45	--	--	--	--

Rampurhat					(b)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	66.18	--	2.00	14.02	--	--	--	--
July'20	77.17	--	2.00	13.91	--	--	--	--
Aug'20	71.02	--	2.00	13.01	--	--	--	--
Sep'20	74.15	--	2.00	14.49	--	--	--	--
Oct'20	76.08	--	2.00	15.38	--	--	--	--
Nov'20	87.73	--	2.00	18.11	--	--	--	--
Dec'20	84.86	--	2.00	15.34	--	--	--	--
Jan'21	87.56	--	2.00	16.14	--	--	--	--
Feb'21	90.00	--	2.00	16.93	--	--	--	--
March'21	92.43	--	2.00	16.76	--	--	--	--

\*SO<sub>2</sub> - LDL - 4.00 µg/m<sup>3</sup>. As per CPCB guidelines, for Calculating 24 hourly average of Various Parameters, BDL is Considers as half of the Lower Detection limit, i.e. - 2.00 µg/m<sup>3</sup>.

Bolpur Town					(c)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	62.39	--	2.00	13.51	--	--	--	--
July'20	71.02	--	2.00	13.01	--	--	--	--
Aug'20	67.16	--	2.00	12.13	--	--	--	--
Sep'20	66.15	--	2.00	13.32	--	--	--	--
Oct'20	72.28	--	2.00	14.71	--	--	--	--
Nov'20	84.43	--	2.00	16.91	--	--	--	--
Dec'20	81.44	--	2.00	15.36	--	--	--	--
Jan'21	85.85	--	2.00	15.83	--	--	--	--
Feb'21	86.69	--	2.00	15.68	--	--	--	--
March'21	88.28	--	2.00	15.71	--	--	--	--

#### (l) Air quality of Purulia district

During April 2020 – March 2021, air quality of Purulia district was monitored through one (1) semi-automated (manual) station. Parameters measured in these stations are shown in Table 6.A.12 (a)

Purulia Town					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	60.92	--	2.00	13.56	--	--	--	--
July'20	72.56	--	2.00	13.30	--	--	--	--
Aug'20	66.96	--	2.00	12.38	--	--	--	--
Sep'20	69.98	--	2.00	13.63	--	--	--	--
Oct'20	73.39	--	2.00	14.53	--	--	--	--
Nov'20	85.10	--	2.00	17.63	--	--	--	--
Dec'20	82.23	--	2.00	14.75	--	--	--	--
Jan'21	86.07	--	2.00	15.61	--	--	--	--
Feb'21	88.42	--	2.00	16.27	--	--	--	--
March'21	88.28	--	2.00	15.89	--	--	--	--

\*SO<sub>2</sub> - LDL - 4.00 µg/m<sup>3</sup>. As per CPCB guidelines, for Calculating 24 hourly average of Various Parameters, BDL is Considered as half of the Lower Detection limit, i.e. - 2.00 µg/m<sup>3</sup>.

**(J) Air quality of Purba Medinipur district**

During April 2020 – March 2021, air quality of Purba Medinipur district was monitored through 5 manual stations. Parameters measured in these stations are shown in Table 6.A.13(a) -6.A.13(e) and Figure 6A.5(a)

Bhabanipur - Purba Medinipur					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	52	-	9.9	34.7	-	-	-	-
July'20	56	-	9.7	39.9	-	-	-	-
Aug'20	58	-	9.0	37.9	-	-	-	-
Sep'20	62	-	8.3	34.3	-	-	-	-
Oct'20	66	-	8.1	34.6	-	-	-	-
Nov'20	126	-	13.8	37.1	-	-	-	-
Dec'20	121	-	11.3	40.5	-	-	-	-
Jan'21	127	-	21.3	46.4	-	-	-	-
Feb'21	129	-	21.6	47.1	-	-	-	-
March'21	130	-	20.0	46.3	-	-	-	-

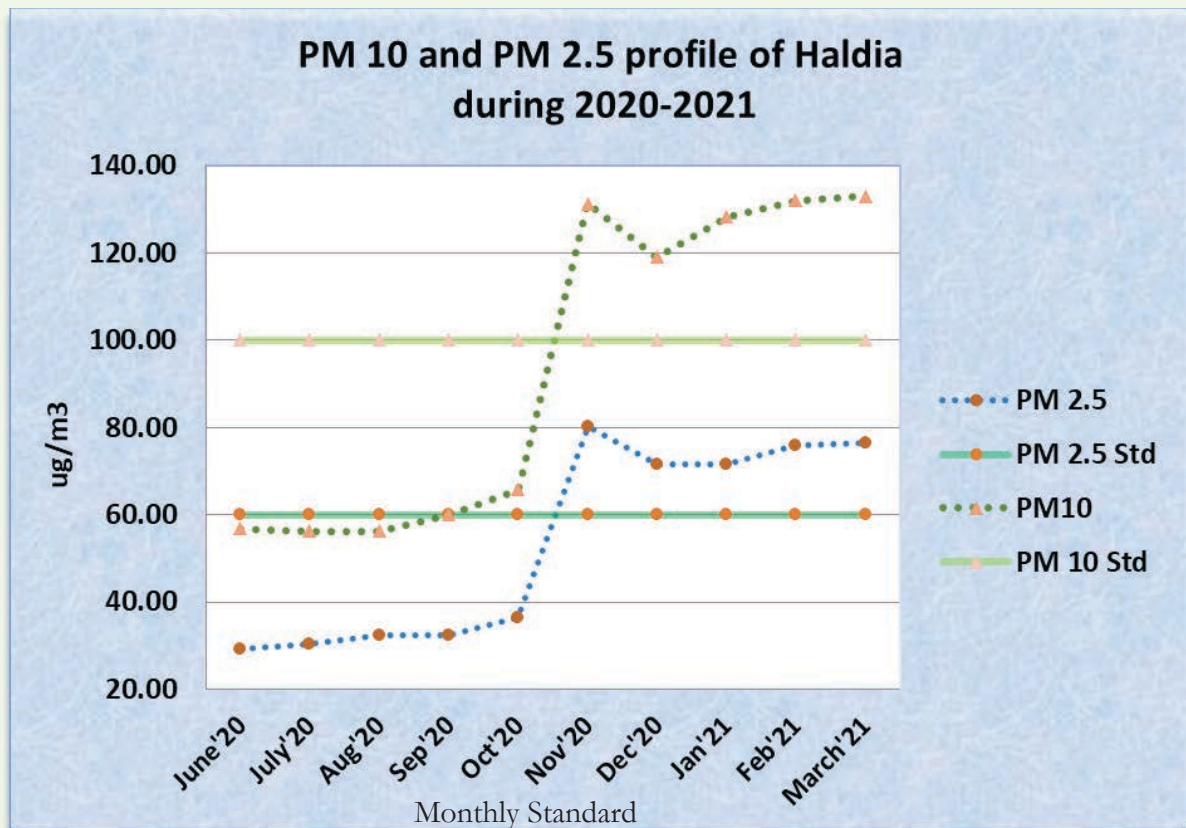
Bhunira Raichak - Purba Medinipur					(b)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	69	-	13.2	36.0	-	-	-	-
July'20	57	-	10.0	40.1	-	-	-	-
Aug'20	54	-	8.5	37.6	-	-	-	-
Sep'20	60	-	8.1	33.4	-	-	-	-
Oct'20	64	-	7.9	34.9	-	-	-	-
Nov'20	126	-	13.3	38.5	-	-	-	-
Dec'20	119	-	11.8	39.9	-	-	-	-
Jan'21	129	-	19.0	45.8	-	-	-	-
Feb'21	134	-	20.7	45.5	-	-	-	-
March'21	133	-	20.4	45.3	-	-	-	-

Supermarket - Purba Medinipur					(c)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	55	29.30	10.6	36.8	-	-	-	-
July'20	57	30.50	10.2	40.1	-	-	-	-
Aug'20	60	32.50	9.1	38.4	-	-	-	-
Sep'20	59	32.40	8.0	33.7	-	-	-	-
Oct'20	66	36.50	8.2	33.9	-	-	-	-
Nov'20	141	80.10	13.4	39.2	-	-	-	-
Dec'20	124	71.40	12.1	40.0	-	-	-	-
Jan'21	126	71.40	19.1	46.3	-	-	-	-
Feb'21	132	76.00	20.3	46.2	-	-	-	-
March'21	133	76.40	20.0	44.9	-	-	-	-

Tamluk - Purba Medinipur					(d)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	62	-	10.2	37.6	-	-	-	-
July'20	59	-	10.0	40.0	-	-	-	-
Aug'20	60	-	8.7	37.7	-	-	-	-
Sep'20	65	-	8.5	34.7	-	-	-	-
Oct'20	71	-	8.2	34.1	-	-	-	-
Nov'20	158	-	15.1	38.3	-	-	-	-
Dec'20	160	-	12.8	42.3	-	-	-	-
Jan'21	185	-	19.1	45.3	-	-	-	-
Feb'21	197	-	20.2	47.0	-	-	-	-
March'21	190	-	20.4	47.5	-	-	-	-

WBIIDC(Haldia) - Purba Medinipur					(e)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	51	-	10.2	37.1	-	-	-	-
July'20	55	-	9.9	40.1	-	-	-	-
Aug'20	53	-	8.3	36.5	-	-	-	-
Sep'20	59	-	8.0	34.1	-	-	-	-
Oct'20	67	-	8.1	33.7	-	-	-	-
Nov'20	132	-	12.8	37.3	-	-	-	-
Dec'20	112	-	11.6	40.0	-	-	-	-
Jan'21	131	-	18.9	44.3	-	-	-	-
Feb'21	133	-	20.1	46.0	-	-	-	-
March'21	136	-	19.3	45.6	-	-	-	-

Figure 6A. 5(a)





**(K) Air quality of Paschim Medinipur district**

During April 2020 – March 2021, air quality of Paschim Medinipur district was monitored through three (3) semi-automated (manual) station. Parameters measured in these stations are shown in Table 6.A.14(a) -6.A.14(c).

Medinipur Town - Paschim Medinipur					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	58	-	10.1	36.1	-	-	-	-
July'20	53	-	10.0	40.3	-	-	-	-
Aug'20	55	-	8.8	37.0	-	-	-	-
Sep'20	61	-	7.8	33.3	-	-	-	-
Oct'20	67	-	7.8	33.9	-	-	-	-
Nov'20	138	-	11.0	37.4	-	-	-	-
Dec'20	125	-	11.2	38.9	-	-	-	-
Jan'21	135	-	19.3	43.3	-	-	-	-
Feb'21	138	-	21.5	44.9	-	-	-	-
March'21	135	-	19.8	45.1	-	-	-	-

Kharagpur - Paschim Medinipur					(b)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	81	-	11.8	38.5	-	-	-	-
July'20	71	-	11.1	40.7	-	-	-	-
Aug'20	70	-	10.7	38.2	-	-	-	-
Sep'20	67	-	8.4	35.4	-	-	-	-
Oct'20	84	-	8.6	35.6	-	-	-	-
Nov'20	153	-	12.0	38.3	-	-	-	-
Dec'20	166	-	12.2	42.7	-	-	-	-
Jan'21	181	-	21.9	51.5	-	-	-	-
Feb'21	190	-	23.3	52.1	-	-	-	-
March'21	182	-	22.0	49.5	-	-	-	-

Ghatal - Paschim Medinipur					(c)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	55	-	9.9	37.5	-	-	-	-
July'20	56	-	9.8	39.9	-	-	-	-
Aug'20	54	-	8.7	36.7	-	-	-	-
Sep'20	63	-	8.1	34.9	-	-	-	-
Oct'20	69	-	8.2	34.7	-	-	-	-
Nov'20	146	-	11.5	38.8	-	-	-	-
Dec'20	138	-	12.0	40.7	-	-	-	-
Jan'21	139	-	20.5	45.8	-	-	-	-
Feb'21	141	-	21.3	46.4	-	-	-	-
March'21	139	-	19.5	45.0	-	-	-	-

#### (L) Air quality of Hooghly district

During April 2020 – March 2021, air quality of Paschim Hooghly district was monitored through 5 stations. The monitoring results are shown in Table 6.A.15(a) -6.A.15(e).

Dankuni					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	56.71	--	2.00	11.16	--	--	--	--
July'20	57.15	--	2.00	12.71	--	--	--	--
Aug'20	60.55	--	2.00	15.15	--	--	--	--
Sep'20	67.39	--	2.00	15.86	--	--	--	--
Oct'20	70.46	--	2.00	17.42	--	--	--	--
Nov'20	75.94	--	2.00	21.26	--	--	--	--
Dec'20	72.79	--	2.00	20.49	--	--	--	--
Jan'21	88.35	--	2.00	20.37	--	--	--	--
Feb'21	103.94	--	2.00	23.88	--	--	--	--
March'21	92.07	--	2.00	21.85	--	--	--	--

\*SO<sub>2</sub> - LDL - 4.00 µg/m<sup>3</sup>. As per CPCB guidelines, for Calculating 24 hourly average of Various Parameters, BDL is Considered as half of the Lower Detection limit, i.e. - 2.00 µg/m<sup>3</sup>.

Rishra					(b)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	65.13	--	2.00	14.94	--	--	--	--
July'20	63.60	--	2.00	13.80	--	--	--	--
Aug'20	64.62	--	2.00	16.09	--	--	--	--
Sep'20	68.55	--	2.00	18.79	--	--	--	--
Oct'20	68.88	--	2.00	18.90	--	--	--	--
Nov'20	83.37	--	2.00	22.51	--	--	--	--
Dec'20	78.76	--	2.00	24.49	--	--	--	--
Jan'21	92.81	--	2.00	20.76	--	--	--	--
Feb'21	98.02	--	2.00	24.28	--	--	--	--
March'21	103.44	--	4.95	27.07	--	--	--	--

Chinsurah					(c)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	55.64	--	2.00	11.96	--	--	--	--
July'20	57.92	--	2.00	13.80	--	--	--	--
Aug'20	61.27	--	2.00	14.39	--	--	--	--
Sep'20	68.96	--	2.00	20.72	--	--	--	--
Oct'20	66.90	--	2.00	19.06	--	--	--	--
Nov'20	75.65	--	2.00	20.59	--	--	--	--
Dec'20	72.80	--	2.00	19.66	--	--	--	--
Jan'21	91.03	--	2.00	19.56	--	--	--	--
Feb'21	90.78	--	2.00	20.85	--	--	--	--
March'21	94.47	--	2.00	21.40	--	--	--	--

\*SO<sub>2</sub> - LDL - 4.00 µg/m<sup>3</sup>. As per CPCB guidelines, for Calculating 24 hourly average of Various Parameters, BDL is Considered as half of the Lower Detection limit, i.e. - 2.00 µg/m<sup>3</sup>.

Tribeni					(d)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	57.91	--	2.00	11.90	--	--	--	--
July'20	58.13	--	2.00	12.85	--	--	--	--
Aug'20	60.35	--	2.00	14.73	--	--	--	--
Sep'20	65.01	--	2.00	17.10	--	--	--	--
Oct'20	66.36	--	2.00	16.88	--	--	--	--
Nov'20	78.47	--	2.00	20.60	--	--	--	--
Dec'20	76.19	--	2.00	21.80	--	--	--	--
Jan'21	89.04	--	2.00	20.33	--	--	--	--
Feb'21	100.65	--	2.00	21.29	--	--	--	--
March'21	92.70	--	2.00	21.84	--	--	--	--

Uttarpara					(e)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	62.82	--	2.00	12.48	--	--	--	--
July'20	56.25	--	2.00	13.39	--	--	--	--
Aug'20	60.61	--	2.00	15.18	--	--	--	--
Sep'20	65.05	--	2.00	15.79	--	--	--	--
Oct'20	69.75	--	2.00	19.11	--	--	--	--
Nov'20	68.83	--	2.00	19.02	--	--	--	--
Dec'20	77.84	--	2.00	21.86	--	--	--	--
Jan'21	87.32	--	2.00	19.79	--	--	--	--
Feb'21	93.44	--	2.00	19.87	--	--	--	--
March'21	90.01	--	2.00	20.49	--	--	--	--

\*SO<sub>2</sub> - LDL - 4.00 µg/m<sup>3</sup>. As per CPCB guidelines, for Calculating 24 hourly average of Various Parameters, BDL is Considered as half of the Lower Detection limit, i.e. - 2.00 µg/m<sup>3</sup>.

**(M) Air quality of Nadia district**

The Board monitored air quality at three (3) station in the Nadia district during April 2020 – March 2021 for parameters like PM<sub>10</sub>, SO<sub>2</sub> & NO<sub>2</sub>. The monitoring results are shown in in Table 6.A.16 (a) -6.A.16(c) and figure Figure 6A. 6(a)

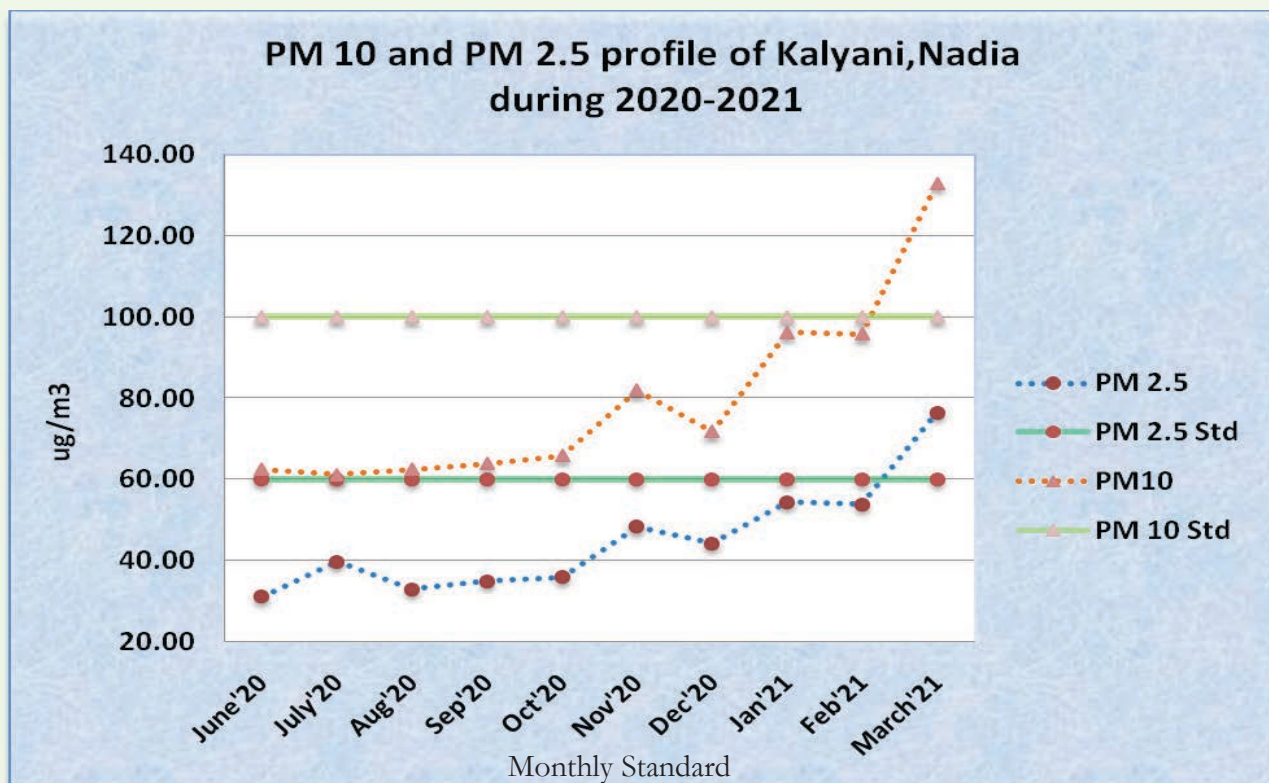
Ranaghat					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	59.77	--	2.00	13.28	--	--	--	--
July'20	60.34	--	2.00	13.55	--	--	--	--
Aug'20	59.80	--	2.00	12.91	--	--	--	--
Sep'20	66.55	--	2.00	16.74	--	--	--	--
Oct'20	68.77	--	2.00	17.34	--	--	--	--
Nov'20	76.12	--	2.00	19.81	--	--	--	--
Dec'20	71.97	--	2.00	20.14	--	--	--	--
Jan'21	94.57	--	2.00	20.14	--	--	--	--
Feb'21	95.21	--	2.00	20.64	--	--	--	--
March'21	92.28	--	2.00	21.90	--	--	--	--

Krishnanagar					(b)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	58.93	--	2.00	16.86	--	--	--	--
July'20	55.89	--	2.00	10.88	--	--	--	--
Aug'20	61.36	--	2.00	15.29	--	--	--	--
Sep'20	63.78	--	2.00	16.49	--	--	--	--
Oct'20	65.77	--	2.00	17.24	--	--	--	--
Nov'20	68.82	--	2.00	18.49	--	--	--	--
Dec'20	71.25	--	2.00	15.70	--	--	--	--
Jan'21	86.84	--	2.00	19.69	--	--	--	--
Feb'21	90.76	--	2.00	22.69	--	--	--	--
March'21	87.94	--	2.00	21.13	--	--	--	--

\*SO<sub>2</sub>- LDL - 4.00 µg/m<sup>3</sup>. As per CPCB guidelines, for Calculating 24 hourly average of Various Parameters, BDL is Considers as half of the Lower Detection limit, i.e. - 2.00 µg/m<sup>3</sup>.

Kalyani					(c)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	62.44	31.04	2.00	12.56	--	--	--	--
July'20	61.15	39.67	2.00	14.09	--	--	--	--
Aug'20	62.41	32.87	2.00	15.31	--	--	--	--
Sep'20	63.93	34.94	2.00	14.20	--	--	--	--
Oct'20	65.90	35.87	2.00	18.68	--	--	--	--
Nov'20	81.90	48.36	2.00	18.72	--	--	--	--
Dec'20	71.74	44.21	2.00	18.42	--	--	--	--
Jan'21	96.25	54.43	2.00	20.43	--	--	--	--
Feb'21	95.81	53.86	2.00	19.48	--	--	--	--
March'21	96.91	56.10	2.00	23.22	--	--	--	--

Figure 6A. 6(a)



\*SO<sub>2</sub> - LDL - 4.00 µg/m<sup>3</sup>. As per CPCB guidelines, for Calculating 24 hourly average of Various Parameters, BDL is Considered as half of the Lower Detection limit, i.e. - 2.00 µg/m<sup>3</sup>.

**(N) Air quality of Murshidabad district**

The Board initiated air quality monitoring at one (1) station at Baharampur under the Murshidabad district during April 2020 to March 2021 for parameters like PM<sub>10</sub>, SO<sub>2</sub> & NO<sub>2</sub>. The monitoring results are shown in in Table 6.A.17 (a)

Berhampore					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	--	--	--	--	--	--	--	--
May'20	--	--	--	--	--	--	--	--
June'20	54.65	--	2.00	12.87	--	--	--	--
July'20	58.67	--	2.00	12.57	--	--	--	--
Aug'20	61.08	--	2.00	15.66	--	--	--	--
Sep'20	63.96	--	2.00	12.48	--	--	--	--
Oct'20	66.35	--	2.00	16.23	--	--	--	--
Nov'20	74.82	--	2.00	20.20	--	--	--	--
Dec'20	75.39	--	2.00	20.67	--	--	--	--
Jan'21	85.90	--	2.00	19.72	--	--	--	--
Feb'21	90.18	--	2.00	18.89	--	--	--	--
March'21	94.80	--	2.00	21.94	--	--	--	--

\*SO<sub>2</sub> - LDL - 4.00 µg/m<sup>3</sup>. As per CPCB guidelines, for Calculating 24 hourly average of Various Parameters, BDL is Considers as half of the Lower Detection limit, i.e. - 2.00 µg/m<sup>3</sup>.

**(O) Air quality of Malda district**

The Board monitored air quality at one (1) station in the Maldah district during April 2020 – March 2021 for parameters like PM<sub>10</sub>, SO<sub>2</sub> & NO<sub>2</sub>. The monitoring results are shown in in Table 6.A.18 (a)

Malda - North Bengal					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	76	-	11.6	39.4	-	-	-	-
July'20	59	-	10.3	40.5	-	-	-	-
Aug'20	59	-	8.8	36.5	-	-	-	-
Sep'20	63	-	7.8	33.9	-	-	-	-
Oct'20	69	-	7.9	34.0	-	-	-	-
Nov'20	133	-	9.8	36.9	-	-	-	-
Dec'20	151	-	9.3	37.6	-	-	-	-
Jan'21	159	-	9.2	38.0	-	-	-	-
Feb'21	164	-	9.8	38.5	-	-	-	-
March'21	160	-	9.7	38.2	-	-	-	-

**(P) Air quality of Dakshin Dinajpur district**

The Board monitored air quality at one (1) station in the Dakshin Dinajpur district for parameters like PM<sub>10</sub>, SO<sub>2</sub> & NO<sub>2</sub>. The monitoring results are shown in in Table 6.A.19 (a)

Balurghat - South Dinajpur					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	66	-	10.8	38.2	-	-	-	-
July'20	56	-	9.9	40.0	-	-	-	-
Aug'20	49	-	8.2	35.3	-	-	-	-
Sep'20	60	-	7.9	34.2	-	-	-	-
Oct'20	64	-	7.9	33.2	-	-	-	-
Nov'20	130	-	8.9	36.3	-	-	-	-
Dec'20	149	-	8.7	36.1	-	-	-	-
Jan'21	154	-	9.1	36.7	-	-	-	-
Feb'21	151	-	9.6	37.0	-	-	-	-
March'21	150	-	9.0	36.6	-	-	-	-

**(Q) Air quality of Uttar Dinajpur district**

The Board monitored air quality monitoring at one (1) station in the Uttar Dinajpur district for parameters like PM<sub>10</sub>, SO<sub>2</sub> & NO<sub>2</sub>. The monitoring results are shown in Table 6.A.20 (a)

Raigunj - Uttar Dinajpur					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	56	-	9.3	35.6	-	-	-	-
July'20	55	-	9.8	40.0	-	-	-	-
Aug'20	54	-	8.4	36.0	-	-	-	-
Sep'20	57	-	7.6	32.9	-	-	-	-
Oct'20	64	-	8.0	33.2	-	-	-	-
Nov'20	127	-	8.8	36.9	-	-	-	-
Dec'20	116	-	8.1	35.8	-	-	-	-
Jan'21	143	-	8.9	36.5	-	-	-	-
Feb'21	147	-	9.4	36.9	-	-	-	-
March'21	148	-	9.0	36.9	-	-	-	-



**(R) Air quality of Cooch bihar district**

The Board monitored air quality monitoring at two (2) locations in the Coochbihar district for parameters like PM<sub>10</sub>, SO<sub>2</sub> & NO<sub>2</sub>. The monitoring results are shown in Table 6.A.21 (a)- 6.A.20 (b)

Coochbehar - North Bengal					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	60	-	9.6	32.8	-	-	-	-
July'20	54	-	10.0	40.2	-	-	-	-
Aug'20	50	-	8.3	35.2	-	-	-	-
Sep'20	60	-	7.7	33.4	-	-	-	-
Oct'20	71	-	8.0	33.7	-	-	-	-
Nov'20	119	-	8.9	36.3	-	-	-	-
Dec'20	127	-	9.1	37.8	-	-	-	-
Jan'21	132	-	9.2	38.3	-	-	-	-
Feb'21	138	-	9.7	38.8	-	-	-	-
March'21	136	-	9.2	37.9	-	-	-	-

Uttarbanga - North Bengal					(b)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	63	-	10.4	35.5	-	-	-	-
July'20	57	-	10.0	40.3	-	-	-	-
Aug'20	54	-	7.9	35.8	-	-	-	-
Sep'20	56	-	7.4	31.8	-	-	-	-
Oct'20	64	-	8.0	34.2	-	-	-	-
Nov'20	122	-	9.3	37.1	-	-	-	-
Dec'20	123	-	8.4	36.9	-	-	-	-
Jan'21	135	-	9.3	38.0	-	-	-	-
Feb'21	140	-	9.6	38.6	-	-	-	-
March'21	138	-	9.4	37.8	-	-	-	-

**(S) Air quality of Jalpaiguri district**

The Board monitored air quality at one (1) station in the Jalpaiguri district for parameters like PM<sub>10</sub>, SO<sub>2</sub> & NO<sub>2</sub>. The monitoring results are shown in in Table 6.A.22 (a)

Jalpaiguri - North Bengal					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	58	-	9.7	35.0	-	-	-	-
July'20	53	-	10.1	40.2	-	-	-	-
Aug'20	55	-	8.2	36.4	-	-	-	-
Sep'20	55	-	7.3	32.6	-	-	-	-
Oct'20	66	-	8.0	34.9	-	-	-	-
Nov'20	104	-	8.4	35.9	-	-	-	-
Dec'20	116	-	8.2	37.0	-	-	-	-
Jan'21	129	-	8.6	36.7	-	-	-	-
Feb'21	131	-	9.5	37.4	-	-	-	-
March'21	132	-	9.1	37.3	-	-	-	-

**(T) Air quality of Darjeeling district**

The Board monitored air quality at two (2) station at Siliguri in the Darjeeling district for parameters like PM<sub>10</sub>, SO<sub>2</sub> & NO<sub>2</sub>. The monitoring results are shown in Table 6.A.23 (a) -6.A.23 (b)

Darjeeling - North Bengal					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	49	21.00	8.9	34.9	-	-	-	-
July'20	51	27.00	9.8	40.0	-	-	-	-
Aug'20	46	23.00	7.6	33.7	-	-	-	-
Sep'20	50	26.00	7.6	32.4	-	-	-	-
Oct'20	60	33.00	7.7	33.5	-	-	-	-
Nov'20	66	35.00	8.0	34.1	-	-	-	-
Dec'20	68	38.00	7.0	34.0	-	-	-	-
Jan'21	73	41.00	7.9	34.4	-	-	-	-
Feb'21	78	44.00	8.2	35.4	-	-	-	-
Mrch'21	84	48.00	8.7	35.0	-	-	-	-

Siliguri - North Bengal					(b)										
Month	Concentration				Concentration in PM <sub>10</sub>										
	PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	B(a)P (ng/ $\text{m}^3$ )	As (ng/ $\text{m}^3$ )	Pb ( $\mu\text{g}/\text{m}^3$ )	Ni (ng/ $\text{m}^3$ )							
Apr'20	-	-	-	-	-	-	-	-							
May'20	-	-	-	-	-	-	-	-							
June'20	53	25.00	9.1	38.2	-	-	-	-							
July'20	54	28.00	10.0	40.4	-	-	-	-							
Aug'20	55	29.00	8.2	36.1	-	-	-	-							
Sep'20	56	30.00	7.7	33.2	-	-	-	-							
Oct'20	66	37.00	8.0	33.4	-	-	-	-							
Nov'20	128	70.00	9.5	37.4	-	-	-	-							
Dec'20	148	84.00	8.5	37.5	-	-	-	-							
Jan'21	161	93.00	9.3	38.1	-	-	-	-							
Feb'21	165	95.00	10.3	39.5	-	- </tr <tr> <td>March'21</td> <td>163</td> <td>94.00</td> <td>9.7</td> <td>38.9</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr>	March'21	163	94.00	9.7	38.9	-	-	-	-
March'21	163	94.00	9.7	38.9	-	-	-	-							

Figure 6A. 7(a)

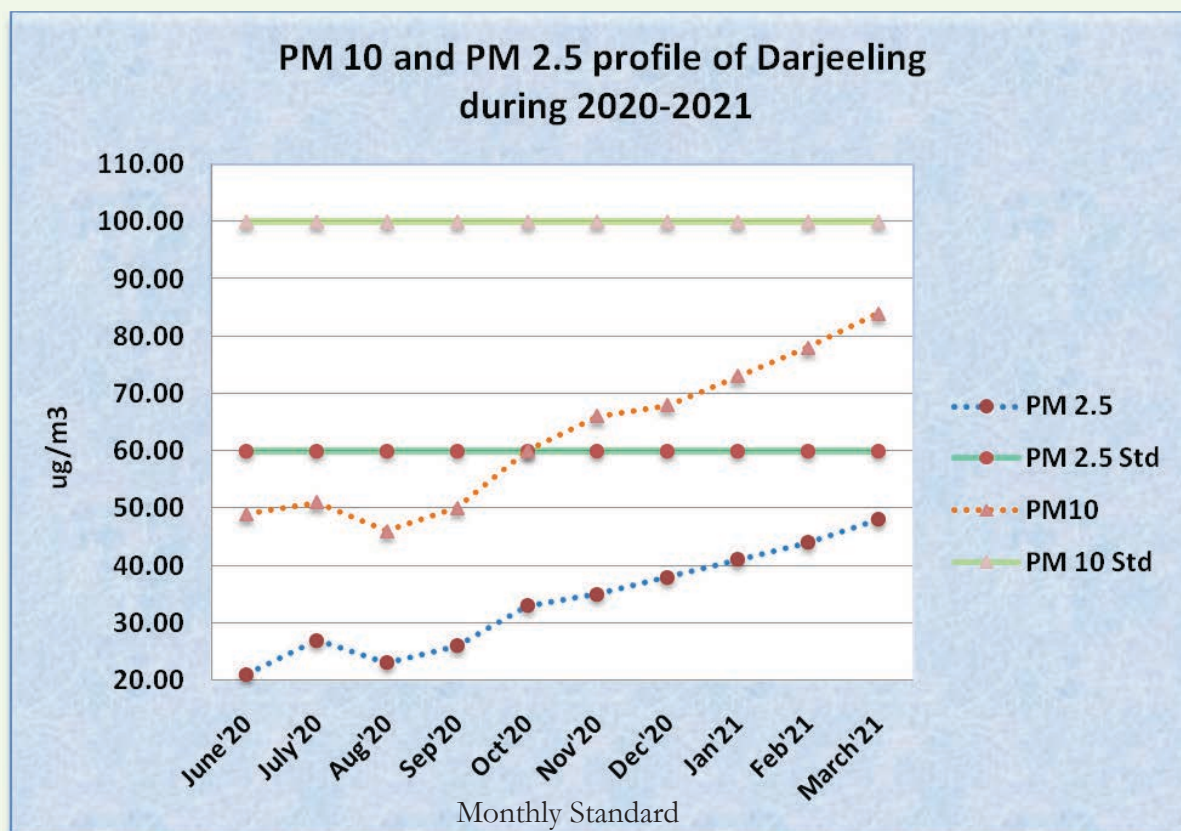
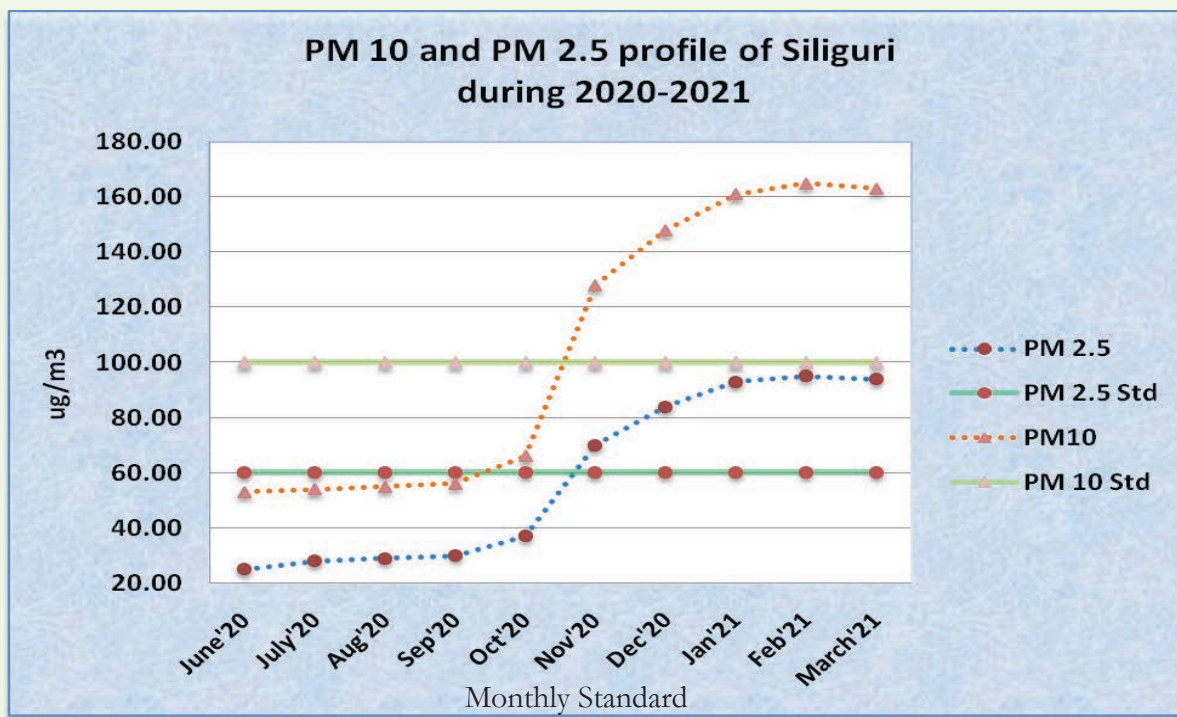


Figure 6A. 7(b)

**(U) Air quality of Alipuduar district**

The Board monitored air quality at three (3) stations in the Alipurduar district for parameters like PM<sub>10</sub>, SO<sub>2</sub> & NO<sub>2</sub>. The monitoring results are shown in Table 6.A.24 (a)- 6.A.24 (c)

Alipur Duar - North Bengal					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	55	-	9.6	31.7	-	-	-	-
July'20	53	-	9.8	40.2	-	-	-	-
Aug'20	52	-	8.5	36.7	-	-	-	-
Sep'20	59	-	7.6	32.8	-	-	-	-
Oct'20	67	-	7.9	34.4	-	-	-	-
Nov'20	117	-	9.1	37.1	-	-	-	-
Dec'20	121	-	8.7	36.2	-	-	-	-
Jan'21	124	-	8.8	36.7	-	-	-	-
Feb'21	135	-	9.5	38.9	-	-	-	-
March'21	134	-	9.2	38.3	-	-	-	-

Birpara - North Bengal					(b)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	54	-	9.8	33.1	-	-	-	-
July'20	53	-	10.1	40.1	-	-	-	-
Aug'20	53	-	8.5	36.5	-	-	-	-
Sep'20	59	-	7.7	34.1	-	-	-	-
Oct'20	65	-	8.0	33.3	-	-	-	-
Nov'20	114	-	9.1	36.1	-	-	-	-
Dec'20	120	-	8.7	36.1	-	-	-	-
Jan'21	149	-	8.8	37.4	-	-	-	-
Feb'21	143	-	9.5	38.8	-	-	-	-
March'21	143	-	9.3	38.0	-	-	-	-

Jaigaon - North Bengal					(c)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a)P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	57	-	9.5	33.9	-	-	-	-
July'20	52	-	9.9	40.2	-	-	-	-
Aug'20	50	-	8.2	36.0	-	-	-	-
Sep'20	59	-	7.6	33.6	-	-	-	-
Oct'20	63	-	7.8	33.7	-	-	-	-
Nov'20	116	-	9.4	35.6	-	-	-	-
Dec'20	117	-	9.0	38.4	-	-	-	-
Jan'21	126	-	8.8	38.6	-	-	-	-
Feb'21	131	-	9.6	38.9	-	-	-	-
March'21	132	-	9.3	38.2	-	-	-	-

**(V) Air quality of Kalingpong district**

The Board monitored air quality at one (1) station in the Kalingpong district for parameters like PM<sub>10</sub>, SO<sub>2</sub> & NO<sub>2</sub>. The monitoring results are shown in in Table 6.A.24 (a)

Kalimpong - North Bengal					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	44	-	8.6	33.7	-	-	-	-
July'20	44	-	9.1	39.3	-	-	-	-
Aug'20	50	-	8.1	34.8	-	-	-	-
Sep'20	51	-	7.5	32.2	-	-	-	-
Oct'20	56	-	7.6	32.8	-	-	-	-
Nov'20	64	-	7.8	34.8	-	-	-	-
Dec'20	82	-	7.1	34.8	-	-	-	-
Jan'21	79	-	7.9	34.9	-	-	-	-
Feb'21	82	-	8.4	35.4	-	-	-	-
March'21	83	-	8.0	35.2	-	-	-	-

**(W) Air quality of Jhargram district**

The Board monitored air quality at one (1) station at Jhargram Raj College in the **Jhargram** district for parameters like PM<sub>10</sub>, SO<sub>2</sub> & NO<sub>2</sub>. The monitoring results are shown in in Table 6.A.25 (a)

Jhargram					(a)			
Month	Concentration				Concentration in PM <sub>10</sub>			
	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )	SO <sub>2</sub> (µg/ m <sup>3</sup> )	NO <sub>2</sub> (µg/ m <sup>3</sup> )	B(a) P (ng/ m <sup>3</sup> )	As (ng/ m <sup>3</sup> )	Pb (µg/ m <sup>3</sup> )	Ni (ng/ m <sup>3</sup> )
Apr'20	-	-	-	-	-	-	-	-
May'20	-	-	-	-	-	-	-	-
June'20	53	-	10.0	36.8	-	-	-	-
July'20	50	-	9.9	40.0	-	-	-	-
Aug'20	53	-	8.4	37.0	-	-	-	-
Sep'20	56	-	7.6	32.6	-	-	-	-
Oct'20	62	-	7.7	33.3	-	-	-	-
Nov'20	127	-	11.3	37.5	-	-	-	-
Dec'20	121	-	10.7	39.5	-	-	-	-
Jan'21	127	-	20.1	52.0	-	-	-	-
Feb'21	132	-	20.7	51.2	-	-	-	-
March'21	132	-	18.8	48.2	-	-	-	-

**Conclusion:**

- Due to the unprecedented time of COVID-19 pandemic, most of the manual stations were inoperative during Apr- May 2021 and only few stations upto June 2021.
- Only  $PM_{10}$ ,  $PM_{2.5}$  &  $NO_2$  during winter months were found to be higher value in some districts as described in the National Daily Standard (NAAQS). However, over a period of 8 months in a year the air quality parameters remain within the national Standard. Other parameters remain within permissible limit.
- WBPCB measures all the twelve air quality parameters in number of stations in the State.
- Air quality data is available in WBPCB website for citizen.

## 6.B Water Quality Monitoring

### 6.B.1 Introduction

Major river systems were historically selected for settlement and establishing communities as rivers were important for bringing energy and trade to the community. With gradual development of towns and cities, rivers were often channelized and impounded providing the power and means to drive industry and commerce in such areas. Due to abrupt growth of population beside the river banks resulting the open defecation, public nuisances caused health hazards. Excepting this, the sewer construction began in major cities to eliminate these problems, conveying domestic waste directly into river water bodies.

Downstream of the rivers may also receive discharges from industries and also storm water and agricultural runoff during the monsoon season. Also, many drains carry domestic and industrial wastes from industries, city, and towns on the banks contribute significantly to river water pollution. Considering the use of rivers and other water bodies for various purposes including recipient of wastewater discharges from different sources, it is very important that the water quality of these surface water bodies is monitored periodically to assess the deterioration or improvement of the water bodies.

Earlier, under the National Water Monitoring Programme (NWMP), the Board was monitoring water quality of sixteen (16) rivers in the state and additional nine (9) more rivers have been brought into monitoring purview of from April 2019. From January 2021, one (01) Marine Water Quality monitoring station at Digha has also been introduced. Under the NWMP, the Board monitors surface and ground water quality from 138 nos. monitoring stations throughout the West Bengal, of which 70 stations are surface water monitoring stations (54 River stations, 13 Ponds/Lakes stations, 2 Canal stations and 1 marine water) and 68 Ground water stations.

The river water samples are collected every month from the stations under NWMP (samples are collected fortnightly from stations on River Ganga) and the Ground water samples are being collected twice in a year for physico-chemical parameters like pH, Total Suspended solids, Dissolved Oxygen, Biochemical Oxygen Demand, Chemical Oxygen Demand, Ammonia, Nitrate, Total Kjeldahal Nitrogen and bacteriological parameters like Total Coliform, Fecal Coliform etc. The Board has started monitoring of Faecal Streptococci, a prominent marker for Fecal contamination of water at stations on River Ganga fortnightly and it is being measured on all locations of other rivers monthly as per guideline of NMCG and CPCB. Heavy metals and Pesticides are measured once in a year (Month of April) at all stations for surface and ground water, however, they are also monitored twice in a year (Month of April & October) for stations on the River Ganga and selected ground water locations on both side of River Ganga by the State Board as per monitoring protocol of Central Pollution Control Board. All samples are analysed at six well equipped Board's laboratories (Central Laboratory, Kakinarua Regional Laboratory, Hooghly Regional Laboratory, Durgapur Regional Laboratory, Haldia Regional Laboratory and Siliguri Regional Laboratory).



**Table- 6.B.1: Water Quality Monitoring stations on Rivers, Lakes, Canals and Wells in West Bengal**

Sl. No.	Station code	Station Type	Name of monitoring station	Monitoring Frequency
1.	10159	River	Ganga at Khagra	Fortnightly
2.	10160	River	Ganga at Gorabazar	Fortnightly
3.	1080	River	Ganga at Baharampur	Fortnightly
4.	2511	River	Ganga at Nabadwip	Fortnightly
5.	2506	River	Ganga at Tribeni	Fortnightly
6.	1054	River	Ganga at Palta	Fortnightly
7.	1472	River	Ganga at Sreerampore	Fortnightly
8.	10161	River	Ganga at Palta Shitalatala	Fortnightly
9.	1053	River	Ganga at Dakshineswar	Fortnightly
10.	1471	River	Ganga at Howrah Shivpur	Fortnightly
11.	1470	River	Ganga at Garden Reach	Fortnightly
12.	1052	River	Ganga at Uluberia	Fortnightly
13.	1335	River	Ganga at Pathikali	Fortnightly
14.	1469	River	Ganga at Diamond Harbour	Fortnightly
15.	1331	River	Damodar at Dishergarh Village	Monthly
16.	1332	River	Damodar at Downstream of IISCO after 3 <sup>rd</sup> outfall at Dhenna Village	Monthly
17.	1333	River	Damodar at Narainpur after confluence of Nunia Nallah	Monthly
18.	1334	River	Damodar near Majher Mana Village after confluence of Tamla Nullah	Monthly
19.	10108	River	Damodar at Andal Downstream	Monthly
20.	10107	River	Damodar at Andal Upstream	Monthly
21.	10109	River	Damodar at Asansol Upstream	Monthly
22.	10109	River	Damodar at Durgapur Upstream	Monthly
23.	10109	River	Damodar at Raniganj Downstream	Monthly
24.	2527	River	Damodar at Water intake point for Burdwan town	Monthly
25.	1336	River	Barakar at Asansol Water intake point	Monthly
26.	1337	River	Rupnarayan before confluence to river Ganga near Geonkhali	Monthly
27.	2509	River	Rupnarayan at Kolaghat, near Kolaghat rail bridge No. 3	Monthly
28.	1764	River	Churni Downstream of of Santipur Town	Monthly
29.	2518	River	Churni, Majhadia	Monthly
30.	2507	River	Kansi at Midnapore, Near new Hanuman Mandir, Gandhi Ghat	Monthly
31.	2508	River	Shilabati at Ghatal	Monthly
32.	2514	River	Jalangi downstream of Krishnanagar	Monthly
33.	2531	River	Dwarka at Sadhak Bamdeb Ghat, Tarapith	Monthly

Sl. No.	Station code	Station Type	Name of monitoring station	Monitoring Frequency
34.	2532	River	Dwarka at Satighat, Tarapith	Monthly
35.	2549	River	Vidyadhari at Haroa Bridge	Monthly
36.	2550	River	Vidyadhari at Malancha burning ghat	Monthly
37.	2541	River	Dwarakeshwar at Water intake point for Bankura town	Monthly
38.	2534	River	Mayurakshi at Water intake point for Suri town	Monthly
39.	2517	River	Mathabhanga at Gobindapur	Monthly
40.	1946	River	Mahananda at Siliguri	Monthly
41.	2525	River	Mahananda at Ramghat	Monthly
42.	4723	River	Teesta at Jalpesh	Monthly
43.	1947	River	Teesta at Siliguri	Monthly
44.	4722	River	Balason at Khaprail More	Monthly
45.	2524	River	Kaljani at Alipurduar Municipality Discharge Point	Monthly
46.	4717	River	Jaldhaka at Dhupguri	Monthly
47.	4718	River	Siltorsa at Hasimara	Monthly
48.	4719	River	Torsa at Ghughumari	Monthly
49.	4724	River	Torsa at Hasimara	Monthly
50.	4727	River	Mechi at Nehaljote	Monthly
51.	4728	River	Raidak at Alipurduar	Monthly
52.	2523	River	Karola at Jalpaiguri, Near Min Bhawan	Monthly
53.	4710	River	Haldi at Norghat	Monthly
54.	4711	River	Rsulpur at Rasulpurghat	Monthly
55.	2513	Canal	Kharda Canal near Jayshree Chemical Industry	Monthly
56.	2512	Canal	Noai Canal near Ganganagar Motibaradge	Monthly
57.	1765	Lake	Rabindrasarovar National Lake, Kolkata	Monthly
58.	2503	Lake	Dudhpukur at Tarakeswar, Hatishala Ghat	Monthly
59.	2504	Lake	Dudhpukur at Tarakeswar, Main Ghat	Monthly
60.	2505	Lake	Dudhpukur at Tarakeswar, Hanuman Ghat	Monthly
61.	2519	Lake	Kochbihar Lake (Sagar Dighi), Kochbihar	Monthly
62.	2520	Lake	Mirik Lake at Darjeeling	Monthly
63.	2521	Lake	Delo Water Reservoir at Kalimpong	Monthly
64.	2522	Lake	Sinchal Lake at Darjeeling	Monthly
65.	2544	Lake	Saheb Bandh at Purulia	Monthly
66.	4720	Lake	Rasikbheel at Kochbihar	Monthly
67.	4725	Lake	Water Reservoir St. Helens School, Darjeeling	Monthly
68.	4729	Lake	Jorepokhari Lake at Sukhiapokhari	Monthly
69.	2539	Lake	Belboni Lake Near Barjora	Monthly
70.	5028	Marine	Digha, Purba Midnapore	Monthly
71.	1773	Groundwater	Tangra, Kolkata	Twice a year
72.	1774	Groundwater	Topsia, Kolkata	Twice a year

Sl. No.	Station code	Station Type	Name of monitoring station	Monitoring Frequency
73.	1775	Groundwater	Dhapa, Kolkata	Twice a year
74.	1776	Groundwater	Garia, Kolkata	Twice a year
75.	1777	Groundwater	Behala, Kolkata	Twice a year
76.	1932	Groundwater	Central Kolkata	Twice a year
77.	1931	Groundwater	Cossipore, Kolkata	Twice a year
78.	4732	Groundwater	Ananda Mohan Commerce College	Twice a year
79.	1778	Groundwater	Domjur, Howrah	Twice a year
80.	1933	Groundwater	Near Galvanization Unit, Howrah	Twice a year
81.	1934	Groundwater	Central Howrah Residential Area	Twice a year
82.	2546	Groundwater	Uluberia College at Howrah	Twice a year
83.	1935	Groundwater	Inside Kolkata Leather Complex	Twice a year
84.	1936	Groundwater	Residential Area – Sonarpur	Twice a year
85.	2547	Groundwater	Amtola on Diamond Harbour Road, 24 Parganas (s)	Twice a year
86.	4737	Groundwater	Shyampur Budge Budge	Twice a year
87.	1937	Groundwater	Rajarhat – New Township	Twice a year
88.	2548	Groundwater	HIDCO Office Rajarhat	Twice a year
89.	1938	Groundwater	Basirhat Municipality, 24 Parganas (North)	Twice a year
90.	1772	Groundwater	Barasat Municipality North 24 Paraganas	Twice a year
91.	1939	Groundwater	Barrackpore Municipality, 24 Parganas (North)	Twice a year
92.	4706	Groundwater	Khardah	Twice a year
93.	4707	Groundwater	Naihati	Twice a year
94.	1813	Groundwater	Rishra, Hooghly	Twice a year
95.	1940	Groundwater	Near The phosphate Company – Rishra	Twice a year
96.	1941	Groundwater	Near Fly ash Dumping site – Kuntighat, Bandel	Twice a year
97.	4709	Groundwater	Chinsurah	Twice a year
98.	1779	Groundwater	Dankuni (Near Coal Complex), Hooghly	Twice a year
99.	1771	Groundwater	Kalyani Industrial area, Nadia	Twice a year
100.	2515	Groundwater	SDO Office Ranaghat	Twice a year
101.	2516	Groundwater	SDO Office Krishnanagar	Twice a year
102.	1766	Groundwater	Mine pit water Asansol, West Bengal	Twice a year
103.	1767	Groundwater	Durgapur Town, Near IISCO, Burdwan	Twice a year
104.	1768	Groundwater	Durgapur town, Burdwan	Twice a year
105.	2528	Groundwater	Inside Burdwan University	Twice a year
106.	4714	Groundwater	Angadpur, Durgapur	Twice a year
107.	4715	Groundwater	Muchipara, Durgapur	Twice a year
108.	2529	Groundwater	Near Burdwan station	Twice a year
109.	2530	Groundwater	Hot spring at Bakreswar	Twice a year
110.	2533	Groundwater	Suri Town Near bus stand	Twice a year
111.	2535	Groundwater	Visva Bharati	Twice a year
112.	2536	Groundwater	Nalhati Railway Station of Birbhum	Twice a year

Sl. No.	Station code	Station Type	Name of monitoring station	Monitoring Frequency
113.	2537	Groundwater	Bolpur near Railway Station	Twice a year
114.	2538	Groundwater	Moregram Crossing	Twice a year
115.	2540	Groundwater	Satighat at Bankura town	Twice a year
116.	2542	Groundwater	Dwarika at Bishnupur Town	Twice a year
117.	2543	Groundwater	SDO office at Bishnupur Town	Twice a year
118.	2545	Groundwater	Purulia RK Mission	Twice a year
119.	4716	Groundwater	Hura Lalpur, Purulia	Twice a year
120.	1769	Groundwater	Inside Hindustan Liver Factory, Haldia	Twice a year
121.	1770	Groundwater	Near IOC Refinery Haldia	Twice a year
122.	1942	Groundwater	Near Exide Industries – Haldia	Twice a year
123.	2510	Groundwater	Geokhali Bunglow Midnapur East	Twice a year
124.	4712	Groundwater	Bore-well inside M/s United Phosphorous Limited	Twice a year
125.	4713	Groundwater	Tube-well beside Green Belt Canal Point No. 8	Twice a year
126.	4734	Groundwater	Tube well inside Mahishadal Rajbari	Twice a year
127.	4735	Groundwater	Tube well inside Mecheda Bus Stand	Twice a year
128.	1943	Groundwater	Inside Tata Metaliks, Kharagpur	Twice a year
129.	1944	Groundwater	Kharagpur Industrial area	Twice a year
130.	4736	Groundwater	Tube Well at Old Digha	Twice a year
131.	1945	Groundwater	English Bazar – Maldah	Twice a year
132.	4708	Groundwater	Berhampore	Twice a year
133.	4721	Groundwater	Matigara Bazaar	Twice a year
134.	4726	Groundwater	Mirik dugwell	Twice a year
135.	4730	Groundwater	Harishpal more	Twice a year
136.	2526	Groundwater	Fulbari Barrage	Twice a year
137.	4731	Groundwater	Groundwater at Uttar Banga Krishi Vishwavidyalaya	Twice a year
138.	4733	Groundwater	Groundwater at Sukna forest range	Twice a year

The Board monitors surface water quality for River, Lake, Canal and ground water quality for Wells for physico-chemical parameters like pH, Total Suspended solids, Dissolved Oxygen, Biochemical Oxygen Demand, Chemical Oxygen Demand, Ammonia, Nitrate, Total Kjeldahl Nitrogen and bacteriological parameters like Total Coliform, Faecal Coliform etc. The Board has started monitoring on stations on River Ganga fortnightly and Faecal Streptococci, a prominent marker for Faecal contamination of water is being measured on all locations for Ganga river water as per guideline of NMCG. Heavy metals and Pesticides are measured once in a year (Month of April) at all stations for surface and ground water, however, they are also monitored twice in a year (Month of April & October) for stations on the River Ganga and selected ground water locations on both side of River Ganga by the State Board as per monitoring protocol of Central Pollution Control Board. All data are made available at <https://www.wbpcb.gov.in>.

## 6.B. 2 Water Quality of River Ganga

pH												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Ganga at Baharampore	8.5	8.3	7.9	8.0	7.9	7.9	8.2	8.0	8.3	8.1	8.2	8.1
Ganga at Dakshineswar	7.8	7.9	7.8	7.4	7.7	7.4	7.1	7.7	7.5	7.9	7.5	7.8
Ganga at Diamond Harbour	7.8	7.7	7.4	7.1	7.3	7.4	7.3	7.4	7.4	7.7	7.1	7.4
Ganga at Durgachak near Patikhali	6.8	8.5	8.0	8.0	7.5	7.4	6.1	7.7	7.7	6.6	7.5	7.5
Ganga at Garden Reach	7.7	7.8	7.5	7.2	7.3	7.4	7.1	7.1	8.0	7.9	7.5	7.3
Ganga at Gorabazar	8.5	8.3	8.0	8.1	7.9	8.1	8.0	8.0	8.3	8.3	8.2	8.1
Ganga at Howrah-Shibpur	7.1	7.2	7.3	7.2	7.3	7.3	7.2	7.7	8.0	8.0	7.9	7.7
Ganga at Khagra	8.5	8.4	7.9	8.1	8.2	8.0	8.1	8.1	8.2	8.3	8.2	7.8
Ganga at Nabadwip	8.5	8.2	8.0	7.9	8.0	7.9	7.9	8.2	8.0	8.2	8.1	8.1
Ganga at Palta Shitalatala	8.5	7.9	8.2	7.9	7.8	7.9	7.9	7.9	8.0	8.4	8.1	8.0
Ganga at Palta	8.4	8.0	8.1	8.1	8.1	8.0	8.2	8.0	8.1	8.3	8.1	7.9
Ganga at Serampore	7.9	8.1	8.0	8.2	7.9	8.0	8.1	7.9	8.1	8.3	8.1	8.2
Ganga at Tribeni	8.2	8.6	7.9	8.0	7.9	7.9	7.9	7.9	8.1	8.3	8.1	8.0
Ganga at Uluberia	7.0	7.4	7.9	7.0	7.5	7.6	7.3	7.6	7.8	7.8	7.6	7.4
Primary Water Quality Criteria for Bathing Waters	Between 6.5 & 8.5											

BOD (mg/l)												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Ganga at Baharampore	3.7	1.0	1.2	2.0	1.1	2.0	3.2	1.6	3.2	3.3	3.2	2.6
Ganga at Dakshineswar	4.0	4.4	2.9	2.5	3.3	3.4	3.0	4.5	4.1	4.1	2.1	3.3
Ganga at Diamond Harbour	2.7	3.2	1.5	1.2	1.2	2.4	3.7	4.2	3.0	2.0	2.0	2.9
Ganga at Durgachak near Patikhali	3.3	1.8	1.6	1.7	0.6	1.0	1.0	2.4	1.0	1.4	1.1	0.8
Ganga at Garden Reach	4.0	3.1	2.2	1.1	2.6	2.3	2.6	4.2	3.1	2.7	2.6	3.0
Ganga at Gorabazar	4.0	1.1	1.3	1.9	1.2	2.0	2.2	2.6	3.8	3.1	3.3	1.9
Ganga at Howrah-Shibpur	1.3	3.6	2.1	1.2	2.6	2.8	2.8	3.6	2.4	3.5	2.8	3.1
Ganga at Khagra	5.5	1.2	1.5	1.6	1.7	2.2	3.7	1.4	3.4	2.7	3.5	3.1
Ganga at Nabadwip	2.8	1.4	2.8	4.2	2.0	2.8	2.6	2.5	2.2	2.3	2.5	2.7
Ganga at Palta Shitalatala	3.9	3.5	3.5	1.5	2.5	2.3	3.7	3.1	3.4	3.9	2.7	3.0
Ganga at Palta	3.6	2.9	2.1	1.9	2.0	2.4	3.7	2.5	2.0	3.7	2.5	1.9
Ganga at Serampore	2.8	3.9	2.8	1.5	2.0	2.0	3.6	2.6	1.3	1.9	4.1	1.8
Ganga at Tribeni	3.0	2.7	1.5	2.7	1.6	3.8	1.5	4.4	3.8	3.5	2.6	3.2
Ganga at Uluberia	1.1	2.2	2.1	1.8	1.6	1.4	3.1	3.9	2.3	3.4	3.2	3.4
Primary Water Quality Criteria for Bathing Waters	3.0 mg/l or less											

DO (mg/l)												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Ganga at Baharampore	6.8	6.3	7.0	5.5	5.5	6.0	6.5	8.1	9.4	9.8	8.4	7.5
Ganga at Dakshineswar	5.8	6.6	4.9	4.5	5.6	5.4	5.1	6.8	7.4	7.7	7.7	5.5
Ganga at Diamond Harbour	6.1	7.1	6.3	6.2	5.2	6.4	6.8	7.4	6.6	6.7	6.0	5.4
Ganga at Durgachak near Patikhali	4.6	7.5	7.3	7.0	5.6	6.1	5.1	8.6	8.1	6.0	5.5	5.7
Ganga at Garden Reach	5.0	6.9	5.0	4.2	5.0	4.7	5.2	6.9	7.3	7.4	7.8	5.6
Ganga at Gorabazar	7.6	6.1	7.5	5.0	5.2	5.5	6.4	8	9.5	9.7	8.6	6.3
Ganga at Howrah-Shibpur	3.9	6.8	5.2	4.3	4.6	4.6	5.0	7.3	6.7	7.5	7.8	5.6
Ganga at Khagra	9.6	6.4	7.4	5.0	5.7	5.8	6.3	8.4	9.3	9.7	8.5	7.7
Ganga at Nabadwip	7.7	5.6	6.4	5.2	5.6	5.4	6.5	7.5	8.5	9.1	8.7	7.4
Ganga at Palta Shitalatala	8.5	5.8	5.7	4.5	4.6	4.7	4.7	6.8	7.5	9.9	8.7	6.0
Ganga at Palta	7.9	5.3	4.9	4.5	4.4	4.9	5.7	7.1	7.7	9.7	8.9	6.5
Ganga at Serampore	6.4	5.4	5.6	5.0	4.2	4.9	5.9	8.3	7.9	8.9	8.4	7.2
Ganga at Tribeni	7.9	6.0	5.2	5.2	4.7	5.3	6.0	7.4	8.2	8.5	8.7	7.4
Ganga at Uluberia	4.0	7.3	5.6	4.7	3.9	4.7	7.0	6.2	7.1	7.8	7.7	5.8
Primary Water Quality Criteria for Bathing Waters	5.0 mg/l or more											

Faecal Coliform (MPN/100 ml)												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Ganga at Baharampore	2400	800	130000	110000	80000	50000	79000	140000	79000	7000	94000	49000
Ganga at Dakshineswar	110000	170000	70000	80000	80000	50000	130000	130000	49000	33000	79000	79000
Ganga at Diamond Harbour	790	3000	11000	8000	8000	4000	14000	7900	6800	6800	7800	4500
Ganga at Durgachak near Patikhali	ND	2300	2100	680	450	920	1400	7900	17000	8400	11000	8400
Ganga at Garden Reach	140000	110000	30000	50000	50000	50000	80000	110000	33000	23000	49000	23000
Ganga at Gorabazar	6000	1700	80000	27000	8000	13000	110000	23000	23000	3300	70000	49000
Ganga at Howrah-Shibpur	33000	110000	23000	70000	70000	80000	70000	130000	33000	49000	33000	13000
Ganga at Khagra	7000	2300	130000	14000	50000	17000	110000	79000	49000	11000	170000	220000
Ganga at Nabadwip	17000	13000	30000	17000	13000	50000	11000	140000	49000	2300	17000	6800
Ganga at Palta Shitalatala	140000	240000	50000	23000	300000	240000	130000	130000	79000	110000	49000	130000
Ganga at Palta	26000	110000	80000	13000	12000	80000	49000	23000	23000	24000	23000	79000
Ganga at Serampore	33000	50000	30000	13000	54000	22000	23000	13000	33000	3300	33000	79000

Faecal Coliform (MPN/100 ml)												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Ganga at Tribeni	92000	4000	17000	50000	240000	50000	7800	23000	23000	11000	2700	8400
Ganga at Uluberia	17000	26000	13000	23000	30000	13000	33000	49000	17000	13000	49000	4500
Primary Water Quality Criteria for Bathing Waters	Less than 2500 MPN/100 ml											

Faecal Streptococci (MPN/100 ml)												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Ganga at Baharampore	110	80	340	300	800	260	490	3500	790	1300	490	2400
Ganga at Dakshineswar	NA	45	110	78	140	90	170	220	170	260	240	78
Ganga at Diamond Harbour	NA	<1.8	40	20	45	40	68	23	33	45	26	78
Ganga at Durgachak near Patikhali	NA	NA	NA	NA	NA	NA	NA	120	220	270	270	130
Ganga at Garden Reach	NA	20	68	68	110	70	92	130	70	130	220	78
Ganga at Gorabazar	90	80	300	230	330	900	790	310	490	330	130	1300
Ganga at Howrah-Shibpur	NA	45	78	110	170	130	170	170	79	170	220	68
Ganga at Khagra	170	90	800	270	220	220	330	5400	490	1400	1100	2400
Ganga at Nabadwip	260	80	130	140	500	800	230	330	170	490	170	170
Ganga at Palta Shitalatala	140	700	2200	800	800	1700	2200	1300	1300	1700	1700	1300
Ganga at Palta	110	110	1700	800	230	5000	790	790	790	790	790	460
Ganga at Serampore	220	220	500	500	2200	2400	490	130	140	330	490	490
Ganga at Tribeni	NA	110	800	900	1300	800	220	2400	490	490	120	130
Ganga at Uluberia	NA	20	45	45	70	110	93	79	49	130	130	23
Primary Water Quality Criteria for Bathing Waters	Less than 500 MPN/100 ml											

The major concern of water quality of river Ganga is BOD concentration above the criteria value and presence of high level of Faecal Coliform bacteria. The Dissolved Oxygen levels are however, good in river water throughout the period indicating that the river water is suitable for aquatic life.

### 6.B. 3 Water Quality of River Damodar

pH												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Damodar at Dishergarh Village	8.1	7.6	7.6	7.7	7.4	7.3	7.2	7.2	7.5	7.0	7.4	7.5
Damodar at Downstream of IISCO after 3Rd outfall at Dhenna Village	8.0	7.4	7.9	7.7	7.9	7.2	7.7	7.5	7.6	7.3	7.2	7.4
Damodar at Narainpur after confluence of Nunia Nallah	8.1	8.0	8.3	7.4	7.9	7.3	7.7	7.4	7.5	7.6	7.6	6.9

pH												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Damodar near Majher Mana Village after confluence of Tamla Nullah	8.0	7.8	7.6	7.5	7.6	7.3	7.2	7.1	7.1	7.2	7.5	7.0
Damodar at Andal Downstream	7.9	7.6	7.9	7.5	7.6	7.4	7.4	7.5	7.6	7.7	7.8	7.1
Damodar at Andal Upstream	8.0	7.7	8.1	7.8	7.5	7.3	7.7	7.5	7.5	7.4	8.2	7.2
Damodar at Asansol Upstream	7.9	7.6	7.8	7.7	7.8	7.6	7.6	7.6	7.7	7.2	7.6	7.5
Damodar at Durgapur Upstream	7.9	7.9	7.8	7.6	7.6	7.4	7.5	7.6	8.5	7.5	7.1	7.3
Damodar at Raniganj Downstream	8.0	8.0	8.1	7.2	8.1	7.4	7.6	7.5	8.0	7.5	7.1	7.4
Damodar at Water intake point for Burdwan town	8.1	7.7	7.9	7.4	7.6	8.4	7.4	7.5	8.6	7.8	7.4	8.1
Primary Water Quality Criteria for Bathing Waters	Between 6.5 & 8.5											

BOD (mg/l)												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Damodar at Dishergarh Village	2.6	2.5	2.1	2.2	2.1	2.0	1.9	2.1	2.2	2.1	2.3	3.2
Damodar at Downstream of IISCO after 3Rd outfall at Dhenna Village	1.4	2.3	2.4	2.5	2.3	2.2	2.3	2.1	2.0	1.8	2.0	2.6
Damodar at Narainpur after confluence of Nunia Nallah	2.6	2.3	2.1	2.2	2.1	2.5	2.4	2.7	2.3	1.8	2.0	2.3
Damodar near Majher Mana Village after confluence of Tamla Nullah	2.9	2.6	2.8	3.3	3.5	3.6	3.8	4.0	3.7	3.1	3.2	3.6
Damodar at Andal Downstream	2.2	2.4	1.9	2.1	2.0	1.8	1.7	1.6	1.7	1.6	1.9	2.8
Damodar at Andal Upstream	2.8	2.9	2.4	2.3	2.2	2.0	1.7	1.7	1.8	1.7	2.0	2.1
Damodar at Asansol Upstream	2.6	2.4	2.0	2.1	2.2	2.1	1.8	1.6	1.5	1.6	1.7	1.9
Damodar at Durgapur Upstream	2.4	2.5	2.1	2.2	1.9	1.7	1.5	1.6	1.6	2.5	2.1	2.3
Damodar at Raniganj Downstream	2.8	2.6	2.2	2.3	2.2	2.1	1.8	1.7	1.6	2.1	2.2	2.7
Damodar at Water intake point for Burdwan town	2.7	2.7	2.1	2.1	2.6	2.9	2.0	1.8	2.1	2.3	2.1	2.4
Primary Water Quality Criteria for Bathing Waters	3.0 mg/l or less											



DO (mg/l)												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Damodar at Dishergarh Village	7.8	8.2	8.3	8.1	7.9	7.7	7.7	7.8	8.0	8.2	8.8	8.4
Damodar at Downstream of IISCO after 3Rd outfall at Dhenna Village	8.2	8.1	8.2	8.0	7.8	7.8	7.7	7.8	8.1	8.3	8.7	8.2
Damodar at Narainpur after confluence of Nunia Nallah	9.0	8.4	8.2	7.9	7.8	7.6	7.5	7.9	8.2	8.1	8.3	8.1
Damodar near Majher Mana Village after confluence of Tamla Nullah	7.9	7.7	7.5	7.2	7.1	7.1	6.9	7.1	7.5	7.7	7.2	7.2
Damodar at Andal Downstream	7.2	7.8	7.7	7.8	7.9	7.7	7.4	8.0	8.2	8.1	8.5	8.1
Damodar at Andal Upstream	7.3	7.5	7.6	7.7	7.9	7.6	7.7	7.9	8.1	8.3	8.7	8.5
Damodar at Asansol Upstream	8.4	8.0	8.3	8.2	8.1	8.0	8.0	8.1	8.4	8.5	8.9	8.3
Damodar at Durgapur Upstream	7.8	7.3	7.6	7.5	7.7	7.5	7.4	7.6	8.0	8.0	8.5	7.6
Damodar at Raniganj Downstream	7.9	7.7	7.8	7.7	7.9	7.6	7.5	7.7	8.2	8.1	8.6	8.4
Damodar at Water intake point for Burdwan town	8.5	8.1	8.2	8.0	8.0	8.1	8.2	8.2	8.1	8.2	8.6	8.2
Primary Water Quality Criteria for Bathing Waters	5 mg/l or more											

Faecal Coliform (MPN/100 ml)												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Damodar at Dishergarh Village	4700	4600	3400	2700	3300	2200	1400	3300	3800	3200	4600	4000
Damodar at Downstream of IISCO after 3Rd outfall at Dhenna Village	3300	3400	3900	3100	3400	2400	2200	2600	2700	2600	2400	3800
Damodar at Narainpur after confluence of Nunia Nallah	2100	3200	2500	2100	2600	1700	1100	1000	1500	3200	2200	2700
Damodar near Majher Mana Village after confluence of Tamla Nullah	4700	4900	3900	4100	4800	4600	7900	5800	4900	3900	4100	3300
Damodar at Andal Downstream	2200	2700	2000	2100	2300	2000	1200	1700	2000	2400	2500	2700
Damodar at Andal Upstream	2600	3100	2400	2000	2100	1700	1100	1700	1400	2700	2100	2100
Damodar at Asansol Upstream	3200	3400	2600	2500	2100	1700	2100	2300	2100	2000	2000	2700
Damodar at Durgapur Upstream	2600	3100	3100	2200	2400	2000	1400	1300	2400	2700	2700	5000

Faecal Coliform (MPN/100 ml)												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Damodar at Raniganj Downstream	4300	4000	3300	2600	2500	2200	1700	2700	2500	3300	3200	3200
Damodar at Water intake point for Burdwan town	2100	2400	2000	2100	2200	2100	1700	2100	2000	1400	2100	2300
Primary Water Quality Criteria for Bathing Waters	Less than 2500 MPN/100 ml											

The BOD level of river Damodar was found to be generally below the maximum criteria value except occasional exceedance at a few locations. The level of DO at ten locations of river Damodar were found well above the minimum criteria level which indicated the aquatic condition was satisfactory for aquatic flora and fauna. The Faecal Coliform counts were found to be much higher than the water quality criteria at most of the stations.

#### 6.B. 4 Water Quality of River Barakar

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	3.9	2.7	2.5	2.7	2.5	2.3	2.2	2.1	2.0	2.2	2.3	2.5	3.0 mg/l or less
DO (mg/l)	8.3	7.9	8.2	8.3	8.1	8.0	7.9	8.1	8.3	8.5	8.8	8.3	5 mg/l or more
pH (Unit)	7.7	7.9	7.9	7.3	7.7	7.4	7.7	7.2	7.4	7.5	7.6	7.3	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)	4600	4300	3800	3100	3300	2100	3800	3800	3200	2100	2200	3900	Less than 2500 MPN/100 ml

The concentration of BOD in the river Barakar was found to be within the maximum criteria level. Dissolved Oxygen level was found to be well above the minimum criteria level which indicates that the water quality was healthy for aquatic life. The Faecal Coliform was found to be higher than the water quality criteria during majority period of the year.

#### 6.B. 5 Water Quality of River Silabati

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	4.2	1.7	1.1	2.2	1.4	1.3	1.7	2.1	1.3	1.6	2.6	2.0	3.0 mg/l or less
DO (mg/l)	6.1	8.4	7.8	8.0	8.4	6.0	7.0	9.3	8.5	9.3	5.5	5.7	5 mg/l or more
pH (Unit)	7.1	7.1	7.2	7.9	7.4	7.0	7.2	7.3	7.2	7.3	7.2	7.7	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)	3300	3100	4600	4300	3300	3300	6300	6300	6300	3300	4900	4600	Less than 2500 MPN/100 ml

The BOD level monitored in the river was found decreasing over time and were mostly found to be below the maximum criteria level. The DO value was found to be well above the minimum criteria level and Faecal Coliform Count was always higher than the water quality criteria.

## 6.B. 6 Water Quality of River Rupnarayan

### Rupnarayan at Geonkhali

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	2.7	1.7	0.6	2.6	0.9	2.8	1.5	1.0	1.8	1.0	1.2	1.1	3.0 mg/l or less
DO (mg/l)	6.4	7.4	6.1	8.1	6.5	8.0	8.4	8.1	7.0	7.8	7.2	5.6	5 mg/l or more
pH (Unit)	6.7	8.2	7.4	8.3	7.4	7.4	7.4	7.5	8.1	7.8	7.8	7.6	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)	ND	4300	8400	3300	3300	3100	4300	6300	5800	930	450	1700	Less than 2500 MPN/100 ml

### Rupnarayan at Kolaghat

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	3.3	2.0	1.3	1.5	1.7	0.7	1.1	0.8	1.5	1.5	1.8	1.6	3.0 mg/l or less
DO (mg/l)	5.4	8.5	5.2	7.1	6.7	5.4	6.4	9.2	7.6	9.0	7.8	6.4	5 mg/l or more
pH (Unit)	7.0	7.8	7.6	7.7	7.2	7.2	7.4	7.5	7.5	7.6	7.8	7.9	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)	8000	5800	9400	6300	8400	7000	6300	7000	6300	8400	9400	8400	Less than 2500 MPN/100 ml

The value of BOD was found to be below the water quality criteria throughout the study period. The value of DO was found to be always well above the water quality criteria (5.0mg/l) and indicated that the water quality is suitable for aquatic life in river Rupnarayan. The Faecal Coliform was observed very high in the river water.

## 6.B.7 Water Quality of River Kansai

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	2.2	1.1	1.1	1.8	0.6	1.5	2.4	2.8	0.8	1.3	2.0	1.7	3.0 mg/l or less
DO (mg/l)	6.6	7.0	6.1	7.5	6.6	8.0	8.0	9.0	9.1	9.2	7.8	8.6	5mg/l or more

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
pH (Unit)	7.3	6.5	7.4	7.6	7.3	7.0	7.2	7.2	7.9	7.6	8.6	8.3	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)	5000	4900	7000	4000	7000	8400	9400	4600	7900	4600	4900	3300	Less than 2500 MPN/100 ml

The BOD level of the river has been well below the maximum water quality criteria and the DO was found to be well above the water quality criteria throughout the study period, which indicates that water quality of the river Kansai was suitable for aquatic life. The Faecal Coliform in the river water was remarkably higher than the water quality criteria.

### 6.B.8 Water Quality of River Dwarkeswar

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	2.8	3.0	2.8	2.8	2.8	2.7	1.9	1.9	2.0	2.7	2.9	3.3	3.0 mg/l or less
DO (mg/l)	8.0	8.0	8.1	8.2	8.0	8.1	7.9	8.0	8.2	8.4	8.5	8.1	5mg/l or more
pH (Unit)	8.1	7.8	8.0	7.9	8.2	7.8	7.6	7.7	7.5	7.4	7.5	7.2	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)	2400	3100	2700	2500	2600	2300	1300	1100	1700	1500	2000	2200	Less than 2500 MPN/100 ml

The BOD level in the river was found to remain within the maximum criteria level except during March 2021. The value of DO was found to be well above the water quality criteria indicating the water quality is suitable for aquatic life. The Faecal Coliform was found to be above the criteria value during some of the months.

### 6.B.9 Water Quality of River Vidyadhari

#### Vidyadhari at Haroa Bridge

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	22.8	12.9	15.9	8.5	8.6	3.2	9.5	19.6	13.6	12.5	17.9	14.8	3.0 mg/l or less
DO (mg/l)	2.7	NIL	1.3	1.3	0.9	2.8	NIL	1.7	1.1	NIL	NIL	0.4	5mg/l or more
pH (Unit)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)	8x10 <sup>3</sup>	23x10 <sup>3</sup>	5x10 <sup>4</sup>	23x10 <sup>3</sup>	23x10 <sup>3</sup>	23x10 <sup>3</sup>	8x10 <sup>4</sup>	33x10 <sup>3</sup>	33x10 <sup>3</sup>	46x10 <sup>3</sup>	23x10 <sup>3</sup>	7x10 <sup>4</sup>	Less than 2500 MPN/100 ml

**Vidyadhari at Malancha Burning Ghat**

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	11.5	10.5	8.8	10.4	10.0	4.9	5.4	14.7	12.5	10.1	15.3	13.8	3.0 mg/l or less
DO (mg/l)	1.6	NIL	2.4	0.8	1.3	2.4	NIL	1.8	0.9	1.4	1.5	1.3	5mg/l or more
pH (Unit)	7.2	7.4	7.8	7.3	7.1	7.3	7.1	7.5	7.5	7.3	7.3	7.4	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)	7x10 <sup>4</sup>	5x10 <sup>4</sup>	7x10 <sup>4</sup>	8x10 <sup>4</sup>	8x10 <sup>4</sup>	5x10 <sup>4</sup>	11x10 <sup>4</sup>	7x10 <sup>4</sup>	49x10 <sup>3</sup>	79x10 <sup>3</sup>	46x10 <sup>3</sup>	13x10 <sup>3</sup>	Less than 2500 MPN/100 ml

The river water is polluted from sewage discharges of North 24 parganas. At both stations DO in most of the months were lower than the criteria level and occasionally found to be “NIL”. The BOD was always higher than the criteria level in both stations Haroa and Malancha. The Faecal Coliform contamination in the river water was so high that indicate the intrusion of unlimited sewage water in the river body.

**6.B.10 Water Quality of River Dwarka****Dwarka at Satighat**

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	4.0	3.3	3.4	4.1	4.2	4.2	4.0	3.2	3.3	3.0	3.1	4.6	3.0 mg/l or less
DO (mg/l)	7.2	7.5	7.1	6.9	7.1	6.7	6.9	7.3	7.5	7.4	7.2	6.5	5mg/l or more
pH (Unit)	7.8	7.8	7.3	7.4	7.5	7.2	7.1	7.5	7.6	8.3	7.3	6.9	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)	7x10 <sup>4</sup>	79x10 <sup>2</sup>	28x10 <sup>3</sup>	24x10 <sup>3</sup>	24x10 <sup>3</sup>	54x10 <sup>3</sup>	43x10 <sup>3</sup>	17x10 <sup>3</sup>	17x10 <sup>3</sup>	94x10 <sup>2</sup>	79x10 <sup>2</sup>	43x10 <sup>3</sup>	Less than 2500 MPN/100 ml

**Dwarka at Sadhak Bamdeb Ghat**

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	3.9	3.1	2.9	3.2	3.3	3.4	3.1	2.9	2.9	2.7	2.7	4.0	3.0 mg/l or less
DO (mg/l)	7.1	7.3	7.4	7.5	7.6	6.9	7.1	7.6	7.9	7.8	7.5	6.8	5mg/l or more
pH (Unit)	7.9	8.0	7.5	7.5	7.6	7.5	7.8	8.1	7.9	7.7	7.3	7.3	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)	63x10 <sup>2</sup>	58x10 <sup>2</sup>	14x10 <sup>3</sup>	17x10 <sup>3</sup>	21x10 <sup>3</sup>	24x10 <sup>3</sup>	21x10 <sup>3</sup>	94x10 <sup>2</sup>	11x10 <sup>3</sup>	63x10 <sup>2</sup>	48x10 <sup>2</sup>	35x10 <sup>3</sup>	Less than 2500 MPN/100 ml

During the year, BOD was found to be high at Satighat compared to Sadhak Bamdev Ghat. However, the DO was well above the water quality criteria. Faecal Coliform contamination was always higher than the water quality criteria which may cause due to domestic discharges and local discharges from drain etc.

### 6.B.11 Water Quality of River Mayurakshi

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	2.3	2.1	2.1	1.9	1.8	1.6	1.5	1.6	1.5	1.4	1.3	1.6	3.0 mg/l or less
DO (mg/l)	7.8	8.0	8.1	8.2	8.1	7.9	8.0	8.0	8.3	8.3	8.1	8.0	5mg/l or more
pH (Unit)	7.7	8.0	7.5	7.4	7.6	7.1	7.0	8.1	7.7	7.8	7.4	7.2	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)	1400	1500	1700	2200	2100	1700	1300	930	1400	1100	1400	2200	Less than 2500 MPN/100 ml

The DO & BOD of the river water was always complying to the water quality criteria values in all months throughout the year and river water was suitable for aquatic life. The Faecal Coliform levels were also below maximum criteria value.

### 6.B.12 Water Quality of River Churni

#### Churni at Downstream of Ranaghat Town

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	2.9	8.5	6.0	5.2	2.0	2.6	3.1	4.2	3.3	4.2	12.0	3.5	3.0 mg/l or less
DO (mg/l)	4.6	3.4	NIL	2.5	4.4	4.6	3.3	4.0	4.9	6.3	1.8	3.2	5mg/l or more
pH (Unit)	8.1	7.9	7.8	7.7	7.7	7.6	7.9	7.9	7.8	7.7	7.7	8.0	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)	13 x10 <sup>4</sup>	8 x10 <sup>3</sup>	13 x10 <sup>3</sup>	8 x10 <sup>5</sup>	7 x10 <sup>4</sup>	1700	33 x10 <sup>3</sup>	14 x10 <sup>3</sup>	22 x10 <sup>3</sup>	13 x10 <sup>3</sup>	4600	24 x10 <sup>3</sup>	Less than 2500 MPN/100 ml

#### Churni at Majhdia

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	6.0	6.3	1.1	5.5	7.1	1.9	3.8	3.5	2.7	5.2	13.8	20.8	3.0 mg/l or less
DO (mg/l)	0.4	1.0	2.2	3.4	0.9	3.0	4.0	3.7	3.5	2.6	0.5	0.4	5mg/l or more
pH (Unit)	7.8	7.9	8.1	7.7	7.9	7.9	7.7	7.6	8.2	7.7	7.4	8.0	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)	13 x10 <sup>4</sup>	13 x10 <sup>3</sup>	4 x10 <sup>4</sup>	11 x10 <sup>3</sup>	8 x10 <sup>3</sup>	22 x10 <sup>2</sup>	14 x10 <sup>3</sup>	450	17 x10 <sup>3</sup>	54 x10 <sup>3</sup>	35 x10 <sup>3</sup>	33 x10 <sup>3</sup>	Less than 2500 MPN/100 ml

BOD levels at both the stations in most of the months were higher than the water quality criteria. The DO level was below the water quality criteria and was even zero or close to zero on some of the months. The Faecal Coliform contamination in the river water was very high at both locations.

### 6.B.13 Water Quality of River Matha Bhanga

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	9.7	5.8	5.4	2.9	5.9	2.9	4.0	2.5	4.5	5.5	15.4	15.3	3.0 mg/l or less
DO (mg/l)	0.5	0.8	1.0	4.0	2.2	3.3	4.3	3.5	3.9	2.5	Nil	0.4	5mg/l or more
pH (Unit)	7.8	7.9	7.8	7.6	7.9	7.7	7.7	7.6	7.9	7.8	7.4	8.0	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)	9 x10 <sup>5</sup>	3 x10 <sup>4</sup>	5 x10 <sup>4</sup>	3 x10 <sup>5</sup>	3 x10 <sup>4</sup>	17 x10 <sup>3</sup>	11 x10 <sup>3</sup>	45 x10 <sup>2</sup>	17 x10 <sup>3</sup>	35 x10 <sup>4</sup>	54 x10 <sup>4</sup>	35 x10 <sup>4</sup>	Less than 2500 MPN/100 ml

The water quality of the river Matha Bhanga was very poor, because the Dissolved Oxygen was lower than the water quality criteria in all months. The BOD was on higher side in most of the months. The Faecal Coliform were very high than the criteria value.

### 6.B.14 Water Quality of River Jalangi

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	2.0	3.3	6.0	1.4	2.9	1.4	2.3	3.8	5.7	5.7	2.9	4.9	3.0 mg/l or less
DO (mg/l)	7.0	5.2	7.0	5.1	4.9	2.2	4.2	6.5	8.8	10.0	10.3	5.1	5mg/l or more
pH (Unit)	8.3	8.0	8.1	7.8	7.8	7.7	7.8	7.7	8.1	8.1	8.0	8.1	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)	350	400	5000	1700	400	1100	7000	14000	7000	14000	4900	49000	Less than 2500 MPN/100 ml

The DO of the river water was above criteria value except in the months of August, September and October 2020. However, fluctuation of BOD was noticed during the study period. The Faecal Coliform was found higher than the water quality criteria during seven months.

### 6.B.15 Water Quality of River Mahanada

#### Mahananda at Siliguri

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	1.8	2.3	1.8	1.8	2.2	2.4	1.8	1.8	1.4	1.6	1.8	2.7	3.0 mg/l or less

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
DO (mg/l)	7.8	6.5	6.9	7.1	6.9	7.0	6.8	6.9	6.8	6.9	6.5	6.4	5mg/l or more
pH (Unit)	7.4	7.4	7.6	7.2	6.1	6.6	6.6	7.4	7.0	6.8	6.9	6.9	Between 6.5 & 8.5
Fecal Coliform (MPN/100ml)	2200	2100	2700	5000	7000	3400	5000	5000	7000	9000	5000	8000	Less than 2500 MPN/100 ml

### Mahananda at Ramghat

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	12.0	18.0	19.0	12.0	14.0	17.0	21.0	16.0	10.0	11.0	13.0	22.0	3.0 mg/l or less
DO (mg/l)	5.9	5.0	5.0	6.0	4.8	5.2	4.8	5.6	3.8	5.0	5.2	4.8	5mg/l or more
pH (Unit)	7.6	6.8	6.5	6.2	7.0	6.5	6.7	6.5	6.5	6.8	6.5	6.9	Between 6.5 & 8.5
Fecal Coliform (MPN/100ml)	8x10 <sup>4</sup>	14 x10 <sup>4</sup>	13 x10 <sup>4</sup>	14 x10 <sup>4</sup>	11 x10 <sup>4</sup>	14 x10 <sup>4</sup>	11 x10 <sup>4</sup>	9 x10 <sup>4</sup>	11 x10 <sup>4</sup>	13 x10 <sup>4</sup>	11 x10 <sup>4</sup>	9 x10 <sup>4</sup>	Less than 2500 MPN/100 ml

It was observed that the value of BOD at Ramghat was very high throughout the study period where as BOD at Siliguri was well with in water quality criteria (3.0 mg/l). The value of DO at Siliguri was found to be above the criteria value but at Ramghat the DO value was fluctuating around the water quality criteria value (5.0 mg/l). The river water was found always to be highly turbid and dark brown to dark green in colour. Faecal Coliform count was well above the water quality criteria in both the stations.

### 6.B.16 Water Quality of River Teesta

#### Teesta at Sevoke

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	1.2	0.8	0.8	1.0	1.4	2.6	1.2	0.7	1.2	1.9	1.6	0.8	3.0 mg/l or less
DO (mg/l)	8.2	6.8	7.1	7.4	7.2	8.4	7.4	7.1	7.1	7.1	7.4	7.2	5mg/l or more
pH (Unit)	7.4	7.6	7.4	7.1	7.2	7.5	7.4	7.8	7.0	6.8	7.1	7.1	Between 6.5 & 8.5
Fecal Coliform (MPN/100ml)	1100	1300	2200	2600	3000	3300	2600	1300	5000	3400	2200	2600	Less than 2500 MPN/100 ml



### Teesta at Jalpesh

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	1.2	0.8	1.5	0.8	0.8	2.3	1.5	2.3	1.4	1.8	1.6	2.2	3.0 mg/l or less
DO (mg/l)	7.8	6.9	7.2	7.1	7.4	7.4	7.2	6.1	6.4	7.6	7.4	7.1	5mg/l or more
pH (Unit)	7.4	7.1	6.9	7.2	7.1	7.0	6.9	7.3	7.0	7.0	7.1	7.6	Between 6.5 & 8.5
Fecal Coliform (MPN/100ml)	1700	2200	3000	3400	2700	2200	2200	3000	5000	5000	3400	1700	Less than 2500 MPN/100 ml

The water quality of river Teesta was complying with criteria value with respect to BOD and DO throughout the study period which indicates that the river water is suitable for aquatic life. The bacteriological study of the water quality shows contamination of coliform bacteria.

### 6.B.17 Water Quality of River Karola

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	1.2	1.8	1.4	1.8	1.9	2.4	1.6	1.8	1.6	2.2	1.5	1.2	3.0 mg/l or less
DO (mg/l)	8.6	7.2	7.1	7.2	7.1	6.3	6.9	6.7	7.4	7.9	7.1	7.5	5mg/l or more
pH (Unit)	7.2	6.9	7.8	7.6	6.8	6.9	7.4	6.9	6.9	7.2	6.9	6.9	Between 6.5 & 8.5
Fecal Coliform (MPN/100ml)	1300	3400	5000	3400	2300	2700	2200	2200	2100	2300	2200	2700	Less than 2500 MPN/100 ml

The value of BOD was well below the water quality criteria value (3.0 mg/l), and DO were well above the water quality criteria (5.0 mg/l) throughout the study period. The bacteriological contamination of the river, in term of FC was above the water quality criteria in some of the months.

### 6.B.18 Water Quality of River Kaljani

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	1.0	1.8	1.7	1.6	2.1	2.4	1.2	2.4	1.6	1.8	0.8	1.4	3.0 mg/l or less
DO (mg/l)	7.8	6.9	7.3	7.1	7.2	6.9	7.3	6.4	7.2	7.5	6.8	7.5	5mg/l or more
pH (Unit)	7.6	7.8	7.6	7.4	7.0	7.2	6.9	7.4	7.4	7.2	7.5	7.1	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)	2700	3300	7000	8000	5000	2700	3400	5000	2100	2700	2600	2200	Less than 2500 MPN/100 ml

The river water quality of Kaljani, was noticed healthy for aquatic life because the BOD value was within the water quality criteria (3.0 mg/l) and Dissolved Oxygen level was well above the criteria value (5.0 mg/l). The river water was showing very high level of Faecal Coliform bacteria.

## 6.B.19 Water Quality of Other Rivers

pH												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Haldi River at Norghat	7.6	8.4	7.9	7.6	7.5	6.9	7.1	7.5	7.7	7.9	8.0	8.1
Rasulpur river at Rasulpur Ghat	7.8	8.2	7.6	8.4	7.6	8.2	7.3	7.7	7.9	8.0	7.9	8.0
River Balason at Khaprail More	7.2	7.8	7.2	7.8	7.1	6.9	7.1	7.6	7.3	6.4	6.8	6.9
River Jaldhaka at Dhupguri	7.2	7.4	7.2	7.2	7.1	7.2	7.6	7.4	7.2	7.4	7.1	7.6
River Mechi at Nehaljote	7.6	7.7	7.9	7.4	6.8	8.0	6.8	7.2	8.0	7.2	7.1	8.0
River Raidak at Alipurduar	7.4	6.9	7.1	7.3	7.6	7.4	6.9	7.3	7.5	7.1	7.7	7.4
River Siltorsa at Hasimara	7.4	6.9	6.5	7.4	7.2	7.4	7.2	6.6	7.4	7.1	7.2	7.4
River Torsa at Hasimara	7.2	7.6	7.2	7.7	7.1	7.6	6.9	7.3	7.5	7.2	7.4	7.2
River Torsa D/S of Ghughumari	NA	6.8	7.8	NA	7.1	7.4	7.2	7.1	7.4	7.5	7.0	7.4
Primary Water Quality Criteria for Bathing Waters	Between 6.5 & 8.5											

BOD (mg/l)												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Haldi River at Norghat	1.8	1.2	1.5	0.9	0.9	2.8	1.6	1.8	1.0	2.3	1.8	0.9
Rasulpur river at Rasulpur Ghat	2.7	1.3	1.0	1.7	1.1	2.0	1.2	2.0	1.0	2.0	1.1	1.1
River Balason at Khaprail More	1.2	1.7	1.8	2.1	1.4	2.0	1.5	1.8	1.2	1.5	1.8	1.8
River Jaldhaka at Dhupguri	1.6	0.8	1.3	1.2	1.2	2.1	1.4	2.6	1.4	2.0	1.2	1.8
River Mechi at Nehaljote	1.8	1.4	1.4	1.6	0.8	1.7	1.2	2.3	1.8	2.3	1.9	1.4
River Raidak at Alipurduar	1.6	1.3	1.2	1.4	1.4	1.8	2.1	2.8	1.2	1.2	1.2	1.8
River Siltorsa at Hasimara	1.4	1.4	2.1	2.0	1.2	2.0	0.8	2.6	1.2	1.8	0.8	1.2
River Torsa at Hasimara	1.8	1.6	1.2	1.6	1.4	2.1	1.9	2.1	1.6	2.0	1.2	1.8
River Torsa D/S of Ghughumari	NA	0.9	1.4	NA	1.2	1.9	1.2	2.4	2.0	1.9	1.3	1.4
Primary Water Quality Criteria for Bathing Waters	3.0 mg/l or less											

DO (mg/l)												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Haldi River at Norghat	4.6	6.0	5.2	5.6	5.1	8.5	7.7	9.5	6.3	9.6	6.0	5.8
Rasulpur river at Rasulpur Ghat	5.7	6.2	6.2	6.4	5.7	6.5	6.3	6.5	6.7	9.4	8.2	6.0
River Balason at Khaprail More	7.1	6.8	6.9	7.2	7.2	6.3	6.9	6.0	7.2	6.9	7.1	6.8
River Jaldhaka at Dhupguri	8.0	7.2	7.1	7.2	7.2	6.2	6.9	6.6	6.6	7.4	6.8	7.5
River Mechi at Nehaljote	8.2	6.8	7.3	7.8	7.4	7.4	6.9	6.1	7.2	6.1	7.2	6.9
River Raidak at Alipurduar	7.4	6.8	7.0	7.1	7.2	7.1	7.1	7.7	7.2	7.8	7.4	7.5

DO (mg/l)												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
River Siltorsa at Hasimara	7.8	7.1	6.9	7.1	7.2	7.8	6.9	7.1	6.9	6.5	6.5	7.3
River Torsa at Hasimara	8.4	7.3	6.8	6.8	7.2	6.1	6.8	6.4	7.2	6.8	7.2	7.3
River Torsa D/S of Ghughumari	NA	7.2	7.2	NA	7.1	7.1	7.4	6.8	7.1	6.8	6.9	7.4
Primary Water Quality Criteria for Bathing Waters	5 mg/l or more											

Faecal Coliform (MPN/100 ml)												
Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Haldi River at Norghat	5000	4600	4600	4900	9400	8400	9400	11000	9400	7000	17000	7000
Rasulpur river at Rasulpur Ghat	400	3300	4800	7900	7000	11000	8400	9400	8400	6300	12000	12000
River Balason at Khaprail More	1100	3000	7000	5000	2200	1400	2100	3400	7000	8000	5000	3300
River Jaldhaka at Dhupguri	1300	2300	1700	2200	7000	5000	5000	2200	3400	2200	2300	2100
River Mechi at Nehaljote	1100	5000	2700	2300	5000	3400	3400	3400	3400	2700	2600	2200
River Raidak at Alipurduar	800	2100	900	1100	2700	1700	2200	2700	2700	2300	2200	1700
River Siltorsa at Hasimara	1400	2200	1100	1300	2100	3400	3300	1100	2600	1100	2600	1300
River Torsa at Hasimara	3400	1300	2100	2200	5000	2200	3000	3400	5000	3400	5000	3400
River Torsa D/S of Ghughumari	NA	NA	1700	NA	2200	1300	3000	5000	2600	2300	2300	2700
Primary Water Quality Criteria for Bathing Waters	Less than 2500 MPN/100 ml											

The water quality of these nine rivers shows that the BOD level is well within the maximum criteria level and DO levels are always above the minimum DO criteria level. However, these rivers are contaminated with Faecal Coliform bacteria.

### 6.B.20 Water Quality of Rabindra Sarobar Lake

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	Not Done	3.5	4.6	5.5	1.1	3.3	2.7	4.6	3.9	4.1	2.6	3.0	3.0 mg/l or less
DO (mg/l)		10.3	10.4	10.0	4.8	9.5	6.7	8.1	7.8	8.8	8.9	9.7	5mg/l or more
pH (Unit)		8.0	8.5	7.9	6.9	7.9	7.4	7.6	8.2	8.5	8.4	8.4	Between 6.5 & 8.5
Fecal Coliform (MPN/100ml)		800	800	800	1100	900	700	450	490	450	450	490	Less than 2500 MPN/100 ml

The data reveals that the lake is well saturated with dissolved oxygen throughout the study period. The pH was always within the water quality criteria and the BOD in most of the months of study period was within the water quality criteria. The Faecal Coliform present in lake water is always well within the maximum criteria level.

### 6.B.21 Water Quality of Saheb Bandh

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	Not Done	3.4	3.9	4.0	3.8	3.8	3.6	3.9	3.6	3.2	3.5	4.0	3.0 mg/l or less
DO (mg/l)		8.7	9.2	9.5	8.6	8.5	8.7	8.8	9.0	9.2	8.8	9.4	5mg/l or more
pH (Unit)		7.5	8.3	7.5	7.4	7.5	7.3	7.6	7.2	7.3	7.2	7.0	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)		3800	3900	4100	2700	2600	2500	2700	3300	3800	3300	3100	Less than 2500 MPN/100 ml

The dissolved oxygen level was found much above the minimum level indicating good water quality. The Faecal Coliform contamination was always higher than the criteria in all the months. BOD was also found to be high than the water quality criteria in most of the months.

### 6.B.22 Water Quality of Sinchal Lake

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	Not Done	0.8	0.5	Not Done	0.5	1.2	1.2	0.8	1.2	0.5	0.9	1.1	3.0 mg/l or less
DO (mg/l)		7.5	7.6		7.8	7.4	7.1	7.6	7.2	7.4	7.8	7.8	5mg/l or more
pH (Unit)		7.1	7.1		6.9	7.7	7.2	7.8	7.4	6.9	7.1	6.9	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)		80	80		70	170	90	90	70	70	110	70	Less than 2500 MPN/100 ml

Both BOD and DO of the water body was found to be satisfying with water quality criteria value for the parameters throughout the study period. The Faecal Coliform Count was within the water quality criteria in all monitoring months. The water body has been observed to be clean, clear green and devoid of any type of unacceptable odor.

### 6.B.23 Water Quality of Delo Lake

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	Not Done	0.8	0.6	Not Done	0.8	Not Done	1.2	0.9	0.8	0.6	0.8	0.5	3.0 mg/l or less
DO (mg/l)		7.2	7.4		7.6		7.2	7.0	7.2	7.6	7.9	7.3	5mg/l or more
pH (Unit)		7.8	7.2		6.9		7.8	7.1	7.0	7.2	7.0	6.9	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)		90	90		90		80	80	80	80	130	80	Less than 2500 MPN/100 ml

The DO was well above the water quality criteria value throughout the study period. The BOD of the Lake water was always within the criteria value. The bacteriological contamination mainly Faecal coliform was well below maximum permissible criteria value.

### 6.B.24 Water Quality at Dudhpukur

#### Hatishala Ghat

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria	
BOD (mg/l)	Not Done	5.5	5.5	6.0	7.2	4.6	6.3	6.1	4.0	3.3	3.3	3.5	3.0 mg/l or less	
DO (mg/l)		4.8	7.8	8.1	8.5	5.0	9.0	7.6	6.2	8.3	9.6	6.6	5mg/l or more	
pH (Unit)		8.6	8.4	8.4	8.5	8.4	8.4	8.4	7.9	8.0	8.4	8.5	8.2	Between 6.5 & 8.5
Fecal Coliform (MPN/100ml)		200	300	400	400	1300	35000	3300	2300	2300	7900	7900	7900	Less than 2500 MPN/100 ml

#### Hanuman Ghat

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	Not Done	4.6	5.6	5.5	2.2	4.5	5.6	6.6	6.0	4.3	4.0	3.2	3.0 mg/l or less
DO (mg/l)		5.9	9.2	7.9	5.5	6.0	6.4	8.0	7.8	8.8	8.9	6.0	5mg/l or more
pH (Unit)		8.5	8.5	8.6	8.6	8.6	8.5	8.1	8.2	8.3	8.4	8.2	Between 6.5 & 8.5
Fecal Coliform (MPN/100ml)		11000	400	200	14000	2200	22000	4900	7900	3300	4900	3300	3300

#### Main Ghat

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria	
BOD (mg/l)	Not Done	4.5	6.5	5.7	4.8	4.3	6.5	6.4	3.5	3.6	4.9	3.9	3.0 mg/l or less	
DO (mg/l)		7.7	6.7	7.5	7.3	4.5	8.8	8.4	6.1	8.7	8.1	5.8	5mg/l or more	
pH (Unit)		8.7	8.4	8.2	8.0	8.5	8.3	7.9	7.9	8.4	8.2	8.0	8.0	Between 6.5 & 8.5
Fecal Coliform (MPN/100ml)		4000	4000	4000	17000	5000	54000	9400	4900	24000	49000	240000	240000	Less than 2500 MPN/100 ml

The Dissolved Oxygen of the water body was fluctuating around the criteria value (5.0 mg/L). High value of BOD and Faecal Coliform was noticed at all stations throughout the study period because of contamination of the water body due to falling of rotten flowers, sweets, milk etc.

### 6.B.25 Water Quality of Belboni Lake

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	Not Done	1.6	2.1	2.1	1.9	1.8	1.6	1.8	1.6	1.3	1.7	1.6	3.0 mg/l or less
DO (mg/l)		8.1	8.2	8.3	8.2	8.0	7.9	7.9	8.0	8.3	8.6	8.0	5mg/l or more
pH (Unit)		7.8	7.7	7.3	7.7	7.7	7.1	6.9	7.6	7.6	7.3	7.0	Between 6.5 & 8.5
Fecal Coliform (MPN/100ml)		1300	1400	1700	1400	1300	600	450	810	1400	1100	1100	Less than 2500 MPN/100 ml

Dissolved Oxygen concentration of the lake water was noticed well above the water quality criteria (5.0mg/l) which indicates that the water quality is fit for aquatic life. The BOD was good throughout the study period. The bacteriological study in the lake water was indicated that the FC was well within the criteria level.

### 6.B.26 Water Quality of Mirik Lake

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	Not Done	2.8	2.4	2.2	0.5	2.6	2.8	2.4	1.9	2.1	1.8	2.4	3.0 mg/l or less
DO (mg/l)		6.8	6.9	6.9	7.4	5.9	5.9	6.2	6.7	6.7	6.5	6.2	5mg/l or more
pH (Unit)		7.6	6.9	6.8	7.3	7.5	7.5	7.2	7.2	7.1	7.0	7.4	Between 6.5 & 8.5
Fecal Coliform (MPN/100ml)		900	2600	3400	90	3400	3000	1700	2600	2100	2600	3300	Less than 2500 MPN/100 ml

The dissolved oxygen was always well above the water quality criteria (5.0mg/l) within the study period. The BOD was found within the criteria value (3.0mg/l). The bacteriological contamination, especially Faecal coliform, was found to be above the criteria during some of the months.

### 6.B.27 Water Quality of Kochbihar Lake (Sagar Dighi)

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	Not Done	1.8	1.4	Not Done	1.8	2.6	1.4	1.2	1.2	1.6	0.8	1.2	3.0 mg/l or less
DO (mg/l)		7.1	7.1		7.2	6.5	6.8	6.4	6.8	6.8	6.8	7.4	5mg/l or more
pH (Unit)		7.2	7.8		6.7	6.9	7.2	6.9	6.9	7.0	6.9	6.8	Between 6.5 & 8.5
Faecal Coliform (MPN/100ml)		2700	2200		3000	2100	2200	14000	2700	2200	2700	5000	Less than 2500 MPN/100 ml

It was noticed that the value of the DO was found to be well above the water quality criteria 5.0 mg/l, indicating that the water quality is suitable for aquatic life. The BOD value is well within the criteria value throughout the study period (3.0mg/l). High Faecal coliform counts were found during the period.

### 6.B.28 Water Quality of Khardah Canal and Noai Canal in 24 Parganas (North)

The Khardah Canal and Noai Canal are flowing through the 24 Parganas (North) district and a good number of different types of chemical, metal finishing, dying and bleaching industries etc. are located around the vicinity of these canals.

#### Khardah Canal near Jayshree Chemical Industry

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	Not Done	43.8	20.8	28.3	12.1	14.0	31.6	61.9	37.5	200.0	110.0	87.5	3.0 mg/l or less
DO (mg/l)		NIL	NIL	1.8	NIL	0.2	1	Nil	NIL	Nil	Nil	Nil	5mg/l or more
pH (Unit)		7.6	7.5	7.7	7.5	7.6	7.4	7.2	7.4	7.4	7.4	7.4	Between 6.5 & 8.5
Fecal Coliform (MPN/100ml)		8x 10 <sup>5</sup>	8x 10 <sup>6</sup>	5x 10 <sup>8</sup>	24x 10 <sup>6</sup>	13x 10 <sup>6</sup>	24x 10 <sup>6</sup>	54x 10 <sup>4</sup>	35x 10 <sup>5</sup>	35x 10 <sup>6</sup>	24x 10 <sup>6</sup>	54x 10 <sup>6</sup>	Less than 2500 MPN/100 ml

#### Noai Canal near Ganganagar Motibridge

Parameters	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Bathing Water Quality Criteria
BOD (mg/l)	Not Done	21.3	10.5	17.7	10.5	4.2	7.8	28.5	18.3	21.3	20.5	11.1	3.0 mg/l or less
DO (mg/l)		NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	5mg/l or more
pH (Unit)		7.48	7.58	7.7	7.33	7.5	7.35	7.68	7.66	7.67	7.78	7.62	Between 6.5 & 8.5
Fecal Coliform (MPN/100ml)		23 x10 <sup>4</sup>	11 x10 <sup>5</sup>	3 x10 <sup>6</sup>	22 x10 <sup>5</sup>	8 x10 <sup>5</sup>	13 x10 <sup>5</sup>	11 x10 <sup>5</sup>	13 x10 <sup>5</sup>	21 x10 <sup>5</sup>	35 x10 <sup>5</sup>	79 x10 <sup>4</sup>	Less than 2500 MPN/100 ml

Both the canals pass through the densely populated area of North 24 Parganas. The high BOD and “NIL” DO are the indication of biodegradable contaminates to the water body. The excessive high count of Faecal Coliform is an indication of municipal sewer contamination.

### 6.B.29 Groundwater quality

The groundwater quality of the state was monitored at 68 locations during the year. Due to COVID-19 Pandemic situation, the groundwater quality could not be monitored during April 2020. Across the state, it was found that the groundwater was free from heavy metal pollutants and pesticides. Occasional presence of Arsenic, Fluoride and Faecal Coliform could be observed.

## 6.C. Noise Monitoring Programme

### 6.C.1 Introduction

Noise pollution is a vital issue of the day, caused by human beings, which affects health of living creatures including wildlife. In rural areas, train and airplane noise can disturb wildlife habitats, while in urban areas, vehicles, rail transport, air-conditioners, factories, microphones or public address system, construction work and even entertainment noise due to playing loud music can cause sleep disruption in humans and animals, hearing loss, heart disease (as a result of stress), and in severe cases even mental instability. Thus, noise pollution has become a great menace to our society at present.

Besides proper monitoring and control of the noise at its source, there is need to create general awareness regarding the hazardous effects of noise pollution in order to reduce the ill effects of noise pollution on human and natural environment. On the basis of this notable fact, West Bengal Pollution Control Board has taken up several effective initiatives like previous years. Such initiatives include conducting noise pollution monitoring during Kali Puja-Diwali, real time continuous ambient noise monitoring in Kolkata through 10(ten) nos of noise monitoring stations at Kasba, Baishnabghata-Patuli, New Market,SSKM Hospital, Bag Bazar, Birati, R.G.Kar Hospital, Taratala, Tollygunje and WBPCB Headquarters. The live display of noise levels can be seen at our Paribesh App as well as at [www.cpcbnoise.com](http://www.cpcbnoise.com)

### 6.C.2 Noise Pollution monitoring in Kolkata during Kali Puja and Diwali, 2020

Manufacture, Sale, Storage and Use of noise generating fireworks that generates noise level more than 90 dB(AI) measured at a distance of 5 m from the point of bursting is prohibited by law in the State of West Bengal, which includes chocolate bomb, chain crackers, loose crackers, Kali Patka, dodoma, seven shots, rocket bomb and similar any other noise making fireworks by any name. The police authorities are empowered to enforce the Rules and take action against indiscriminate use of loudspeakers and banned fire crackers in order to control noise pollution. Accordingly, like previous years, the State Board arranged some awareness campaigns regarding use of banned fire crackers before Kali Puja and Diwali and also set up special control rooms at Head Quarters at Paribesh Bhawan and other Regional Offices of the State Board during Durga Puja and Kali Puja and Diwali days.

#### Awareness Campaign :

- Meeting was arranged with the Police personnel for compliance of Noise Rules during Kali Puja and Diwali days.
- Banners Posters, leaflets etc. carrying various environmental campaign messages were distributed to Housing Complexes and major Puja organisers to generate awareness on noise pollution.
- Scroll messages on restriction of prohibited fireworks were advertised in various TV channels.
- Ad-spots and jingles on restriction of prohibited fireworks were advertised during the prime time in various TV channels and also in FM Radio channels.



- Advertisement on restriction of prohibited fireworks was released in various Newspapers for public awareness.
- The State Board arranged to send awareness message on noise pollution to the general people through SMS.

### Real Time Ambient Noise Monitoring & Results:

There are ten Real Time Ambient Noise Monitoring stations at Kolkata. Location of the stations are at Kasba, Kolkata, which is an industrial area, Kolkata Municipal Corporation, which is a commercial area, Baishnabghata-Patuli, Kolkata, which is a residential area, SSKM Hospital, Kolkata, which is silence zone, WBPCB Head Quarter, Kolkata, which is a commercial area, Bag Bazar, Kolkata, which is a residential area, Birati Neelanchal, Kolkata, which is a residential area, R.G.Kar Hospital, Kolkata, which is a silence zone, Taratala, Kolkata, which is an industrial area and Tollygunge, Kolkata, which is a commercial area.

Data of these Real Time Ambient Noise Monitoring stations is available at the web site : [www.cpcbnoise.com](http://www.cpcbnoise.com).

### Analysis of Complaints:

In view of the extraordinary situation due to the COVID-19 pandemic, the State Board decided to monitor noise pollution in a restricted manner. The State Board set up a special Control Room at Head Office, Paribesh Bhawan, Bidhannagar during Durga Puja (21.10.2020 to 25.10.2020), pre-Kali Puja (13.11.2020), Kali Puja (14.11.2020) and post-Kali Puja (15.11.2020) festive days till midnight to receive complaints over phone against the violation of noise norms in case of loud speakers and firecrackers. Similar Control Rooms were set up in Regional Offices at Durgapur, Asansol, Hooghly, Kankinara, Haldia, Malda and Siliguri. The mobile teams from the Head Office as well as the other Regional Offices patrolled in Kolkata, Howrah and other district towns in the State.

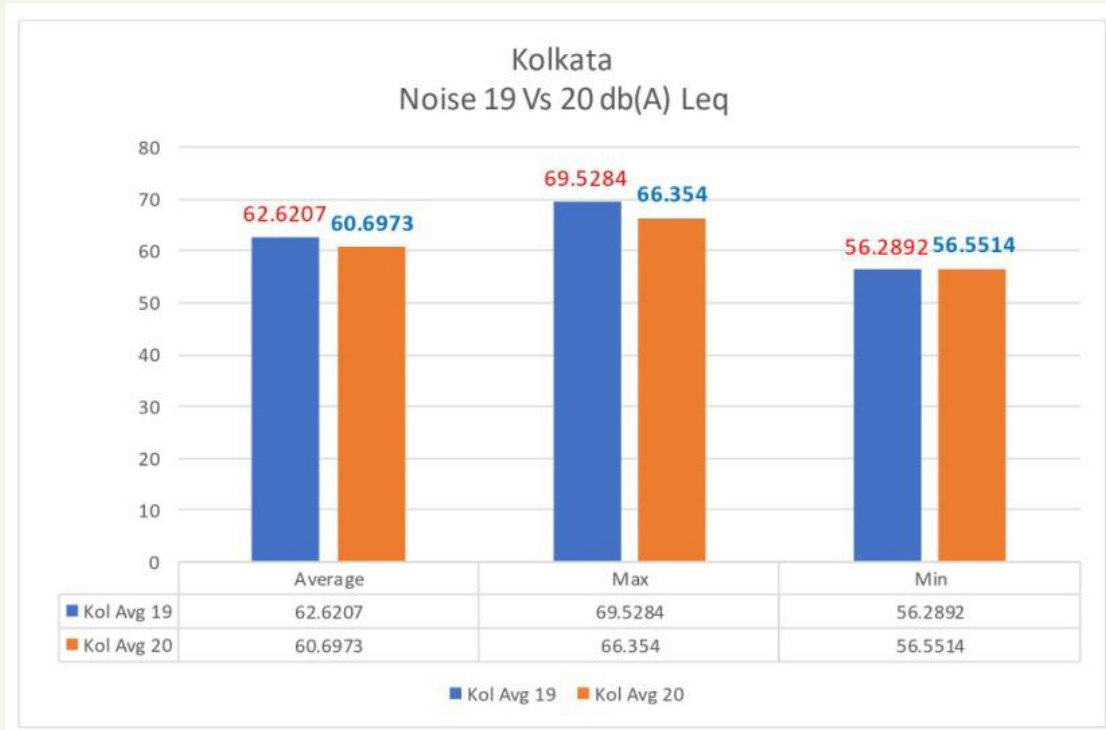
The complaints received in State Board's Special Control Room at Paribesh Bhawan, Bidhannagar are furnished below:

**Table-6.C.1: Complaints received during Kali Puja & Diwali— 2020**

Pre-Kali Puja, 13.11.2020 02nos of complaints from the following areas under		Kali Puja& Diwali, 14.11.2020 33 nos of complaints from the following areas under		Post-Kali Puja, 15.11.2020 13nos of complaints from the areas under	
Kolkata Police	West Bengal Police	Kolkata Police	West Bengal Police	Kolkata Police	West Bengal Police
Bhawanipore	Maheshtala,	Beliaghata, Haridevpur, Kalighat, Behala, Parnashree, Bansdroni, Patuli, Entally.	Pursura, Chinsurah, Sonarpur, Coochbehar Kotwali, Ranaghat, Haripal, Jhargram, Andul, Kulpi, Bishnupur, Baruipur, Chatterjihata, Habra, Islampur, Shibpur, Bhatpara, Rishra, Golabari, Serampore,Kalyani	Jadavpur, Kasba, Tiljala, Cossipore, Beliaghata	Bantra, Ghola, Serampore, Noapara, Kharagpur TownJagaddal

Pre-Kali Puja, 13.11.2020 02nos of complaints against		Kali Puja& Diwali, 14.11.2020 33nos of complaints against		Post-Kali Puja, 15.11.2020 13nos of complaints against	
Loudspeakers/ D.J.	Firecrackers	Loudspeakers/ D.J.	Firecrackers	Loudspeakers/ D.J.	Firecrackers
01	01	02	31	06	07

Fig.-6.C.1: Comparison of Noise level in Kolkata during Kali Puja & Diwali of 2019 and 2020



# Chapter 7

# LEGAL MATTERS

## 7.1 Introduction

The West Bengal Pollution Control Board (WBPCB) is implementing the Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and Environment (Protection) Act, 1986 and Rules made thereunder through Police and other enforcing authorities.

The Legal Cell of the State Board has to handle all cases filed against the State Board before the Hon'ble Supreme Court of India, Hon'ble High Court, Calcutta, Hon'ble Subordinate Courts, Hon'ble Pollution Control Appellate Authority (W.B) and Hon'ble National Green Tribunal. Almost in every case affidavits of the State Board are duly filed in time and orders of the Hon'ble Courts are being complied within the stipulated period of time. Barring a few almost every order of the Hon'ble Court goes in favour of the State Board. On many occasions, Chief Justice of Hon'ble High Court openly acknowledged and praised the prompt actions on the part of the State Board in filing affidavits before the Hon'ble Court. On many cases Officers of the Legal Cell without waiting for directions from the Hon'ble Court are initiating necessary action from the State Board.

Thus Legal Cell of the State Board is rendering Yeoman's Service to the general public particularly the persons who are suffering due to pollution for removal of their long-standing ordeal relating to environmental problems and hazards. There can be no denying the fact that the general public has been immensely benefited due to the untiring efforts of the Legal Cell in this regard within its ambit.

Legal Cell of the State Board will go on continuing its earnest endeavour in the matter of removal of legal hurdles for the benefit of the peoples in the days to come.

## 7.2 Before the Hon'ble National Green Tribunal

**Original Application No. 593/2017**

**(arising from W.P. (Civil) No. 375/2012 on the file of the Hon'ble Supreme Court)**

**(With Report dated 13.02.2020 and 14.05.2020)**

**WITH**

**Original Application No. 148/2016**

**(With Report dated 15.05.2020)**

**WITH**

**Original Application No. 148/2016**

**(With Report dated 15.05.2020)**

**Paryavaran Suraksha Samiti & Anr.**

**Applicant(s)**

**Versus**

Union of India & Ors. Respondent(s)

With

Mahesh Chandra Saxena Applicant(s)

Versus

South Delhi Municipal Corporation & Ors. Respondent(s)

Date of hearing: 21.05.2020

Re.: Matter relating to treated sewage.

### Summary of directions:

- i. All States/UTs through their concerned departments such as Urban/Rural Development, Irrigation & Public Health, Local Bodies, Environment, etc. may ensure formulation and execution of plans for sewage treatment and utilization of treated sewage effluent with respect to each city, town and village, adhering to the timeline as directed by Hon'ble Supreme Court. STPs must meet the prescribed standards, including faecal coliform.

CPCB may further continue efforts on compilation of River Basin-wise data. Action plans be firmed up with Budgets/Financial tie up. Such plans be overseen by Chief Secretary and forwarded to CPCB before 30.6.2020. CPCB may consolidate all action plans and file a report accordingly.

Ministry of Jal Shakti and Ministry of Housing and Urban Affairs may facilitate States/UTs for ensuring that water quality of rivers, lakes, water bodies and ground water is maintained.

As observed in para 13 above, 100% treatment of sewage/effluent must be ensured and strict coercive action taken for any violation to enforce rule of law. Any party is free to move the Hon'ble Supreme Court for continued violation of its order after the deadline of 31.3.2018. This order is without prejudice to the said remedy as direction of the Hon'ble Supreme Court cannot be diluted or relaxed by this Tribunal in the course of execution. PCBs/PCCs are free to realise compensation for violations but from 1.7.2020, such compensation must be realised as per direction of this Tribunal failing which the erring State PCBs/PCCs will be accountable.

- ii. The CPCB may study and analyse the extent of reduction of industrial and sewage pollution load on the environment, including industrial areas and rivers and other water bodies and submit its detailed report to the Tribunal.
- iii. During the lockdown period there are reports that the water quality of river has improved, the reasons for the same may be got studied and analysed by the CPCB and report submitted to this Tribunal. If the activities reopen, the compliance to standards must be maintained by ensuring full compliance of law by authorities statutorily responsible for the same.
- iv. Accordingly, we direct that States which have not addressed all the action points with regard to the utilisation of sewage treated water may do so promptly latest before 30.06.2020, reducing the time lines in the action plans. The timelines must coincide with the timelines for setting up of STPs since both the issues are interconnected. The CPCB may compile further information on the subject accordingly.
- v. Needless to say that since the issue of sources of funding has already been dealt with in the orders of the Hon'ble Supreme Court, the States may not put up any excuse on this pretext in violation of the judgment of the Hon'ble Supreme Court.

The CPCB may furnish its report by 15.09.2020 giving the status of furnishing of action plans and their execution as on 31.08.2020 by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image/PDF.

A copy of this order be sent to the Chief Secretaries of all States/UTs, Secretaries of MoHUA and Ministry of Jal Shakti, Govt. of India, CPCB and all the State PCBs/PCCs by e-mail.

A copy of this be also sent to the Secretary General, Supreme Court of India with reference to the order of the Hon'ble Supreme Court in (2017) 5 SCC 326, for information and record.

List for further consideration 21.09.2020.

Adarsh Kumar Goel, CP      Sheo Kumar Singh, JM      Dr. Nagin Nanda, EM

**O.A. No. 673/2018**

**In Re: News item published in “The Hindu” authored by Shri Jacob Koshy, titled “More river stretches are now critically polluted: CPCB”**

**(With Reports dated 18.06.2020 & 19.06.2020)**

**Date of hearing: 22.06.2020**

**Date of uploading of order: 29.06.2020**

**Directions:**

We reiterate our directions in order dated 6.12.2019 in the present matter, reproduced in Para 38 above, read with those in order dated 21.5.2020 in OA 873/2017 and direct CPCB and Secretary, Jal Shakti to further monitor steps for enforcement of law meaningfully in accordance with the directions of the Hon'ble Supreme Court and this Tribunal. The monitoring is expected with reference to ensuring that no pollution is discharged in water bodies and any violation by local bodies or private persons are dealt with as per mandate of law as laid down in orders of the Hon'ble Supreme Court and this Tribunal without any deviation from timelines. The higher authorities must record failures in ACRs as already directed and recover compensation as per laid down scale. Every State/UT in the first instance must

ensure that at least one polluted river stretch in each category is restored so as to meet all water quality standards upto bathing level.

This may serve as a model for restoring the remaining stretches.

Further reports be filed by the CPCB and Secretary Jal Shakti by 15.9.2020 by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) in (preferably in the form of searchable/OCR PDF and not image PDF).

As already noted, the constant difficulty faced by this Tribunal in monitoring abatement of pollution in river Ganga (as well other polluted rivers) remains failure of States and PCBs/PCCs to enforce

its orders, despite repeated directions and close monitoring, even in physical presence of Chief Secretaries who have appeared before this Tribunal.

A copy of this order be sent to the Chief Secretaries of all States/UTs, Secretaries of MoHUA and Ministry of Jal Shakti, Govt. of India, CPCB and all the State PCBs/PCCs by e-mail.

A copy of this order be also sent to the Secretary General, Supreme Court of India with reference to the order of the Hon'ble Supreme Court in (2015) 12 SCC 764, for information and any further directions in

terms of para 20 of the said judgement. This is being sent in continuation of earlier orders passed in O.A. 200 of 2014 (relating to River Ganga). The Secretary-General may place the matter on the judicial side in terms of the direction of the Hon'ble Supreme Court in para 20 of said judgement.

List for further consideration on 21.09.2020.

Adarsh Kumar Goel, CP Sheo Kumar Singh, JM Dr. Nagin Nanda, EM

**Original Application No. 593/2017**

**Paryavaran Suraksha Samiti & Anr. Applicant(s) Versus Union of India & Ors. Respondent(s)**

**WITH**

**Original Application No. 673/2018**

**In Re: News item published in "The Hindu" authored by Shri Jacob Koshy, titled "More river stretches are now critically polluted: CPCB"**

**WITH**

**Original Application No. 829/2019**

<b>Lt. Col. Sarvadaman Singh Oberoi</b>	<b>Applicant(s)</b>
<b>Versus Union of India &amp; Ors.</b>	<b>Respondent(s)</b>

**WITH**

**Original Application No. 148/2016**

**Mahesh Chandra Saxena Applicant(s)**

**Versus**

<b>South Delhi Municipal Corporation &amp; Ors.</b>	<b>Respondent(s)</b>
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**Date of hearing: 21.09.2020**

#### **Directions:**

Accordingly, we issue following directions:

- i. All the States/UTs may address gaps in generation and treatment of sewage/effluents by ensuring setting up of requisite number of functional ETPs, CETPs and STPs, as directed by the Hon'ble Supreme Court in (2017) 5 SCC 326.
- ii. The timeline for commissioning of all STPs fixed by the Hon'ble Supreme Court, i.e., 31.03.2018, has long passed. The Hon'ble Supreme Court directed that the State PCBs must initiate prosecution of the erring Secretaries to the Governments, which has also not happened. This Tribunal was directed to monitor compliance and in the course thereof, we direct that compensation may be recovered in the manner already directed in earlier orders (See, Paras 5 and 6 herein), which may be deposited with the CPCB for restoration of the environment.
- iii. The unutilized capacity of the existing STPs may be utilized expeditiously.
- iv. The States/ UTs may ensure that the CETP, ETPs and STPs meet the laid down norms and remedial action be taken wherever norms are not met.

- v. It must be ensured that no untreated sewage/effluent is discharged into any water body. Prompt remedial action may be taken by the State PCBs/PCCs against non-compliant ETPs/CETPs by closing down or restricting the effluents generating activity, recovering compensation and taking other coercive measures following due process of law.
- vi. Directions outlined in Paras 24-26 herein may be implemented by the States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level.
- vii. Wherever action plans have not yet been finalized in respect of polluted river stretches or polluted coastal stretches, the same may be completed within one month from today. The execution of action plans may be overseen in the manner already directed in OA 673/2018 by River Rejuvenation Committees (RRCs). In the coastal areas, the said Committees may be known as 'River/Coastal Rejuvenation Committees'. The action plans must have provision for budgetary support in the manner laid down by the Hon'ble Supreme Court or otherwise which aspect may also be monitored by the CMC.
- viii. Directions outlined in Para 29 herein may be implemented by the concerned coastal States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level. OA No. 829/2019 stands disposed of and further monitoring of the issue will henceforth be in OA 593/2017 and OA 673/2018.
- ix. Directions outlined in Para 34 and 35 herein may be implemented by the States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level. OA No. 148/2016 stands disposed of and further monitoring of the issue will henceforth be in OA 593/2017 and OA 673/2018.
- x. CMC may consider development of an appropriate App to enable easy filing and redressal of grievances with regard to illegal discharge of sewage/effluents.
- xi. The monitoring by the CMC may have the target of reduction of pollution loads and improvement of water quality of rivers and coastal areas.
- xii. The CMC may also monitor the setting up of the bio-diversity parks, constructed wetlands and other alternative measures to reduce pollution load.
- xiii. The CMC may also monitor demarcation of flood plain zones.
- xiv. The treated sewage water may be duly utilized for secondary purposes by preparing appropriate action plans and reports in this regard be filed with the CPCB periodically.
- xv. CMC may submit its consolidated update report incorporating all the above, before the next date. Each action point mentioned in Para 26 may be individually covered, and summarized in a tabular format.

A copy of this order may be forwarded to the Chief Secretaries of all the States/UTs, CPCB, NMCG, all PCBs/ PCCs, Secretaries, Ministry of Jal Shakti and Ministry of Housing and Urban Development, by email.

List for further consideration on February 16, 2021.

Adarsh Kumar Goel, CP

S. P. Wangdi, JM

Dr. Nagin Nanda, EM

**Original Application No. 593/2017**

**(With report of CMC dated 12.02.2021, reports of OC dated 12.02.21 & 13.02.21)**



**Paryavaran Suraksha Samiti & Anr. Applicant(s)**

**Versus**

**Union of India & Ors. Respondent(s)**

**WITH**

**Original Application No. 673/2018**

**In re: News item published in “The Hindu” authored by Shri Jacob Koshy titled “More river stretches are now critically polluted: CPCB Date of hearing: 22.02.2021.**

**Date of hearing: 22.02.2021**

We find that the monitoring mechanism introduced as per directions of this Tribunal in the form of RRCs at the States level and CMC at the Central level is to an extent identical to the monitoring mechanism laid down under the River Ganga Rejuvenation, Protection and Management Authorities Notification 2016. However, mechanism under the 2016 notification being statutory and exhaustive, it will be better that the same is adopted for all the river stretches as issues involved are common. The Empowered Task Force on river Ganga headed by Union Minister of Jal Shakti may exercise all powers and discharge all functions in relation to all the polluted river stretches in the same manner as the functions entrusted to it under the River Ganga 2016 order for control of pollution and rejuvenation of polluted river stretches. This is necessary so that the Nation/Central Monitoring Mechanism can be effective, in view of continuing failure of statutory mechanism under the Water Act for preventing pollution of water, resulting in pollution of almost all the rivers and water bodies in the country, posing serious threat to availability of potable water for drinking purposes as well as for safety of food chain. Hardly any accountability has been fixed for such serious failures. It will be open to the MoJS to issue any further appropriate statutory order to give effect to the above directions under the EP Act. The National/Central Mechanism may enforce the earlier directions of this Tribunal for collecting compensation for the failure to commence or complete the projects for setting up of sewage treatment equipments or taking steps for interim remediation measures. This is necessary for accountability for the failure to obey the law. The compensation so assessed may be deposited in a separate account to be used for rejuvenation of the polluted river stretches in the same manner as directed in the case of Ganga quoted above. As directed vide order dated 19.12.2018 in OA 673/2018, responsibility to pay compensation on behalf of the States/UTs will be of the Chief Secretaries. As per scheme of the NGT Act, every order of NGT is executable as a decree of Civil Court<sup>27</sup>. Further, failure to comply order of the NGT is an offence punishable with imprisonment upto three years or fine upto Rs. 10 crores with additional fine for continuing offence after conviction.<sup>28</sup> If the offence is by a Government Department, Head of the Department is deemed to be guilty.<sup>29</sup> Cognizance of the offence can be taken by a Court on a complaint of Central Government or any other person who has given notice to the Central Government or its authorized representative. The complaint can be filed before a Court of Magistrate of first class. It is, thus, necessary in view of continuing violation of NGT order, requiring payment of compensation to reiterate the direction of responsibility for payment of compensation, to be of the Chief Secretaries and in default, their liability to be proceeded against for coercive measures for execution or by way of prosecution as per NGT Act, 2010.

39. Our directions are summed up as follows: (i) In the light of observations in Para 38 above, MoJS may devise an appropriate mechanism for more effective monitoring of steps for control of pollution and rejuvenation of all polluted river stretches in the country. The said mechanism may be called “National River Rejuvenation Mechanism” (NRRM) or given any other suitable name. NRRM may also consider the observations with regard to setting up of National/State/District Environment

Data Grid at appropriate levels as an effective monitoring strategy. (ii) Chief Secretaries of all States/UTs and PCBs/PCCs must work in mission mode for strict compliance of timelines for commencing new projects, completing ongoing projects and adopting interim phyto/bio-remediation measures, failing which compensation in terms of earlier orders be deposited with the MoJS, to be utilised in the respective States as per action plan to be approved by the NRRM. Other steps in terms of action plans for abatement of pollution and rejuvenation of rivers, including preventing discharge or dumping of liquid and solid waste, maintaining eflow, protecting floodplains, using treated sewage for secondary purposes, developing biodiversity parks, protecting water bodies, regulating ground water extraction, water conservation, maintaining water quality etc. be taken effectively. The process of rejuvenation of rivers need not be confined to only 351 stretches but may be applicable to all small, medium and big polluted rivers, including those dried up. (iii) The Chief Secretaries of all States/UTs may personally monitor progress at least once every month and the NRRM every quarter. (iv) Directions of this Tribunal in earlier order, the last being dated 21.9.2020 are reiterated. (v) The NRRM and the Chief Secretaries of all the States/UTs may take into account the observations in Paras 24 to 38 above. (vi) In view of discussion in para 38 above, it is made clear that accountability for failure to comply with the direction for payment of compensation will be of the concerned Chief Secretaries under Sections 25, 26, 28 and 30 of the NGT Act, 2010. The MoJS or any other aggrieved person will be free to take remedies by way of initiating prosecution or execution.

The applications are disposed of in above terms.

A copy of this order be forwarded to Secretary, MoJS, MoEF&CC, GoI, CPCB, Chief Secretaries and State PCBs/PCCs of all States/UTs by e-mail for compliance.

Adarsh Kumar Goel, CP S. P. Wangdi, JM Dr. Nagin Nanda, EM

### **Original Application No. 681/2018**

**News item published in “The Times of India” authored by Shri Vishwa Mohan Titled “NCAP with multiple timelines to clean air in 102 cities be released around August, 15” with Dr. Gautam Ghosh**

**(Applicants)**

**Versus**

**State of West Bengal & Ors.**

**(Respondents).**

**Date of Hearing : 21-08-2020.**

### **Directions:**

In view of the above, the directions are summed up as follows:

- i. The work of completing remaining 175 monitoring stations needs to be expeditiously completed within next six months. Work in this regard may commence within one month, which may be monitored by the CPCB, by holding periodical online meetings with the Chairman/Member Secretaries of State PCBs/PCCs or other authorities. The funds available under the ‘consent mechanism’/‘environmental compensation’ may be utilized for the purpose by the State PCBs/PCCs. It will be preferable that out of the above, 25 stations are set up by CPCB/State PCBs/PCCs jointly (with CPCB financing out of its EC funds), following an appropriate procedure to ensure best price and quality;

- ii. Carrying Capacity and Source Apportionment studies may be simultaneously undertaken by the State PCBs/PCCs, utilizing the 'consent mechanism'/ 'environmental compensation' fund.  

Work in this regard may commence within one month and completed in six months. State PCBs/PCCs will be at liberty to either undertake the study in-house or by hiring any other agencies. However, as far as possible a uniform policy may be adopted in this regard which may be finalized by the CPCB in consultation with all State PCBs/PCCs in same manner as in direction. It will be preferable that 25 such studies are conducted jointly by CPCB/State PCBs/PCCs (with CPCB financing out of its EC Funds) to set a pattern;
- iii. Let further steps of prohibiting/shifting polluting activities which are found unsustainable/non-conforming and beyond carrying capacity of NACs, as a consequence of SA/CC Studies or otherwise, to other locations, in the interest of public health and protection of environment to give effect to 'Sustainable Development' principle be taken by the States/UTs;
- iv. The States may take further steps to set up and operate PGRPs expeditiously, within three months. The CPCB as well as State PCBs/PCCs may evaluate functioning of such portals on real time basis in the direction of protection of environment. In particular analysis may be undertaken about the number of complaints received, effective steps for redressal taken and improvement achieved and planned. Such exercise may be ongoing but in the first instance may be compiled as on 31.12.2020 and report filed by the State PCBs/PCCs with the CPCB within one month hereafter;
- v. Action plans for newly added 20 NACs be completed expeditiously on the pattern of such plans for 102 cities, already prepared;
- vi. All the concerned States/UTs may execute action plans, including control of stubble burning, where ever necessary and bursting polluting and noise generating fire crackers and give information about the status of compliance of action plans as on 31.12.2020 to CPCB before 15.1.2021. They may also give information in a tabulated form about the extent of improvement achieved, if any, in terms of reduction in pollution load. Steps in terms of action plans completed, actions ongoing and actions incomplete;
- vii. Detailed micro level planning be undertaken in respect of each NAC by the concerned State/UT expeditiously and status as on 31.12.2020 be furnished to the CPCB within one month thereafter;
- viii. The States/UTs may address the gaps communicated by the CPCB with respect to the action plans for control of noise pollution and the States/UTs which have not yet furnished their action plans may do so positively by 31.12.2020. Compensation regime for violations of noise pollution be applied by all the States/UTs;
- ix. We find that NCAP for reduction of air pollution does not fully meet the mandate of sustainable development. Violation of laid down air pollution levels resulting in large number of deaths and diseases needs to be addressed expeditiously. Targeted time of reduction of pollution loads needs to be reduced and planned steps need to be sternly implemented on the ground. MoEF&CC may take further action as per law in the light of observations in para 19 above. The States may utilize CAMPA funds, undertaking special afforestation drives in forest lands or other permissible locations in 122 NACs as per CAF Act, 2016 to abate pollution in the said cities. The CEO of CAMPA may hold a video conferencing with all the States PCBs/PCCs to coordinate and facilitate the utilization of CAMPA Funds;
- x. Let all the States/UTs take further action for procurement of equipments and taking other steps for control of noise pollution in 122 NACs as discussed in para 20 above and direction (viii) above,

including applying compensation regime prepared by the CPCB and file their respective reports of status of compliance as on 31.12.2020 by 15.1.2021;

- xi. Let further steps be taken by all the States/UTs to finalise ERSs in terms of suggestion of the CPCB as quoted above in para 24, constituting a suitable mechanism similar to Task Force under GRAP for Delhi-NCR and information furnished to the CPCB by 31.12.2020;
- xii. let further steps be taken to plan utilisation of consent/EC funds by all the State PCBs/PCCs in the light of order of this Tribunal on the subject dated 24.07.2020 in O.A. No. 102/2019, Ashish Kumar Dixit v. State of Uttar Pradesh & Ors by 31.12.2020. It will be preferable that MoEF&CC with assistance of CPCB lays down an institutional mechanism on the pattern of CAMPA or otherwise for proper utilization of consent and EC funds available with CPCB/State PCBs/PCCs.
- xiii. Let CPCB issue a fresh direction with regard to the remediation of legacy waste sites in the light of deficiencies noticed by the CPCB and coordinate further action with the concerned Urban Development /Local Bodies/PCBs/PCCs/Municipal Corporations. At least one site may be remediated and made a model of compliance in each of the 122 NACs. Where ever legacy waste sites remediation has not commenced, it may commence earliest having regard to the fact that timeline under statutory rules to complete such action is 7.4.2021 and continued delay is detrimental to public health and environment. Information of compliance status as on 31.12.2020 be furnished to CPCB in terms of observations in para 24 above;
- xiv. All the States/UTs and PCB/PCCs may take steps to coordinate with the State Disaster Management Authorities and Meteorological Departments. The observations of this Tribunal while dealing with the problem of frequent environmental disasters in order dated 23.07.2020 in OA 134/2020, News Item published on 13.07.2020 in daily "India Today" titled "Massive fire engulf Vizag chemical plant, explosions heard, injuries reported" may also be taken into account. Action taken reports be filed with the CPCB for submission of consolidated report to this Tribunal;
- xv. MoRTH may take further prompt action of undertaking carrying capacity studies with regard to road infrastructure, specially in 122 NACs, through Central Road Research Institute or any other agency which may be financed by CPCB out of compensation funds or otherwise. On that basis, proper policies be prepared to deal with the number of vehicles beyond parking capacity or carrying capacity and permitting entry or registration of number of vehicles, parking areas etc. This is necessary to reduce congestion, unregulated parking and air pollution loads in 122 NACs. CPCB may coordinate with the concerned Ministries and acquaint this Tribunal with the outcome in its next report;
- xvi. The recommendations of the Oversight Committee for the State of UP, in its report dated 15.07.2020, need serious consideration and action by the concerned authorities in the State of UP. The Chief Secretary, UP may ensure further action in the State at different levels which may be coordinated and overseen by the Monitoring Committee. The oversight Committee may give its further independent report to this Tribunal before the next date by e-mail;
- xvii. In view of continued violation of law on significant environmental issues, to give effect to rule of law and Constitutional mandate of clean environment and for protection of public health and environment, monitoring must be done at the level of Chief Secretaries at least once in a month and the Chief Secretaries must have environment cells attached to their offices, as earlier directed by the Hon'ble Supreme Court and this Tribunal in OA 606/2018;
- xviii. CPCB may file its consolidated report by email by January 31, 2021.

Copies of the order be sent to the Chief Secretaries of all States/UTs, Justice SVS Rathore, Chairman, Oversight Committee for the State of UP, Justice Jasbir Singh, Chairman Monitoring Committee

appointed by this Tribunal for several environmental issues in the State of Punjab, Justice Pritam Pal, Chairman Monitoring Committee appointed by this Tribunal for several environment issues in Haryana and Chandigarh, MoEF&CC, MoRTH, MoH&UD, CPCB, all States/UTs, State PCBs/PCCs and CEO, CAMPA by e-mail for compliance.

List for further consideration on 18.02.2021.

Adarsh Kumar Goel, CP

S. P. Wangdi, JM

**Original Application No. 33/2014/EZ**

**Subhas Datta Applicant(s)**

**Versus**

**State of West Bengal & Ors. Respondent(s)**

**Date of hearing: 18.09.2020**

**Date of uploading on: 01.10.2020**

While accepting the Action Plan, we find that there are certain areas which require to be looked into by the State Government and the regulatory authorities including the State PCB which are as follows: (i) The report on the Legacy Dumpsite at serial no. 4(ii) reproduced above states that “12.14 hectare land at Dhapa has already been remediated after scientific closure of the landfill site.” This gives an impression that the landfill site has been capped. If that be so, it is not clear as to how it has been done. Legacy waste requires to be treated by bio-mining and the inert waste dumped at the scientific landfill site in terms of Clause (j) of Schedule 1 of the Schedule to the Solid Waste Management (SWM) Rules, 2016. We, therefore, make it clear that closure of the landfill site if done in any other manner would not be permissible under the SWM Rules, 2016 and, therefore, requires to be corrected by ensuring compliance of the procedure prescribed therein.

- (ii) The next, on the same question is with regard to use of the trommel, which is stated to be only one in number and likely to be increased by two additional ones. Considering the volume of the legacy waste at the Dhapa dumpsite, the use of only three trommels for bio-remediation would be grossly inadequate which is likely to result in the quantum of waste to be bio-mined not being able to match the waste being dumped at the site daily. Ideally, quantum of bio-remediation should exceed the quantum of waste being dumped to ensure successful clearance of the site by bio-remediation within a specified timelines.
- (iii) We accordingly direct the State to ensure installation sufficient number of trommels to be used at the Dhapa dumpsite.
- (iv) We also deem it essential to constitute a Committee comprising of (i) the CPCB; (ii) the NEERI and, (iii) the State PCB, to assess the damage to environment and cost of its restoration/remediation on account of waste at the site currently which would include both the legacy waste (old waste and the current waste). The Committee shall also examine the current practices and propose means to accelerate the pace of bio-remediation of the legacy waste. The entire exercise shall be completed within two months from hence. The State PCB is directed to be the nodal agency.

The next question that we find the State lagging in is with regard to phasing out of old commercial vehicles as evidently no serious effort is being made in this regard. The Committee constituted by the State Government to deal with this also appear to be dragging its seat and has now taken the convenient

plea of the locked down due to Covid-19 pandemic. We, therefore, require the Transport Department, Government of West Bengal, to ensure that the final report of the Committee is submitted in not more than three months days from hence. We may also note that in O.A. No. 681/2018, remedial action for air pollution in 122 Non-Attainment Cities (NACs) in the country is being considered, which also includes the cities of Kolkata and Howrah. Various directions have been passed to deal with the menace of air pollution and many of the directions overlap the ones we have issued. Amongst them is the exercise for undertaking studies of source apportionment and carrying capacity. The State Government is expected to comply with the directions issued in that case, last of which was order dated 21.08.2020.

The next is the entry of non-Bharat Stage IV vehicles within the cities of Kolkata and Howrah. It is high time for the State to ensure that the public transport vehicles below BS-IV are phased out rapidly to arrive at a stage when only BS-VI would ply in the two cities to be extended gradually to the rest of the State. Exemption being permitted to BS-IV compliant vehicles, in our considered opinion, is an antithesis to the environmental law and a licence to pollute the air to the detriment of the health of the people and, therefore, violation Article 21 of the Constitution. All considerations override environmental health and Sustainable Development Principle as well as the Precautionary Principle which are now accepted as part of Article 21 of the Constitution. We, therefore, direct the State to ensure phasing out of all vehicles, both private and public transport system which are BS-IV compliant in a time bound manner. 4 Further delay in complying with this would amount to abdication of public trust which the State is held responsible to uphold.

It is trite that decline in quality of environment demonstrates the failure of the authorities to perform their obligation under the constitutional scheme and mandate of the environmental laws.

It is also trite that if the regulatory authorities either connives or acts negligently by not taking prompt action to prevent or avoid or control damage to the environment, natural recourses and the people health and property, the principle of accountability for restoration and compensation will have to be applied.

Thus, it is incumbent upon the State to be diligent in taking prompt steps and measures for mitigation of the deteriorated environment for the well being of the people at large by according top priority. There can be no compromise on this as it would transcend all other considerations.

The study conducted by the NEERI on source apportionment of the pollution in the cities of Kolkata and Howrah, obviously is in consonance with the recommendations of the Committee forming part of the original judgement as will appear from recommendation no. (vi) thereof referred to in the original judgement. While we appreciate the efforts put in for collection of data and the narrative on the various aspects, the Action Plan ought to be executed urgently if any meaningful result is to be achieved. It is accordingly directed so.

In view of the above, we reiterate that the Action Plan placed by the State in the affidavit of the Chief Secretary, Government of West Bengal, shall be put into action and executed subject to the above directions and including the specific directions contained in paragraph 13 of this order.

With above observations and directions, this execution proceedings stand disposed off, except that the State shall file a compliance of report of the directions contained herein within six months from hence by e-mail at [judicialngt@gov.in](mailto:judicialngt@gov.in).

Copies of this order be transmitted to the CPB, NEERI and the WBPCB for compliance of direction (iv) above.

S.P. Wangdi, JM

Dr. Nagin Nanda, EM

**Original Application No. 606/2018****Compliance of Municipal Solid Waste Management Rules, 2016 and other environmental issues.****Date of hearing: 14.12.2020****Directions:**

In view of the grave situation faced by the country in the form of pandemic, but at the same time having regard to the necessity of continuous monitoring of the scientific management of waste in the interest of protection of environment and public health, we defer the appearances of the Chief Secretaries till further orders subject to the condition that the monitoring at the level of Chief Secretaries may continue, as directed earlier and quarterly compliance reports may be filed with the CPCB and CPCB may file a consolidated report every six months before this Tribunal. First such report may be filed by 30.06.2021 which may be put up for consideration on 28.07.2021.

The compensation in terms of earlier order be recovered and credited to a separate account with the Environment Department of the States/UTs to be used for restoration of environment in the concerned States/UTs. The deposit, instead of being made with the CPCB, may now be made to the said account.

We also direct that while by order dated 16.01.2019 and further orders passed, the Chief Secretaries were directed to give a consolidated report on the subject of waste management as well as remedial action for rejuvenation of 351 polluted river stretches, 122 non-attainment cities, 100 polluted industrial clusters, sand mining, etc., henceforth the present matter will primarily deal with the issues of solid waste management only, other issues being subject matter of separate proceedings.

We may note that in terms of the Solid Waste Management Rules, 2016, the statutory authorities for various actions have been specified. Under Rule 5, a Central Monitoring Committee (CMC) is to be constituted headed by the Secretary, MoEF&CC with representation from Ministries of Urban Development, Rural Development, Chemicals and Fertilizers, Agriculture, CPCB, State PCBs/PCCs, Urban and Rural Development Departments, Urban Local Bodies and Towns from the of the States, FICCI, CII and subject experts. The CMC is to meet once in a year.

The Ministry of Urban Development has to coordinate with the States/UTs under Rule 6 for periodic review and formulation of National Policy and strategies and taking other measures. Under Rule 7, the Department of Fertilizers, Ministry of Chemical and Fertilizers have to provide market development assistance for compost and promote marketing of such compost. Under Rule 8, Ministry of Agriculture has to evolve mechanism for utilization of compost. Under Rule 9, Ministry of Power has to decide compulsory purchase and tariff issues. Under Rule 10, Ministry of New and Renewable Energy Sources has to facilitate infrastructure creation and provide for subsidy. Under Rule 11, the concerned Secretaries of Urban Development have to prepare State Policy and Management strategies and the Town Planning Department has to ensure setting up waste processing and disposal facilities and take other enumerated actions. Under Rule 12, the District Magistrates have to identify suitable lands and review performance of local bodies. Under Rule 13, the Secretaries of Panchayats have also to perform similar duties. Under Rule 14, CPCB is to coordinate with State PCBs and formulate standards of ground water, ambient air quality, noise, etc. Under rule 15, local authorities have to prepare solid waste management plans, collection of waste and coordination with the other stakeholders for enumerated steps. Under Rule 16, the SPCBs/PCCs have to enforce the rules and monitor compliances. Under Rule 17, there are duties of private bodies, including the manufacturers to be monitored by the State Bodies. The timelines are provided in Rule 22 for various steps. Last timeline of 5 years from the Rules expires on 7.4.2021. There is also provision for audit and submitting of annual report under Rule 24. Since there has been large scale non-compliances of the said rules, all the

concerned authorities need to review the progress and perform their responsibility in accordance with law. The MoEF&CC has to finally monitor compliance, as already mentioned. We hope all the authorities will now take necessary steps for meaningful compliances for protection of environment and public health.

A copy of this order be forwarded to the Secretaries, MoEF&CC, Urban Development, Chemical and Fertilizers, Agriculture, Power, New and Renewable Energy Sources in the Central Govt., the Chief Secretaries of all the States/UTs, CPCB and State PCBs/PCCs by e-mail for compliance.

List for further consideration on 28.07.2021.

Adarsh Kumar Goel, CP      S. K. Singh, JM      Dr. S.S. Garbyal, EM      Dr. Nagin Nanda, EM



# Chapter 8

# PUBLIC GRIEVANCE REDRESSAL

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## 8.1 Introduction

The West Bengal Pollution Control Board receives public complaints regularly from the different sections of society of the state regarding various environmental issues. People prefer to lodge the complaints before the West Bengal Pollution Control Board to get rid of the situation (problem) they face due to activity of the neighbouring unit/establishment/people causing degradation of environment in terms of air/water/noise pollution and/or any other environmental hazards.

In order to address and to take appropriate steps against these complaints, the Public Grievance Cell of the State Board is actively functioning at the Mani Square, Block-8IT, Western Side, 8<sup>th</sup> Floor, 164/1, Maniktala Main Road, Kolkata-700 054. It is a unique entity of the West Bengal Pollution Control Board where the complainants/aggrieved persons can register their grievances in a hassle free manner utilizing the varied modes of communication available today {24 x 7 telephone helpline, social media (Facebook & Twitter), physical letters, WBPCB app, E-mail etc.}, with a brief description of his/her specific grievance, even without disclosing his/her identity.

Complaints received by the Public Grievance Cell are acknowledged, duly scrutinized, enquired into, inspected and redressed through a hearing, arranged by involving both the aggrieved complaint(s) and the unit/establishment against whom the complaint is lodged, in presence of techno-legal officers of the Board.

Public hearing procedure adopted by the WBPCB is a quasi-judicial method for resolving the environmental problem of the State. The public hearing authority is composed of a Retd. Judicial Magistrate and other legal and technical officers of the Board. During hearing, both the parties are heard from environmental point of view considering techno-legal statutes. And after careful consideration of the submission of both sides, necessary directions are issued for redressal of the grievances of the complainant(s) and for maintenance of statutory obligation.

Durgapur Regional Office, Asansol Regional Office, Siliguri Regional Office and Malda Regional Office of the State Board also conduct technical hearings in their respective jurisdictions for redressal of the grievances of the complainants and directions are issued accordingly.

If the directions are complied with within a specific time frame (as directed), the case is disposed off. Otherwise, actions are taken against the recalcitrant units in accordance with law including closure and disconnection of electricity of the unit.

Some complaints are found beyond the scope/legal jurisdiction of the State Board. In such cases, necessary suggestion letter/letter of direction/request letters are sent to the concerned authority for appropriate course of action as deemed fit.

Fact remains, that people prefer to lodge complaint before the West Bengal Pollution Control Board for intervention on environmental issues, which may be considered as an indicator of environmental awareness amongst the general public.

During April, 2020 – March, 2021, the State Board received 1162 nos. of complaint and 211 nos. of hearings have been conducted. Four (04) nos. of Closure Notices have also been issued to the violators. In view of the extraordinary situation due to the Covid-19 pandemic, hearings were conducted by the State Board in a restricted manner.

**Table -8.1: The details of complaint cases dealt by the P.G.Cell during the April, 2020 to March, 2021 is furnished in a tabular form below:**

Month	No. of Complaint Cases received	Letter of Suggestion issued/Letter forwarded	Total Hearings Conducted	Closure Orders issued
April, 20	-	-	-	
May, 20	-	-	-	
June, 20	59	49	00	
July, 20	83	69	00	
August, 20	67	42	21	
September, 20	117	54	33	
October, 20	146	62	20	01
November, 20	110	126	34	
December, 20	210	152	29	01
January, 21	112	119	21	
February, 21	134	85	29	02
March, 21	124	140	24	
<b>Total</b>	<b>1162</b>	<b>898</b>	<b>211</b>	<b>04</b>

# Chapter 9

# MAJOR POLICY DECISION OF THE STATE BOARD

## 9.1 Introduction

The West Bengal Pollution Control Board conducts meeting with Board members at a regular interval to discuss regarding various important issues related to the different activities of the Board and the adoption of important policy decisions. During each Board meeting, the decisions of the previous meeting were confirmed and the follow up actions taken on the resolutions of the past were examined. Besides, the Board Members reviewed the performance of the State Board including Board's statutory activities.

One Board meeting was held during the financial year 2020-21:

Board Meetings No.	Date	Venue
171th	30/09/2019	Paribesh Bhawan, Bidhannagar

- **Source Apportionment Study and Carrying Capacity Study in Non-Attainment Cities of West Bengal**

The Central Pollution Control Board has identified the following 7 (seven) cities of West Bengal as 'Non-attainment Cities' (NAC) which do not meet the National Ambient Air Quality Standards (NAAQS), 2009 :-

- (1) Kolkata                      (2) Howrah                      (3) Barrackpore                      (4) Haldia  
 (5) Durgapur                      (6) Asansol                      (7) Raniganj.

The State Board has been directed by the Hon'ble National Green Tribunal in respect of O.A. No.681/2018/PB to prepare Comprehensive Action Plan for these seven (7) Non-attainment cities of West Bengal and also to conduct Source Apportionment (SA) Study and Carrying Capacity (CC) Study in these cities (as per guidelines of the Central Pollution Control Board). Since Source Apportionment and Carrying Capacity Studies are very specialized activity, the State Board has requested the NEERI, Nagpur for conducting SA and CC Studies for Barrackpore & Haldia region and Indian Institute of Delhi for conducting SA & CC Studies for Durgapur & Asansol (including Raniganj) region.

The Board Members had considered and approved in principle for awarding the said study works to the NEERI, Nagpur and to IIT, Delhi.

It may be noted that 'Clean Air Action Plan' for six cities have been prepared by the Centre for Science & Environment (CSE) and those are under consideration of Department of Environment, Govt. of West Bengal.

- **Strengthening of laboratories of West Bengal Pollution Control Board under Namami Ganga Programme**

The National Mission for Clean Ganga (NMCG) under the Ministry of Water Resources, River Development & Ganga Rejuvenation, Govt. of India has accorded the Administrative Approval and Expenditure Sanction (AA&ES) of Rs.1293.44 lakhs for augmentation of analytical infrastructure and manpower of Central Laboratory, Barrackpore Regional Laboratory and Malda / Baharampore Regional Laboratory of West Bengal Pollution Control Board. However, as per proposal of the State Board, the NMCG has accorded further sanction to include Hooghly Regional Laboratory of the State Board in place of Malda/Baharampore Regional Laboratory for proposed empowering of manpower and procurement of analytical infrastructure of Hooghly Regional Laboratory, presently working within the premises of Barrackpore Regional Laboratory.

The Board Members had noted the information and approved proposal for conducting the activities as per AA&ES for the Hooghly Regional Laboratory of WBPCB at the Barrackpore Regional Laboratory.

- **Air Quality Management – Introduction of LPG to road side coal based eateries and cloth-ironing vendors, sprinkling of water on roads, dousing of fire in dump sites.**

(i) **Introduction of LPG to road-side coal based eateries and cloth-ironing vendors :**

The West Bengal Pollution Control Board has proactively initiated activities regarding conversion of coal based eateries and cloth-iron vendors to cleaner LPG fuel in Kolkata Municipal Corporation area, Bidhannagar Municipal Corporation Area and Howrah Municipal Corporation areas involving Indian Oil Corporation Limited and Hindustan Petroleum Corporation Limited. An amount of Rs.1,36,98,967/- (Rupees One crore thirty-six lakh ninety-eight thousand nine hundred and sixty-seven) only has been allocated for this purpose for the F.Y. 2019-2020.

Members of the Board noted and approved the expenditure of Rs.1,36,98,967/- (Rupees One crore thirty-six lakh ninety-eight thousand nine hundred and sixty-seven) only. The Members have also approved the projected cost of Rs.490 lakhs for F.Y. 2020-2021 for providing 2000 nos. of new connections in each of seven Non-attainment Cities at an average cost of Rs.3500/- per connection.

(ii) **Sprinkling of water on roads, dousing of fire in dump sites :**

The West Bengal Pollution Control Board had taken up a program for controlling of road-dust in Kolkata, Howrah and adjoining areas and also in a few other towns which were identified as Non-attainment Cities/Towns with respect to air pollution. It was decided that WBPCB will provide necessary charges for engagement of vehicles @Rs.4000/- only per vehicle per day for 7 working hours and each vehicle shall spray of water up to a minimum of 20 km. 27 such vehicles were employed in Kolkata, Howrah, Asansol, Barrackpore, South Dumdum Municipality and Siliguri during December 2019 to February 2020. WBPCB has also requested the Fire Department to deploy fire tenders for dousing fire in dump sites like Dhapa and Pramodnagar; it was also decided that WBPCB would provide necessary operational cost to the Fire Department for deployment of such fire tenders for the above mentioned purpose. Total estimated cost for such water sprinkling program is to the tune of Rs.97.2 lakh.

This initiative resulted in considerable improvement of ambient air quality in Kolkata, Asansol, Haldia and Siliguri in global ranking in terms of PM 2.5 content in the ambient air. This noticeable improvement has led to immediate recognitions from independent assessors. West Bengal has been chosen as the Best Improved State in the Field of Environment in a recent study conducted by the India Today Group, in the recently published 2019 World Air Quality Report by IQAIR.

The Members of the Board noted and approved the expenditure of Rs.97.2 lakh only for the F.Y. 2019-20. The Board Members have also approved the projected cost of Rs.180 lakhs for 2020-2021 financial year for deployment of 50 such vehicles for 90 days @Rs.4000/-only per vehicle per day for 7 working hours.

- **GIS based information system for air quality management along with provisions for identification of water body encroachments, legacy dumpsites and polluted river stretches in West Bengal and to train the scientists to develop in-house capacity for data analysis**

The members were apprised of the information that the State Board has established a GIS based information system for air quality management along with provisions for identification of encroached water-bodies, legacy dumpsites and polluted river stretches in West Bengal and to train the Scientists to develop in-house capacity for data analysis at its Office at Mani Square, Kolkata-54 in collaboration with Indian Institute of Technology (IIT), Delhi.

The Board Members considered and approved the estimated budget proposal for Rs.11,68,200/- (Rupees Eleven lakh sixty-eight thousand and two hundred) only for the purpose as below :-

Head	Unit cost (INR)	Total Cost (INR)
Technical fee for the PI	Monthly @ 35,000	4,20,000
Travel (including field work)	Per trip @ 15,000	2,70,000
Contingency	Incidental and associated cost	30,000
Overhead	50% of the technical fee + 20% of the rest	2,70,000
Total	Sum of the above four	9,90,000
GST	@18%	1,78,200
<b>GRAND TOTAL</b>	<b>Total + GST</b>	<b>11,68,200</b>

- **Online competition amongst the students of schools under the National Green Corp Programme during lockdown.**

The West Bengal Pollution Control Board organised an on-line competition amongst the school students of the State of West Bengal under the National Green Corp Programme (NGC). Owing to break-out of pandemic COVID-19, the Chairman of the State Board made an appeal to all the students to submit their experiences during lockdown period in the written form as well as in audio-visual media, through their respective schools to the Board. This initiative has received a roaring success. Top ten were selected for conferring award and certificate.

The Board Members noted and approved the estimated cost of Rs.15,000/- (Rupees Fifteen thousand) only for the programme.

- **Purchase of Sound Level Meter and Sound Level Calibrator for distribution to Police Stations and Police Training Schools etc.**

The West Bengal Pollution Control Board had distributed 543 Sound Level Meters in 2018-2019 and 750 Sound Level Meters in 2019-2020 to Police authorities. Further, as per direction of the Hon'ble National Green Tribunal in O.A. No.158/2016 (EZ) and decision taken in the meeting headed by the Chief Secretary, Govt. of West Bengal, the Board has decided to distribute further 2000 nos. of Sound Level Meters with Calibrators in the F.Y. 2020–2021 to the Police authority and to the Transport Department. Considering the same unit price of Sound Level Meter and Sound Level Calibrator, procured from M/s. West Bengal Electronics Industry Development Corporation Ltd. (WML Divn.) in the F.Y. 2019-2020, the

estimated cost of 2000 numbers of Sound Level Meters with Calibrators would be Rs.8,80,00,000/- plus 18% GST.

The Board Members approved the estimated cost of Rs.8,80,00,000/- (Eight crore eighty lakh) only.

The Members has also apprised about the installation of additional 25 nos. of Continuous Ambient Noise Monitoring Network in Kolkata, Howrah and other important towns in the State.

- **Consideration & adoption of the Budget Estimate for the F.Y. 2020-2021 and the Revised Budget Estimate for the F.Y. 2019-2020.**

The member of the Board considered and accepted the Budget Estimate for the financial year 2020-2021 under Revenue Heads & Development Scheme Heads and the Revised Budget Estimate for the financial year 2019-2020.

- **Placement of Audited Accounts for the financial year 2018-2019 along with proposed Management's reply.**

The member of the Board considered and approved the Statutory Audit Report of the Annual Accounts of the State Board for the financial year 2018-2019 along with proposed reply of the management as Auditor's Observation.

- **Amendment of Financial delegation of Powers due to re-allocation of work of the Finance & Accounts Section.**

The Members of the Board have granted post-facto approval for the amendment of financial delegation of powers of the Board issued vide No.542/1(1-30)-21/WPB-A/74(Part-V) dated 09/03/2010 in respect of (B) Passing of Bills/Vouchers and Signing of Pay Orders and (C) Signing of Cheque and Operation of bank A/cs. for smooth functioning of the Finance & Accounts Section of WBPCB as below :-

Sl	Existing delegation of power	Revised delegation of power
II	<p>C) Signing of Cheque and Operation of Bank A/cs:-</p> <p>Since the accounts of the Board are maintained centrally, Bank A/cs will be operated and the cheque will be signed by any two of the following:-</p> <p>i) Member Secretary; or ii) Sr. Personnel Manager</p> <p style="text-align: center;"><b>And</b></p> <p>iii) Finance &amp; Accounts Manager (A); or iv) Finance &amp; Accounts Manager(F)</p> <p>Regional Offices for which separate Bank A/s is maintained from head office, the In-charge of that offices are authorized to draw the amount against the cheque issued in their favour from the head office.</p>	<p>C) Signing of Cheque and Operation of Bank A/cs:-</p> <p>Since the accounts of the Board are maintained centrally, Bank A/cs will be operated and the cheque will be signed by any two of the following: -</p> <p>i) Member Secretary; or ii) Sr. Personnel Manager</p> <p style="text-align: center;"><b>And</b></p> <p>iii) Finance &amp; Accounts Manager (A); or iv) Finance &amp; Accounts Manager (F); or v) Finance &amp; Accounts Manager</p> <p>Regional Offices for which separate Bank A/s is maintained from head office, the In-charge of that offices are authorized to draw the amount against the cheque issued in their favour from the head office.</p>



Sl	Existing delegation of power	Revised delegation of power
II	<p>C) Signing of Cheque and Operation of Bank A/cs:-</p> <p>Since the accounts of the Board are maintained centrally, Bank A/cs will be operated and the cheque will be signed by any two of the following:-</p> <p>i) Member Secretary; or ii) Sr. Personnel Manager</p> <p style="text-align: center;"><b>And</b></p> <p>iii) Finance &amp; Accounts Manager (A); or iv) Finance &amp; Accounts Manager(F)</p> <p>Regional Offices for which separate Bank A/s is maintained from head office, the In-charge of that offices are authorized to draw the amount against the cheque issued in their favour from the head office.</p>	<p>C) Signing of Cheque and Operation of Bank A/cs:-</p> <p>Since the accounts of the Board are maintained centrally, Bank A/cs will be operated and the cheque will be signed by any two of the following: -</p> <p>i) Member Secretary; or ii) Sr. Personnel Manager</p> <p style="text-align: center;"><b>And</b></p> <p>iii) Finance &amp; Accounts Manager (A); or iv) Finance &amp; Accounts Manager (F); or v) Finance &amp; Accounts Manager</p> <p>Regional Offices for which separate Bank A/s is maintained from head office, the In-charge of that offices are authorized to draw the amount against the cheque issued in their favour from the head office.</p>

- **Re-greening of Kolkata-Bidhannagar and its adjoining areas in the post Amfan scenario.**

The West Bengal Pollution Control Board has initiated a project for re-greening of Kolkata-Bidhannagar and its adjoining areas in the post Amfan scenario that has resulted in a rampant and large destruction of trees in the city. This is a dream project of the Hon'ble Chief Minister of West Bengal and an initiative of the State Board and the Department of Environment, Govt. of West Bengal, towards restoration of the greeneries of the city.

Accordingly, following the e-tendering process, the work order has been awarded to M/s. The Calcutta Construction, 158, Green Park, Kolkata-700055 for Plantation (including fencing) of 10,000 number of seedlings of different species and their maintenance, watering for two years against the quoted rate of Rs.1,47,02,500.00 (Rupees one crore forty seven lakh two thousand five hundred) only inclusive of all taxes. The estimated price of the project work was Rs. 2.5 crore. It has been discussed in the meeting to cover more area particularly in VIP Road and decided that further 4000 seedlings shall be planted with the residual amount of the estimated cost under this re-greening project.

The Members of the Board considered and approved the quoted rate of Rs.1,47,02,500/- (Rupees one crore forty seven lakh two thousand five hundred) only inclusive of all taxes for this project work. The Members also agreed for further 4000 Plantation with the residual amount of the estimated cost.

- **Recruitment process for filling up of 48 vacant posts of various categories of the West Bengal Pollution Control Board.**

The Department of Environment has communicated vide No. 1210/EN/2W-04/2017 dated 22.09.2020 that the Cabinet has accorded post-facto approval of the West Bengal Pollution Control Board Employees' Service Regulation, 2009 (WBPCBESR,2009) and permission for filling up of 48 vacant posts of West Bengal Pollution Control Board for following categories vide Cabinet Sectt. U/O No.CAB(D)-1622 dated 03.09.2020:-

1. Assistant Environmental Engineer	-----	05
2. Junior Environmental Engineer	-----	12
3. Environmental Analyst	-----	03
4. Senior Accounts Clerk	-----	05
5. Accounts Clerk	-----	03
6. Laboratory Assistant	-----	07
7. Junior Environmental Assistant	-----	13

This proposal has also approval of the Finance Department, GoWB, under it's U.O. No. Group P2/2019-2020/0952 dated 13.03.2020 read with U.O. No. 845 Group-P2 dated 14.06.2019 by the State Level Committee.

The members of the Board took note of it and approved the process for filling up of 48 vacant posts by engaging government agencies like National Productivity Council (NPC) or any other government organization for conducting the recruitment

# Chapter 10

# IMPLEMENTATION OF THE RIGHT TO INFORMATION ACT, 2005

The “right to information” means, an access to the information which is held by or under the control of any public authority and includes the right to inspect the works, documents, records, notes, extracts or certified copies of document/record and certified samples of the material and obtaining information which is also stored in electronic form.

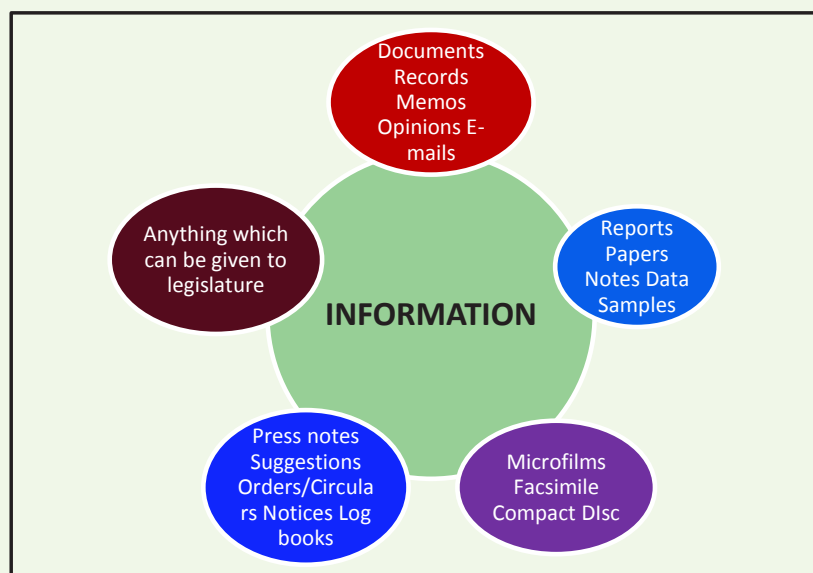
## 10.1 Introduction of Right to Information (RTI) Act, 2005

The Right to Information Bill was introduced in the Lok Sabha in December, 2004. It was passed by both Houses of Parliament in May, 2005. The assent of the President was received on 15<sup>th</sup> June and the Act was notified in the Gazette of India on 21<sup>st</sup> June, 2005. The Right to Information Act has become operational by the 12<sup>th</sup> October, 2005 after the completion of 120 days from the date of the Presidential assent. The Freedom of Information Act passed by Parliament in 2002 has been repealed.

The citizens right to information is not explicitly in the fundamental rights chapter of the Constitution. But in more than ten cases, the Supreme Court of India has declared that the fundamental right to life and liberty (Article 21) and the fundamental right to freedom of speech and expression {Article 19(1)} include every citizen’s fundamental right to access information. The Parliament passed the Right to Information Act (RTI Act) to enable all citizens to use their fundamental right to access information (Fig 1) from public bodies.

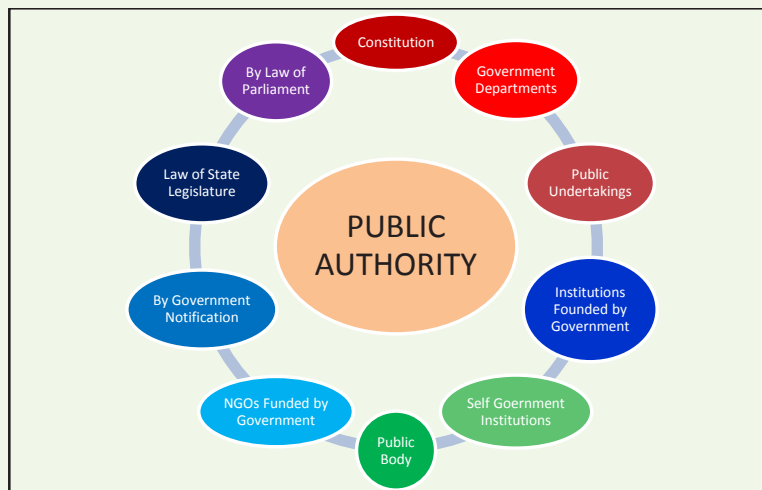
**Fig. 10.1: What is Information?**

(Section 2(f)(I)(j), 4)



## 10.2 Main objectives

- To promote transparency and accountability in the working of every public authority (**Fig.10.2**); and
- To set up a practical regime for giving citizens access to information that is under the control of public authorities.



**Fig. 10.2: Public Authority**

The State Board took the effective initiative to promote transparency and accountability and to set up a practical regime for giving citizens access to information. The State Board has also disseminated the relevant information in connection with the Board electronically through its website.

## 10.3 Application Procedure

According to Section 3 of this Act, all citizens have the right to information. As per section 6 of this Act, any person who desires to obtain any information under this Act can apply specifying the particulars of the information sought by him or her in writing or electronically in English or local official language.

## 10.4 Application may be sent to

As per the Right to Information Act 2005, the West Bengal Pollution Control Board is providing available information as and when sought through proper application. The State Board has designated Shri Arup Guchait, Public Relation Officer as Nodal Officer for implementing the “Right to Information Act, 2005”. For obtaining information application may be sent to :-

**Shri Arup Guchait,**

Public Relation Officer & State Public Information Officer,

(Under The Right To Information Act 2005)

West Bengal Pollution Control Board,

10A, LA- Block, Sector – III, Bidhannagar, Kolkata 700 106

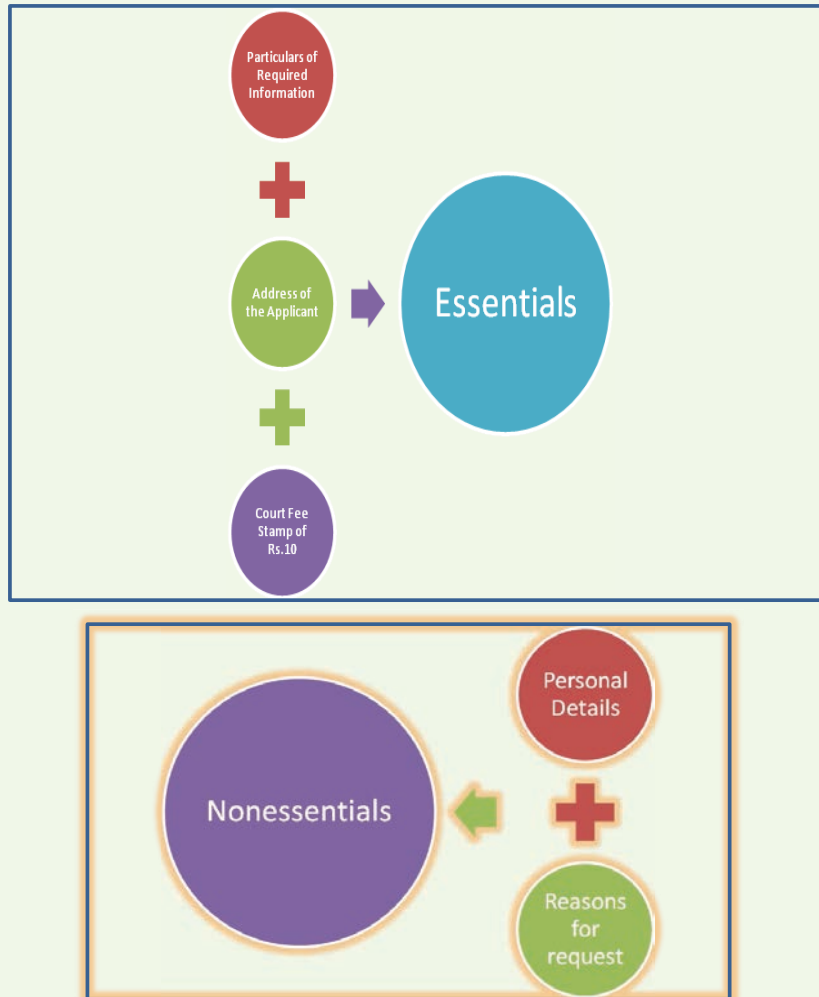
Email: [pro.wbpcb-wb@bangla.gov.in](mailto:pro.wbpcb-wb@bangla.gov.in)

Ph: (033) 2335 9088/0261/8211 (Extn-261), 2335-3913 (D)

*\*\* Please furnish application with contact details (Full address, telephone & fax no. if any) of the applicant.*

- An applicant making request for information shall not be required to give any reason for requesting information. However, the applicant is required to provide necessary information required for contacting the applicant (Fig. 10.3).

**Fig. 10.3: For obtaining information under The RTI Act, 2005  
(Essentials and Nonessentials matters)**



### 10.5 Application Fee

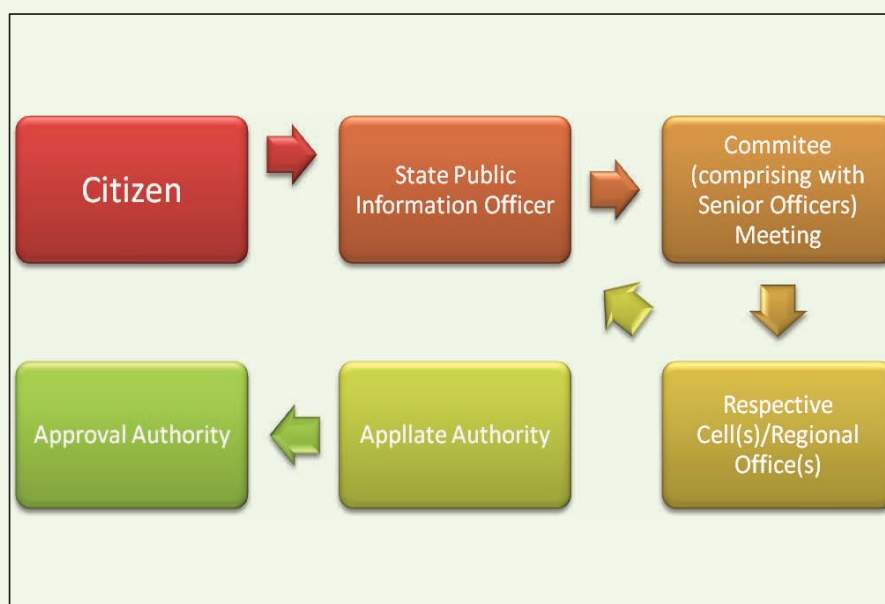
An application containing a request in writing to the State Public Information Officer made under rule 3 of the West Bengal Right to Information Rules, 2006 of sub-section (1) of Section 6 of the Right to Information Act, 2005 for obtaining information, shall be accompanied with a **court-fee stamp of rupees ten** or a non-Judicial Stamp Paper of rupees ten, or by Demand Draft or Bankers Cheque or India Postal Order of rupees ten, payable in favour of “West Bengal Pollution Control Board” (if the applicant is not belonging to below the poverty line category).

### 10.6 Processing of an application

The State Board constituted a Committee comprising with senior officers to help the State Public Information Officer (SPIO) for implementing the Right to Information Act, 2005. The said committee particularly helps the SPIO to prepare technical answer, so that the relevant information as sought for can be provided as soon as possible.

After receiving any application, the SPIO invites a Meeting of the Committee for discussion on the queries as asked for to decide about which Cell or Regional Office will prepare the relevant information as sought for. Accordingly, the in-charge of concerned Cell(s) / Regional Office(s) is/are requested to provide the relevant information within a few days. The SPIO prepare the reply based on information received from the concerned Cell(s) / Regional Office(s) sends the same to the Competent Authority through Appellate Authority for necessary approval. After obtaining approval, the SPIO sends final reply (information) in favour of the applicant (Fig – 10.4).

**Fig. 10.4: Processing of an application under the RTI Act, 2005**



### 10.7 Fee for providing information

Save as otherwise provided in the provision of rule 4 of the West Bengal Right to Information Rules, 2006 of sub-section (5) of section 7, the State Public Information Officer shall provide information under sub-section (1), and sub-section (5) of Section 7 upon receipt of a request under Section 6, on payment of a fee of –

- rupees two, for each page (in A-4 or A-3 size paper) created or copied; or
- actual charge or cost price, for a copy in large size paper; or
- actual cost price, for sample or model; or
- rupees five for each fifteen minutes or fraction thereof, for inspection of records; or
- rupees fifty per diskette or floppy, for information provided in the diskette or floppy; or
- actual charge fixed for publication or rupees two per page of photocopy for extracts therefrom, for information provided in printed form.

### 10.8 Appeal

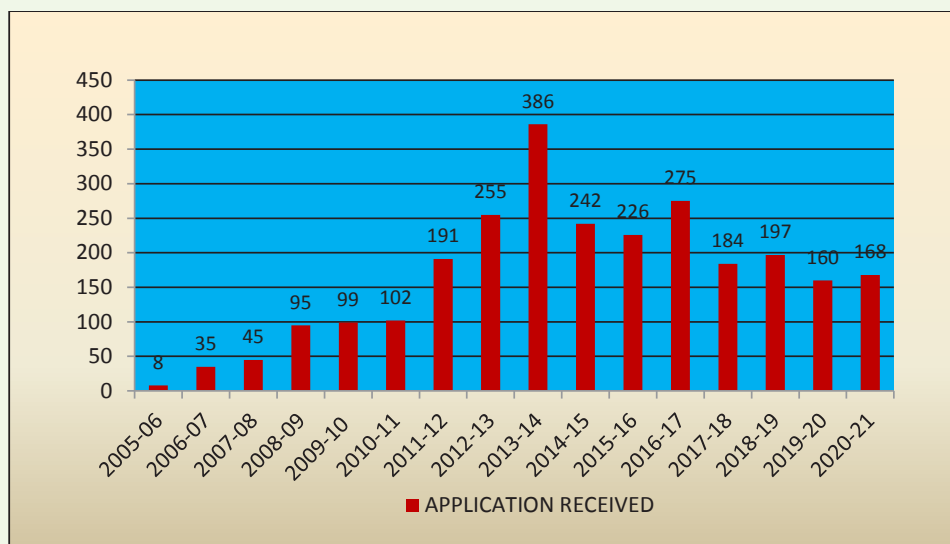
- As per provision under section 19(1) of the Right to Information Act, **Shri Abhijit Bose, WBCS (Exe.), Senior Personnel Manager**, (e-mail: [spm.wbpcb-wb@bangla.gov.in](mailto:spm.wbpcb-wb@bangla.gov.in). Ph: (033) 2335 9088/0261/8211 (Extn. - 423), 23358161 (D) of the Board is appointed as Appellate Authority. Any citizen can lodge appeal before the Appellate Authority as specified therein.

## 10.9 Interesting Facts for the financial year 2020-21

It is a preference to inform that the State Board is handling all the cases under the Right to Information Act, 2005 steadily. The State Board received a total of 168 applications under the Right to Information Act, 2005 from the different parts of West Bengal as well as country during 01.04.2020 to 31.03.2021. All the applications had been scrutinized properly under the different sections of the said Act and disposed of with relevant information. The State Board took the sincere effort for providing relevant information as sought for to all the applicants as early as possible as per the Right to Information Act, 2005.

The rate of receiving applications has been enhanced heavily since the financial year of 2006-07. A total of 168 applications were received during last financial year (2020-21), which is however 5% more in respect of the financial year 2019-20 (Fig. 10.5).

**Fig.- 10.5: Year-wise application received under the Right to Information Act, 2005 During 2020-2021**



**Table- 10.1: Year-wise application received under the Right to Information Act, 2005**

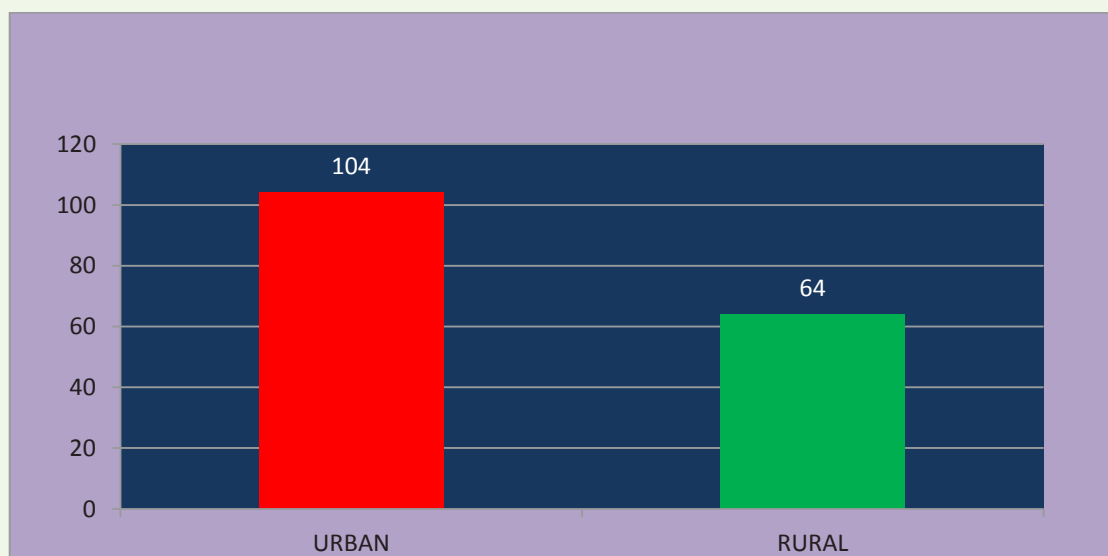
Year	No. of applications received	Increased percentage in respect of previous year	Compound increase of applications in percentage
2005-2006	8	.....	.....
2006-2007	35	337.5%	.....
2007-2008	45	28.57%	.....
2008-2009	95	111.11%	171.42% since 2006-07
2009-2010	99	04.21%	182.85% since 2006-07
2010-2011	112	13.13%	220% since 2006-07
2011-2012	191	70.53%	445.71% since 2006-07
2012-2013	251	31.41%	617.14% since 2006-07
2013-2014	386	53.78%	1002.85% since 2006-07
2014-2015	242	37.30% decreased percentage in respect of 2013-2014	591.42% since 2006-07



Year	No. of applications received	Increased percentage in respect of previous year	Compound increase of applications in percentage
2015-2016	226	6.61% decreased percentage in respect of 2014-2015	545.71% since 2006-07
2016-17	275	21.68%	685.71% since 2006-07
2017-18	184	33.09% decreased percentage in respect of 2016-2017	425.7143% since 2006-07
2018-19	197	7.06%	462.85% since 2006-07
2019-20	160	18.78% decreased percentage in respect of 2018-19	357.14% since 2006-07
2020-21	168	5%	380% since 2006-07

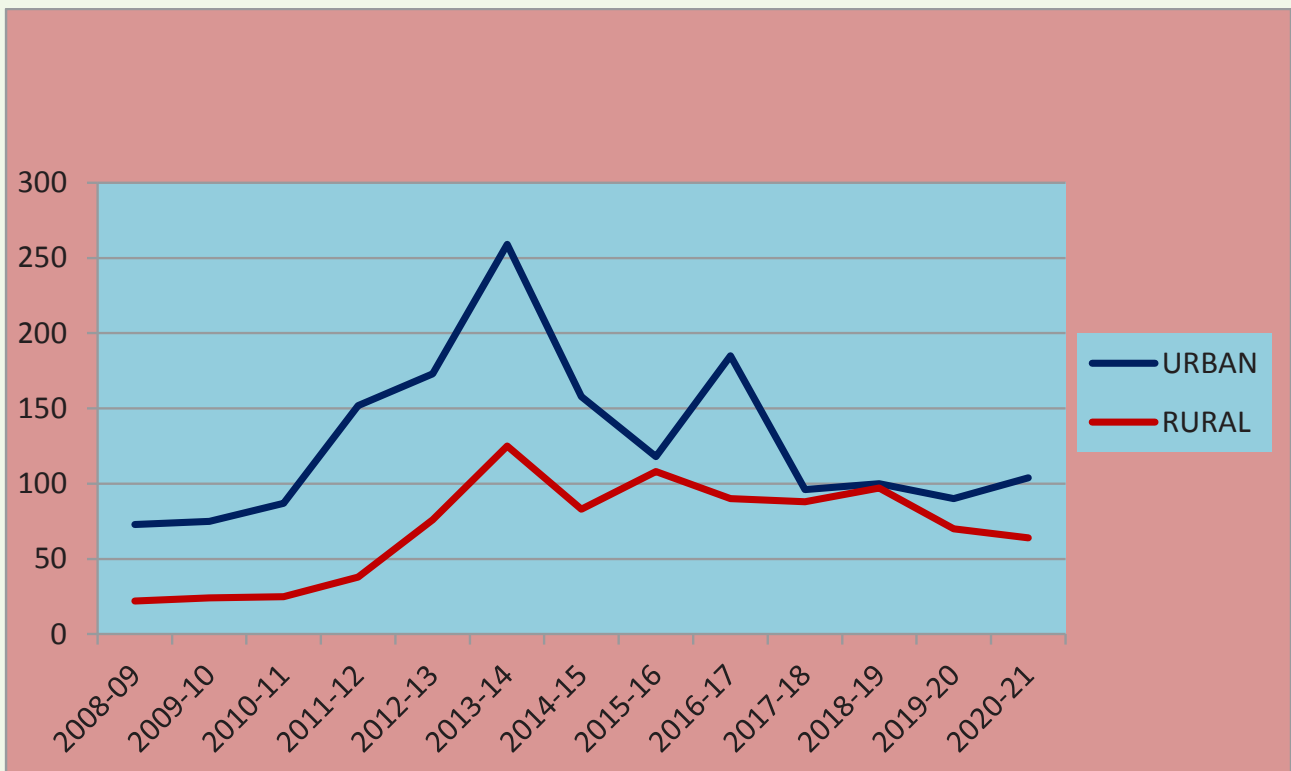
Some of the interesting facts are mentioned in the Table– 10.1. Just about 380% increase of applications received in 2020-21 since 2006-07. The Table– 10.1 shows the increase of awareness regarding the Right to Information Act, 2005 and the pressure of jobs in connection with the processing of the applications under this Act regular basis. The Table – 10.1 also indicates the increase of awareness level regarding the Right to Information Act, 2005 and the consequent pressure of work in connection with the processing of the applications under this Act regular basis.

**Fig. 10.6: Applications received from urban and rural sectors under the RTI Act, 2005 during 2020-2021**



During 2020-2021, a total of 104 applications from urban areas and 64 applications from rural areas were received. That is 61.9% applications and 38.1% applications were received from urban and rural area respectively (Fig. 10.6). Almost similar percentage of applications were received from urban and rural areas like the financial year 2019-20 when 56.25% and 43.75% applications from urban and rural areas were received respectively.

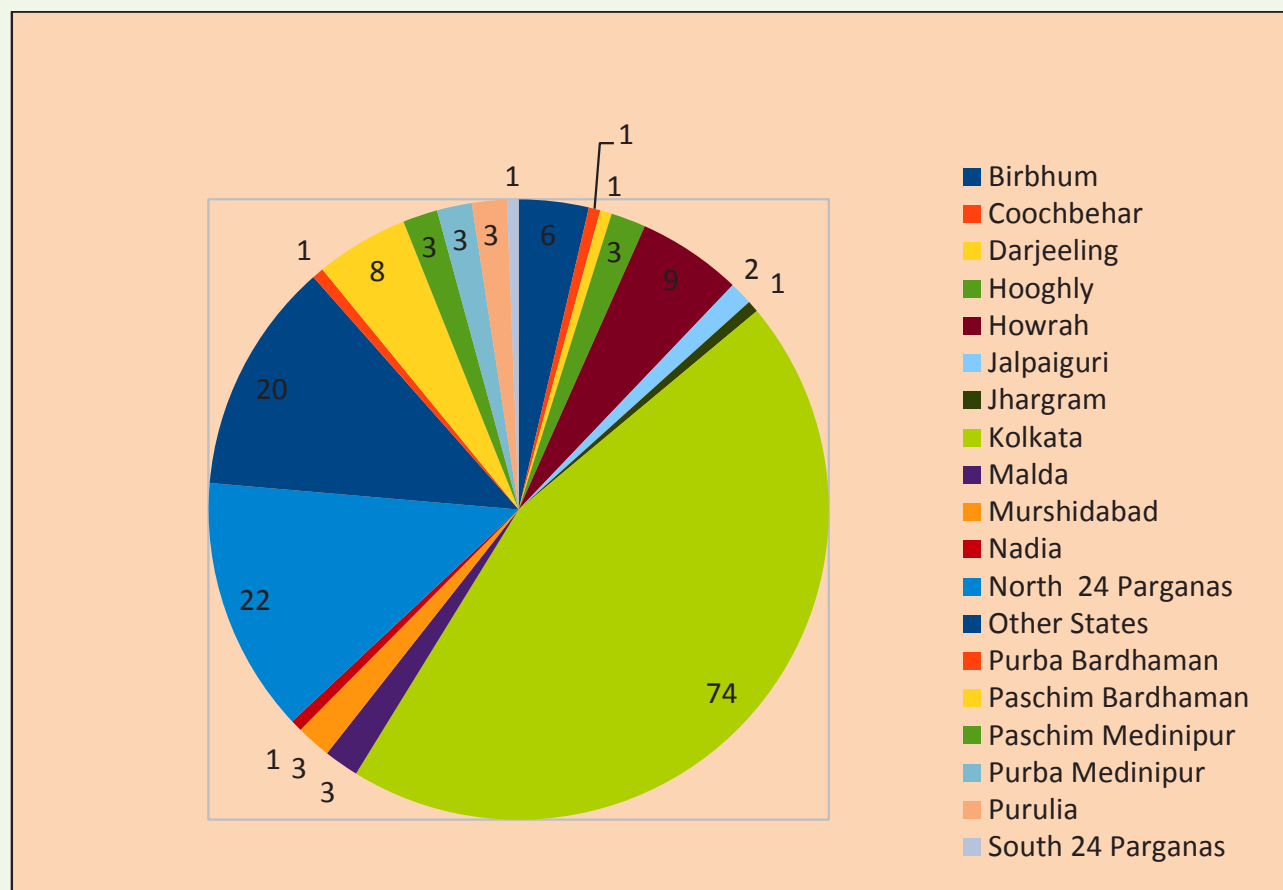
**Fig. 10.7: Progressive status of urban and rural applications received under the RTI Act, 2005 over the years**



According to **Fig. 10.7**, it is observed that the percentage of urban applications had increased at very minimal rate from 2008-09 up to 2010-11. Similarly percentage of rural applications had also increased at minimal rate from 2008-09 up to 2010-11. Percentage of urban application had drastically increased continuously during 2011-12 up to 2013-14 and similarly percentage of rural applications had also significantly increased during the same financial years. Again urban applications had continuously decreased 2013-14 and 2014-15. Similarly, rural applications also continuously decreased during 2013-14 and 2014-15. Number of rural applications slightly increased during 2015-16 and the gap between the number of applications received from urban and rural areas during financial year 2015-16 narrowed down. The gap between the number of applications received from urban and rural areas during financial year 2016-17 again broadened. During 2017-18, the gap between the number of applications received from urban and rural areas narrowed down considerably. During 2018-19, the gap between the number of applications received from urban and rural areas narrowed down noticeably. The gap between the numbers of applications received from urban and rural areas during financial years of 2019-20 and 2020-21 again widened slightly.

During 2020-21, the State Board received 20 applications out of 168 from other States. Highest 13 number of applications were received from New Delhi. There are 08 number of applications were received from New Delhi. Besides that, applications from Karnatak (5), Chattisgarh (4), Maharashtra (2) Uttar Pradesh (1) have been received during 2020-21. Only 11.9% of total applications from other states were received. It was 15.62% in 2019-20.

**Fig. 10.8: District wise application received under the RTI Act, 2005 during 2020-21**

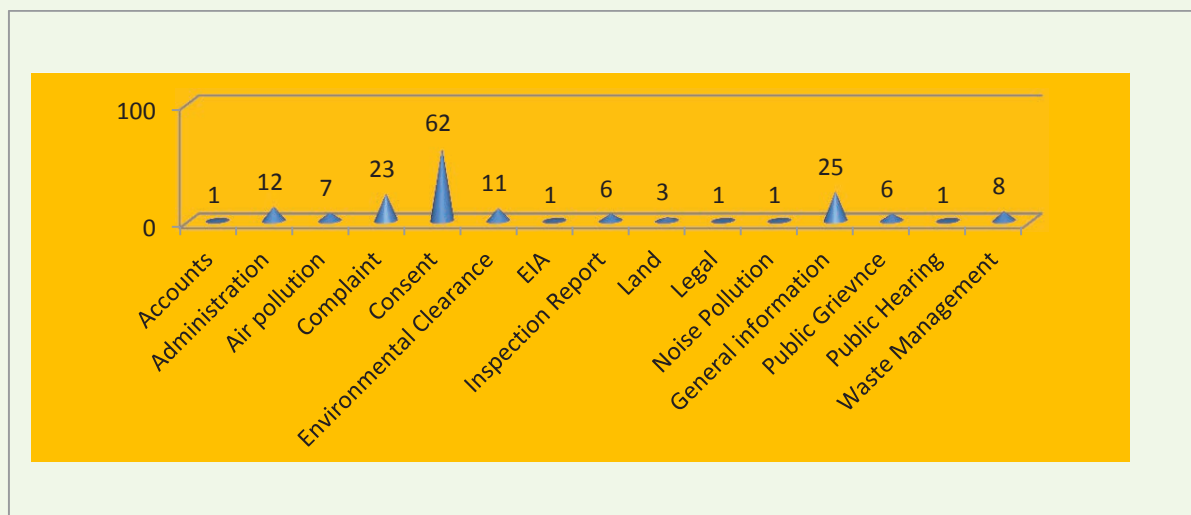


Form Fig-10.8, it can easily be understood that applicants from 18 districts of West Bengal sent their applications under this Act in 2020-21. It has been observed since last few years that the maximum numbers of applications are coming from Kolkata itself. About 44.04% applications (exactly 74 nos. applications out of 168) had been received from Kolkata only in 2020-21. It is about 40.62% applications were received from Kolkata in the financial year 2019-20. The district of North 24 Parganas (22 applications) stood second in position. Rest were received from other districts and other parts of the country.

The State Board treated only 07 (seven) applications out of 168 (only 04.16%) as refusal for not submitting requisite fee under rule 3 of West Bengal Right to Information Rules, 2006 or not for applying as per Section 3 of the Right to Information Act, 2005. All these applicants were informed regarding refusal of his/her application and were requested to furnish fresh application honouring the said Act.

Out of said 168 applications, the State Board received 39 such applications (23.21%) which were forwarded by the Ministry of Environment, Forests and Climate Change, Government of India; Central Pollution Control Board, New Delhi; Department of Environment, Government of West Bengal; L&LRO, Hooghly, West Bengal; District Magistrate, Paschim Bardhaman, West Bengal; North Dum Dum Municipality. In this regard, all the available and relevant information under this Act were sent in favour of the original applicants, with copies were forwarded to the concerned Department, for necessary information.

**Fig. 10.9: Various subjects asked for in different applications under the RTI Act, 2005 during 2020-21**



Applicants furnished their applications under the Right to Information Act, 2005, seeking various information on different issues of environmental matters. The State Board received highest 62 applications in which information in connection with consent matters were sought for. The second highest, 25 applicants sent their applications seeking information in connection with general information related issues. Moreover, applicants also sent their applications for seeking information in connection with legal, waste management, water pollution, EIA, administrative, air pollution etc.

**Table- 10.2: Summary of the status of applications/cases during 2020-21**

Sl. No.	Particulars	No. of Applications	Remarks
1	Total No. received	168	Applications were received under the Right to Information Act, 2005 from the different parts of West Bengal as well as the country during 01.04.2020 to 31.03.2021.
2	Disposed with necessary information	152 (90.47%)	Board took sincere effort to provide relevant information against all the applications received. State Board provided relevant information against 90.47% applications. The numbers of pending cases are only 16, those are under process.
3	Refused Applications	07 (4.16%)	Only 5.62% of applications were treated as refusal for not submitting requisite fee under rule 3 of West Bengal Right to Information Rules 2006 or not for applying as per Section 3 of the Right to Information Act, 2005.
4	Forwarded by various Government Departments	39 (23.21%)	Around 23.21% of applications were forwarded by the Ministry of Environment, Forests and Climate Change, Government of India; Central Pollution Control Board, New Delhi; Department of Environment,

Sl. No.	Particulars	No. of Applications	Remarks
			Government of West Bengal; L&LRO, Hooghly, West Bengal; District Magistrate, Paschim Bardhaman, West Bengal; North Dum Dum Municipality. In this regard, all the available and relevant information under this Act were sent in favour of the original applicants and copies were forwarded to the concerned Department, for necessary information.
5	Application received from other states	20 (11.9%)	Applications were received from New Delhi, Karnatak, Chattisgarh, Maharastra and Uttar Pradesh.
6	Application received from West Bengal	148 (88.09%)	The State Board received applications from 16 districts. There are highest number of 65 applications were received only from Kolkata (43.91%).
7	Information mainly sought for	62 (36.90%)	Regarding consent matter
		25 (14.88%)	Regarding general information
		23 (13.69%)	Regarding complaint matter

# Chapter 11

# CAPACITY BUILDING OF BOARD PERSONNEL

## 11.1 Introduction

According to United Nations Development Programme (UNDP), capacity is “the ability of individuals, institutions and societies to perform functions, solve problems, and set and achieve objectives in a sustainable manner”. The terms capacity building or capacity development described the task of establishing human and institutional capacity, i.e., human resource development as a whole, it encompasses the process of equipping individuals with specialized skills by proper training and providing updated information that enables them to perform effectively toward organizational development.

## 11.2 Status of Capacity Building in the WBPCB during 2020-21

In the West Bengal Pollution Control Board, the total workforce comprises of scientist, engineers, legal professionals, researchers provided with efficient support staffs with administrative and financial expertise. The Board aims to improve the performance of its technical personnel through various training programs. Most new entrant officials of the State Pollution Control Boards normally do not have any formal training in the field of prevention, abatement and control of pollution. When appointed in the Board, they face a gigantic task before them. Therefore, it is necessary to have them trained and oriented for discharging their responsibilities, smoothly and efficiently in areas, such as consent management and implementation of effluent and emission standards. In addition, there is a need to improve the capabilities of persons already working with the Board. It is necessary that uniform methods of analysis of pollutants, consent granting and other activities are adopted and ensured through training for proper and effective implementation of the provisions of the Acts.

In order to update the knowledge of the Board Officials on various aspects of environmental issues, they participated in various training programs organized by different agencies both at national and international levels. The Board officials attended 19 nos. of national level training programs (online) during the financial year 2020-21.

**Table- 11.1: National Level Training Programme / Workshop attended by the Board Officials during 2020-21**

Sl. No.	Name	Designation	Course/ Workshop	Sponsorer	Organizer	Period	Venue
1.	Shri Asit Bhowmic	Scientist	Analysis of Pesticides and other Organic Chemicals in Environmental Samples	CPCB	CSIR-Indian Institute of Toxicology Research, Lucknow	02.02.2021 to 04.02.2021	Online training Programme

Sl. No.	Name	Designation	Course/ Workshop	Sponsorer	Organizer	Period	Venue
2.	Smt. Tapati Roy	Junior Scientist	-do-	CPCB	-do-	-do-	-do-
3.	Shri Subhajt Choudhury	Junior Scientist	Advance Instrumental Analytical Techniques and Preventive Maintenance	CPCB	National Institute of Occupational health, Nirmal Bhavan, Bangalore	03.02.2021 to 04.02.2021	Online training Programme
4.	Smt. Soumya Chakraborty	Environmental Analyst	-do-	CPCB	-do-	-do-	-do-
5.	Shri Kunal Sahoo	Assistant Environmental Engineer	Operating Mechanism and Performance Evaluation of CBWTP	CPCB	Deptt. Of Chemical Engineering, Nanded, Maharashtra	05.02.2021 to 06.02.2021	Online training Programme
6.	Shri Biswajit Pan	Assistant Environmental Engineer	-do-	CPCB	-do-	-do-	-do-
7.	Q.Q. Hassan	Environmental Engineer	Environmental Legislations, Interpretation, Enforcement, Legal and Statutory Requirements- Case Studies	CPCB	National Law School of India University, Bengaluru	08.02.2021 – 12.02.2021	Online training Programme
8.	Ms. Tanwi De	Law Assistant	-do-	CPCB	National Law School of India University, Bengaluru	08.02.2021 – 12.02.2021	-do-
9.	Smt. Mousumi Saha	Environmental Engineer	Environmental Data Interpretation, compilation Analysis, Presentation and Reporting-Hands - on-Training and Case Study	CPCB	Indian Statistical Institute, Delhi	08.02.2021 – 12.02.2021	Online training Programme
10.	Sibasis Dhar	Environmental Analyst	-do-	-do-	-do-	-do-	-do-
11.	Dr. Ramkrishna Saha	Senior Scientist	Occupational Health & Safety Management System 45001:2018	CPCB	National Institute of Occupational Health	10.02.2021 to 12.02.2021	Online training Programme
12.	Shri Debanjan Gupta	Senior Scientist	-do-	-do-	-do-	-do-	-do-



Sl. No.	Name	Designation	Course/ Workshop	Sponsorer	Organizer	Period	Venue
13.	Smt. Manjira Biswas	Assistant Environmental Engineer	Aspects of Hazardous Waste TSDF from Initiation till Commissioning and Issues Pertaining to Compliance Monitoring	CPCB	International Institute of Waste Management, Bengaluru	09.02.2021 to 11.02.2021	Online training Programme
14.	Shri Jagannath Koley	Junior Scientist	-do-	CPCB	-do-	-do-	-do-
15.	Shri Chayan Gayen	Assistant Environmental Engineer	Performance Evaluation of ETP/STP/CETPs	CPCB	Engineering Staff College of India	09.02.2021 to 11.02.2021	Online training Programme
16.	Shri Bhim Tikader	Assistant Environmental Engineer	-do-	-do-	-do-	-do-	-do-
17.	Shri Niranjana Mondal	Assistant Environmental Engineer	-do-	-do-	-do-	-do-	-do-
18.	Shri Sisir Mondal	Assistant Environmental Engineer	Monitoring of Implementation Status of Extended Producer Responsibility under the E-Waste & Plastic Waste Management Rules	CPCB	Centre for Environmental Studies , Chennai	15.02.2021 to 17.02.2021	Online training Programme
19.	Shri Arup Kumar Dey	Environmental Engineer	Environmental Sustainability of Sugarcane Ethanol	CPCB	National Sugar Institute, Kanpur	17.02.2021 to 19.02.2021	Online training Programme
20.	Smt. Jayati Mitra	Assistant Environmental Engineer	-do-	CPCB	-do-	-do-	-do-
21.	Smt. Aishi Sengupta	Junior Scientist	Environmental Monitoring – Sample Collection of Effluent, AAQM, Stack and Testing of Various Environmental Parameters like Air, Water and Noise in the Laboratory	CPCB	National Productivity Council, Chennai	17.02.2021 to 19.02.2021	Online training Programme
22.	Shri Amiya Bhusan Mazumdar	Environmental Analyst	-do-	CPCB	-do-	-do-	-do-

Sl. No.	Name	Designation	Course/ Workshop	Sponsorer	Organizer	Period	Venue
23.	Shri Sudip Bhattacharya	Environmental Engineer	Advanced Oxidation Treatment Technology – A Futuristic Way forward for Treatment of Recalcitrant Pollutants	CPCB	Centre for Environmental Studies, Chennai	24.02.2021 to 26.02.2021	Online training Programme
24.	Smt. Nupur Sengupta	Assistant Environmental Engineer	-do-	CPCB	-do-	-do-	-do-
25.	Shri Sanjib Mondal	RS-GIS Specialist	Short Term course in Remote Sensing and GIS	--	Deptt. Of Science and Technology and Biotechnology, Bikash Bhavan	15.03.2021 to 26.03.2021	Online training Programme
26.	Smt. Kaveri Samanta	RS-GIS Specialist	-do-	--	-do-	-do-	-do-
27.	Dr. Debashis Chakrabarty	Senior Scientist	Urban Air Quality Management	CPCB	Centre for Environmental Studies TERI, Delhi	24.03.2021 to 25.03.2021	Online training Programme
28.	Shri Bajayanta Kumar Majumdar	Environmental Engineer	-do-	-do-	-do-	-do-	-do-
29.	Smt. Soumya Chakraborty	Environmental Analyst	Sophisticated Instruments for Analysis of Toxic Heavy Metals in Environmental Samples and GC / GC-MS Operation	CPCB	National Geophysical Research Institute, Hyderabad	15.03.2021 to 17.03.2021	Online training Programme
30.	Shri Sibasis Dhar	Environmental Analyst	-do-	-do-	-do-	-do-	-do-
31.	Shri Arup Kumar Dey	Environmental Engineer	Control of Air Pollution, Source Apportionment Studies and preparation of Emission Inventory	CPCB	Centre for Environmental Studies TERI, Delhi	17.03.2021 to 19.03.2021	Online training Programme
32.	Dr. Ramkrishna Saha	Senior Scientist	-do-	-do-	-do-	-do-	-do-

Sl. No.	Name	Designation	Course/ Workshop	Sponsorer	Organizer	Period	Venue
33.	Gargi Ghosh	Scientist	Epidemiological Study of Human Community towards Impact of Toxic Chemicals like Arsenic, Polycyclic Aromatic Hydrocarbon (PAH)	-do-	TERI School of Advanced Studies, Teri-SAS, Delhi	17.03.21 to 19.03.21	Online training Programme
34.	Jagannath Koley	Junior Scientist	-do-	-do-	-do-	-do-	-do-
35.	Smt. Manjira Biswas	Assistant Environmental Engineer	Detailed Insight into Management of Various Wastes like Hazardous Waste, E-waste, Construction and demolition Waste, Municipal Solid Waste and Biomedical Waste	CPCB	Engineering Staff College of India, Hyderabad	27.03.21 to 29.03.2021	Online training Programme
36.	Shri Kunal Sahoo	Assistant Environmental Engineer	-do-	CPCB	-do-	-do-	-do-
37.	Shri Biswajit Pan	Assistant Environmental Engineer	-do-	CPCB	-do-	-do-	-do-
38.	Shri Bhim Tikader	Assistant Environmental Engineer	Workshop on Business Models for establishing and operating CETPs in India”	--	GOPA Infra GmbH, Germany	08.04.2021	Online workshop

# Chapter 12

# ENVIRONMENTAL AWARENESS PROGRAMMES

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## 12.1 Introduction

Environmental awareness is very much essential in order to understand the vulnerability of our environment and the importance of its protection. Presently, we all need to take necessary responsibility to respect, protect, and preserve the natural world from the adverse anthropogenic (caused by humans) afflictions as well as natural disasters. Promoting environmental awareness is an easy way to become an environmental steward and participate in creating a brighter future for the next generation.

Environmental awareness and education may be promoted through various ways, like group learning (inside or outside of the classroom), informational and inspirational seminars, online courses, webinars, books, articles, booklets, videos and brochures etc.

## 12.2 Environmental Awareness drive by the State Board

The West Bengal Pollution Control Board is continuously carrying out all sincere efforts to spread environmental awareness among the students, teachers, stakeholders and other people utilizing all these means throughout the year in our state. The objectives and the mode of its environmental awareness movement are:

1. To promote environmental awareness among all sections of the society;
2. To spread environment education about relevant laws and regulations and about their rights, interests, duties and responsibilities, as well as about the social, environmental and economic consequences of non-compliance, especially in the non-formal system among different sections of the society;
3. To facilitate development of education/training/campaign materials and aids in the formal education sector;
4. To promote environment education through existing educational/scientific/research institutions;
5. Inclusion of awareness and environmental educational programmes in schools and other educational establishments;
6. To ensure training and manpower development for environment education, awareness and training;
7. To encourage non-governmental organizations, mass media and other concerned organizations for promoting awareness about environmental issues among the people at all levels;
8. To use different media including films, audio, visual and print, theatre, drama, advertisements, hoarding, banners, posters, seminars, workshops, competitions, meetings etc. for spreading messages concerning environment and awareness; and
9. To mobilize people's participation for preservation and conservation of environment.

The State Board is committed to act for environmental protection for the wellbeing of the society. For this purpose, the State Board gives importance on public awareness about the environment and conducts various environmental campaign programmes throughout every year. The main components of such programmes are stated below:

1. National Green Corps (NGC) Programme;
2. Swachhta Action Plan (Nirmal Bangla Abhijaan)
3. District wise Nature camps
4. Organizing seminars/workshops/conferences etc. on various environmental issues/topics;
5. Environmental awareness/campaign programmes on noise pollution, restrictions on using banned single-use plastic carry bags and other environmental issues;
6. Saplings plantation programme,
7. Social environmental responsibilities
8. Participation in various fairs/melas etc.

In a developing country like India, environmental awareness is very much required for each and every level of the civic society of both urban and rural areas irrespective of their economic entity. This is necessary as well as helpful for any government to build up active public participation in taking action for any kind of environmental cause. This large scale public involvement can strengthen environmental movements for the sake of implementation of environment-friendly rules and regulations by government machinery in a much better way to have the most desired result in terms of better environment to live in.

In West Bengal, considering the fact above, the State Board with active cooperation of the State Government has initiated various types of environmental awareness programmes, targeting people of all works of life, genre, students, teachers etc. These positive initiatives also include the Ministry of Environment, Forest & Climate Change (MoEF&CC), Government of India funded National Green Corps (NGC) Programmes since 2003 throughout the country for the school children. Now, the Ministry has launched some new programmes, like Swachhta Abhijaan (Cleanliness drive) at various public and prominent places in the State, river ghats and sea-beach cleaning programme, nature camping or Nature studies, making the schools plastic-free etc. Apart from this, the Board conducts various campaign programmes throughout the year utilizing the services of local bodies, various educational institutions and government departments towards generation of environmental awareness among general people.

The world has been witnessing a critical situation due to Covid-19 pandemic since the end of 2019. India has also faced a toughest time of livelihood during the long lockdown period since March, 2020 and onwards. During such critical time, the West Bengal Pollution Control Board sincerely carried out various environmental campaign/awareness programmes virtually. After this, during the unlock period, the State Board even arranged few offline events/programmes maintaining all necessary Covid-19 guidelines.

### 12.3 Various meetings organized during 2020-21

- **Online meeting with the students of NGC schools regarding combating air and noise pollution during upcoming Kali Puja/ Diwali- 2020**

The WBPCB has taken utmost initiatives to combat both air and noise pollution during ensuing Kali Puja/Diwali festival-2020 by imposing complete restriction on bursting firecrackers as per the order of Hon'ble Calcutta High Court and NGT. As part of these initiatives, an online meeting was conducted with the enlisted schools under National Green Corps Programme (NGC) on **12 November, 2020**. Dr. Kalyan

Rudra, Chairman, Dr. Rajesh Kumar, IPS, Member Secretary and Shri Subrata Ghosh, Chief Engineer of the Board talked with the representatives of about 65 schools & requested them to abide by the rules & restrictions for the sake of the present condition. The participating schools agreed not to use firecrackers this year and committed to create awareness about the matter in respective local areas also. Moreover, above 600 schools have been communicated through social media page of the Board.

## 12.4 Observation of various environmentally significant days during 2020-21

### • Observation of World Earth Day-2020

The West Bengal Pollution Control Board planned to celebrate the 50th year of the World Earth Day on **22 April, 2020** involving the Eco-club students virtually. The theme for Earth Day, 2020 is climate action. The State Board intended to encourage the Eco-club students to utilise their time during the lockdown period by engaging in the Earth Day celebration through digital means. A number of interested students of different schools enlisted under the NGC Programme across the state sent their entries in the form of write-up, videos, poems, drawings, pictures, posters etc.

The participating schools were as below:

Sl. No.	Name of the School	District
1.	Namkhana Union Rashmoni Balika Vidyamandir	24 Paraganas (South)
2.	Lalbagh Singhi High School	Murshidabad
3.	Pranami Balika Vidyamandir	Kalimpong
4.	Bethune Collegiate School	Kolkata
5.	Bolpur High School	Birbhum
6.	Prabartak Vidyarthi Bhawan	Hooghly

### • Celebration of World Environment Day-2020

The West Bengal Pollution Control Board observed the World Environment Day-2020 during the Covid-19 pandemic situation on **5 June, 2020** at our Auditorium of Paribesh Bhawan maintaining social distancing and all other essential Govt. guidelines.

The theme of this year's World Environment Day was 'Ecosystem Restoration' [Time for Nature- Celebrate Biodiversity]. The programme started with welcome address by Dr. Kalyan Rudra, Chairman, WBPCB and delivered his elaborated speech on the importance of conserving biodiversity and other different environmental issues. Shri Vivek Kumar, IAS, Principal Secretary, Dept. of Environment, Govt. of West Bengal addressed the gathering and raised the issues of biodiversity and climate change in his speech.

Prof. Dr. Saumen Mahapatra, Hon'ble, Minister-in-charge, Dept. of Environment and Public Health Engineering, Govt. of West Bengal graced the programme as the chief guest. He showed us the visionary of the future action plan of the Environment Department.

The programme ended with the vote of thanks by Dr. Rajesh Kumar, IPS, Member Secretary, WBPCB. He summarised all the issues discussed in the programme and conveyed his gratitude to all the dignitaries, senior officers of the department and all the officials of the State Board present in the programme.

The following Board's publications were released during the programme:

1. Activity Report of National Green Corps Programme, 2018-19
2. A Book – "Test your Knowledge- Environmental Quiz"

3. A Booklet – “Success story Behind Improvement of Air Quality of Kolkata”
4. Environmental and Covid-19 Posters

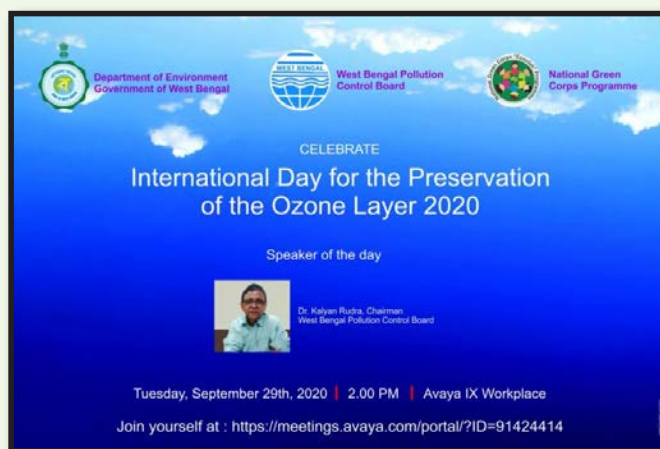
The names of the ten winners of the World Environment Day competition organized digitally among the school students under the National Green Corps were announced.

At the end of the programme, Hon’ble Minister and other guests planted trees at the office premises to mark the auspicious occasion.



***Celebration of World Environment Day-2020***

- **Observation of World Ozone Day- 2020**



Despite the pandemic situation due to the Covid-19 virus, the West Bengal Pollution Control Board organized an online programme for the school students on **29 September, 2020** at Paribesh Bhawan to mark the international Ozone Day. Dr. Kalyan Rudra, Chairman, WBPCB spoke on the importance of ozone layer and its preservation from the environmental point of view elaborately. Shri Subrata Ghosh, Chief Engineer and Dr. T.K. Gupta, Chief Engineer of the State Board attended the session and interacted with the participating students about the topic. About 112 students from different

schools across the State participated in the programme and showed great enthusiasm towards it.



Some of the participating schools were:

1.	Ahmadpur Joy Durga High School
2.	Dhubulia Nivedita Balika Vidyalaya
3.	Noorpur Panchanan Paik Smriti Vidyalaya
4.	Bantika Girls High School
5.	Taranagar Sarasati High School
6.	Behala Arrya Vidmandir
7.	Baligeria Balika Vidyapith H.S
8.	Taranagar Sarasati High School
9.	Bhimpur Swamiji Vidyapith
10.	Dhubulia Nivedita Balika Vidyalaya
11.	Taranagar Saraswati High School
12.	Bandel Vidyamandir
13.	Asanda Siksha Niketan
14.	Bamundiha High school
15.	Bhagabandihi High School
16.	Balurghat JLP Vidyachakra, Dakshin Dinajpur
17.	Bantika Girls High School
18.	Bandel Vidyamandir
19.	others

## 12.5 Various environmental awareness activities during 2020-2021

- Sabujayan- 2020

As desired by Hon'ble Chief Minister, West Bengal, an initiative was undertaken to compensate the loss of greenery in Kolkata and its surrounding areas due to the cyclonic storm Amphan happened in May, 2020.



This large scale plantation programme has been titled, Sabujayan Prakalpa. As part of this programme, a plantation programme was organized at Newtown area on **7 August, 2020** with an objective of re-greening the area.

*Plantation by Dr. Kalyna Rudra,  
Chairman, WBPCB*

Shri Derbasish Sen, IAS, Chairman and Managing Director of HIDCO, Dr. Kalyan Rudra, Chairman, WBPCB, Shri Abhijit Bose, WBCS, Jt. Secretary to the Govt. of West Bengal and Senior Personnel Manager, WBPCB, Dr. T.K. Gupta, Chief Engineer, WBPCB, other Board officials were present in the programme.

All the dignitaries planted saplings to mark the inauguration of the noble Programme and urged the citizens to protect the greeneries for the sake of clean and green environment in our city.

- **Webinar on awareness about protecting the Tourists Spots during forthcoming Picnic Season**

The West Bengal Pollution Control Board organized a Webinar on **‘Our Role to Protect the Tourists Spots during forthcoming Picnic Season’** for school students on **15 December, 2020** at Paribesh Bhawan, Kolkata. A number of students of 30 NGC enlisted schools located near some prominent picnic/tourist spots, like Bethuadahari, Baranti, Jharkhali, Garpanchkot, Digha etc. participated in the programme.

Shri Subrata Ghosh, Chief Engineer welcomed the students and described the objective of the programme. Dr. Kalyan Rudra talked about the present critical situation due to the pandemic. Highlighting the topic of the webinar, he gave some useful advice to protect the environmental pollution at prominent tourist spots during upcoming picnic season :

1. To maintain all the norms for preventing COVID-19, like- social distancing, wearing mask.
2. Instead of burning coal and wood for cooking purpose, LPG gas should be used.
3. To control waste generation and not to use thermocol and plastic items.
4. To use microphone along with sound limiter within permissible limit. DJ should not be used. Loud noise should be avoided at Silence Zone areas.
5. To avoid use of chemical fertilizer for agriculture in order to prevent food contamination as well as environmental pollution.

He informed the students that the State Board will provide 2 separate bins to the NGC schools for disposal of plastic wastes and E-wastes. He also encouraged the students by announcing reward for the school for collecting maximum amount of wastes and also for an individual student for disposing maximum amount of wastes in the bins placed at the school premises.

Dr. Rajesh Kumar, IPS, Member Secretary of the Board also addressed the participants providing some important information about some initiatives of the Board, like large scale plantation of about



**Webinar at Paribesh Bhawan in presence of Dr. Kalyan Rudra, Chairman, WBPCB, Dr. Rajesh Kumar, IPS, Member Secretary & Shri Subrata Ghosh, Chief Engineer, WBPCB**

17,000 saplings throughout the State. He also urged them to be involved with the Board's initiatives for environmental concern by sharing relevant information about environment, plantation etc. through **PARIBESH App** and reward for the same to the students. He informed that, from now onwards Air Quality index (AQI) will be recorded at all the Head Quarters of all districts and Noise meter will be provided at all the housing complexes of Kolkata by the State Board.

The Webinar ended with vote of thanks to the participating students by Shri Subrata Ghosh, Chief Engineer, WBPCB.

The participating schools were:

Sl. No.	School Name	District
1	Mairar Danga Goppu Memorial High School	Alipurduar
2	Alipurduar Newtown Girls' High School	Alipurduar
3	Falakata High School	Alipurduar
4	Bhutnirghat Girls High School	Alipurduar
5	Deshbandhunagar Girls' High School	Jalpiguri
6	Belakoba Girls' High School	Jalpaiguri
7	Sanaulla High School	Jalpaiguri
8	Purbanchal High School(H.S)	Jalpaiguri
9	Purba Mallickpara High School	Jalpaiguri
10	Tatari Kendadih High School	Purulia
11	Belkuri High School.	Purulia
12	Balakdih K.B.M High School (H.S)	Purulia
13	Manguria S.S.B.M. Vidyamandir	Purulia
14	Pakbirra Jr. High School	Purulia
15	Bargaria High School (H.S)	Purulia
16	Aniruddha High School	Purba Medinipur
17	Analberia High School (H.S)	Purba Medinipur
18	Sarpai Model Institution (H.S)	Purba Medinipur
19	Kalindi Union Girls' High School	Purba Medinipur
20	Kanthi Jatiya Vidyalaya For Girls'	Purba Medinipur
21	Ramkrishnapur High School	South 24 Paraganas
22	Mongal Chandra Vidyapith (H.S.)	South 24 Paraganas
23	Bipradaspur High School (H.S.)	South 24 Paraganas
24	Hiranmoypur Joygopalpur Netaji Vidyapith (H.S)	South 24 Paraganas
25	Gosaba R. R. Govt. Sponsored Institution	South 24 Paraganas
26	Moukhali G. G. Vidyalaya(H.S.)	South 24 Paraganas
27	Birpur Lalita Srikrishna Girls' High School	Nadia

Sl. No.	School Name	District
28	Dhubulia Nivedita Balika Vidyalaya(H.S.)	Nadia
29	Holi Family Girls' High School	Nadia
30	Dhubulia Shyamaprosad Sikshayatan (H.S)	Nadia

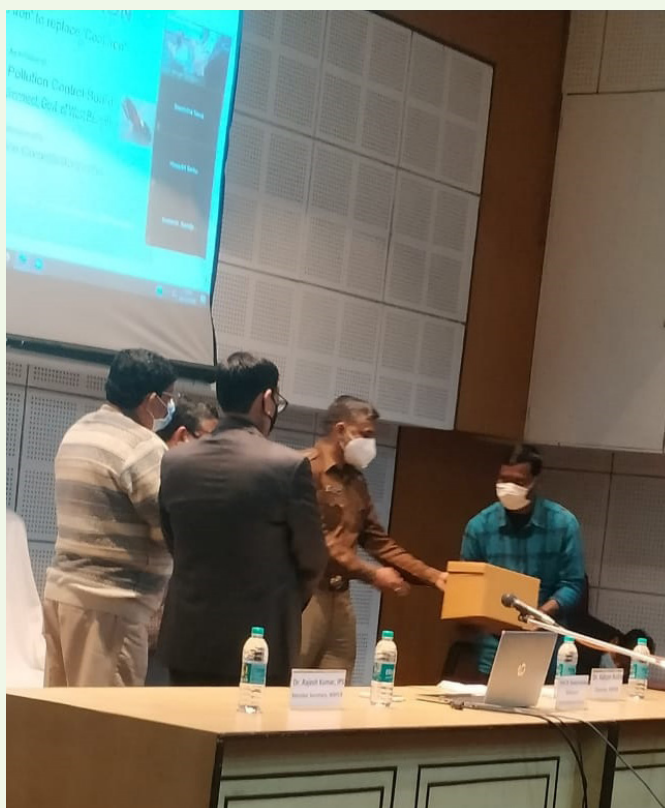
- **Distribution of Gas Iron to the beneficiaries**



#### At Paribesh Bhawan, Bidhannagar

The West Bengal Pollution Control Board started an endeavour of distributing LPG cylinders to the owners of the road-side eateries of Bidhannagar, Alipore etc. to comply with the direction of the Hon'ble National Green Tribunal regarding improvement of ambient air quality in and around Kolkata since last year. In continuation to this, the State Board in collaboration with the Bidhannagar Police Commissionerate took an initiative to distribute Gas-Iron along with LPG cylinder and smoke-less chullah to replace coal-iron to about 160 beneficiaries of Bidhannagar areas.

For this purpose, a programme was organized on **30 December, 2020** at the Auditorium, Paribesh Bhawan, where the State Board handed over Gas-irons to 10 beneficiaries. Prof. Dr. Saumen Kr. Mahapatra, Minister-in-charge, Dept. of Environment & PHE, Govt. of West Bengal graced the programme as chief guest. Dr. Kalyan Rudra, Chairman, WBPCB explained the beneficiaries that use of Gas-iron would be beneficial for them as it reduces health hazards, air pollution as well as it is cost-efficient also. Dr. Rajesh Kumar, IPS Member Secretary, WBPCB told that the Board has the target to distribute gas-iron to about 10,000 beneficiaries in and around Kolkata. He also requested the beneficiaries to cooperate with the State Board to achieve the objective of air pollution control. Hon'ble MIC talked about various environmental and social activities taken up by the Board and the State Govt. as well. He also assured that such initiatives will be organized at Shri Subrata Ghosh, Chief Engineer, WBPCB, the Commissioner, Bidhannagar Police Commissionerate and other police officials of the commissionerate were present in the programme.



**Hon'ble Environment Minister Prof. (Dr.) Saumen Mahapatra is distributing gas-iron to the beneficiaries in presence of Dr. Kalyan Rudra, Chairman & Dr. Rajesh Kumar, IPS Member Secretary of the State Board**

### At Laketown, Bidhannagar



***Hon'ble Fire & Emergency Minister Shri Sujit Bose distributing gas-iron to the beneficiaries in presence of Dr. Kalyan Rudra, Chairman & Dr. Rajesh Kumar, Member Secretary of the Board***

In continuation of its endeavour to comply with the direction of the Hon'ble National Green Tribunal (NGT) in order to combat air pollution and improvement of ambient air quality in and around Kolkata, the West Bengal Pollution Control Board in association with Bidhannagar Police Commissionerate organized a programme on **2 February, 2021** at Gokul Banquet Hall, Lake Town for the second time to distribute Gas iron along with LPG cylinder free of cost to replace Coal based iron to about 60 beneficiaries of Bidhannagar area.

Shri Sujit Bose, Hon'ble Minister-in-charge, Dept. of Fire & Emergency Services, Govt. of West Bengal graced the programme as the Chief Guest. Dr. Kalyan

Rudra, Chairman, WBPCB delivered the inaugural speech to welcome all the dignitaries, officials of the State Board and Bidhannagar Police Commissionerate. He requested all the beneficiaries to use the Gas irons instead of coal iron as it is more cost-efficient as well as helps to avoid health hazards due to smoke they had suffered earlier. He also explained them that use of Gas irons will lead to improvement of air quality in the city. Hon'ble MIC extended his heartiest thanks to the State Board and Bidhannagar Police Commissionerate for this initiative and encouraged the beneficiaries to use the Gas irons for the sake of their wellbeing as well as the betterment of the environment. Shri Umesh Yadav, Dy. Commissioner of Police, Bidhannagar Police Commissionerate informed the beneficiaries that using the coal-iron instead of Gas-iron given to them from now will be a punishable offence. He also told that the police officials will monitor the area to check for the same.

Dr. Rajesh Kumar, IPS, Member Secretary, WBPCB gave vote of thanks at the end of the programme. He also extended thanks to the Hon'ble MIC for arranging fire extinguisher vehicle at Dhapa and Promodnagar dumping ground area to avoid fire hazards. He also announced to install Air Quality Index monitoring system.

### At Howrah

The West Bengal Pollution Control Board has started an endeavour of distributing LPG cylinders along with gas iron to the shop-owners of different areas in Kolkata to comply with the direction of the Hon'ble National Green Tribunal regarding improvement of ambient air quality of the city since 2019. As part of this initiative, the State Board in collaboration with the Howrah Police Commissionerate took an initiative to distribute Gas-Iron to replace coal-iron along with LPG cylinder to the shop-owners of the respective area. For this purpose, a programme was organized on **12 February, 2021** at the Bellilious Park Hall, Howrah, where the State Board handed over Gas-irons to about 20 beneficiaries. Dr. Kalyan Rudra, Chairman, WBPCB delivered a welcome address explaining the beneficiaries that use of Gas-iron would be beneficial for them as it reduces health hazards, air pollution as well as it is cost-efficient also.

He also told that the items are geo-tagged in order to monitor that whether they are using the same or not. Md. Shana Akhtar, IPS, Dy. Commissioner of Police (Central Division), Howrah Police Commissionerate also encouraged the beneficiaries to use the gas-irons. Dr. Rajesh Kumar, IPS, Member Secretary, WBPCB told that the Board has the target to distribute gas-iron to about 10,000 beneficiaries in and around Kolkata. He also requested the beneficiaries to cooperate with the State Board to achieve the objective of air pollution control. He also told about the Board's plan to make a short film on the change of the lifestyle of the beneficiaries before and after using gas-irons in order to aware the people across the state. Shri Mrityuinjoy Bannerjee, WBPS, Asstt. Commissioner of Police, Howrah Police Commissionerate gave vote of thanks at the programme.



***Dr. Kalyan Rudra, Chairman & Dr. Rajesh Kumar, IPS, Member Secretary of the Board and Police officials are distributing gas-iron to the beneficiaries***

- **LPG Gas and oven distribution Programme at Laketown**

In order to comply with the order of the Hon'ble National Green Tribunal (NGT), the West Bengal Pollution Control Board, Department of Environment, Government of West Bengal has taken various initiatives in order to improve the ambient air quality of Kolkata, Howrah and its surrounding areas. As part of this, the State Board started distributing LPG cylinders and gas oven burners to the road-side eateries to avoid use of coal and wood as fuel for cooking purpose and to provide them a cleaner option to run their business in an environment-friendly way. Earlier, such programmes were organized at Salt Lake and Alipore in 2019. In continuation to that, a programme was organized by the State Board in collaboration with the Bidhannagar Police Commissionerate and Bidhannagar Municipal Corporation on **11 February, 2021** at Gokul Banquet to distribute LPG cylinders and gas oven burners to about 25 road-side eatery owners of Laketown area.

Shri Sujit Basu, Hon'ble Minister-in-Charge, Department of Fire and emergency services; Dr. Kalyan Rudra, Chairman and Dr. Rajesh Kumar, IPS, Member Secretary of the West Bengal Pollution Control Board, Shri Surya Prakash Yadav, IPS, Dy. Commissioner of Police (HQ), Bidhannagar Police Commissionerate, graced the programme. Senior officials of the State Board and police officials of the Bidhannagar Police Commissionerate were present in the programme.



***Hon'ble Fire & Emergency Minister Shri Sujit Bose distributing LPG gas to the beneficiaries in presence of Dr. Kalyan Rudra, Chairman & Dr. Rajesh Kumar, IPS Member Secretary of the Board***

- **Different Fairs/Melas organized by the WBPCB during 2020-21**

Due to the pandemic situation, only a few fairs or melas were organized during 2020-2021 across the state. Amongst those, the WBPCB participated only in Gangasagar Mela-2021 at Gangasagar, 24 Paraganas (South) dist. from **08 January, 2021 to 16 January, 2021**. The State board set up a stall displaying the campaign board to show case various environmental messages at the fairground in order to spread environmental awareness amongst the visitors and took necessary initiatives to keep the mela ground 'Plastic-free'.

## 12.6 Environmental awareness activities under NGC Programme during 2020-21

- Poshan Plantation Programme-** A number of school participated in the following activities at their school premises and its surrounding areas during January-February, 2021:
  - Gardening in adjacent Area
  - Gardening in adjacent Area
  - Setting up of Herbal Garden, Kitchen Garden, Medicinal plant Garden inside the school campus and adjacent areas.
  - An area covering nearly 5000 square feet has been prepared for gardening and it is regularly maintained. To produce vegetables for Mid- Day Meal and flowers for the beautification of the school campus.
- Celebration of National Science Day-** The enlisted schools under NGC Programme observed National Science Day (the day of discovering the Raman effect by Sir C.V. Raman) on **28 February, 2021** at their school premises. Seminars and cultural programmes were organized by the teachers and students to celebrate the day in a befitting manner.
- Celebration of International Women's Day-** A number of students and teachers of some NGC schools participated in seminar/ talk show, quiz contest, poster preparation on 'Women Empowerment & significance of the International Women's Day-2021, campaign programme, rally and cultural programme to celebrate the International Women's day on **8 March, 2021**.
- Celebration of World Water Day-2021-** Some of the enlisted NGC schools celebrated World Water Day on **22 March, 2021** at their school premises in a befitting manner. Students and teachers participated in Seminar on 'Present status of water crisis & importance of water conservation', preparation of poster & placards on water conservation, rally to create awareness about water conservation, rainwater harvesting etc.
- Activities as per NGC Programme guideline-** The Eco-club students participated in some following regular activities throughout the year at their school premises or virtually:
  - Tree Plantation programme,
  - Anti- plastic campaign programme.
  - Awareness on air, water, noise pollution. Waste Management- proper segregation at source and its disposal.
  - Celebration of Bano Mohatsav.
  - Campaigning against the use of single use of Plastic carry bags.
  - Waste Management- proper segregation at source & its disposal.
  - Celebration of World Environment Day and other significant days.



**Poshan Plantation activity by the students of Palaspai Bejoy Modak Uchha Balika Vidyalaya, Hooghly dist.**



**Poshan Plantation activity by the students of Agarpara Netaji Vidyapith for Girls, 24 Pgs (N) dist.**



**Rally to observe World Water Day by the students of Haripur Jr High School, Chakulia, Uttar Dinajpur dist.**



**Observation of Women's Day by the teachers of Tindharia girls high school, Darjeeling dist.**



# Chapter 13

## NEW INITIATIVES OF THE STATE BOARD

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The State Board has undertaken various new developmental initiatives during 2020-2021. The details of such significant activities have been elaborated below:

- West Bengal Pollution Control Board(WBPCB) had implemented the On-line Consent Management and Monitoring System (WBOCMMS) by engaging NIC which allows:
  - Online submission of applications.
  - Eliminate physical touch point for document submission.
  - Online payment of application fee.
  - Allow applicant to track status of application online.
  - Applicant can download the final certificate online.
  - Provision for public access to verify status of consent application in WBOCMMS.
- WBPCB is in the process of implementation of different action points under State Business Reform Action Plan (SBRAP)-2020-21 under the “Ease of Doing Business” for different services of Board. WBPCB is in compliance with most of the action points.
- The West Bengal Pollution Control Board has launched ‘Paribesh App’, Integrated Grievance Management System (IGMS) and Court Case Monitoring System (CCMS).
- Environmental Awareness Programs like World Environmental Day which was observed throughout the State on 5th June to create environmental awareness among the people of the State. Awareness campaign program for noise, plastic, use of loudspeaker continues.
- A Booklet – “Success story Behind Improvement of Air Quality of Kolkata” was published on the eve of the World Environment Day-2020.
- Under the World Bank funded “Capacity Building for Industrial Pollution Management” project, the WBPCB undertook remediation project of the Dhapa municipal waste dumpsite. The project was completed and its Operation & Maintenance is continuing.
- To mitigate air pollution caused by vehicular movement on road, the Board has engaged around 40 dedicated water sprinkling vehicles for water sprinkling on busy roads of Kolkata, Howrah, Bidhannagar, South Dum Dum, Barrackpore Commissionerate, Asansol – Raniganj and Siliguri Municipal areas for road dust suppression. Also fire department is spraying water in various legacy MSW dumpsite.
- WBPCB has introduced clean fuel by providing LPG oven to replace wood and coal based chullah in Bidhannagar, Howrah & Kolkata. LPG cylinders and accessories were distributed to the owners of road side eateries and ironing units situated within Kolkata, Bidhannagar and Howrah. This endeavour is a part of a program initiated for improvement of ambient air quality in and around Kolkata as per direction of the Hon’ble National Green Tribunal.

- Work of setting up of Board's own laboratory and office building has started at Haldia & Asansol.
- WBPCB has received the prestigious SKOCH ORDER OF MERIT by qualifying in the Semi-final of SKOCH Award 2020 in COVID-19 Waste Management.
- WBPCB has taken a commendable Initiative of Re-greening of Kolkata after devastating effect of cyclone Amphan that has resulted in a rampant and large destruction of trees in the city. The work of plantation of 10,000 seedlings at different places within 25 km radius of 'Paribesh Bhawan' under Bidhannagar Municipal Corporation area alongside VIP road (from HUDCO to Dum Dum Airport) has been completed. Further project of plantation of 4,000 seedlings of different trees has been undertaken at the Newtown-Rajarhat Satellite Township is on-going.
- To prevent air pollution caused due to indiscriminate burning of waste during winter season in existing MSW dumpsites, WBPCB, with the help of fire department has engaged dedicated fire tenders and water sprinkling arrangements at Dhapa and Promodnagar Municipal Solid Waste dumpsite to douse landfill fire.

# Chapter 14

# INITIATIVES FOR EASE OF DOING BUSINESS (EODB) BY WEST BENGAL POLLUTION CONTROL BOARD

The Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Govt. of India in coordination with States and Union Territories (UTs), has undertaken a series of reforms to improve the business climate in the country. The objective of the Action Plan is to layout the series of reforms targeted at increasing transparency and improving the efficiency and effectiveness of regulatory framework and services for businesses in India. The West Bengal Pollution Control Board (WBPCB) has implemented the reform points pertaining to EODB State Reform Action Plan (SRAP 2020– 2021). Following are the initiatives taken by the Board for compliance of EoDB services:

1. The On-line Consent Management and Monitoring System (WBOCMMS) have been implemented for the services of WBPCB. Industries / Projects/ Health Care Establishments can apply online for application of Consent to Establish, Consent to Operate and its renewal, Hazardous Waste Authorization and its renewal, Biomedical Waste authorization and its renewal, E-Waste Authorization and its renewal, Plastic Waste Registration and its renewal, Registration for Dealers of Lead Acid Battery and its renewal, Municipal Solid Waste Authorization and its renewal and C&D Waste Authorization and its renewal.
2. The WBPCB has been implemented ‘no physical touch point for submission of various applications’.
3. The WBPCB, has issued order for minimum mandatory documents required from project proponent for submission of Consent to Establish, Consent to Operate, Hazardous Waste Authorisation, Biomedical Waste Authorization, Plastic Waste Registration, E-Waste Authorisation, Municipal Solid Waste Authorization, C&D Waste Authorization and Registration for Dealers of Lead Acid Battery applications to ensure uniformity.
4. The WBPCB has published complete information for online application for the above services in website / WBOCMMS for-
  - Fees
  - Procedure and
  - Comprehensive list of documents required.
5. The WBPCB has integrated Online Central Inspection System (CIS) developed by Labour Department, GoWB with Labour Commissionerate, Factory Directorate, Boiler Inspector & Legal Metrology for HIGH RISK (RED Category) Establishment. Random selection of establishments and scheduling for inspection is undertaken under the CIS. The system is in place since January 2021.
6. The WBPCB has published Inspection policy for compliance inspection.

7. Online dashboard / information are available in public domain for services of WBPCB in WBOCMMS.
8. WBOCMMS is integrated with Single Window Portal of Silpasathi for all services of WBPCB.
9. The WBPCB has published notification mandating that each draft business regulations is published online for at least 30 days before enactment to invite public comments / feedback and to publish the comments received and how they were addressed in the final regulation.
10. Online system is in place to publish draft business regulation and public comments / feedback received against it and how they were addressed in the final regulation.

# Chapter 15

# FINANCIAL SUMMARY OF THE WEST BENGAL POLLUTION CONTROL BOARD

## 15.1 Financial position of the Board (Unaudited)

The financial summary for the financial year 2020-2021 reveals that during the said period, the total receipts of the State Board were Rs.11,482.23 lakhs and total expenditure were Rs. 9,223.04 lakhs only. The State Board earned a major portion of its total revenue from different industrial units of West Bengal on accounts of Consent Administration, Hazardous Authorization fees, Bio-Medical Authorization fees, Grants from State and Central Government. The State Board incurred major portion of its total expenditure towards Pay & Allowances including Superannuation benefits & Other Contingencies, expenditure towards pollution control abatement measure.

The financial summary for the financial year 2020-2021 is placed in table 15.1 below:-

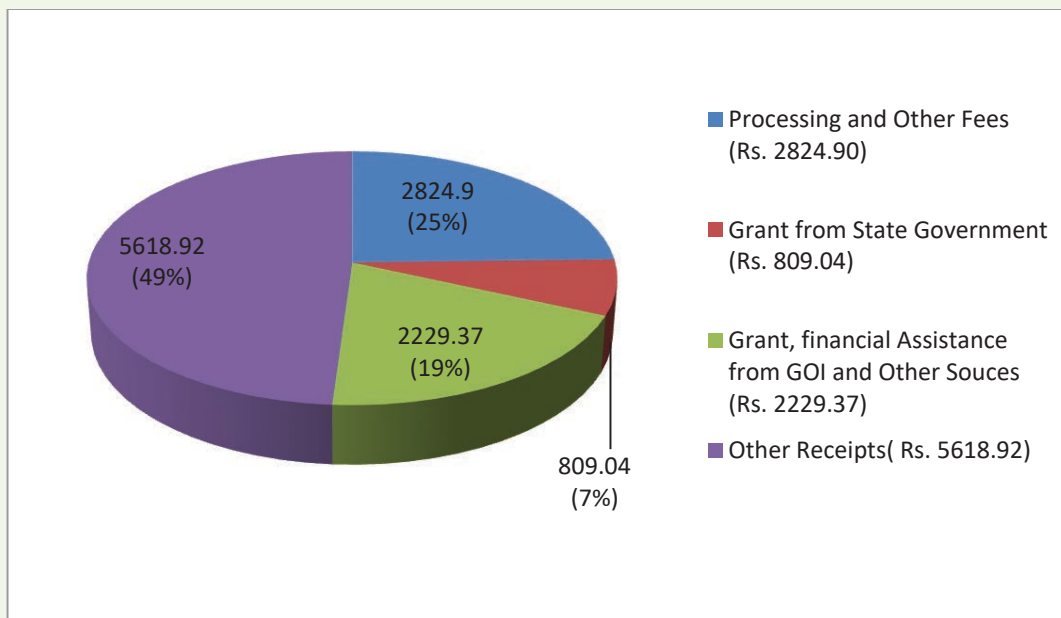
**Table 15.1 : Financial Summary for the financial year 2020-2021 (Unaudited)**

Sl. No.	Head of Account	Amount (Rs. In Lakh)
1	<b>Receipts Under Non Plan Head :-</b>	
	i) Processing Fees from NOC, Consent to Operate, Hazardous/Biomedical Waste Authorization Fees, Import Clearance Fees, effluent/emission Sample analysis charges etc.	2824.90
	ii) Grants from State Government (towards salary grants)	636.13
	iii) Cess Re-imburement for office establishment & Operation	0.00
	iv) Other receipts including interest	5618.92
	<b>Receipts Under Plan Head:-</b>	
	v) Grants, Financial Assistance from GoI and other sources	2229.37
	vi) Grants from State Govt. under Plan head	172.91
	vii) Cess Re-imburement for pollution control abatement measure	0.00
2	<b>Total Receipts ( i to vii )</b>	<b>11482.23</b>
3	<b>Expenditure under Non- Plan Head :-</b>	
	i) Pay & Allowance including Superannuation Benefits	4856.82
	ii) Other Contingencies (including office rent and other Administrative Exp.)	1380.15
	<b>Expenditure under Plan Head :-</b>	
	iii) Expenditure on Grants, Subsidies, Cess etc.	2108.41
	iv) Other Expenditure	877.66
4	<b>Total Expenditure incurred from the fund receipts during the year (i to iv)</b>	<b>9223.04</b>
5	Excess of Receipts over Expenditure (2-4)	<b>2259.19</b>



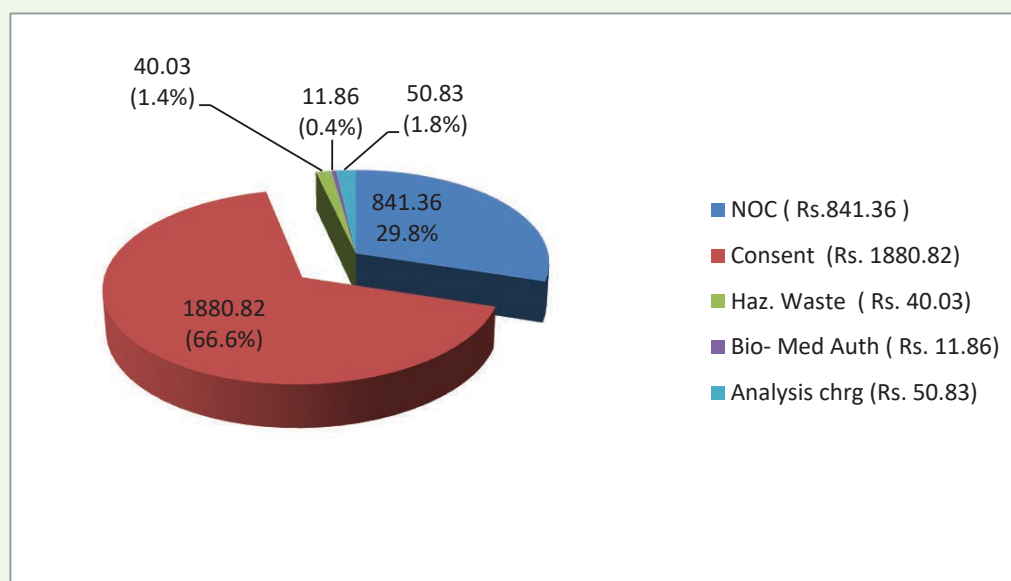
During the Financial Year 2020-2021, total receipts of the State Board were Rs. **11,482.23** lakhs. The total receipts of the State Board have been shown under five separate heads i.e. Receipts of Processing Fees is Rs. **2,824.90** lakhs, Receipts of Grants from State Govt. is Rs.**809.04** lakhs (Rs.636.13 + Rs.172.91), Receipts of Grants from GoI and other sources is Rs. **2,229.37** reimbursement of Water Cess (including interest) is Rs. **0.00** lakhs and from other receipts is Rs.**5618.92** lakhs only as shown Fig. 15.1.

**Fig 15.1: Receipts Under different heads during 2020-2021 of Rs. 11,482.23 lakhs**



Processing fees collected from Industrial /Non-Industrial units of West Bengal under Consent Administration, Hazardous Authorization & Biomedical Waste Authorization and Analysis Charges during the Financial Year is Rs. **2,824.90** lakhs (Fig. 15.2).

**Fig 15.2 Sub-Component wise break up of processing and other fees during 2020-2021 of Rs.2824.90 lakhs**

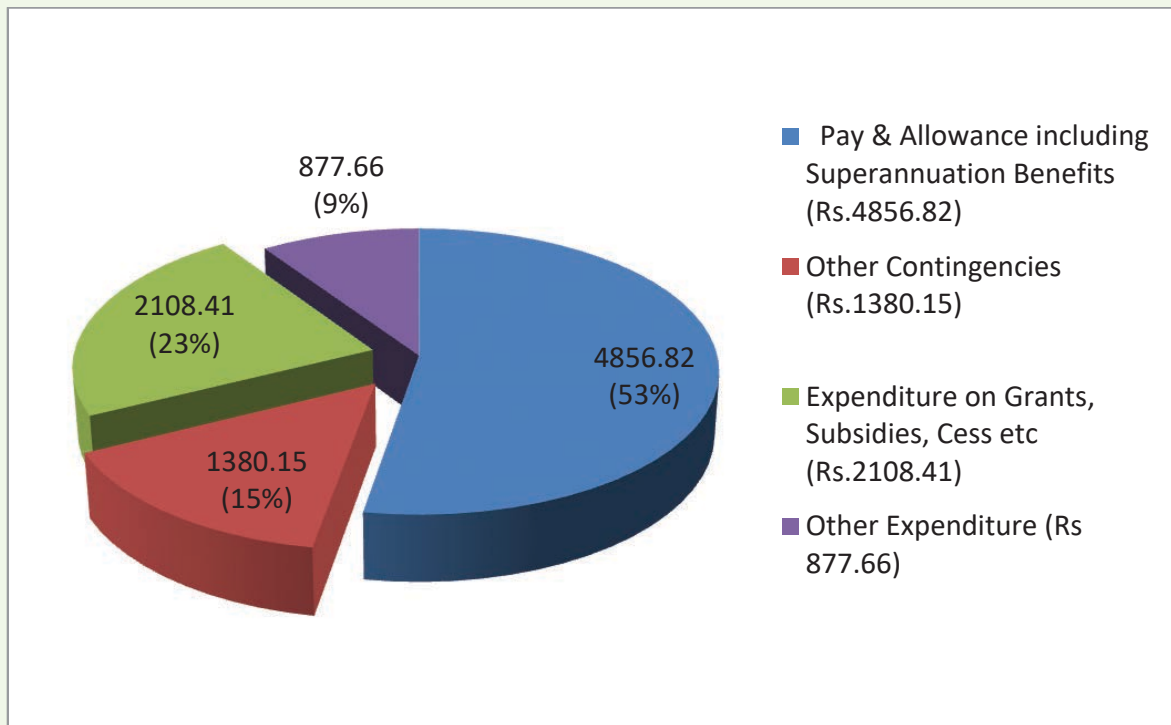


Total expenditure of the Board during the financial year 2020-2021 was Rs. **9,223.04** lakhs. The total expenditure of the Board has been shown under following four major heads :

- i. Expenditure on Pay & Allowances including Superannuation benefit during the financial year were Rs. **4,856.82** lakhs
- ii. Expenditure on other contingencies was Rs. **1,380.15** lakhs.
- iii. Expenditure on Grants, Subsidies, Cess etc. was Rs. **2,108.41** lakhs.
- iv. Other Expenditure was Rs. **877.66** lakhs

Details of Expenditure shown in Fig 15.3.

**Fig. 15.3 Head wise and Component wise expenditure during 2020-2021 of Rs.9,223.04 lakhs**



# **Annexure**

## Annexure I

# Industry Category List of the West Bengal Pollution Control Board

(This version is available in [www.wbpcb.gov.in](http://www.wbpcb.gov.in))

## RED CATEGORY

Sl. No.	Activity
1	Isolated storage of hazardous chemicals (as per schedule of manufacturing, storage of hazardous chemicals rules, 1989 as amended)
2	Automobile manufacturing (integrated facilities) and heavy engineering including ship building (with investment on plant and machinery >10 crores)
3	Industries engaged in recycling / reprocessing / recovery / reuse of Hazardous Waste under schedule iv of HW (M, H & TBM) rules, 2008 - Items namely - Spent cleared metal catalyst containing copper, Spent cleared metal catalyst containing zinc
4	Manufacturing of lubricating oils, grease and petroleum based products
5	DG Set of capacity >5 MVA
6	Industrial carbon including electrodes and graphite blocks, activated carbon, carbon black
7	Lead acid battery manufacturing (excluding assembling and charging of lead - acid battery in micro scale)
8	Phosphate rock processing plant (including grinding)
9	Power generation plant (including Waste to Energy plants >15 MW capacity which attract provisions of EIA Notification, 2006 as amended) [except Wind and Solar renewable power plants of all capacities and Mini Hydel power plant of capacity <25 MW] (Other than Thermal Power Plants)
10	Industries engaged in recycling / reprocessing / recovery / reuse of Hazardous Waste under schedule-IV of HW (M, H & TBM) Rules, 2008 - Items namely - Spent catalyst containing nickel, cadmium, Zinc, copper, arsenic, vanadium and cobalt
11	Processes involving chlorinated hydrocarbons [including rigid PVC pipe manufacturing]
12	Sugar (excluding Khandsari)
13	Fibre glass production and processing (excluding moulding) [including glass wool and rock wool production, manufacturing of mica based electrical insulating products using thinners/ solvents]
14	Fire crackers manufacturing and bulk storage facilities
15	Industries engaged in recycling / reprocessing / recovery / reuse of Hazardous Waste under schedule iv of HW (M, H & TBM) rules, 2008 - Items namely - Dismantlers Recycling Plants -- Components of waste electrical and electronic assemblies comprising accumulators and other batteries included on list A, mercury-switches, activated glass cullets from cathode-ray tubes and other activated glass and PCB-capacitors, or any other component contaminated with

Sl. No.	Activity
	Schedule 2 constituents (e.g. cadmium, mercury, lead, polychlorinated biphenyl) to an extent that they exhibit hazard characteristics indicated in part C of this Schedule.
16	Milk processes and dairy products (integrated project)
17	Phosphorous and its compounds
18	Pulp & Paper (waste paper based without bleaching process to manufacture Kraft paper)
19	Coke making, liquefaction, coal tar distillation or fuel gas making
20	Manufacturing of explosives, detonators, fuses including management and handling activities [including manufacturing of safety match]
21	Manufacturing of paints varnishes, pigments and intermediate (excluding blending / mixing)
22	Organic Chemicals manufacturing [including phenolic products, rubber chemicals]
23	Airports and Commercial Air Strips (waste water generation >100 KLD.)
24	Asbestos and asbestos based industries
25	Basic chemicals and electro chemicals and its derivatives including manufacturing of acid
26	Cement
27	Chlorates, per-chlorates & peroxides
28	Chlorine, fluorine, bromine, iodine and their compounds
29	Dyes and Dye-Intermediates
30	Health-care Establishment (as defined in BMW Rules) for waste water generation >100 KLD or with incinerator or both
31	Hotels (3 star and above) and hotels having $\geq 100$ rooms or waste-water generation $\geq 100$ KLD
32	Industries engaged in recycling / reprocessing / recovery / reuse of Hazardous Waste under schedule iv of HW (M, H & TBM) rules, 2008 - Items namely - Lead acid battery plates and other lead scrap / ashes / residues not covered under Batteries (Management and Handling) Rules, 2001. [* Battery scrap, namely: Lead battery plates covered by ISRI, Code word "Rails" Battery lugs covered by ISRI, Code word "Rakes". Scrap drained / dry while intact, lead batteries covered by ISRI, Code word "rains"]
33	Industries engaged in recycling / reprocessing / recovery / reuse of Hazardous Waste under schedule iv of HW (M, H & TBM) rules, 2008 - Items namely - Integrated Recycling Plants -- Components of waste electrical and electronic assemblies comprising accumulators and other batteries included on list A, mercury - switches, activated glass cullets from cathode -ray tubes and other activated glass and PCB -capacitors, or any other component contaminated with Schedule 2 constituents (e.g. cadmium, mercury, lead, polychlorinated biphenyl) to an extent that they exhibit hazard characteristics indicated in part C of this Schedule
34	Manufacturing of glue and gelatin [excluding glue from starch and including manufacturing of synthetic adhesives, shellac processing, rubber based adhesives, industrial adhesives using paraffin wax and resin powder (for polishing leather goods, shoes etc.)]
35	Mining and ore beneficiation
36	Nuclear power plant
37	Pesticides (technical) (excluding formulation)
38	Photographic film and its chemicals
39	Railway locomotive work shop / Integrated road transport workshop / service centers having waste-water generation $\geq 100$ KLD

Sl. No.	Activity
40	Yarn / Textile processing involving any effluent / emission generating processes including bleaching, dyeing, printing and colouring [including composite woolen mill, dewaxing of raw wool and raw silk, manufacturing of woolen blanket from woolen fibre]
41	Chlor Alkali
42	Ship Breaking Industries
43	Oil and gas extraction including CBM (offshore & on-shore extraction through drilling wells)
44	Industry or process involving metal surface treatment or process such as pickling / electroplating / paint stripping / heat treatment using cyanide bath / phosphating or finishing and anodizing / enamellings / galvanizing
45	Tanneries
46	Ports and harbour, jetties and dredging operations
47	Synthetic fibers including rayon, tyre cord, polyester filament yarn [including natural fibre, raw wool, raw silk, cellophane paper, cellulose nitrate]
48	Thermal Power Plants
49	Slaughter house (as per notification S.O.270 (E) dated 26.03.2001) and meat processing industries, bone mill, processing of animal horn, hoofs and other body parts
50	Aluminium Smelter
51	Copper Smelter
52	Fertilizer (basic) (excluding formulation / granulation / blending only)
53	Iron & Steel (involving processing from ore / integrated steel plants) and or Sponge Iron units
54	Pulp & Paper (waste paper based units with bleaching process to manufacture writing & printing paper)
55	Zinc Smelter
56	Oil Refinery (Mineral Oil or Petro Refineries)
57	Petrochemicals Manufacturing (including processing of Emulsions of oil and water)
58	Pharmaceuticals (Basic Drugs) and related R & D
59	Pulp & Paper (Large-Agro & wood), Small Pulp & Paper (agro based-wheat straw / rice husk) [including straw board, grey board, duplex board and de-inking, bleaching activity]
60	Distillery (molasses / grain / yeast based) including Fermentation industry with waste water generation $\geq 100$ KLD (including blending, bottling of alcoholic products with waste water generation $\geq 100$ KLD)
61	Ceramic, Refractories having coal consumption $\geq 12$ MT / day
62	Common treatment and disposal facilities (CETP, TSDF, E-waste recycling, CBMWTF, effluent conveyance project, incinerators, solvent / acid recovery plant, MSW sanitary landfill sites, STP)
63	Ferrous and Non-ferrous metal extraction $> 1$ MT/hr involving different furnaces through melting, refining, reprocessing, casting and alloy making and including metal extraction from Lead [including gold and silver smelting using greater than 1.0 litre sulfuric acid / nitric acid per month, forging with coal fired boilers and smelting, lead, zinc and other metals]
64	Industrial estates / parks / complexes / areas / export processing zones / SEZs / biotech parks (For Red Category member industries)
65	Industry or process involving foundry operations(foundries having capacity $\geq 5$ MT/hr and requiring coal / coke consumption $\geq 500$ kg/hr)

Sl. No.	Activity
66	Manufacturing of glass (bulb, lamp, optical lens etc.) using coal / wood fired kiln including manufacturing of lead glass
67	Parboiled rice mills (Waste Water generation $\geq 100$ KLD or fuel $\geq 12$ MTD or both)
68	Synthetic detergents and soaps (excluding formulation) waste water generation $\geq 100$ KLD
69	Vegetable oils including solvent extraction and refinery / hydrogenated oils having waste water generation $\geq 100$ KLD.
70	Non-alcoholic beverage (soft drink) and bottling of non-alcoholic products with waste water generation $\geq 100$ KLD
71	Building and construction projects $> 20,000$ sq.mtr. built up area (waste water generation $\geq 100$ KLD)
72	Cleaning / washing of old PVC and MS drums using mineral turpentine oil, kerosene oil and water
73	Steel and steel products using various furnaces like blast furnaces / open hearth furnace / induction furnace / arc furnace / submerged arc furnace / basic oxygen furnace [industries attracting EIA (Notification) 2006 as amended]
74	Any industry / industrial activity (irrespective of category), having solid fuel fired boiler / Thermic Fluid Heater (TFH) irrespective of capacity or oil / gas fired boiler $> 5$ TPH

**Note:-**

- Any industry / industrial activity which is not covered in category lists, having coal fired boiler with steam generation capacity  $> 5$  TPH, will be considered under Red category subject to approval by the categorisation committee of the Board.
- Any industry / industrial activity using solid fuel (coal / wood / husk etc.) fired boiler / TFH irrespective of capacity and oil / gas fired boiler  $> 5$  TPH will be considered under Red category.
- Capacity of boilers / furnace / kiln / oven / DG set etc. in any unit refers to the cumulative capacity of all such respective items.
- For activities attracting EIA notification, Environmental Clearance is mandatory followed by 'Consent to Establish' and 'Consent to Operate' of the Board.
- Detailed information for selection of specific nature of activity under industry category is available in the EMIS of the Board for facilitating project proponents.

## ORANGE CATEGORY

Sl. No.	Activity
1	Dismantling of rolling stocks (wagons / coaches)
2	Bakery / confectionery / Sweet production units with capacity >1 TPD [with oven / furnaces], units with solid fuel fired oven of any capacity
3	Chanachur and laddoo from puffed and beaten rice (muri and chira) using husk coal / wood fired oven
4	Coated electrode manufacturing
5	Compact disc, computer floppy and cassette manufacturing / Reel manufacturing
6	Flakes from rejected PET bottles
7	Food and food processing including fruits and vegetable processing
8	Jute processing without dyeing
9	Manufacturing of silica gel
10	Manufacturing of tooth powder, toothpaste, talcum powder and other cosmetic items
11	Printing or etching of glass sheet using hydrofluoric acid
12	Silk screen printing, saree printing by wooden blocks
13	Synthetic detergents and soaps (excluding formulation) having waste water generation <100 KLD
14	Thermometer manufacturing
15	Cotton spinning and weaving (medium and large scale)
16	Almirah, grill manufacturing (dry mechanical process and with painting)
17	Aluminium and copper extraction from scrap using oil fired furnace (dry process only)
18	Railway locomotive workshops / integrated road transport workshop / Automobile servicing, repairing and painting having waste water generation <100 KLD) (excluding only fuel dispensing)
19	Ayurvedic and homeopathic medicine [with boiler]
20	Brickfields (excluding fly ash brick manufacturing using lime process)
21	Building and construction projects >20,000 sq.mtr. built up area (waste water generation <100 KLD)
22	Ceramic, Refractories (coal consumption <12 MT / day)
23	Coal washeries
24	Dairy and dairy products (small scale)
25	DG set of capacity >1 MVA but <5 MVA
26	Dry coal processing / mineral processing, industries involving ore sintering, pelletization, grinding, pulverization
27	Fermentation industry having waste water generation <100 KLD [including manufacture of yeast, beer, distillation of alcohol (Extra Neutral Alcohol)]
28	Ferrous and non-ferrous metal extraction ( $\leq 1$ MT / hour production and excluding metal extraction from Lead) involving different furnaces through melting, refining, reprocessing, casting and alloy making
29	Fertiliser (granulation / formulation / blending only)
30	Fish feed, poultry feed and cattle feed



Sl. No.	Activity
31	Fish processing and packing [excluding chilling of fish]
32	Forging of ferrous and non-ferrous metal (using oil or gas fired furnaces)
33	Formulation / pelletization of camphor tablets, naphthalene balls from camphor / naphthalene powders [including pesticide formulation]
34	Glass, ceramic, earthen potteries and tile manufacturing using oil or gas fired kiln, coating on glasses using cerium fluoride, magnesium fluoride etc. [including cement products like pipe, pillar, concrete sleeper using oil fired boiler]
35	Gravure printing, digital printing on flex, vinyl
36	Heat treatment using oil fired furnace (excluding cyaniding)
37	Hot mix plants
38	Hotels (<3 star) or hotels having >20 rooms and <100 rooms having waste-water generation <100 KLD and >10 KLD, and / or having boiler / heater / oven etc. [including restaurants with capital investment on land, building, plant and machinery >30 lac]
39	Ice cream
40	Industries engaged in recycling / reprocessing / recovery / reuse of Hazardous Waste under schedule IV of Hazardous Wastes (M, H & TBM) Rules, 2008 and its amendments : items namely Paint and ink Sludge / residues
41	Industries engaged in recycling / reprocessing / recovery / reuse of Hazardous Waste under schedule IV of Hazardous Wastes (M,H & TBM) Rules, 2008 and its amendments : Items namely Brass Dross, Copper Dross, Copper Oxide Mill Scale, Copper Reverts, Cake & Residues, Waste Copper and copper alloys in dispersible form, Slags from copper processing for further processing or refining, Insulated Copper Wire, Scrap / copper with PVC sheathing including ISRI-code material namely "Druid", Jelly filled Copper cables, Zinc Dross-Hot dip Galvanizers SLAB, Zinc Dross-Bottom Dross, Zinc ash / Skimming arising from galvanizing and die casting operations, Zinc ash / Skimming / other zinc bearing wastes arising from smelting and refining, Zinc ash and residues including zinc alloy residues in dispersible form
42	Industry or process involving foundry operations (foundries having capacity <5 MT/hr requiring coal / coke consumption <500 kg/hr)
43	Lime manufacturing (using lime kiln)
44	Liquid floor cleaner, black phenyl, liquid soap, glycerol monostearate manufacturing
45	Manufacturing of glass (excluding solid fuel fired kiln and excluding lead glass)
46	Manufacturing of iodized salt from crude / raw salt
47	Manufacture of mirror from sheet glass
48	Manufacturing of mosquito repellent coil
49	Manufacturing of starch / sago
50	Mechanized laundry using oil fired boiler
51	Modular wooden furniture from particle board, MDF, sawn timber etc., ceiling tiles / partition board from saw dust, wood chips etc. and other agricultural waste using synthetic adhesive resin, wooden box making (with boiler)
52	New highway construction projects
53	Non-alcoholic beverage (soft drink) and bottling of non-alcoholic products with waste water generation <100 KLD

Sl. No.	Activity
54	Paint blending and mixing (ball mill) including construction chemicals manufacturing by mixing
55	Paints and varnishes (mixing and blending)
56	Plyboard manufacturing (including veneer and laminate) with oil fired boiler / thermic fluid heater (without resin plant)
57	Potable alcohol (IMFL) by blending, bottling of alcoholic products (Waste water generation <100 KLD)
58	Printing ink manufacturing
59	Printing press
60	Reprocessing of waste plastic (including PVC)
61	Rolling mill (oil or coal fired)
62	Spray painting, paint baking, paint stripping
63	Steel and steel products using various furnaces like blast furnaces / open hearth furnace / induction furnace / arc furnace / submerged arc furnace / basic oxygen furnace [not attracting EIA (Notification) 2006 as amended]
64	Stone crushers
65	Surgical and medical products involving prophylactics and latex
66	Teflon based products
67	Thermocol manufacturing (with boiler)
68	Tobacco products including cigarettes and tobacco / opium processing
69	Transformer repairing / manufacturing (dry processing only)
70	Tyres and tubes vulcanization / hot retreading
71	Vegetable oils including solvent extraction and refinery / hydrogenated oils having waste water generation <100 KLD [including manufacturing of citronella oil (herbal aromatic chemical), bio-diesel from vegetable oil by trans-esterification process, jute batching oil and oil for sizing in paper industries from waste vegetable oil]
72	Wire drawing and wire netting [including bailing straps, wire drawing by cold process only]
73	Dry cell battery (excluding manufacturing of electrodes) and assembling and charging of acid lead battery in micro scale
74	Pharmaceutical formulation and related R&D
75	Synthetic resins
76	Synthetic rubber excluding moulding [including reclamation of rubber, manufacture of rubber solution containing mineral naphtha and rubber wastes]
77	Cashew nut processing
78	Coffee seed processing
79	Parboiled rice mills (Waste Water <100 KLD and fuel <12MTD)
80	Foam manufacturing
81	Industries engaged in recycling / reprocessing / recovery / reuse of Hazardous Waste under schedule IV of Hazardous Wastes (M,H & TBM) Rules, 2008 and its amendments : Used Oil – As per specifications prescribed from time to time
82	Industries engaged in recycling / reprocessing / recovery / reuse of Hazardous Waste under schedule IV of Hazardous Wastes (M,H & TBM) Rules, 2008 and its amendments : Waste Oil – As per specifications prescribed from time to time

Sl. No.	Activity
83	Producer gas plant using conventional up-drift coal gasification (linked to rolling mills, glass and ceramic industry, refractories for dedicated fuel supply)
84	Airports and commercial air strips (waste water generation <100 KLD)
85	Tea processing with boiler
86	CETP and effluent conveyance project, (only Orange category member industries)
87	Health care establishment (as defined in BMW Rules) having waste water generation $\leq 100$ KLD and without incinerator
88	Industrial estates / parks / complexes / areas / export processing zones / SEZs / biotech parks / leather complex (only Orange category member industries)
89	Heavy engineering (investment on plant and machinery $\leq 10$ crore)
90	Waste to Energy plants $\leq 15$ MW capacity
91	Handicraft products like terracotta work, sculptures (plaster of paris and fibre glass)
92	Infrastructure development project
93	Any industry / industrial activity which is not covered in category lists, using oil / gas fired boiler of capacity $> 2$ TPH and $\leq 5$ TPH

**Note:-**

- Any industry/industrial activity which is not covered in Orange category list, using oil/gas fired boiler of capacity  $> 2$  TPH and  $\leq 5$  TPH will be considered under Orange category subject to approval by the Categorisation Committee of the Board.
- Capacity of boilers /furnace/kiln/oven/DG set etc. in any unit refers to the cumulative capacity of respective items.
- Sl.No.16 (Almirah, grill manufacturing) is not permitted in municipal areas of West Bengal.
- For activities attracting EIA notification, Environmental Clearance is mandatory followed by 'Consent to Establish' and 'Consent to Operate' of the Board.
- Detailed information for selection of specific nature of activity under industry category is available in the EMIS of the Board for facilitating project proponents.

## GREEN CATEGORY

Sl. No.	Activity
1	Aluminium utensils from aluminium circles by pressing only (dry mechanical operation)
2	Ayurvedic and homeopathic medicines (without boiler)
3	Bakery / confectionery / sweets products (with production capacity <1tpd (with oil, gas or electrical oven)
4	Bi-axially oriented PP film along with metalizing operations [including adhesive coating, viscose / polyester coated brass, glass yarn]
5	Biomass briquettes (sun drying) without using toxic hazardous wastes
6	Blending of melamine resins & different powder, additives by physical mixing [including simple mixing and mould / coating compound by mixing, versatile master batch / polymer compound using talc, calcite, pigment, additives, polymer etc. as raw material]
7	Brass and bell metal utensils manufacturing from circles (dry mechanical operation without re-rolling facility)
8	Candy
9	Cardboard or corrugated box and paper products (excluding paper or pulp manufacturing and without using boilers)
10	Carpentry & wooden furniture manufacturing (excluding saw mill) with the help of electrical (motorized) machines such as electrical wood planner, steel saw cutting circular blade, etc. [including modular wooden furniture from particle board, MDF, sawn timber etc., ceiling tiles / partition board from saw dust, wood chips etc. and other agricultural waste using synthetic adhesive resin, wooden box making (without boiler)]
11	Cement products (without using asbestos / boiler / steam curing) like pipe, pillar, jafri, well ring, block / tiles etc. (should be done in closed covered shed to control fugitive emissions)
12	Ceramic colour manufacturing by mixing & blending only (not using boiler and wastewater recycling process)
13	Chilling plant, cold storage and ice making (including only chilling of fish)
14	Coke briquetting (sun drying)
15	Cotton spinning and weaving (small scale)
16	Dal Mills
17	Decoration of ceramic cups and plates by electric furnace
18	Digital printing on PVC Clothes
19	Facility of handling, storage and transportation of food grains in bulk
20	Flour mills (dry process)
21	Glass, ceramic, earthen potteries, tile and tile manufacturing using electrical kiln or not involving fossil fuel kiln (including activity not involving kiln)
22	Glue from starch (physical mixing) with gas / electrically operated oven / boiler
23	Gold and silver smithy (purification with acid, smelting operation and sulphuric acid polishing operation) (using $\leq 1$ litre of sulphuric acid / nitric acid per month)
24	Heat treatment with any of the new technology like ultrasound probe, induction hardening, ionization beam, gas carburizing etc. (including heat treatment using electrical heater)
25	Insulation and other coated papers (excluding paper or pulp manufacturing)

Sl. No.	Activity
26	Leather foot wear and leather products (excluding tanning and hide processing except cottage scale)
27	Lubricating oil, greases or petroleum based products (only blending at normal temperature)
28	Manufacturing of pasted veneers using gas fired boiler or thermic fluid heater and by sun drying
29	Oil mill ghani and extraction (no hydrogenation / refining)
30	Packing materials manufacturing from non-asbestos fibre, vegetable fibre yarn
31	Phenyl / toilet cleaner formulation and bottling
32	Polythene and plastic processed products manufacturing (virgin plastic)
33	Poultry, Hatchery and Piggery
34	Power looms (without dyeing and bleaching)
35	Puffed rice (muri) (using oil, gas or electrical heating system)
36	Pulverization of bamboo, scrap wood, rice husk, groundnut, soya waste, coconut shell
37	Ready mix cement concrete
38	Reprocessing of waste cotton including dhanian mill & cotton from scrap cloth
39	Rice mill (Rice hullers only)
40	Rolling mill (gas fired) and cold rolling mill
41	Rubber goods industry (with oil / gas operated baby boiler $\leq$ 2 TPH steam generation capacity)
42	Saw mills
43	Soap manufacturing (handmade without steam boiling / boiler)
44	Spice grinding ( $\leq$ 20 HP motor)
45	Spice grinding ( $>$ 20 HP motor)
46	Steel furniture without spray painting
47	Steeping and processing of grains
48	Tyres and tube retreating (without boilers)
49	Ice making without using ammonia
50	CO <sub>2</sub> recovery (including core CO <sub>2</sub> manufacturing)
51	Distilled water (without boiler) with electricity as source of heat
52	Hotels (up to 20 rooms) without boilers or with electrical / gas fired boiler / heater / oven etc. having $\leq$ 10 KLD waste water generation and only restaurants with capital investment on land, building, plant and machinery upto 30 lac
53	Manufacturing of optical lenses (using electrical furnace)
54	Mineralized water (including water softening and demineralization plant)
55	Tamarind powder manufacturing
56	Cutting, sizing and polishing of marble stone
57	Emery powder (fine dust of sand) manufacturing
58	Flyash export, transport & disposal facilities
59	Mineral stack yard / railway sidings
60	Oil and gas transportation pipeline
61	Seasoning of wood in steam heated chamber
62	Synthetic detergent formulation (excluding LABSA manufacturing)

Sl. No.	Activity
63	Tea processing (without boiler)
64	Thermocol manufacturing (without boiler)
65	Industrial estates / parks / complexes / areas / export processing zones / SEZs / biotech parks / leather complex (Only for Green Category member industries)
66	Common Effluent Treatment Plant and effluent conveyance project (Only for Green Category member industries)
67	Any industry / industrial activity which is not covered in category lists, using oil / gas fired boiler of capacity <2 tph

**Note:-**

- a. Any industry / industrial activity which is not covered in category lists, using oil / gas fired boiler of capacity <2 TPH will be considered under Green category subject to approval by the Categorisation Committee of the Board.
- b. Any industry / industrial activity using oil / gas fired boiler of capacity <2 TPH will be considered under Green category.
- c. Capacity of boilers / furnace / kiln / oven / DG set etc. in any unit refers to the cumulative capacity of respective items.
- d. For activities attracting EIA notification, Environmental Clearance is mandatory followed by 'Consent to Establish' and 'Consent to Operate' of the Board.
- e. Detailed information for selection of specific nature of activity under industry category is available in the EMIS of the Board for facilitating project proponents.

## WHITE CATEGORY

Sl. No.	Activity
1	Assembly of air coolers / conditioners, repairing and servicing
2	Assembly of bicycles, baby carriages and other small non motorizing vehicles
3	Bailing (hydraulic press) of waste papers
4	Bio fertilizer and bio-pesticides without using inorganic chemicals
5	Biscuits trays etc. from rolled PVC sheet (using automatic vacuum forming machines)
6	Blending and packing of tea (including tea garden)
7	Block making of printing without foundry (excluding wooden block making)
8	Chalk making from plaster of paris (only casting without boilers etc. - sun drying / electrical oven)
9	Compressed oxygen gas from crude liquid oxygen (without use of any solvents and by maintaining pressure & temperature only for separation of other gases)
10	Cotton and woolen hosiery making (dry process only without any dyeing / washing operation)
11	Diesel pump repairing and servicing (complete mechanical dry process)
12	Electric lamp (bulb) and CFL manufacturing by assembling only
13	Electrical and electronic item assembling (completely dry process) (including manufacturing of electrical and electronic items, electronic and mechanical toys, hardware for computers and other information technology instruments)
14	Engineering and fabrication units [dry process without any heat treatment / metal surface finishing operations / painting]
15	Flavoured betel nuts production / grinding (completely dry mechanical operations)
16	Fly ash bricks / block manufacturing
17	Fountain pen manufacturing by assembling only
18	Glass ampoules and vials making from glass tubes (including laboratory wares)
19	Glass putty and sealant (by mixing with machine only)
20	Ground nut decorticating
21	Handloom / carpet weaving (without dyeing and bleaching operation)
22	Leather cutting and stitching (> 10 machine and using motor)
23	Manufacturing of coir items from coconut husks
24	Manufacturing of metal caps, containers etc.
25	Manufacturing of shoe brush and wire brush
26	Medical oxygen
27	Organic and inorganic nutrients (by physical mixing)
28	Organic manure (manual mixing)
29	Packing of powdered milk [including repacking of chemicals, bitumen etc. in small container without any processing or heating]
30	Paper pins and u clips [including safety pins]
31	Repairing of electric motors and generators (dry mechanical process)
32	Rope (plastic and cotton)
33	Scientific and mathematical instrument manufacturing
34	Solar module non-conventional energy apparatus manufacturing unit

Sl. No.	Activity
35	Solar power generation through solar photovoltaic cell, wind power and mini hydel power (< 25 MW)
36	Surgical and medical products assembling only (not involving effluent / emission generating processes)
37	Almirah, grill manufacturing (Dry mechanical process and without painting operation)

**Note :**

- (a) There is no necessity of obtaining consent for White Category of industries and an intimation to WBPCB is sufficient.
- (b) Industry / industrial activity mentioned in the White category is permitted in any area in West Bengal subject to site clearance by local authority.
- (c) Sl.No.31 (Repairing of electric motor and generator) is not permitted in congested areas.
- (d) Sl.No.37 (Almirah, grill manufacturing) is not permitted in municipal areas of West Bengal.



## EXEMPTED CATEGORY

Sl. No.	Activity
1	Agarbati manufacturing and packaging
2	Assembly of domestic electrical appliances, servicing and repairing
3	Atta chakkis (wheat grinding)
4	Auto emission testing centres
5	Ball pen refill
6	Bamboo and cane products (only dry operation)
7	Biogas plant
8	Black smithy (should not be allowed in congested areas)
9	Boarding and lodging
10	Book binding
11	Cable TV network
12	Candles manufacturing
13	Colour/black and white studio
14	Cushions/pillows and quilts manufacturing
15	Cyber café
16	Diesel generator sets ( $\leq 1$ MVA) for residential buildings, commercial buildings and health care organisation etc.
17	Gold and silver smithy (excluding purification/polishing with any acid and smelting operation)
18	Handicraft products like conchshell, coconutshell, dokra, cane and bamboo products, baluchari saree, stone carving, wood carving, batik, sola work etc.
19	Handmade paper
20	House hold decorative (interior and exterior) involving coloured artificial flowers, sola, palms, jute etc. (without dyeing and bleaching of flowers and other items)
21	Building and construction projects upto 20,000 sq.mtr. built up area
22	Leather cutting and stitching ( $\leq 10$ machines and without any motor)
23	Leather footwear and leather products (excluding tanning and hide processing) (cottage scale only)
24	Manual brass painting
25	Manufacture of steel trunks and suitcases
26	Manufacturing and packaging of 'alta' and packaging of 'sindoor'
27	Manufacturing of umbrella (only assembling)
28	Mushroom plantation and spawn
29	Musical instrument manufacturing
30	Optical frames
31	Optical lens manufacturing (without furnace)
32	Photo framing
33	Plant tissue culture laboratory
34	PP and PE bag (only cutting and sealing)
35	Radio assembling, servicing and repairing work
36	Repairing & servicing of bicycles, baby carriage and other non-motorised vehicles

Sl. No.	Activity
37	Repairing and servicing of electronic equipment
38	Shoelace manufacturing
39	Soft toys, wooden toys manufacturing (except electronic and mechanical toys)
40	Software development for information and technology industry
41	Sports goods manufacturing
42	Storage and distribution of LPG cylinders less than threshold storage quantity at a time, as per rules
43	Tailoring and garment stitching/garment and apparel manufacturing
44	Tank calibration centre
45	Weigh bridge (not manufacturing)
46	Wooden block making for printing
47	Xerox and photocopying
48	Zari embroidery work
49	Automobile fuel outlet (only dispensing)
50	E-waste collection Centre
51	Rubber goods industry (without boiler)

#### D. Exempted category industries

- (a) Industry / industrial activity mentioned in the Exempted category is permitted in any area in West Bengal subject to site clearance by local authority.
- (b) Industry / industrial activity mentioned in the Exempted category need not apply for either 'Consent to Establish' or 'Consent to Operate' from the Board.

## Annexure II

# Industrial Siting / Locational Policy in West Bengal

## A. Red category industries

- (a) Setting up of any Red category industry is not permitted within municipal areas of Kolkata Metropolitan Area (KMA) and within municipal areas of Burdwan district except Jamuria Industrial Estate. These can however be set up beyond the municipal areas of KMA and Burdwan district with adequate pollution abatement system subject to site clearance by local authority.
- (b) However, for Red category industry / industrial activity in following serial nos., the consideration for siting within municipal areas of KMA and municipal areas of Burdwan district is location specific and will be decided by the Board.

Sl. No.	Industry / Activity Type
RED 1	Isolated storage of hazardous chemicals (as per schedule of manufacturing, storage of hazardous chemicals rules, 1989 as amended)
RED 2	Only heavy engineering including ship building (with investment on plant and machinery > 10 crores)
RED 5	DG Set of capacity > 5 MVA
RED 9	Power generation plants (applicable only for Waste to Energy plants)
RED 23	Airports and Commercial Air Strips (for airports having waste water generation > 100 KLD.)
RED 30	Health-care establishment (as defined in BMW Rules) for waste water generation > 100 KLD or with incinerator or both
RED 31	Hotels (3 star and above) and hotels having $\geq 100$ rooms or waste-water generation $\geq 100$ KLD
RED 39	Railway locomotive work shop / Integrated road transport workshop / service centers having waste-water generation $\geq 100$ KLD
RED 42	Ship breaking activities
RED 43	Oil and gas extraction including CBM (offshore & on-shore extraction through drilling wells)
RED 46	Ports and harbour, jetties and dredging operations
RED 62	Common treatment and disposal facilities (CETP, effluent conveyance project, incinerator, MSW sanitary landfill site, STP only)
RED 64	Industrial estates / parks / complexes / areas / export processing zones / SEZs / biotech parks (for Red Category member industries and only activities which do not attract siting restrictions)

- (c) Diversification / modification / modernization / expansion of existing Red Category industry situated within the municipal boundaries of KMA is allowed on a case to case basis considering the location of industry, type of activity, environmental impact, environmental pollution management proposal for such activity.

## B. Orange category industries

- (a) Setting up of any Orange category industry is not permitted within Kolkata Municipal Corporation (KMC) and Howrah Municipal Corporation (HMC) areas (except industrial estates in KMC and HMC area). These can however be set up beyond the KMC and HMC areas and in industrial estates in KMC and HMC area with adequate pollution control measures subject to site clearance by local authority.
- (b) However, for Orange category industry/industrial activity in following serial nos., the consideration for siting within KMC and HMC areas will be location specific and will be decided by the Board.

Sl. No.	Industry / Activity Type
ORANGE 1	Dismantling of rolling stocks (wagons / coaches)
ORANGE 18	Railway locomotive workshops / integrated road transport workshop / Automobile servicing, repairing and painting having waste water generation < 100 KLD) (excluding only fuel dispensing)
ORANGE 21	Building and construction projects >20,000 sq.mtr. built up area (waste water generation <100 KLD)
ORANGE 25	DG set of capacity >1 MVA but <5 MVA
ORANGE 37	Hot mix plants
ORANGE 38	Hotels (< 3 star) or hotels having >20 rooms and < 100 rooms having waste-water generation <100 KLD and >10 KLD, and / or having coal / oil fired boiler / heater / oven etc. [including restaurants with capital investment on land, building, plant and machinery >30 lac]
ORANGE 50	Mechanized laundry using oil fired boiler
ORANGE 51	Modular wooden furniture from particle board, MDF, sawn timber etc., ceiling tiles / partition board from saw dust, wood chips etc. and other agricultural waste using synthetic adhesive resin, wooden box making (with boiler)
ORANGE 52	New highway construction projects
ORANGE 54	Paint blending and mixing (ball mill) [including construction chemicals manufacturing by mixing]
ORANGE 55	Paints and varnishes (mixing and blending)
ORANGE 56	Plyboard manufacturing (including veneer and laminate) with oil fired boiler / thermic fluid heater (without resin plant)
ORANGE 59	Printing press
ORANGE 73	Dry cell battery (excluding manufacturing of electrodes) and assembling and charging of acid lead battery in micro scale
ORANGE 74	Pharmaceutical formulation and related R&D
ORANGE 84	Airports and commercial air strips (waste water generation < 100 KLD)

Sl. No.	Industry / Activity Type
ORANGE 87	Health-care Establishment (as defined in BMW Rules) for waste water generation $\leq 100$ KLD or with incinerator or both
ORANGE 89	Heavy engineering (investment on plant and machinery $\leq 10$ crore)
ORANGE 90	Waste to Energy plants upto 15 MW capacity
ORANGE 92	Infrastructure development project

- (c) Activity under sl. no. 16 (Almirah, grill manufacturing - dry mechanical process and with painting) is not permitted in municipal areas of West Bengal.
- (d) Activity under 71 (Transformer repairing / manufacturing (dry processing only) is not permitted in congested areas.
- (e) There is no restriction for allowing expansion of Orange Category of industries within KMC and HMC area without prejudice to any existing Order.

### C. Green category industries

- (a) Setting up of any Green category industry is permitted in any area of West Bengal with adequate pollution control measures subject to the site clearance by local authority.
- (b) However, for Green category industry / industrial activity in following serial nos., the consideration for siting will be location specific and will be decided by the Board.

Sl. No.	Industry / Activity Type
GREEN 33	Poultry, Hatchery and Piggery
GREEN 41	Rubber goods industry (with oil / gas operated baby boiler $\leq 2$ TPH steam generation capacity)
GREEN 62	Synthetic detergent formulation (excluding LABSA manufacturing)
GREEN 13	Chilling plant, cold storage and ice making (including only chilling of fish)
GREEN 56	Cutting, sizing and polishing of marble stone
GREEN 58	Flyash export, transport & disposal facilities
GREEN 59	Mineral stack yard / railway sidings

### D. White category industries

- (a) There is no necessity of obtaining consent for White Category of industries and an intimation to WBPCB is sufficient.
- (b) WHITE 37 (Almirah, grill manufacturing) is not permitted in municipal areas of West Bengal.
- (c) Industry / industrial activity mentioned in the White category is permitted in any area in West Bengal subject to site clearance by local authority.

### E. Exempted category industries

- (a) Industry / industrial activity mentioned in the Exempted category is permitted in any area in West Bengal subject to site clearance by local authority.
- (b) Industry / industrial activity mentioned in the Exempted category need not apply for either 'Consent to Establish' or 'Consent to Operate' from the Board.

## F.Special Restrictions

- (a) Specific 60 categories of water intensive industries (Annexure-1) are not permitted in within 10 Km. radius (specified Mouzas mentioned in Annexure-2) around the integrated leather complex at Bantala.
- (b) For area around Victoria Memorial Hall (as per Order of the Hon'ble Calcutta High Court):-
- (i) All hotels and restaurants situated within a radius of 3 Km. of Victoria Memorial Hall shall use cleaner fuels such as LPG.
  - (ii) No dry leaf is allowed to be burnt within a radius of 3 Km. of Victoria Memorial Hall.
  - (iii) There will be total ban on establishing new industrial units and expansion of the existing industries within 10 Km. from the Victoria Memorial Hall which may emit CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub> or other gaseous substance which form acids in contact with moisture in the atmosphere.
- (c) Green Category industries will be allowed to operate in the premises vacated by tanneries earlier operating at Tiljala, Topsia, Tangra and Pagladanga area within KMC. Consent to Establish and Consent to Operate for such Green category industries will be issued by the Board only.
- (d) For East Kolkata Wetland (declared as a RAMSAR site) area:-  
[Order no. S/EN/487/177/08 dated 03.03.2008 of Department of Environment, Govt. of West Bengal read with The East Kolkata Wetlands (Conservation and Management) Act, 2006 published vide No. 404-L dated 31.03.2006]
- (i) Local authority should not issue any license or building plan for any commercial activity without clearance from the East Kolkata Wetland (EKW) Authority.
  - (ii) Land & Land Reforms Department of the concerned area will not issue any certificate for change of character of land without clearance from the EKW Authority.
  - (iii) The occupiers of EKW areas cannot transfer land to any person(s) in any manner through Deed of Sale, or through providing lease or tenancy right, without clearance from the EKW Authority.
  - (iv) The Registration Authority of land or houses in the EKW area shall not allow registration of land, house or pond of EKW area (specified in Annexure-3) without clearance from the EKW Authority (<http://www.ekwma.com>).
  - (v) The occupiers of EKW areas may approach the Member Secretary, EKW Authority for obtaining necessary clearance for transfer of land and EKW Authority will consider such prayer within 2 months from the receipt of such application.
- (e) For Kalyani and Gayeshpur Industrial Estate:-
- a) Setting up new red category of industries will be allowed in the vacant plots of Block-D of Kalyani Industrial area excepting Plot No. 39. Expansion of existing red category of industries in the area will also be permitted.
  - b) Setting up of new red category of industries in the vacant plots and in the premises of closed units in Phase-II of WBIDC of Kalyani Industrial Estate, Block-A will be allowed on a case to case basis considering the environmental pollution load of the proposed unit.
  - c) Setting up new red category of industries in the closed industrial premises of Phase-I of WBIDC and/or in Gayeshpur will be allowed on a case to case basis comparing the pollution load of the proposed unit with that of the closed units. Expansion of red category of industries will also be permitted on a case to case basis considering the pollution load of the proposed activity.

- (f) Hotels, restaurants and resorts are not to be developed within a radius of 1 km. of reserve forests area, notified wild life sanctuaries within the State of West Bengal without prior permission of the Department of Tourism, Government of West Bengal.

### **Annexure-1**

#### **List of Industries restricted in Mouzas as mentioned in Annexure-2**

1. Distillery including Fermentation industry
2. Sugar (excluding khandsari)
3. Fertiliser (Basic) (excluding formulation)
4. Pulp & Paper (paper manufacturing with or without pulping)
5. Basic Drugs & Pharmaceuticals (excluding formulation)
6. Chlor - alkali
7. Dyes and Dye-intermediates
8. Pesticides (excluding formulation)
9. Oil refinery (Mineral oil or Petro refineries)
10. Tanneries
11. Petrochemicals (Manufacture of and not merely use of as raw material)
12. Cement
13. Thermal power plants
14. Iron and Steel (Involving processing from ore / scrap / integrated steel plants)
15. Zinc smelter
16. Copper smelter
17. Aluminium smelter
18. Synthetic rubber
19. Rubber goods industry (with boiler)
20. Ferrous & Non - ferrous metal extraction (different furnaces & smelting), refining, casting, forging, alloy making etc.
21. Paints and varnishes (excluding units with only blending / mixing)
22. Pigments and intermediates
23. Lubricating oils, greases or petroleum - based products (excluding blending at normal temperature)
24. Synthetic & natural fibre including rayon, tyre cord, polyester filament yarn & raw woolen, raw silk
25. Synthetic detergent (excluding formulation) and soap (with steam boiling)
26. Chemical, petrochemical and electrochemicals, manufacture (including distillation) of acids such as Sulphuric Acid, Nitric Acid, Phosphoric Acid etc.
27. Industrial or inorganic gases
28. Chlorates, perchlorates and peroxides
29. Glue and gelatine

30. Integrated textile mills (processing involving scouring, bleaching, dyeing, printing or any effluent / emission generating process)
31. Vegetable oils processing including solvent extracted oils, hydro-generated oils.
32. Industry or process involving metal treatment or process such as pickling, surface coating (excluding spray, manual brush, dip painting, paint baking, paint stripping), heat treatment (only cyaniding), phosphating or finishing etc.
33. Electroplating operations
34. Galvanizing operations
35. Asbestos and asbestos-based industries
36. Slaughter houses and meat processing units
37. Steel and steel products including coke plants involving use of any of the equipment such as blast furnaces, open hearth furnace, induction furnace or arc furnace etc. or any of the operations or processes such as heat treatment, acid pickling, rolling or galvanizing etc.
38. Power generating plants (excluding D.G. Sets)
39. Lime manufacturing
40. Phosphate rock processing plants
41. Coke making, coal liquefaction, coal tar distillation or fuel gas making, coke briquetting (excluding sundrying)
42. Phosphorous and its compounds
43. Processes involving chlorinated hydrocarbons
44. Chlorine, fluorine, bromine, iodine and their compounds
45. Hydrocyanic acid and its derivatives
46. Milk processing and dairy products (Integrated Project)
47. Industry or process involving foundry operations
48. Rubber chemicals
49. Electrochemicals
50. Food and food processing (with more than Rs.20 lac investment on plant and machinery)
51. Dyeing of fabrics, yarns etc.
52. Bone Mill
53. Phenolic products
54. Radioactive elements
55. Stone crushing
56. Rolling mill
57. Shellac processing
58. Plyboard manufacturing (with captive resin manufacturing plant)
59. Acid lead batteries
60. Lead Smelting



## Annexure-2

## List of Mouzas within 10 km. radius of Kolkata Leather Complex

## Police Station: Bhangore

Sl.No.	J.L.No.	Name of Mouza
1.	2	Kochpukurria
2.	3	Jotibhirn
3.	4	Hatgachha
4.	5	Nadia
5.	6	Oharmatala Pachuria
6.	7	Kulberia
7.	8	Chanda Kanthalberia
8.	9	Hatisala
9.	10	Bhagabanpur
10.	12	Dakshih Khairpur
11.	13	Tarahadia
12.	14	Swastayangachhi
13.	15	Anantapur
14.	17	Uttar Ghazipur
15.	18	Uriapara
16.	22	Jaynagar
17.	23	Naoabad
18.	24	Pithapukuria
19.	25	Jirancachhi
20.	26	Wari
21.	27	Beonta
22.	28	Paikan
23.	29	Chariswar
24.	30	Sukpukuria
25.	31	Krolbaria
26.	32	Karaidanga
27.	33	Bhatipota
28.	34	Kharamba
29.	35	Gangapur
30.	36	Andulgari
31.	37	Mousal
32.	38	Taradah Kapasati
33.	39	Narayantala
34.	40	Ushpara
35.	41	Bairampur
36.	42	Biqhari

Sl.No.	J.L.No.	Name of Mouza
37.	43	Dakshin Gazipur
38.	44	Ghomineghi
39.	45	Bamunia
40.	46	Kachua
41.	47	Uttar Mashikelbaria
42.	48	Norgalbeki
43.	49	Seduli
44.	50	Majherhat
45.	51	Uttar Kashipur
46.	52	Chandihat
47.	56	Bhogati
48.	61	Bankachua
49.	62	Kantadanga
50.	63	Sonpur
51.	64	Rampur
52.	65	Nimkuria
53.	66	Dheati
54.	67	Sanpukuria
55.	68	Uttar Rajapur
56.	69	Chakbaria
57.	70	Jawpur
58.	71	Chak Maricha
59.	72	Maricha
60.	73	Serpur
61.	74	Narayanpur
62.	75	Madhabpur
63.	76	Hosaidara
64.	77	Taldighi
65.	78	Kasiadanga
66.	79	Maheshpukuria
67.	80	Kasinagar
68.	81	Sundia
69.	82	Kamarhati
70.	83	Dari Madhabpur
71.	84	Amreswar
72.	85	Dara

Sl.No.	J.L.No.	Name of Mouza
73.	86	Padmapuria
74.	87	Malancha
75.	88	Chak Barali
76.	89	Bhangore Raghunathpur
77.	90	Panapukur
78.	91	Uttar Khatalia
79.	92	Gobindapur
80.	99	Ghatakpur
81.	100	Kalikapur
82.	101	Nalmuri
83.	102	Ranigachhi
84.	103	Balipur
85.	104	Chak Bhika
86.	105	Bazarati
87.	106	Bangoda

Sl.No.	J.L.No.	Name of Mouza
88.	107	Karunarhati
89.	108	Dharmatala
90.	109	Dakshin Kasipur
91.	110	Satbaria
92.	114	Jalalabad
93.	115	Kasinathpur
94.	116	Chandaneswar
95.	117	Bausahar
96.	118	Chungri
97.	119	Sankshar
98.	120	Erenda
99.	121	Sainhati
100.	122	Sangachhi
101.	123	Jagulgachhi
102.	141	Situri

**Police Station: Rajarhat**

Sl. No.	J.L. No.	Name of Mouza
1.	18	Mahishbathan
2.	19	Thakdari
3.	20	Mahishgot
4.	23	Ghuni
5.	24	Jatragachhi
6.	25	Kadampukur
7.	32	Mahammadpur
8.	33	Chak Pachuria
9.	34	Baligori
10.	35	Chhapna
11.	36	Patharghata
12.	37	Bauragari

Sl. No.	J.L. No.	Name of Mouza
13.	38	Jhulgachhi
14.	39	Kasinathpur
15.	40	Kalikaour
16.	41	Umarhati
17.	42	Jamalpara
18.	49	Sikharpur
19.	50	Bazelari
20.	51	Arbelia
21.	52	Bagu
22.	53	Naoabad
23.	54	Hadarait
24.	55	Akandakesri

**Police Station: Sonarpur**

Sl. No.	J.L. No.	Name of Mouza
1.	2	Chak Kolarkhal
2.	3	Ranabhutia
3.	4	Kantipota
4.	5	Bhaqabanpur
5.	6	Kharki
6.	7	Deara

Sl. No.	J.L. No.	Name of Mouza
7.	8	Kheadaha
8.	9	Khodhati
9.	10	Goalapota
10.	12	Kumarpukuria
11.	13	Tardaha
12.	14	Tihuria

Sl. No.	J.L. No.	Name of Mouza
13.	15	Nayabad
14.	17	Gangajoara
15.	18	Dihi
16.	22	Chandpur
17.	23	Khurigachhi
18.	24	Ghasiara
19.	25	Jagadishpur
20.	26	Radhanagar
21.	27	Gopalpur
22.	28	Araoalch
23.	29	Hasanpur
24.	30	Kamrabandh

## Station: Kasba

Sl.No.	J.L.No.	Name of Mouza
1.	2	Dhapa

Sl. No.	J.L. No.	Name of Mouza
25.	31	Samukpota
26.	32	Protapnagar
27.	33	Garal
28.	34	Metiari
29.	35	Kalikapur
30.	36	Muragacha
31.	37	Natagachhi
32.	38	Chakbaria
33.	39	Makrampur
34.	40	Kustia
35.	41	Sangur
36.	42	Nabhasan

## Station: Salt Lake

Sl.No.	J.L.No.	Name of Mouza
1.	1	Dhapa Manpur

## Annexure-3

District	Police Station	Mouza	J.L. No.	Area	Sl.No. as shown in the map in Schedule-II
(1)	(2)	(3)	(4)	(5)	(6)
24-Parganas (South)	Tiljola	Dhapa	2	as specified in Table 1	1
		Chowbaga	3	as specified in Table 2	2
		Bonchtala	4	as specified in Table 3	3
		Dhalenda	8	as specified in Table 4	4
		Paschim Chowbaga	9	as specified in Table 5	5
		Nonadanga	10	as specified in Table 6	36
	Sonarpur	Chak Kolar Khal	1	as specified in Table 7	6
		Karimpur	2	as specified in Table 8	7
		Jagatipota	3	as specified in Table 9	8
		Mukundapur	4	as specified in Table 10	9
		Atghara	5	as specified in Table 11	10
		Ranabhutia	6	as specified in Table 12	11
		Kantipota	7	as specified in Table 13	12
		Bhagabanpur	8	as specified in Table 14	13
		Kharki	9	as specified in Table 15	14
		Deara	10	as specified in Table 16	15
		Kheadaha	11	as specified in Table 17	16
		Khodahati	12	as specified in Table 18	17
		Goalpota	13	as specified in Table 19	18
		Kumapukuria	14	as specified in Table 20	19
		Tardaha	15	as specified in Table 21	20
		Tihuria	16	as specified in Table 22	21
		Nayabad	17	as specified in Table 23	22
	Samukpota	91	as specified in Table 24	23	
	Pratapnagar	92	as specified in Table 25	24	
	Garal	93	as specified in Table 26	25	
	Kolkata Leather Complex	Dakshin Dhapa Manpur	1	as specified in Table 27	34
		Dhapa Manpur (presently Kochpukur)	2	as specified in Table 28	35
		Hatgachha	4	as specified in Table 29	26
		Haldia	5	as specified in Table 30	27
		Dharmatala Pachuria	6	as specified in Table 31	28
		Kulberia	7	as specified in Table 32	29
		Beonta	27	as specified in Table 33	30
Tardaha Kapashati		38	as specified in Table 34	31	
Purba Jadabpur	Kalikapur	20	as specified in Table 35	33	
24-Parganas (North)	South Bidhan Nagar	Dhapa Manpur	1	as specified in Table 36	32
	Rajarhat	Thakdari	19	as specified in Table 37	37

Note: Table 1-37 available at <http://www.ekwma.com>

## Newly Categorised Sectors by Central Pollution Control Board(CPCB)

### RED CATEGORY

Sl. No.	Activity
1	Railway Stations (Waste Water Generation > 100 KLD)
2	Compressed Bio-Gas (CBG) plants based on Municipal Solid Waste(MSW) (discharge of waste water >100 KLD)
3	Compressed Bio-Gas (CBG) plants based on process waste (industrial / process liquid effluent & solid waste like press mud, organic sludge, molasses, etc.) (discharge of waste water >100 KLD)

### ORANGE CATEGORY

Sl. No.	Activity
1	Scrapping Centres (for End of Life of Vehicles and other scraps such as plant and machineries, structural material, railway coaches and wagons etc.) <ul style="list-style-type: none"> <li>• Collection,</li> <li>• De-Pollution</li> <li>• Dismantling Centres and</li> <li>• Shredding Centres (can include white goods / other scraps also)</li> </ul>
2	Railway Stations Waste Water Generation >10 KLD, but <100 KLD
3	Dairy Farm (where milching animals (cows / buffalos) are housed to produce milk for distribution and supply to milk processing plants and stand-alone or isolated dairy farm, having 15 animals & above)
4	Building and Construction Projects, having built-up area upto 20,000 m <sup>2</sup> and waste water generation >50 KLD
5	Construction and Demolition (C&D) Waste Processing Plants
6	Gold Assaying & Hallmarking Centres
7	Compressed Bio-Gas (CBG) plants based on Municipal Solid Waste(MSW) (discharge of waste water ≤100 KLD)
8	Compressed Bio-Gas (CBG) plants based on process waste (industrial / process liquid effluent & solid waste like press mud, organic sludge, molasses, etc.) (discharge of waste water ≤100 KLD)
9	Compressed Bio-Gas (CBG) plants based on crop residue (paddy straw / wheat straw / corn sweet sorghum / napier grass, etc.) (discharge of waste water >100 KLD)
10	Compressed Bio-Gas (CBG) plants based on animal waste (dairy farms, poultry farms, and other animal waste) (discharge of waste water >100 KLD)

**GREEN CATEGORY**

Sl. No.	Activity
1	Railway Stations Waste Water Generation <10 KLD
2	Gaushalas
3	Compressed Bio-Gas (CBG) plants based on crop residue (paddy straw / wheat straw / corn sweet sorghum / napier grass, etc.) (discharge of waste water $\leq$ 100 KLD)
4	Compressed Bio-Gas (CBG) plants based on animal waste (dairy farms, poultry farms, and other animal waste) (discharge of waste water $\leq$ 100 KLD)

**WHITE CATEGORY**

Sl. No.	Activity
1	Used Cooking Oil (UCO) collection centers
2	Compressed Biogas (CBG) / Bio-CNG plants (irrespective of the type of feed) producing Fermented Organic Manure (FOM) & Liquid Fermented Organic Manure (LFOM) as by-products
3	Household bio-digesters / gobar-gas (cow-dung) plants based on biodegradable wastes, etc.

## Annexure III

# Application Fees for Licenses from WBPCB

(Effective from 15th March, 2018)

[A] Fee structure of application for 'Consent to Establish' for all industrial units (other than health care establishment and ship breaking industry)

Capital investment* on Land, Building, Plant & Machinery (without depreciation) excluding capital investment on pollution control equipment	Fees for 'Consent to Establish' (in Rs.)		
	Red	Orange	Green
Upto Rs.5 Lakh	700/-	450/-	250/-
Above Rs.5 Lakh to Rs.10 Lakh	1,200/-	800/-	450/-
Above Rs.10 Lakh to Rs.25 Lakh	2,450/-	1,650/-	800/-
Above Rs.25 Lakh to Rs.50 Lakh	4,750/-	3,200/-	1,650/-
Above Rs.50 Lakh to Rs.1 Crore	28,000/-	16,850/-	7,800/-
Above Rs.1 Crore to Rs.1.5 Crore	39,000/-	28,000/-	11,800/-
Above Rs.1.5 Crore to Rs.5 Crore	52,150/-	33,550/-	15,600/-
Above Rs.5 Crore to Rs.10 Crore	0.143% of capital investment	0.114% of capital investment	0.094% of capital investment
Above Rs.10 Crore to Rs.50 Crore			
Above Rs.50 crore to Rs.100 Crore			
Above Rs.100 Crore to Rs.500 Crore	0.143% of capital invest. Sub to max. Rs.55 lakh	0.114% of capital invest. Sub to max. Rs.55 lakh	0.094% of capital invest. Sub to max. Rs.55 lakh
Above Rs.500 Crore			

\*Capital Investment of MSME units shall be guided as per MSMED Act, 2006.

[B] Fee structure of application for 'Consent to Operate' for all industrial units (other than health care establishment and ship breaking industry)

Capital investment* on Land, Building, Plant & Machinery (without depreciation) excluding capital investment on pollution control equipment	Fees for 'Consent to Operate' (in Rs.)		
	Red (for 5 years)	Orange (for 5 years)	Green (for 7 years)
Upto Rs.5 Lakh	6,000/-	4,000/-	3,150/-
Above Rs.5 Lakh to Rs.10 Lakh	15,500/-	9,500/-	6,300/-

Capital investment* on Land, Building, Plant & Machinery (without depreciation) excluding capital investment on pollution control equipment	Fees for 'Consent to Operate' (in Rs.)		
	Red (for 5 years)	Orange (for 5 years)	Green (for 7 years)
Above Rs.10 Lakh to Rs.25 Lakh	21,000/-	13,750/-	9,450/-
Above Rs.25 Lakh to Rs.50 Lakh	42,000/-	27,000/-	18,550/-
Above Rs.50 Lakh to Rs.1 Crore	71,000/-	46,750/-	33,250/-
Above Rs.1 Crore to Rs.1.5 Crore	1,49,000/-	93,000/-	65,450/-
Above Rs.1.5 Crore to Rs.5 Crore	1,77,000/-	1,16,750/-	78,400/-
Above Rs.5 Crore to Rs.10 Crore	2,37,000/-	1,86,000/-	2,08,600/-
Above Rs.10 Crore to Rs.50 Crore	4,65,000/-	3,90,500/-	4,29,800/-
Above Rs.50 crore to Rs.100 Crore	11,62,250/-	9,29,500/-	10,40,900/-
Above Rs.100 Crore to Rs.500 Crore	23,23,750/-	18,59,000/-	19,51,950/-
Above Rs.500 Crore	46,47,500/-	37,18,000/-	39,03,900/-

\*Capital Investment of MSME units shall be guided as per MSMED Act, 2006.

**[C] Fee structure of application for 'Consent to Establish' and 'Consent to Operate' for Housing Complex, Commercial Complexes, Office Complexes including IT Complex, Infrastructural and Township Development Projects \*\***

Particulars of Units	Fees for Consent to Establish (in Rupees)	Fees for Consent to Operate (for 5 Years) above 20000 sq. m Built-up Area	
		Housing Complex	Commercial Complexes, Office Complexes including IT Complex, Infrastructural and Township Development Projects
Housing Complex, Commercial Complex, Office Complex, infrastructure IT Complex, infrastructure and township development project Total Buildup Area (Sq.m)		<ul style="list-style-type: none"> <li>Red category - Rs.1 lakh</li> <li>Orange category - Rs.0.50 lakh</li> </ul>	On the basis of the capital investment as mentioned in Table [B].
20,000- <50,000	3,71,800/-		
50,000-<1,00,000	7,43,600/-		
1,00,000-<1,50,000	11,15,400/-		
1,50,000 and above	18,59,000/-		

\*\* Note :- as per latest categorization of State Board vide memo No. 1512/4A-18/2010 (Pt.I) dated 14/06/2016.



**[D] Fee structure of application for ‘Consent to Operate’ for local bodies, urban townships and industrial townships**

Population in the area under local body, urban township, industrial township (based on decennial population census)	Fees for ‘Consent to Operate’ (Per year) (in Rs.)
Up to 50,000	1,500/-
Above 50,000 to 1,00,000	2,600/-
Above 1,00,000 to 5,00,000	5,100/-
Above 5,00,000 to 10,00,000	10,200/-
Above 10,00,000	25,400/-

**[E] Fee structure of application for ‘Consent to Establish’ and ‘Consent to Operate’ for Diesel Generator sets (above 1 MVA) for non-industrial use excepting Health care establishments**

Capacity of Diesel Generator Sets (cumulative capacity)	Fees for ‘Consent to Establish’ (in Rs.)	Fees for ‘Consent to Operate’ (Per Year) (in Rs.)
Above 1 MVA	2,500/-	4,500/-

**[F] Fee structure of application for ‘Consent to Establish’ and Consent to Operate’ for Fire Works Manufacturing Units**

Quantity of fireworks manufactured / to be manufactured per year	Fees for ‘Consent to Establish’ (in Rs.)	Fees for ‘Consent to Operate’ (for 5 Years) (in Rs.)
Up to 10,000 kg	450/-	4,000/-
Above 10,000 kg to 20,000 kg	800/-	9,500/-
Above 20,000 kg to 50,000 kg	1,650/-	13,750/-
Above 50,000 kg	3,200/-	27,000/-

**[G] Fee structure of application for ‘Consent to Establish’ for Health Care Establishment**

Categories		Fees for ‘Consent to Establish’ (in Rs.)
On bed capacities of institutions providing service to indoor patients	Up to 25 beds	1,000/-
	26-50 beds	1,450/-
	51-100 beds	3,750/-
	101-200 beds	5,600/-
	201-300 beds	14,300/-
	301 beds and above	20,000/-
On number of patients per month in case treatment / service is not provided to indoor patients	Less than 1000 patients p.m.	450/-
	1000-2000 patients p.m.	1,900/-
	More than 2000 patients p.m.	3,750/-
All ‘Not for profit’ Institution		100/-
All Government Health Care Establishment		

## [H] Fee structure of application for Consent to Operate' and Authorization of Bio-Medical Waste for Health Care Establishment

### (I) Applicable for the Institutions providing services to indoor patients

Categories		Fees for 'Consent to Operate' and Authorization (for 5 Years) (each) (in Rs.)
On bed capacities of institutions providing service to indoor patients	Upto 25 beds	5,000/-
	26-50 beds	7,250/-
	51-100 beds	18,750/-
	101-200 beds	28,000/-
	201-300 beds	71,500/-
	301 beds and above	1,00,000/-
All 'Not for profit' Institution		500/-
All Government Health Care Establishment		500/-

### (II) Applicable for the Institutions not treating/ providing services to indoor patients

Categories		Fees for 'Consent to Operate' (for 5 Years) (in Rs.)	Fees for one-time Authorization (in Rs.)
On number of patients per month in case treatment / service is not provided to indoor patients	Less than 1000 patients p.m.	2,250/-	450/-
	1000-2000 patients p.m.	9,500/-	1,900/-
	More than 2000 patients p.m.	18,750/-	3,750/-
All 'Not for profit' Institution		500/-	100/-
All Government Health Care Establishment		500/-	100/-

## [I] Fee structure of application for Authorisation for Operators of Bio-Medical Waste Management Facility

Categories	Fee (Per Year) (in Rs.)
Collection and / or transport of bio-medical waste	1,900/-
Collection, transport, storage, treatment, disposal of any other form of handling bio-medical waste	7,150/-
All 'Non- profit Operators' including Municipal Corporation and Municipalities	100/-

**[J] Fee structure of application for Authorisation for Industry Generating / Managing/ Handling/ Storing/ Treating / Disposing of Hazardous Waste**

Particulars	Fees for authorization (for 5 years) (in Rs.)
All industry generating / managing / handling / storing/ treating / disposing of Hazardous Waste	14,300/-

**[K] Fee structure of application for 'Consent to Operate' for Ship Breaking Industries**

Particulars	Fees for 'Consent to Operate' (per Light Displacement Ton) (in Rs.)
Per Ship Breaking Activity	100/-

**[L] Authorization fees for handling and processing of Municipal Solid Waste**

Particulars	Fees for Authorization (Per Year) (in Rs.)
Fees for Private Operator	2,900/-

**[M] Registration fees for Dealers of Lead Acid Storage Batteries**

Particulars	Fees for Registration (For Five Year) (in Rs.)
All dealers of Lead Acid Storage Batteries	7,150/-

**[N] Application fees for 'Consent to Establish' and 'Consent to Operate' for Sewage Treatment Plants / Water Treatment Plants / Other Infrastructure Project / Common Bio-medical Waste Treatment Facilities etc. owned by the Government Institutions, non-profit organizations, Municipal Corporations and Municipalities**

Particulars	Fees for 'Consent to Establish' (in Rs.)	Fees for 'Consent to Operate' (Per Year) (in Rs.)
Government Institutions, non-profit organizations, Municipal Corporations and Municipalities	100/-	100/-

**[O] Authorization fees under E-Waste (Management) Rules, 2016**

Particulars	Fees for Authorization (For Five Year) (in Rs.)
Manufacturer, refurbishers, dismantler & recyclers	Rs.14,300/-

**[P] Fees for mining and Short Term Permits (in rupees) for minor minerals only**

Sl. No.	Lease area of the mines	For Consent to Establish (in Rs.)	For Consent to Operate (Per year) (in Rs.)
1.	Less than 1 Hectare	8,000/-	24,000/-
2.	1 Hectare to 5 Hectare	12,000/-	33,000/-
3.	Above 5 Hectare	Rs.15,000/- + (Rs.400/- per incremental Hectare above 5 Hectares)	Rs.37,500/- + (Rs.750/- per incremental Hectare above 5 Hectare)

**[Q] Fees for conducting Public Hearing :- For units under EIA notification 2006 and its amendment**

Sl. No.	Capital Investment on Plant & machineries	Fees for Public Hearing (in Rs.)
1.	Less than Rs.50.00 Crores	75,000/-
2.	Above Rs.50.00 Crores to Rs.500.00 Crores	1,25,000/-
3.	Above Rs.500.00 Crores	1,50,000/-

## Annexure IV

## List of 17 category Industries

Sl. No.	Industry Name and Address	District	Sector
1	M/s ACC Limited, Damodhar Cement Works, Madhukunda, P.O. Sunuri, District Purulia, 723121	Purulia	Cement
2	M/s Ambuja Cement Ltd. (Unit Farakka) Kendua, P.O. Srimantapur, District Murshidabad, Pin 742212	Murshidabad	Cement
3	M/s Ambuja Cement Ltd. Village & P.O. Dhulagori District Howrah Pin 711302	Howrah	Cement
4	M/s ASO CEMENT LIMITED Salua Road, Vill & P.O. GOPALI District Medinipore (W) Pin 721145	Paschim Medinipur	Cement
5	M/s Emami Cement Ltd., Vill. + P.O.-Kotagram, P.S.- Budbud, Dist.- Purba Bardhaman	Purba Bardhaman	Cement
6	M/s Balmukund Cement & Roofings Ltd. Muldi, P.O. Nanduka, District Purulia, Pin 723145	Purulia	Asbestos sheet manufacturing
7	M/s Bhawani Cement Pvt. Ltd. P.D. Nagar Industrial Complex, Village Balanpur, P.O. Ikrah, Pin 713362	Paschim Burdwan	Cement
8	M/s Dankuni Cement Works (unit of Ultratech Cement Ltd.), Panchghara, P.O.-Panchghara Bazar, P.S.- Chanditala, Dist.- Hooghly, Pin-712306	Hooghly	Cement
9	M/s Durgapur Cement Works (Birla Corporation Ltd.), Kada Road, Waria, P.O. Durgapur District Burdwan, Pin 713203	Paschim Burdwan	Cement
10	M/s Jagadamba Fiscal Services (P) Ltd. Bidhan Commercial Complex, Mouza Bhirangi, Plot No 757 Durgapur, Pin 713 203	Paschim Burdwan	Cement
11	M/s Nuvoco Vistas Corporation Ltd. (Formerly: Lafarge India Private Limited), Amdanga, P.O. M.T.P.S. (D.V.C.) District Bankura, Pin 722183	Bankura	Cement
12	M/s Bharat Hitech Cements (Formerly Pronto Commercial Pvt. Ltd.), Bongabari, District Purulia, Pin 723147	Purulia	Cement
13	M/s Mirdha Cement Pvt. Ltd., Ketlapur, P.O. Rukni, District Purulia Pin 723145	Purulia	Cement
14	M/s Pragati Cement (India) Pvt. Ltd. Vill & P.O. Simulia District Purulia, Pin 723102	Purulia	Cement
15	M/s Rashmi Cement Ltd. Vill. Baria, P.O. Garh Salboni, District Midnapore (W), Pin 721507	Jhargram	Cement

Sl. No.	Industry Name and Address	District	Sector
16	M/s Shri Shyam Cement Works Pvt. Ltd., Mangalpur, P.O. Raniganj, District Burdwan, Pin 713347	Paschim Burdwan	Cement
17	M/s. Shristi Cement Ltd., ADDA, Industrial Estate, Mangalpur, P.O. Raniganj, District Burdwan, Pin 713347	Paschim Burdwan	Cement
18	M/s Ultratech Cement Ltd., (L & T Ltd. West Bengal Cement Works Ltd.), P.O. Rajbandh, Burdwan, 713212	Paschim Burdwan	Cement
19	M/s Durgapur Chemicals Ltd. Vill. Raturia, P.S. Coke Oven, P.O. Durgapur, Dist. Burdwan, Pin. 713215	Paschim Burdwan	Chloroalkali
20	M/s IFB Agro Industries Ltd., Vill. Durgapur, P.O. Noorpur, Via-Shrisha Ashram, Ramnagar, Pin 743368	South 24 Pgs	Distillery
21	M/s Jayashree Chemicals & Fertilizers, Nanda Bose Road, Khardh	North 24 Pgs	Fertiliser
22	M/s IRC Agrochemicals Pvt.Ltd. (formerly Tata Chemicals Ltd.) Durgachak, Haldia, P.O. + P.S. Durgachak, Dist. Medinipore (E), Pin. 721602	Purba Medinipur	Fertiliser
23	M/s TEESTA AGRO INDUSTRIES LTD. Vill. Majhabari, P.O. + P.S. Rajganj, Dist Jalpaiguri, Pin. 735134	Jalpaiguri	Fertiliser
24	M/s The Phosphate Company Limited. Vill. + P.O. Rishra, P.S. Srirampore, Pin. 712248	Hooghly	Fertiliser
25	M/s Shyam Sel & Power Ltd. Mangalpur Industrial Area, P.O. & P.S. Raniganj, Pin. 713347	Paschim Burdwan	Sponge Iron
26	M/s Shyam Sel & Power Ltd., Vill.-Dhasna, P.O.-Bahadurpur, P.S.-Jamuria, Dist.- Paschim Bardhaman	Paschim Burdwan	Sponge Iron
27	M/s Haldia Petrochemicals Limited. P.O. +P.S. Durgachak, Dist. Medinipore(E), Pin. 721602	Purba Medinipur	Petrochem
28	M/s MCPI Pvt. Ltd. formerly, MCC PTA India Corp. Pvt. Ltd Vill. + P.O. Bhuniaraichak, Haldia Dist. Medinipore(E), Pin. 721635	Purba Medinipur	Petrochem
29	M/s Dhunseri Petrochem & Tea Ltd. (Petrochem Divn.) Vill. +P.O. Khanjanchak, Dist. Medinipore (E), Pin. 720602	Purba Medinipur	Petrochem
30	M/s Adhunik Corporation Ltd. Angadpur, P.O. Durgapur, P.S. Coke Oven, Pin. 713215	Paschim Bardhaman	Sponge Iron
31	M/s. Amiya Steel Pvt. Ltd., Vill. Tarapur, P.O. & P.S. Mejia, Dist. Bankura, Pin. 722143	Bankura	Sponge Iron
32	M/s Ankit Metal & Power Ltd. P.O. Jorehira, P.S. Chhatna, Dist. Bankura, Pin. 722137	Bankura	Sponge Iron
33	M/s. Aryabrata Steel Pvt. Ltd., Lohameya, P.O. Mohanpur, P.S. Jhargram, West Midnapore, Pin 721507	Paschim Medinipur	Sponge Iron

Sl. No.	Industry Name and Address	District	Sector
34	M/s.Supersmelt Sponge Pvt. Ltd. (formerly Sree Sanyjee Steel and Power Ltd.). Vill. Dantia, P.O. Shyamnagar, P.S Balarampur, Dist. Purulia - 723143	Purulia	Sponge Iron
35	M/s RAIC Integrated Sponge and Power Pvt. Ltd. (Formerly Bhagawati Sponge (P) Ltd.), Jamuria Industrial Estate, P.O.- Ikrah, Pin. 713336	Paschim Burdwan	Sponge Iron
36	M/s Bisco Metal & Power Ltd. P.O. Rangadih P.S. Balarampur, Dist. Purulia, Pin 723143	Purulia	Sponge Iron
37	M/s Bravo Sponge Iron Pvt. Ltd., Vill. Mahuda, P.O. Rukni (Near Rly. Station), Dist. Purulia, Pin. 723145	Purulia	Sponge Iron
38	M/s. C.P. Sponge Iron Pvt.Ltd. Raturia Angadpur Industrial Area, Durgapur, Pin-713215	Paschim Burdwan	Sponge Iron
39	M/s Calstar Sponge Ltd. Mouza – Ikra, Jamuria Industrial Estate, Jamuria, Pin. 713362	Paschim Burdwan	Sponge Iron
40	M/s. Concast Steel and Power formerly, Concast Bengal Industries Ltd.Vill. Gourandi, P.O. Achuri Salboni, Bankura Pin. 722102	Bankura	Sponge Iron
41	M/s D.D. International (P) Ltd.P.O.- Shyamnagar, Dist.- Purulia, Pin 723143	Purulia	Sponge Iron
42	M/s Damodar Ispat Ltd. Jamuria Industrial, Estate,Damodarpur, Jamuria, Pin. 713336	Paschim Burdwan	Sponge Iron
43	M/s Dhanbad Fuels Ltd, Mangalpur Industrial Estate, Raniganj, Dist.- Burdwan. Pin 713 347	Paschim Burdwan	Sponge Iron
44	M/s C.P.Ispat Pvt. Ltd.(Formerly Divyajyoti Sponge Iron (P) Ltd.), Nandanpur, P.O. Ranipur, Mejia, Dist.- Bankura, Pin. 722133	Bankura	Sponge Iron
45	M/s Durgapur Steel Plant (SAIL)P.O. Durgapur, Pin 713203	Paschim Burdwan	Iron & Steel
46	M/s Electrosteel Casting (Sponge Iron Unit) Vill. Kashberia, P.O. Shivramnagar, Haldia, Dist. Purba Midnapore, Pin 721 635	Purba Medinipur	Sponge Iron
47	M/s Gagan Ferrotech Ltd., Jamuria Industrial Estate, Vill + P.O. Ikra, Pin. 713362	Paschim Burdwan	Sponge Iron
48	M/s. Govinda Impex Pvt. Ltd. located at Sahebdihi, P.O.- Hatasuria, P.S.- Barjora, Dist.- Bankura, Pin. 722202	Bankura	Sponge Iron
49	M/s Haldia Steels Ltd. Unit – I & II, Raturia Industrial Area, Angadpur, Durgapur, Dist. Burdwan, Pin. 713215	Paschim Burdwan	Sponge Iron
50	M/s Shree Satya Sponge and Power Pvt. Ltd. (Formerly, Howrah Gases Ltd.) G/4A, Mangalpur Industrial Estate, P.O. Raniganj, Dist. Burdwan, Pin713347	Paschim Burdwan	Sponge Iron

Sl. No.	Industry Name and Address	District	Sector
51	M/s SAIL-IISCO Steel Plant , Vill and P.O. Burnpur Pin 713325	Paschim Burdwan	Iron & Steel
52	M/s Ispat Damodar Ltd. Nabagram, P.O. Digha, P.S. Neturia, Dist. Purulia, Pin. 723121	Purulia	Sponge Iron
53	M/s Jai Balaji Industries Ltd., Unit – I, G-1, Mangalpur Industrial Complex, P.O. Baktarnagar, Pin713321	Paschim Burdwan	Sponge Iron
54	M/s. Kunj Bihari Steel Pvt. Ltd. Jamuria Industrial Area, P.O. Nandi, P.S. Jamuria, Dist. Burdwan, Pin. 713344	Paschim Burdwan	Sponge Iron
55	M/s MB Ispat Corporation Ltd., Plot No. 1861, Durgapur Bankura Road, P.O. Borjora, Dist. Bankura, Pin. 722202	Bankura	Sponge Iron
56	M/s Ma Amba Sponge Iron Ltd., Vill.- Jemua, P.O. & P.S.- Mejia, Dist.- Bankura, Pin. 722143	Bankura	Sponge Iron
57	M/s Ma Chandi Durga Ispat Pvt. Ltd. Kanjilal Avenue, P.O. Durgapur, P.S. Coke Oven, Pin. 713 210	Paschim Burdwan	Sponge Iron
58	M/s Shakambhari Ispat & Power Ltd., Vill. Madandih, P.O. Bartoria, Dist. Purulia, Pin. 723121	Purulia	Sponge Iron
59	M/s Maheshwary Ispat Ltd., Beldanga, P.O.- Chhotoramchandrapur, Dist.- Burdwan, Pin. 713148	Paschim Burdwan	Sponge Iron
60	M/s Mark Steels Ltd, Jagannathdihi, P.O.-Murulia, Block- Santuri, Purulia, Pin. 723121	Purulia	Sponge Iron
61	M/s MB Sponge & Power Ltd., P.O. Hijalgoda, Near Ikrah Railway Station, Pin. 713362	Paschim Burdwan	Sponge Iron
62	M/s. Maithan Steel & Power Ltd. Bonra, P.S. Neturia, Dist. Purulia, Pin. 723121	Purulia	Sponge Iron
63	M/s Rabindra Enterprises Pvt. Ltd. P.O. Digha, P.S. Neturia, Dist. Purulia Pin. 723121	Purulia	Sponge Iron
64	M/s Rajshri Iron Industries Pvt. Ltd. Jamuria Industrial Area, Seikhpur, P.O. Nandi, Dist. Pin. 713344	Paschim Burdwan	Sponge Iron
65	M/s Maan Steel & Power Ltd., Jamuria Industrial Estate, Vill.-Ikrah, P.S.-Jamuria, P.O.- Nandi, Dist.- Paschim Bardhaman	Paschim Burdwan	Sponge Iron
66	M/s Rashmi Cement Ltd. (Steels & Power Division) Vill. Jitusole, P.O. Garhsalboni, P.S. Jhargram, Dist. Paschim Medinipur, Pin. 721507	Paschim Medinipur	Sponge Iron
67	M/s Rashmi Ispat Ltd. Vill: Gajasimul, P.O. Lodhasuli, PS Jhargram, Dt. Midnapore (W), Pin. 721513	Paschim Medinipur	Sponge Iron
68	M/s Rishabh Sponge Ltd., Durgapur – Bankura Main Road, Barjora, Dist. Bankura, Pin. 722 202	Bankura	Sponge Iron



Sl. No.	Industry Name and Address	District	Sector
69	M/s Ritesh Tradefin Ltd. Plot No. 3513 (P), Lenin Sarani (Kanjilal Avenue), Durgapur Pin 713210	Paschim Burdwan	Sponge Iron
70	M/s Satyam Iron & Steel Co. Pvt. Ltd. G-7, Mangalpur Industrial Area, P.O. Raniganj, 713347	Paschim Burdwan	Sponge Iron
71	M/s Satyam Smelters Pvt. Ltd. Jamuria Industrial Area P.O. Ikrah, Jamuria, Dist. Burdwan, Pin. 713362	Paschim Burdwan	Sponge Iron
72	M/s Savitri Sponge Iron (P) Ltd Mangalpur, Raniganj, G.T. Road, Pin. 713347	Paschim Burdwan	Sponge Iron
73	M/s Sen Ferro Alloy Pvt. Ltd. Vill Dejudi, P.O. Unra Jambedia, P.S. Barjora, Dist. Bankura, Pin. 722202	Bankura	Sponge Iron
74	M/s Shiv Shankar Sponge (P) Ltd. Mouza- Dantia, P.S.- Balarampur, Dist.- Purulia, Pin. 723143	Purulia	Sponge Iron
75	M/s Shree Gopal Govind Sponge (P) Ltd., Mangalpur Industrial Estate, Raniganj, Pin. 713347	Paschim Burdwan	Sponge Iron
76	M/s Jai Balaji Industries Ltd. Unit 4, Banskopa, Kanksa, Durgapur	Paschim Burdwan	Sponge Iron
77	M/s Salgram Power & Steel(P) Ltd.(Formerly Shyam Sel & Power Ltd. )Palitpur Road, Dewandighi, P.O. & P.S. Burdwan, Pin. 713102	Paschim Burdwan	Sponge Iron
78	M/s Shyam Steel Industries Ltd. Angadpur, P.O. Durgapur, Pin. 713215	Paschim Burdwan	Sponge Iron
79	M/s Shyam Steel manufacturing Ltd. formerly, Sova Ispat Ltd. Jemua Mouza, Mejia Block, Dist. Bankura, Pin. 722143	Bankura	Sponge Iron
80	M/s SPS Steels and Power Ltd. Vill. + P.S. Durgapur, Dist. Burdwan, Pin. 713206	Paschim Burdwan	Sponge Iron
81	M/s. S.R.S. Sponge (P) Ltd. Vill. Dantia, P.O. Rangadih, P.S. Balarampur, Dist. Purulia, Pin. 723143	Purulia	Sponge Iron
82	M/s. Super Smelters Ltd.,Unit-3 Jamuria Industrial Area, P.O. Ikra, P.S. Jamuria, Pin. 713362	Paschim Burdwan	Sponge Iron
83	M/s. Shivam Dhatu Udyog Pvt. Ltd. Jamuria Industrial Area, P.O. Ikra, P.S. Jamuria, Dist. Burdwan, Pin. 713362	Paschim Burdwan	Sponge Iron
84	M/s Vijaya Sponge & Ispat (P) Ltd., Mouza-Kourang, Kantadih, Dist.- Purulia. Pin. 723153	Purulia	Sponge Iron
85	M/s Vision Sponge Iron Pvt. Ltd. Rakta, P.O. Madhukunda, P.S. Santuri, Dist. Purulia, Pin. 723121	Purulia	Sponge Iron
86	M/s ASG Biochem Pvt. Ltd. Vill. + P.O. Ganganagar, P.S. Airport, Dist. 24 PGS (N), Pin. 700132	North 24 Pgs	Pharmaceuticals
87	M/s Deys Medical Stores (Mfg.) Ltd. [De-Se-Chem Division] P.O. Ballygunge, P. S. Karaya, Pin. 700019	Kolkata	Pharmaceuticals
88	M/s Fresenius Kabi Oncology Limited. Vill. + P.O. KALYANI, Dist. Nadia, Pin. 741235	Nadia	Pharmaceuticals

Sl. No.	Industry Name and Address	District	Sector
89	M/s East India Pharmaceutical Works Limited. Vill. Durgapur, P.O. Durgapur-15, P.S. Coke Oven Pin. 713215	Paschim Burdwan	Pharmaceuticals
90	M/s Indian Oil Corporation Limited- P.O. Haldia Refinery, Dist. Medinipore (E) , Pin. 721606	Purbo Midnapore	Oil Refinery
91	M/s Emami Paper Mills Limited (Unit- Gulmohar), P.O. Alambazar, P.S. Belghoria, Dist. 24 PGS (N), Pin. 700035	North 24 Pgs	Pulp and Paper
92	M/s Ballavpur Paper Mfg. Ltd. Vill. + P.O. Ballavpur, P.S. Ranigunj, Pin. 713323	Paschim Burdwan	Pulp and Paper
93	M/s Indian Pulp & Paper (P) Ltd. Vill. Naihati, P.O. Hazinagar, Dist. 24 PGS (N), Pin. 743135	North 24 Pgs	Pulp and Paper
94	M/s KRISHNA TISSUES PRIVATE LIMITED Vill. Madari, P.O. Kantapur, P.S. Bagnan, Dist. Howrah, Pin. 711303	Howrah	Pulp and Paper
95	M/s ITC Limited PSPD Tribeni Vill. Tribeni, P.O. Chandrahati, P.S. Mogra, Dist. Hooghly, Pin. 712504	Hooghly	Pulp and Paper
96	M/s SUPREME PAPER MILLS LIMITED Vill. Raninagar, P.O. + P.S. Chakdaha, Dist. Nadia, Pin. 741222	Nadia	Pulp and Paper
97	M/s UNIGLOBAL PAPER MILLS Jhargram, West Medinipur Pin 721507	Paschim Medinipur	Pulp and Paper
98	M/s UNITECH PAPER MILLS PVT LTD Vill. + P.S. Debra, P.O. Chakshyampur , Dist. Medinipore (W) Pin. 721124	Paschim Medinipur	Pulp and Paper
99	M/s UNITED PHOSPHORUS LIMITED (SWAL Corporation) P.O. +P.S. Durgachak, Dist. Medinipore (E), Pin. 721602	Purba Medinipur	Pesticide
100	M/s ANKAR INDUSTRIES PRIVATE LIMITED Vill. +P.O. MADHYAMGRAM, P.S. Barasat, Dist. 24 PGS (N), Pin. 700129	North 24 Pgs	Pesticide
101	M/s Khaitan (India) Ltd. Vill. Plassey, P.O. Plassey Sugar Mill, Dist. Nadia, Pin. 741157	Nadia	Sugar
102	M/s Shree Renuka Sugars Ltd. P.O. Debhog, P.S. Bhabanipur, Dist. Medinipore (E) , Pin. 721657	Purba Medinipur	Sugar
103	M/s. West Bengal Power Development Corporation Ltd. Bakreswar Thermal Power Station, P.O – Bk.T.P.P, Dist – Birbhum, PIN – 731 104.	Birbhum	Power Plant
104	M/s. West Bengal Power Development Corporation Ltd. Bandel Thermal Power Station, P.O – Tribeni, Dist – Hooghly, PIN – 712 503.	Hooghly	Power Plant
105	M/s. CESC Limited, Budge Budge Generating Station, Budge Budge, PO – Pujali, Dist – 24 Parganas (South) PIN – 700 138	South 24 Pgs	Power Plant

Sl. No.	Industry Name and Address	District	Sector
106	Durgapur Steel Thermal Power Station(DVC) Andal, Paschim Bardhaman- 713321	Paschim Burdwan	Power Plant
107	M/s. CESC Limited, Southern Generating Station, PO & PS – Garden Reach, PIN – 700 024, West Bengal	Kolkata	Power Plant
108	M/s Mejia Thermal Power Station, Vill Durlavpur, P.O. MTPS, P.S. Gangajalghati Bankura Pin 722183	Bankura	Power Plant
109	M/s. Chinakuri Power Station[formerly Dishergarh Power Supply Co. Ltd.( Chinakuri Unit)]; PO.Sundarchak, P.S.-Kulti, Dist.- Paschim Bardhaman	Paschim Burdwan	Power Plant
110	M/s India Power Corporation Limited (formerly Dishergarh Power Supply Co. Ltd.) Dishergarh Unit; PO.Sitarampur	Paschim Burdwan	Power Plant
111	M/s. West Bengal Power Development Corporation Ltd. Kolaghat Thermal Power Station, P.O.– Mecheda, Dist. – Purba Medinipur, PIN – 721 137.	Purba Medinipur	Power Plant
112	M/s. NSPCL NTPC - SAIL Power Company Private Limited –DurgapurCPP-II, DSP Complex, Distt. Burdwan, Durgapur – 713 203.	Paschim Burdwan	Power Plant
113	M/s. NTPC, Farakka, P.O. – Nabarun, Dist. – Murshidabad, PIN – 742 236, West Bengal.	Murshidabad	Power Plant
114	M/s. West Bengal Power Development Corporation Ltd. Santaldih Thermal Power Station, P.O. – S.T. Plant, Dist– Purulia, PIN –723 146, West Bengal	Purulia	Power Plant
115	M/s. Durgapur Projects Ltd., Durgapur , West Bengal. 713 201	Paschim Burdwan	Power Plant
116	M/s Durgapur Thermal Power Station D.V.C.P.O. Durgapur, Pin 713 207	Paschim Burdwan	Power Plant
117	M/s. West Bengal Power Development Corporation Ltd. Sagardighi Thermal Power Station, P.O. – Manigram, P.S. – Sagardighi, Dist – Murshidabad .	Murshidabad	Power Plant
118	M/s. Raghunathpur Thermal Power Station, DVC,Vill. Dumdumi, PO- Nildih, PS- Neturia,Dist.- Purulia.	Purulia	Power Plant
119	M/s. Crescent Power Ltd. Vill. Madanpur, PO- Kapista, PS- Barabani Dist.- Paschim Bardhaman	Paschim Burdwan	Power Plant
120	M/s Haldia Energy Pvt. Ltd.,Bhaneswar Chak, P.O.-Golapchak, P.S.-Durgachak,Haldia, Purba Medinipur, Pin-721658	Purba Medinipur	Power Plant

## Annexure V

## List of GPI Units in West Bengal

Sl. No.	Industry Code	Name of Units	District	RO	Sector	Basin or Sub-basin
1	646	Kesoram Rayon (Unit Of Cygnet Industries Ltd.), P.O.Nyasari,Ps. Morga, Hooghly - 513	Hooghly	Hooghly	Textile	Ganga
2	647	Bengal Beverages Pvt. Ltd.; Durgapur Expressway, P.O. Dankuni Coal Complex, P.S. Dankuni, Disy.- Hooghly	Hooghly	Hooghly	Food & Beverages	Ganga
3	648	Dankuni Coal Complex Coal India Ltd. Dankuni	Hooghly	Hooghly	Others	Ganga
4	649	Diamond Beverages Pvt. Ltd.; P-41, Taratala Road, Pin - 700088	Kolkata	Kolkata	Food & Beverages	Ganga
5	650	Hindustan Unilever Ltd. 63 Garden Reach Road, Kolkata- 700024	Kolkata	Kolkata	Others	Ganga
6	651	Indian Oil Corporation, Haldia Refinery,Haldia Oil Refinery Po, HaldiaDist,Purba Mednapur-721606	Purba Medinipur	Haldia	Oil & Refinery	Ganga
7	652	Mcpri Private Limited, (Formerly Name - Mcc Pta Corp. Pvt. Ltd), Bhunia Rai Chakmednipore East,Haldia Dist, 7112249	Purba Medinipur	Haldia	Petrochemical	Ganga
8	653	Mother Dairy Calcutta P.O. Dankuni Coal Complex Pin - 712310	Hooghly	Hooghly	Food & Beverages	Ganga
9	654	Exide Industries Ltd., Haldia, Po. & Ps . Durgachak, Haldia , Purba Medinipur - 602	Purba Medinipur	Haldia	Others	Ganga
10	655	Exide Industries Ltd., Shyamnagar, 91, New Chord Road , Thakurpukur, - 743128	South 24 Parganas	Barrackpore	Others	Ganga
11	656	East India Pharmaceutical Works Ltd,; Raturia Waria Road, P.S. Coke Oven, L.B.D.M.C Durgapur - 15	Burdawan	Durgapur	Pharmaceuticals	Damodar / Ganga
12	657	Durgapur Steel Plant, Durgapur -3, Burdwan	Burdawan	Durgapur	Others	Damodar / Ganga

Sl. No.	Industry Code	Name of Units	District	RO	Sector	Basin or Sub-basin
13	658	Indian Iron & Steel Co. (IISCO), (Burnpur Works), P.O. Burnpur, P.S. Hirpur, Burdwan	Burdawan	Durgapur	Others	Damodar / Ganga
14	1096	Krishna Tissue Pvt. Ltd., Burdwan Katwa Road, Po.+ Ps. Bhatar, Dist.-Burdwan, Pin-713125	Burdawan	Durgapur	Pulp & Paper	Damodar / Ganga
15	660	Pepsico India Holdings Pvt. Ltd. (M/S Frito Lay Division), Sankrail, P.O. Dhulagorh, P.S. Howrah - 711302	Howrah	Howrah	Food & Beverages	Ganga
16	661	Adani Wilmar Ltd., Debhog, Hpl Link Road, Haldia - 721657	Haldia	Haldia	Food & Beverages	Ganga
17	662	Ruchi Soya Industries Ltd., Durgachak, Haldia, Purba Medinipur	Purba Medinipur	Haldia	Food & Beverages	Ganga
18	663	Gun & Shell Factory, Cossipore, 7, K.C. Road, Po. & Ps. Cossipore, Kolkata - 2	Kolkata	Salt Lake	Others	Ganga
19	664	Ordnance Factory, Dum Dum, Kolkata - 2	Kolkata	Salt Lake	Others	Ganga
20	665	Berger Paints India Ltd., 14&15 Swarnamoyee Road, Po. B. Garden, Howrah-3	Howrah	Howrah	Others	Ganga
21	666	Berger Paints India Ltd., 103, G.T. Road, Rishra, Hooghly - 712 248	Hooghly	Hooghly	Others	Ganga
22	667	Ab Mayuri India Pvt. Ltd. (Formerly u, Kalyani east), Chandmari More, Gayeshpur, Kalyani, Nadia - 741235	Nadia	Barrackpore	Distillery	Ganga
23	668	Ballavpur Paper Manufacturing Ltd., PO, Ballavpur, Raniganj, Dist. Burdwan	Burdawan	Durgapur	Pulp & Paper	Damodar / Ganga
24	669	Indian Pulp And Paper Pvt. Ltd. PO Hazarinagar, PS Naihati, Dist-24 Pargana (N) Pin - 743135	24 North Paragnas	Barrackpore	Pulp & Paper	Ganga
25	670	Kohinoor Paper & Newsprint Pvt. Ltd.; FIGC, Phase -II, Sector-V, P.O. Kalatalahat, PS. Falta, 24-Pgs(S), Pin - 743504	24 South Paragnas	Alipore	Pulp & Paper	Ganga
26	671	Krishana Tissue Pvt. Ltd. Madari, Po. Kantapukur, Ps. Bagnan, Dist. Howrah	Howrah	Howrah	Pulp & Paper	Ganga
27	672	Nalco Chemicals India Ltd. Kannagar, Hooghly	Hooghly	Hooghly	Chemical	Ganga

Sl. No.	Industry Code	Name of Units	District	RO	Sector	Basin or Sub-basin
28	673	Tata Chemicals Ltd., Durgachak, Haldia, Purba Medinipur	Purba Medinipur	Haldia	Fertilizer	Ganga
29	674	Unitech Paper Mills Pvt. Ltd. Balichak, Ps.Debra, Chakshyampur, Dist. Midnapur	Paschim Medinipur	Haldia	Pulp & Paper	Ganga
30	675	Uniglobal Paper Mill Pvt. Ltd. , Po. Jhargram, Dist.-Jhargram	Jhargram	Haldia	Pulp & Paper	Ganga
31	676	Aditya Birla Nuvo Ltd. [Jayashree Textiles]; 5, Panchugopal Bhaduri Sarani Rishra, District - Hooghly Pin-712249	Hooghly	Hooghly	Textile	Ganga
32	677	Britannia Industries Ltd.; 15, Taratala Road, Po & Ps Taratara, Kolkata-700088	Kolkata	Kolkata	Food & Beverages	Ganga
33	678	Dhunseri Petrochem & Tea Ltd. (South Asian Petrochem Ltd.); P.O. Khanjanachak, P.S. - Durgachak,	Purba Medinipur	Haldia	Petrochemical	Ganga
34	679	Emami Paper Mills Ltd. Gulmohor Unit, R.N. Tagore Road PO Alambazar, Kolkata 700035	Kolkata	Kankinara	Pulp & Paper	Ganga
35	680	Haldia Petrochemicals Ltd. Po Durgachak Medinipur 713203	Purba Medinipur	Haldia	Petrochemical	Ganga
36	681	Ifb Agro Industries Ltd. Village - Durgapur, Po Noorpur, Via - Sarisha Ashram, 24 South Parganas	24 South Parganas	Alipore	Distillery	Damodar / Ganga
37	682	Itc Limited Paper Boards & Speciality Paper Division Tribeni Unit Chandrahati Po Hooghly 712504	Hooghly	Hooghly	Pulp & Paper	Ganga
38	683	Pmc Rubber Chemicals 103 Gt Road (West) Po & Ps Rishra District Hooghly Pin - 712248	Hooghly	Hooghly	Chemical	Ganga
39	684	Shree Renuka Sugars, City Center, Behog PO, Poorba Medinipore, 721651	Purba Medinipur	Haldia	Sugar	Ganga
40	685	Supreme Paper Mills Ltd. Vill : Rainanagar, Po Chakdah Dist - Nadia	Nadia	Barrackpore	Pulp & Paper	Ganga
41	686	United Breweries Limited, Kalyani Unit Plot No - 18, Block - D, Vittal Mallya Road, Kalyani, Dist - Nadia, Pin - 741235	Nadia	Barrackpore	Distillery	Ganga

Sl. No.	Industry Code	Name of Units	District	RO	Sector	Basin or Sub-basin
42	687	United Phosphorus Ltd, Durga Chak PO, Haldia, 721602, Purba Medinipur	Purba Medinipur	Haldia	Pesticide	Ganga
43	688	Kamarhati Paper Mill, Kamarhatti, West Bengal	Kamarhati	Barrackpore	Pulp & Paper	Ganga
44	945	Khaitan India Ltd. Khaitan Nagar, Pollashi, Nadia, Pin - 741157	Nadia	Barrackpore	Sugar	Ganga
45	1116	Bardhaman Dharmaraj Paper Mill (P) Ltd., Vill: Konarpara, P.O. Kalanabogram, P.S. Memari, Purba Bardhaman - 713124	Burdawan	Durgapur	Pulp & Paper	Damodar / Ganga
46	1117	Pinex Paper Mill Pvt. Ltd., Jambon, Kataberia Road Shivpur, Durgapur District - Burdwan	Burdawan	Durgapur	Pulp & Paper	Damodar / Ganga
47	1118	Debjyoti Pulp & Paper, Vill. Millicola, Grand Trunk Rd, Asansol, West Bengal 713359	Asansol	Durgapur	Pulp & Paper	Damodar / Ganga
48	1119	Natraj Electrocasting Pvt. Ltd., Chhotaram Chandrapur, P.S. Ausgram, Dist.- Burdwan - 713148	Burdawan	Durgapur	Pulp & Paper	Damodar / Ganga
49	1139	Sukhjiti Starch Industries. ,Narayanpur ,P.O.-Narayanpur ,P.S.-Malda,Dist.-Malda,Pin-732141	Malda	Malda	Food & Beverages	Mahanada / Ganga
50	1126	East End Silk (P) Ltd.,Narayanpur ,P.O.-Narayanpur ,P.S.-Malda,Dist.-Malda,Pin-732141	Malda	Malda	Textile	Mahanada / Ganga
51	1129	Madhubati Papers Pvt. Ltd., National Highway - 6 ,P.O.-Mahishrekha ,P.S.-Howrah, Dist.-Howrah, Pin-711303	Howrah	Howrah	Pulp & Paper	Ganga
52	1127	Grd Paper Industries Private Limited , NH- 6, Chamrail ,P.O. + P.S.-Liluah, Dist.-Howrah, Pin-711114	Howrah	Howrah	Pulp & Paper	Ganga
53	1137	Sri Siddhi Vinayak Paper Mills Private Limited ,Bhaktipara ,P.O.-Bhaktipara , P.S.-Rajganj , Dist.-Jalpaiguri,Pin-735133	Jalpaiguri	Siliguri	Pulp & Paper	Mahanada / Ganga
54	1136	Sapphire Papers Mill Private Limited ,Nh-31,Jaganathpur, P.O.-Bidhannagar ,P.S.-Phansidewa, Dist.-Darjeeling,Pin-734426	Darjeeling	Siliguri	Pulp & Paper	Mahanada / Ganga

## Annexure VI

## Hearings Conducted during 2020-2021

Sl. No.	Name of units and address	Date
1	M/s. Himadri Speciality Chemical Ltd. located at Vill.- Mahistikry, P.O. & P.S.- Haripal, Dist.- Hooghly, Pin- 712 223	04-11-2020
2	M/s. Govind Steel Co. Ltd. located at 100/1, G.T. Road, Rishra, Dist.- Hooghly, Pin-712 248	05-11-2020
3	M/s. Tirupati Trading Company located at 100/1, G.T. Road, Rishra, Dist.- Hooghly, Pin-712 248	05-11-2020
4	M/s. Dinesh Trading Co. located at 95/5, G.T. Road, Rishra, Dist.- Hooghly, Pin-712 248	05-11-2020
5	M/s. Swastika Muri Mill located at Bolpur Palitpur Road, Vill & P.O-Muluk, P.S-Bolpur, Dist.-Birbhum, Pin-731204	04.12.2020
6	M/s. Sunidhi Estates Pvt. Ltd. located at P-243, Lake Town, Block-A, Kolkata-700 089	04.12.2020
7	M/s. Nakrakonda Kumardihi B UG & OC located at P.O.- Ukhra, P.S. Andal, Dist.- Paschim Bardhaman, Pin- 713 363	16.12.2020
8	Ganges Puja, (Developer-M/s. Ganges Gardens Realtors Pvt. Ltd.) located at 1, Shibtala Ghat Lane, G.T. Road (West), Ward No. 8, P.O.- Bhadrakali, P.S.- Uttarpara, Dist.- Hooghly, Pin-712 232	16.12.2020
9	M/s. Mani Square Ltd. (Swarnamani) located at 163B, Maniktala Main Road, Kolkata – 700 054	08.01.2021
10	M/s. Howrah Diagnostic Centre located at 2, Kings Road, P.S.- Golabari, P.O. & Dist.- Howrah	08.01.2021
11	M/s Gajraj Hyundai (A unit of Fulcrum Agencies Pvt. Ltd.) located at Plot No.- 05, Sector-V, Salt Lake, BMC Ward No. 28, P.O.- Krishnapur, Pin-700 091	08.01.2021
12	M/s. Sugam Griha Nirman Ltd. located at Morya residential complex, 88A, B.L. Saha Road, P.O.- Kalabagan/Behala, P.S.- Behala, Kolkata – 700053	05.02.2021
13	M/s. Goodluck Infradevelopers Pvt. Ltd. located at Morya residential complex, 88A, B.L. Saha Road, P.O.- Kalabagan/Behala, P.S.- Behala, Kolkata – 700053	05.02.2021
14	M/s. Super Diamond Nirman Pvt. Ltd. located at Morya residential complex, 88A, B.L. Saha Road, P.O.- Kalabagan/Behala, P.S.- Behala, Kolkata – 700053	05.02.2021



Sl. No.	Name of units and address	Date
15	M/s. Orbit Towers Pvt. Ltd. located at Morya residential complex, 88A, B.L. Saha Road, P.O.- Kalabagan/Behala, P.S.- Behala, Kolkata – 700053	05.02.2021
16	M/s Bengal Peerless Housing Development Co. Ltd. (Project site of ‘Avidipta Phase 2’) located at 401 Barakhola, Mukundapur, EM Bypass, P.O. Mukundapur, P.S. Purba Jadavpur, Pin. 700099	19.02.2021
17	M/s Shree Shyam Developer located at 360, G.T. Road, P.O. & P.S. Shibpur, Howrah – 711102	19.02.2021
18	M/s Power Point Buildcon (P) Ltd. and Others, Project: ‘Siddha Water Front’ located at Old Calcutta Road, Patulia, P.O. Patulia, P.S. Rahara, Dist. North 24 PGS, Pin. 700119	19.02.2021
19	M/s Shree Shyam Developer located at 360, G.T. Road, P.O. & P.S. Shibpur, Howrah – 711102	26.02.2021
20	M/s Vedic Village located at Shikhapur Gram Panchayat – Chandpur, P.O. Bagu, P.S. Rajarhat, Dist. 24 PGS (N), Pin. 700135	26.02.2021
21	M/s Vishal Water World Pvt. Ltd. (Aquatika) located at Kochpukur, Dist. South 24 PGS, Pin 700156	26.02.2021
22	M/s Rajwada Altitude (Developer – Rajwada Developers Pvt. Ltd. & Others) located at 933, Fartabad Sahapara, P.S. Sonapur, Dist. 24 PGS (S), Kolkata – 700084	26.02.2021
23	M/s Mahakaleswar Agro Udyog., located at Paraj Station, Vill. + P.O. Paraj, P.S. Galsi, Dist. Purba Burdwan, Pin. 713406	02.03.2021
24	M/s Satyam Rice Mill., located at Paraj Station Road, Vill. + P.O. Paraj, P.S. Galsi, Dist. Purba Burdwan, Pin. 713403	02.03.2021
25	M/s Amin Rice Mill., located at Paraj Station Road, Vill. + P.O. Paraj, P.S. Galsi, Dist. Purba Burdwan, Pin. 713403	02.03.2021
26	M/s S.T. Agro Products., located at Paraj Station Road, P.O. Jotkolkol, P.S. Galsi, Dist. Purba Burdwan, Pin. 713144	02.03.2021
27	M/s Joy Durga Rice Mill., located at Paraj Station Road, Vill. & P.O. Kolkol, P.S. Galsi, Dist. Purba Burdwan, Pin. 713144	02.03.2021
28	M/s Nupur Rice Mill located at Vill. & P.O. Paraj, P.S. Galsi, Dist. Purba Burdwan, Pin. 713406	02.03.2021
29	M/s Tara Shakti Rice Mill., located at Vill. & P.O. Paraj, P.S. Galsi, Dist. Purba Burdwan, Pin. 713403	02.03.2021
30	M/s Paraj Trading Mini Rice Mill., located at Vill. & P.O. Paraj, P.S. Galsi, Dist. Purba Burdwan, Pin. 713403	02.03.2021
31	M/s Bhadreswar Rice Mill located at P.O. Paraj, P.S. Galsi, Dist. Purba Burdwan, Pin. 713403	02.03.2021

Sl. No.	Name of units and address	Date
32	M/s RDC Concrete (India) Pvt. Ltd. located at Uniworld City, Action Area – III, New Town, Dist. 24 PGS (N), Pin. 700160	12.03.2021
33	M/s Aluwalia Contracts India Ltd., located at 3, J.B.S. Halden Avenue, P.S. Pragati Maidan, Kolkata 700046	12.03.2021
34	M/s Santaldih Thermal Power Station (WBPDCL),, located at P.O. & P.S. Santaldih, Purulia – 723146	12.03.2021
35	M/s Bengal Greenfield Housing Development Co. Ltd. located at Holding no. E3/398, Shibrampur Road, Kolkata – 700141	12.03.2021
36	M/s ITC Limited. PSPD, Unit – Tribeni located at P.O. Chandrahati, P.S. Mogra, Dist. Hooghly, Pin. 712504	12.03.2021
37	M/s Jaypee India Ltd. (Jaypee International Haat) located at NH – 6, Vill. Ankurhati, P.O. Salap, P.S. Domjur, Howrah – 711409	12.03.2021
38	M/s Pioneer Chemicals located at 2/41C, Sanghati Colony, P.O. Regent Estate, Kolkata – 700 092	12.03.2021
39	M/s Sankrail Brick Works (Brand name : Munna) located at South Sankrail – Purbapara, P.O. + P.S. - Sankrail, Howrah – 711313	12.03.2021

## Annexure VII

## Imposition of Bank Guarantee Status for the period from 01/04/2020 to 31/03/2021

Sl. No.	Name & Address of the Industry	Bank Guarantee imposed (Rs.)
1	Dollons Food Products Pvt. Ltd. Vill. Dhalarbagan, P.O. Makalpur, P.S. Dadpur, Dist. Hooghly, Pin. 712305	1000000
2	Sun Fabrics Vill. Mirapara, P.O. Ilsora, P.S. Jamalpur, Dist. Purba Bardhaman, Pin. 713166	500000
3	Himadri Speciality Chemical Ltd. Vill. Mahistikry, P.O. & P.S. Haripal, Dist. Hooghly, Pin. -71223	2000000
4	Rashmi Cement Ltd. (Unit- III) (Steel & Power Division), Vill. - Jitusole, P.O. + P.O. + Dist. Jhargram, Pin. 721507	5000000
5	Motilal Banka (Prop. Shri Shyam Banka) at Vill. & P.S. Balarampur, P.O. Rangadih, Dist. Purulia, Pin. 723143	200000
6	Shree Jagannath Fabrics (P) Ltd. Vill. Khamar, P.O. Rajarhat, Bishnupur, P.S. Rajarhat, 24 PGS(N), Pin. 700135	400000
7	Popular Udyog (P) Ltd. Vill. Khamar, P.O. Rajarhat, Bishnupur, P.S. Rajarhat, Dist. 24 PGS (N), Pin. 700135	400000
8	Sen Ferro Alloys Pvt. Ltd. Vill. Dejudi, Deucha, P.O. Unra Jambedia, P.S. Barjora, Dist. Bankura, Pin. 722202	800000
9	Kamarhatty Company Ltd. (Papar Division) 1, Graham Road, P.O. Kamarhatti, P.S. Belghoria, Kolkata - 700 058	2000000
10	Tata Hitachi Construction Machinery Company Pvt. Ltd. Vill. Rupnarayanpur, P.O. Jakpur, P.S. Kharagpur, Dist. Paschim Medinipur, Pin. 721301	500000
11	Pepsico India Holdings Pvt. Ltd. Sudharas Food Park, Vill. Kanduah, P.S. Sankrail, P.O. Dhulagari, Dist. Howrah, Pin 711302	1200000

Sl. No.	Name & Address of the Industry	Bank Guarantee imposed (Rs.)
12	Sri Aadinath Rice Mill, Vill. Rudra Nagar, P.O. & P.S. Sainthia, Dist. Birbhum, Pin. 731234	125000
13	Hindustan Unilever Ltd. 63, Garden Reach Road, Kolkata - 700 024	3000000
14	Standard Galvanizer at Makardah Road, P.O-Bankra, P.S-Domjur, Dist-Howrah, Pin-711 403	200000
15	AMRI Hospitals Ltd.(hereinafter shall be referred to as the hospital) located at Annex Building , KB-24, Sector-3, Salt Lake City, P.S-Bidhannagar(S), Kolkata-700098	500000
16	Sri Siddhi Vinayak Paper Mills. Pvt. Ltd. Vill. & P.O. Bhaktipara, P.S. Rajganj, Dist. Jalpaiguri, Pin. 735133	200000
17	Medicare Environmental Management Pvt. Ltd. 'F' Road, Belgachia, Dist. Howrah, Pin. 711108	500000
18	Durgapur Steel Plant, SAIL P.O. + P.S. Durgapur, Dist. Paschim Bardhaman, Pin. 713203	1000000
19	Ayush Minerals Vill. Jemari, P.O. Basudevpur Jemari, P.S. Salanpur, Dist. Paschim Bardhaman, Pin. 713335	200000
20	Sunbright Fabrics Pvt. Ltd. Vill. Mirapara, P.O. Illsora, P.S. Jamalpur, Dist. Purba Bardhaman, Pin. 713166	500000
21	Himrag Coir Products Pvt. Ltd. NH-2, Delhi Road, Bighati, P.O. Bighati, P.S. Bhadreswar, Dist. Hooghly, Pin. 712124	1000000
22	Maa Maynamata Agro Products Pvt. Ltd. Vill. Kadamtala, P.O. & P.S. Maynaguri, Dist. Jalpaiguri, Pin. 735224	250000
23	Joy Guru Refractory Vill. Lachmanpur, P.O. Salanpur, P.S. Kulti, Dist. Paschim Bardhaman, Pin. 713357	100000
24	Ispat Damodar Ltd. Vill. & P.O. Digha, P.S. Neturia, Dist. Purulia, Pin. 723121	1000000
25	Chemtreat Technologies Vill. Kalagachia, P.O. Joka, P.S. Thakurpukur, Dist. South 24 PGS, Pin. 7000063	200000
26	Global Seamless Tubes & Pipes Pvt. Ltd. Vill. & P.O. Nowpala, P.S. Bagnan, Dist. Howrah, Pin. 711 303	800000
27	Tina Dress Pvt. Ltd. Sankrail Industrial Park, Jaladhulagori, P.O. Dhulagori, P.S. Sankril, Dist. Howrah, Pin - 711 302	1000000

Sl. No.	Name & Address of the Industry	Bank Guarantee imposed (Rs.)
28	Indian Oil Corporation Ltd. Haldia Refinery, P.O. Haldia Oil Refinery, Dist. Purba Medinipur, Pin. 721606	1000000
29	Aryavrata Steel Pvt. Ltd. Vill. Lohamellya, NH- 6, P.O. Montipa Mohanpur, P.S. & Dist. Jhargram, Pin. 721507	1000000
30	Marq Plaza LLP Chakpachuria, P.S. New Town, North 24 PGS, W.B.	1000000
31	Pinax Paper Mills Pvt. Ltd. Vill. Jambon, P.O. Shivpur, P.S. Kanksa, Dist. Paschim Bardhaman, Pin. 713212	500000
32	Nataraj Electro Casting Pvt. Ltd. (Paper Division) Vill. & P.O. Chotramchandrapur, P.S. Aisgra, Dist. Purba Bardhaman, Pin. 713426	500000
33	Happy Niketan Pvt. Ltd. 5, Gprlu Terrace. 2nd Floor, Kolkata - 700017	500000
34	Graphite India Ltd. P.O. Sagarbhanga, P.S. Coke Oven, Durgapur, Dist. Paschim Burdwan, Pin. 713211	1000000
35	Ritesh Tradefin Ltd. Plot No. 3513 (P), Lenin Sarani, P.S. Coke Oven, Durgapur- 713210	1000000
36	A.M. Industries NH-6, Jalan Industrial Complex, P.O. Biprannapara, P.O. Biprannapara, P.O. Begri, P.S. Domjur, Dist. Howrah, Pin. 711 411	200000
37	Haldiram Bhujiwala Ltd. at NH-6, Vill & P.O. New Kolorah, Dist. Howrah, Pin. 711302	500000
38	Eastern Organic Fertilizer Pvt Ltd. Mathpukur, Dhapa of E.M. Bypass, P.S. Parama Island, Kolkata - 700105	200000
39	Sunidhi Estate Pvt. Ltd. P-243, Lake Town, Block - A, Kolkata - 89	500000
40	Bright Bar Industries located at Vill. & P.O.-Bhandardaha, P.S.-Domjur, Dist.-Howrah, Pin-711 405	200000
41	Eco Wires Pvt. Ltd. located at Saraswati Complex, Vill.-Nimerhati (Ankurhati), P.O.-Makardah, P.S.-Domjur, Dist.-Howrah, Pin-711409	200000
42	IVL Dhunseri Petrochem Industries Pvt. Ltd. located at J.L. No.-126, Basudevpur Mouza, HPL Link Road, P.O. Khanjanchak, Basudevpur, Haldia, Dist.-Purba Midnapore, Pin-721602	2000000

Sl. No.	Name & Address of the Industry	Bank Guarantee imposed (Rs.)
43	Nicholson Chemical Pvt. Ltd. (located at Vill & P.O-Murlu, P.S-Saltora, Dist.-Bankura, Pin-722158	400000
44	Crown Tannery located at Plot No.388 & 388A, Zone-V, P.O-Bhojerhat, P.S-Kolkata Leather Complex, Dist.-South 24 Parganas, Pin-743502	300000
45	M/s. Surama Processing located at Vill.-Saibona, P.O.-Malikapur, P.S.-Duttapukur, Dist.-North 24 Pgs., Pin-700 126	500000
46	India Dairy Products Ltd. Naldighi, Vill & P.O. Kalachara, P.S. Chanditala, Dist. Hooghly, Pin. 712702	1000000
47	M/s. Uday Industries (Processing Division) located at Vill.-Kalachara, P.O. & P.S.-Chanditala,Dist.-Hooghly, Pin-712 702	500000
48	Manpasand Cement Pvt. Ltd. Mangalpur Industrial Estage, P.O. & P.S. Rajiganj, Dist. Paschim Bardhaman, Pin. 713347	200000
49	Bengal Stoneware Products Pvt. Ltd. Vill. & P.O. Hatashuria, P.S. Barjora, Dist. Bankura, Pin. 722204	400000
50	Krishna Tissues Pvt. Ltd. NH-6, Vill. Madari, P.O. Barunda, P.S. Bagnan, Dist. Howrah, Pin. 711303	500000
51	Amrit Crafts (P) Ltd. Bira Chowmatha, Jessore Road, Vill. & P.O. Joypul, P.S. Duttapukur, Dist. North 24 PGS, Pin. 743234	1000000
52	A.B. Mauri India Pvt. Ltd. Chandmari More, P.O. Gayeshpur, Kalyani, Dist. Nadia, Pin. 741234	1000000
53	Srimani Silpayan (India ) Pvt. Ltd. Zone -1 , Plot No. 49, CLC, P.O. Bhojerhat, Dist. South 24 PGS, Pin. 743 502	400000
54	Panda Mini Rice Mill Vill. Barunaberia, P.O. Durmuth, P.S. Marishda, Dist. Purba Medinipur, Pin. 721449	200000
55	M/s. Amit Paridhan Pvt. Ltd. located at Dhabdhara (Bira), P.O.-Raturia, P.S.-Habra, Dist.-North 24 Pgs. Pin-743234	1000000
56	M/s. Exide Industries Ltd.(hereinafter referred to as the industry) located at P.O. & P.S.: Durgachak, Dist.-Purba Medinipur, Pin-721 602	2000000
57	M/s. Lakhota Texpro Pvt. Ltd. located at NH-2, Delhi Road, Jagannathpur, P.O-Bamunari, P.S-Dankuni, Dist.-Hooghly, Pin-712250	400000
58	M/s. Govind Steel Co. Ltd. located at 100/1, G.T.Road, P.O & P.S.-Rishra,Dist.-Hooghly, Pin-712248	1000000

Sl. No.	Name & Address of the Industry	Bank Guarantee imposed (Rs.)
59	M/s. Haldiram Bhujawala Ltd. located at Vill-Ghanashyampur, NH-2, P.O-Paltagarh, P.S-Singur, Dist-Hooghly, Pin-712 409	1000000
60	M/s. Supreme & Co. Pvt. Ltd.(Unit-II) [hereinafter shall be referred to as the industry]located atSouth Chamrail, P.O-Chamrail, P.S-Liluah, Dist.-Howrah, Pin-711 114	800000
61	R.K. Wire Products Ltd. Vill. Panchghara, P.O. Panchghara Bazar, P.S. Chanditala, Dist. Hooghly, Pin. 712306	500000
62	Rupa & Co. Ltd. Jalan Industrial Complex, Baniara, P.O. Domjur, Dist. Howrah, Pin. 711411	1000000
63	Salagram Power & Steel Pvt. Ltd. Vill. Dewandighi, P.O. Mirzapur, P.S. Burdwan, Dist. Purba Bardhaman, Pin. 713102	1000000
64	M/s.Amit Enterprises Pvt. Ltd. located atJalan Industrial Complex, Baniara, P.O-Begri, P.S-Domjur, Dist-Howrah, Pin-711 411	500000
65	M/s.Celebrity Breweries Pvt. Ltd. located at NH-2, Durgapur Expressway, Vill-Aima, P.O-Hanral, P.S-Dadpur, Dist-Hooghly, Pin-712149	2000000
66	M/s.Maa Bhagwati Metal Industries located atJalanIndustrial Complex, Gate No.3, Baniara, P.O-Begri, P.S-Domjur, Dist-Howrah, Pin-711 302	500000
67	M/s.Uma Poly Solutions Pvt. Ltd. located atJalanIndustrial Complex, Gate No.3, Baniara, P.O-Begri, P.S-Domjur, Dist-Howrah, Pin-711 411	400000
68	M/s. Baraduary Foodgrain Product Pvt. Ltd. located at Vill-Charudangi, P.O-Baraduri, P.S-Raiganj, Dist.-Dakshin Dinajpur, Pin-733134i	200000
69	M/s. Maa Manasa Rice Mill Pvt. Ltd. located at Vill-Charudangi, P.O-Baraduri, P.S-Raiganj, Dist.-Dakshin Dinajpur, Pin-733 134	200000
70	M/s Mahadev Fabrics Sankrail Industrial Park, Jaladhulagori, P.S. Sankrail, Dist. Howrah, Pin. 711302	200000
71	M/s.Ruchi Soya Industries Ltd. located atBijayramchak, P.O-Durgachak, Haldia, Dist-Purba Medinipur, Pin-721602	2000000
72	M/s. Adani Wilmar Ltd. (Unit-1) located at HPL Link Road,PO-Debhog, P.S-Bhabanipur, Dist-Purba Medinipur, Pin-721657	2000000
73	M/s. Khaitan Winding Wire Pvt. Ltd. located atJalanIndustrial Complex, Gate No.1, Argori, P.O-Argori, P.S-Sankrail, Dist-Howrah, Pin-711 302	500000
74	M/s. Savi Trexim Pvt. Ltd. located at Jalan Industrial Park, Sankaridaha, P.O.-Begri, P.S.-Domjur, Dist.-Howrah, Pin-711411	500000
75	M/s. Rinkee Creations Pvt. Ltd.located at Biswakabipara, Vill.-Dakshin Rajyadharpur, P.O-Mallickpara, P.S.-Serampore, Dist.-Hooghly, Pin-712203	1000000

Sl. No.	Name & Address of the Industry	Bank Guarantee imposed (Rs.)
76	M/s. Shree Renuka Sugars Ltd. located at City Centre, PO-Debhog, P.S-Haldia, Dist –Purba Medinipur, Pin–721657	2000000
77	Rajgaria Timber Pvt. Ltd. NH-2, Delhi Road, Vill. & P.O. Bamunari, P.S. Serampore, Dist. Hooghly, Pin. 712250	500000
78	Balaji Paper & Newsprint Pvt. Ltd. Vill. & P.O. Manikpara, P.S. & Dist. Jhargram, Pin. 721513	1000000
79	Shree Vaishnavi Ispat Ltd. Bamunara Industrial Area, P.O. Gopalpur, P.S. Kanksa, Dist. Paschim Bardhaman, Pin. 713212	500000
80	Amarnath Dyeing & Bleaching Works Pvt. Ltd. Vill. & P.S. Anantapur, P.S. Shyampur, Dist. - Howrah, Pin. 711301	1000000
81	RAIC Integrated Sponge & Power Pvt. Ltd., Vill. & P.O. Ikra, P.S. Jamuria, Dist. Paschim Bardhaman, Pin. 713362	1000000
82	Magus Bengal Estate LLP Plot no. IIF, Action Area-II, P.S. Rajarhat, New Town, Dist. 24 PGS North	500000
83	J.R. Galvanizers 1/H, Jheel Road, P.O. & P.S. Liluah, Howrah, Pin. 711 106	100000
84	Ritika Pvt. Ltd. 138, Belegkata Road, P.S. Narkeldanga, Ward No. 36, Kolkata - 700015	500000
85	Kothari Processors Pvt. Ltd. Sankrail Industrial Park, P.O. Chaturbhujkati, P.S. Sankrail, Dist. Howrah, Pin. 711313	500000
86	Amrit Crafts (P) Ltd. Bira Chowmatha, Jessore Road, Vill. & P.O. Joypul, P.S. Duttapukur, Dist. North 24 PGS, Pin. 743234	1000000



## Annexure VIII

## Closure order issued by the State Board for the period 1st April 2020 to 31st March 2021

Sl. No.	Name of the Unit	Date of Issue
1.	M/s. Bishnu Tulsian located at behind Sarai Maidan, Chutkidhi Road, Vill. & P.O.- Rangadih, P.S.- Balarampur, Dist.- Purulia, Pin- 723 143	30/06/2020
2.	M/s. Nitai Garai located at Sani Gali, Vill. & P.O.- Rangadih, P.S.- Balarampur, Dist.- Purulia, Pin- 723 143	30/06/2020
3.	M/s. Sajan Tulsian located at behind Sarai Maidan, Chutkidhi Road, Vill. & P.O.- Rangadih, P.S.- Balarampur, Dist.- Purulia, Pin- 723 143	30/06/2020
4.	M/s. Harish Chandra Gorai located at Chutkidhi, P.O.- Rangadih, P.S.- Balarampur, Dist.- Purulia, Pin- 723 143	30/06/2020
5.	M/s Rupnarayan Brick Industries (Brand name'Diamond') located at Vill.- Payratungichar, P.O. & P.S.-Tamluk, Dist.-Purba Medinipur, Pin-721636,	08/07/2020
6.	M/s Begam Salughter House located at Jharna Basti, P.O & P.S.-Jaigaon, Dist-Alipurduar, Pin-736182	13/07/2020
7.	M/s. Swastika Muri Mill located at Bolpur Palitpur Road, Vill & P.O-Muluk, P.S-Bolpur, Dist.-Birbhum, Pin-731204	15/07/2020
8.	M/s Super Right Brick Field located at Vill.-Chatimtala, P.O.-Choa, P.S.- Hariharpara, Dist.-Murshidabad, Pin-742166	28/07/2020
9.	M/s. Debjyoti Pulp & Paper Pvt. Ltd. located at Vill. -Melakola, P.O.- Sitarampur, P.S.- Salanpur, Dist.- Paschim Bardhaman, Pin – 713 359	19/08/2020
10.	M/s. Panda Mini Rice Mill located at Vill –Barunaberia, P.O-Durmut, P.S.- Marishda, Dist- Purba Medinipur, Pin-721449	04/09/2020
11.	M/s. M. R. Charcoal Supplier & Product (Prop. Mojibur Rahaman) located at Vill –Gosaipur, P.O-Araidanga, P.S.- Ratua, Dist.- Malda, Pin- 732230	21/09/2020
12.	M/s. Bhol Nath Charcoal Manufacturing unit located at Vill. & P.O-Bhabta, P.S.-Beldanga, Dist.- Murshidabad, Pin- 742134	24/09/2020
13.	M/s. Tina Dresses Pvt. Ltd. located at Sankrail Industrial Park, Jaladhulagori, P.O.- Dhulagori, P.S.- Sankrail, Dist.- Howrah, Pin- 711 302	24/09/2020
14.	M/s. Global Seamless Tubes & Pipes Pvt. Ltd. located at Vill. & P.O.- Nowpala, P.S.- Bagnan, Dist.- Howrah, Pin- 711 303	24/09/2020
15.	M/s. Himrag Coir Products Pvt. Ltd. located at NH-2, Delhi Road, Bighati, P.O.- Bighati, P.S.- Bhadreswar, Dist.- Hooghly, Pin-712 124	24/09/2020

Sl. No.	Name of the Unit	Date of Issue
16.	M/s. Urmila Industries located at Vill.-Haral, P.O.-Champahati, Begampur P.S.-Baruipur, Dist.-24 Parganas(S), Pin-743330	30/09/2020
17.	M/s. Tara Ma Fire Works located at Haral, P.O.-Champahati, P.S.-Baruipur, Dist.- 24 Parganas(S), Pin-743330	30/09/2020
18.	M/s. Shree Balaji Industries located at Vill.- Sadhuna, P.O.- Samdi, P.S.- Salanpur, Dist.- Paschim Bardhaman, Pin-713 359	30/09/2020
19.	M/s. Tara Ma Enterprise located at Vill.- Sadhuna, P.O.- Samdi, P.S.- Salanpur, Dist.- Paschim Bardhaman, Pin-713 359	30/09/2020
20.	M/s. Rajlaxmi Fire Works located at Vill.-Bajeharal, P.O.-Champahati, P.S.- Baruipur, Dist.-24 Parganas(S), Pin-743330	30/09/2020
21.	M/s. Nirupama Industries located at Vill.-Solgohalia, P.O.-Champahati, P.S.- Baruipur, Dist.-24 Parganas(S), Pin-743330	30/09/2020
22.	M/s. Maa Mangal Chandi Industries located at Vill.-Bajeharal, P.O.- Champahati, Begampur P.S.-Baruipur, Dist.-24 Parganas(S), Pin-743330	30/09/2020
23.	M/s. Kabita Industries located at Vill. & P.O.- Champahati, P.S.-Baruipur, Dist.-24 Parganas(S), Pin-743330	30/09/2020
24.	M/s. Joy Industries located at Vill.-Haral, P.O.-Champahati, Begampur P.S.- Baruipur, Dist.-24 Parganas(S), Pin-743330	30/09/2020
25.	M/s. Danicare Industries located at Vill.-Haral, P.O.-Champahati, Begampur, P.S.-Baruipur, Dist.-24 Parganas(S), Pin-743330	30/09/2020
26.	M/s. Maa Bishalaxmi Industries located at Vill.-Orancha, P.O.-Begampur P.S.-Baruipur, Dist.-24 Parganas(S), Pin-743330	30/09/2020
27.	M/s. Baba Loknath Industries located at Vill. & P.O.-Naridana, P.S.-Baruipur, Dist.-24 Parganas(S), Pin-743330	30/09/2020
28.	M/s. Bishal Industries located at Vill.-Haral, P.O.-Champahati, Begampur P.S.-Baruipur, Dist.-24 Parganas(S), Pin-743330	30/09/2020
29.	M/s. New Deep Aqua Industries located at Vill: Atberia, PO: Harijhama, PS: Panskura, Purba Medinipur, Pin-721152	20/10/2020
30.	M/s. Hotel Amantran located at Vill.-Amarabati, P.O.- Frazerganj, P.S.- Frazerganj Coastal, Dist.- South 24 Parganas	02/11/2020
31.	M/s. Hotel Mahamaya Palace (Formerly Hotel Indrakana) located at Vill.- Paschim Amarabati, P.O.- Frazerganj, P.S.- Frazerganj Coastal, Dist.- South 24 Parganas	02/11/2020
32.	M/s. Hotel Monalisha located at Vill.-Lakshmipur, P.O.-Lakshmipur Prabatak, P.S.- Frazerganj Coastal, Dist.- South 24 Parganas	02/11/2020
33.	M/s. Hotel Sreeguru (Shri Guru Lodge) located at Vill.-Amarabati, P.O.- Frazerganj, P.S.- Frazerganj Coastal, Dist.- South 24 Parganas	02/11/2020
34.	M/s. Hotel Sudhamoyee located at Vill.-Lakshmipur, P.O.-Lakshmipur Prabatak, P.S.- Frazerganj Coastal, Dist.- South 24 Parganas	02/11/2020
35.	M/s. New Sagarika Tourist Lodge located at Vill.-Amarabati, P.O.- Frazerganj, P.S.- Frazerganj Coastal, Dist.- South 24 Parganas	02/11/2020

Sl. No.	Name of the Unit	Date of Issue
36.	M/s. Sunderban Tiger Camp located at Vill.- Dayapur, P.O.- Gosaba, P.S.- Sundarban Coastal, Dist: 24 Pgs.(S)	02/11/2020
37.	M/s. Sunderban Tourist Lodge located at Canning Bazar, P.O. & P.S.- Canning, Dist.- South 24 Parganas	02/11/2020
38.	M/s. Maa Manasha Husking Mill located at Vill-Azadpur, P.O-Safanagar, P.S-Kumarganj, Dist.- Dakshin Dinajpur, Pin- 733141	02/11/2020
39.	M/s. Bright Bar Industries located at Vill. & P.O.- Bhandardaha, P.S.- Domjur, Dist.- Howrah, Pin-711 405	10/11/2020
40.	M/s. Eco Wires Pvt. Ltd. located at Saraswati Complex, Vill.- Nimerhati (Ankurhati), P.O.- Makardah, P.S.- Domjur, Dist.- Howrah, Pin-711 409	10/11/2020
41.	M/s. Pinax Paper Mills Pvt. Ltd. located at Vill: Jambon, P.O. Shivpur, P.S. Kanksa, Dist.- Paschim Bardhaman, Pin-713212	12/11/2020
42.	M/s. Nataraj Electro Castings Pvt. Ltd. (Paper Division) located at Vill & P.O.- Chotramchandrapur, P.S. Ausgram, Dist.- Purba Bardhaman, Pin-713 426	12/11/2020
43.	M/s. Bengal Stoneware Products Pvt. Ltd. located at Vill. & P.O.- Hatashuria, P.S. Barjora, Dist.- Bankura, Pin-722 204	07/12/2020
44.	M/s. Nicholson Chemical Pvt. Ltd. located at Vill & P.O-Murlu, P.S-Saltora, Dist.- Bankura, Pin-722158	07/12/2020
45.	M/s. Uday Industries (Processing Division) located at Vill.- Kalachara, P.O. & P.S.- Chanditala, Dist.- Hooghly, Pin-712 702	07/12/2020
46.	M/s. Surama Processing located at Vill.- Saibona, P.O.- Malikapur, P.S.- Duttapukur, Dist.- North 24 Pgs., Pin-700 126	07/12/2020
47.	M/s. India Dairy Products Ltd. located at Naldighi, Vill & P.O- Kalachara, P.S- Chanditala, Dist-Hooghly, Pin-712702	07/12/2020
48.	M/s Farida Enterprise (Prop.-Lt. Abu Sayed Khan & Amiul Islam) located at Vill. & P.O.-Sujapur, near Punjab National Bank, P.S.- Kaliachak, Dist.- Malda .Pin-732206	07/12/2020
49.	M/s. Eskay Kaycee Industries Pvt. Ltd. located at New Mohishpota Road, Bilkanda, P.O-Karna Madhabpur, P.S- Gholra, District: 24 Parganas (North), Pin- 700113	10/12/2020
50.	M/s. Amrit Crafts (P) Ltd. located at Bira Chowmatha, Jessore Road, Vill. & P.O.- Joypul, P.S.- Duttapukur, Dist.- North 24 Parganas, Pin-743 234	22/12/2020
51.	M/s Omkar Engineering Works located at 60/3, Deshapriya Road, Nandan Kanan, P.O.:Nabapally, P.S.:Barasat, North 24 Parganas, Pin- 700126	24/12/2020
52.	M/s. Connaught Plaza Restaurants Pvt. Ltd. located at 18B, Ashutosh Mukherjee Road, P.O. & P.S.- Bhawanipur, Kolkata- 700 020	05/01/2021
53.	M/s. Haldiram Bhujawala Ltd. located at Vill-Ghanashyampur, NH-2, P.O-Paltagarh, P.S-Singur, Dist-Hooghly, Pin-712 409	08/01/2021
54.	M/s. Alia Enterprise (Prop.- Md. Arman) located beside the old Dhapa dumping site, P.S.- Pragati Maidan, Kolkata-700 105	08/01/2021

Sl. No.	Name of the Unit	Date of Issue
55.	M/s. Shellac Processing unit of Sri Binay Khandelia, Partner located at Hanuman Gali, Bus Stand Road, P.O-Rangadih, P.S- Balarampur, Dist.-Purulia, Pin- 723 143	09.02.2021
56.	M/s. Bright Steel Works located at 81, Nabapally Main Road, Kalua, PO: Joka, PS: Haridevpur, Kolkata- 700104	15/02/2021
57.	M/s. Vijaya Sponge & Ispat Pvt. Ltd. located at Vill-Kourang-Juri, P.O-Puara, P.S-Arsha, District: Purulia, Pin- 723 153	22/02/2021
58.	M/s. Azad Metal Works (Unit-II) located at Mouza: Jaladhulagori, P.O-Dhulagori, P.S-Sankrail, District: Howrah, Pin-711 302	22/02/2021
59.	M/s. Rinkee Creations Pvt. Ltd. located at Biswakabipara, Vill.-Dakshin Rajyadharpur, P.O-Mallickpara, P.S.- Serampore, Dist.- Hooghly, Pin-712203	22/02/2021
60.	M/s. R. K. Wire Products Ltd. located at Vill.- Panchghara, P.O- Panchghara Bazar, P.S.- Chanditala, Dist.- Hooghly, Pin-712306	22/02/2021
61.	M/s. Ecotyrex located at Mouza: Jaladhulagori , P.O-Dhulagori, P.S-Sankrail, District: Howrah , Pin-711 302	22/02/2021
62.	M/s. Rajgaria Timber Pvt. Ltd. located at NH-2, Delhi Road, Vill. & P.O.-Bamunari, P.S.- Serampore, Hooghly, Pin- 712 250	23/02/2021
63.	M/s. Tirupati Trading Company located at 100/1, G.T.Road, P.O & P.S-Rishra, Dist.- Hooghly, Pin-712 248	23/02/2021
64.	M/s J.P. Plastic (Prop. Late Jiarul Hoque) located at Vill.-Jhunka, P.O. & P.S.-Beldanga, Dist- Murshidabad, Pin-742134	24/02/2021
65.	M/s Water Angel located at 36/75, Rajdanga Main Road, Kasba EKTP, Ward No.107, Kolkata 700107	26/02/2021
66.	M/s. Shree Renuka Sugars Ltd. located at City Centre, PO- Debhog, P.S-Haldia, Dist – Purba Medinipur, Pin–721657	26/02/2021
67.	M/s. Amarnath Dyeing & Bleaching Works Pvt. Ltd. located at Vill & P.O-Anantapur, P.S-Shyampur, District: Howrah, Pin-711 301	26/02/2021
68.	M/s. Adani Wilmar Ltd. (Unit-1) located at HPL Link Road, PO- Debhog, P.S-Bhabanipur, Dist – Purba Medinipur, Pin–721657	02/03/2021
69.	M/s. Mahadev Fabrics located at Sankrail Industrial Park, Jaladhulagori, P.S-Sankrail, District: Howrah, Pin-711302	04/03/2021
70.	M/s. Choudhary Bitumen & Allied Products Pvt. Ltd. located at Jalan Industrial Complex,,Gate No.1, Biprannapara, P.O-Begri, P.S-Domjur, Dist-Howrah, Pin-711 411	04/03/2021
71.	M/s. Khaitan Winding Wire Pvt. Ltd. located at Jalan Industrial Complex, Gate No.1, Argori, P.O- Argori, P.S- Sankrail, Dist-Howrah, Pin-711 302	05/03/2021
72.	M/s. Sona Plywood Industries located at Vill-Charudangi, P.O-Baraduri, P.S- Raiganj, Dist.- Dakshin Dinajpur, Pin- 733 134	08/03/2021
73.	M/s. Balaji Paper and Newsprint Pvt. Ltd. located at Vill. & P.O-Manikpara, P.S. & Dist.- Jhargram	08/03/2021
74.	M/s. Casto-Nik Enterprises located at Sankaripota Road, Kalagachia, P.O-Thakurpukur, P.S-Maheshtala, Dist-24 Parganas(South), Kolkata-700063	09/03/2021

Sl. No.	Name of the Unit	Date of Issue
75.	M/s. Ritika Pvt. Ltd. located at 138, Belegkata Road, P.S-Narkeldanga, Ward No.36, Kolkata-700015	09/03/2021
76.	M/s. Nisa Enterprise located at Plot No.46, Zone-01, Calcutta Leather Complex, P.O-Bhojerhat, P.S-Kolkata Leather Complex, Dist-24 Parganas(South), Pin-743502	09/03/2021
77.	M/s. Khaitan Winding Wire Pvt. Ltd. located at Jalan Industrial Complex, Gate No.1, Argori, P.O- Argori, P.S- Sankrail, Dist-Howrah, Pin-711 302	16/03/2021
78.	M/s. Shree Vaishnavi Ispat Ltd. located at Bamunara Industrial Area, P.O-Gopalpur, P.S-Kanksa, District: Paschim Bardhaman, Pin- 713212	22/03/2021
79.	M/s. Shree Jagannath Fabrics Pvt. Ltd. located at Vill-Khamar, P.O-Rajarhat, Bishnupur, P.S.- Rajarhat, Dist.- North 24 Parganas, Pin-700 135	22/03/2021
80.	M/s. Sangam Processing located at Khamar P.O-Rajarhat, Bishnupur, P.S.- Rajarhat, Dist.- North 24 Parganas, Pin-700 135	22/03/2021
81.	M/s. Shree Parashnath Re-Rolling Mills Ltd. located at Dr. B.C. Roy Avenue, P.O-Durgapur, P.S- Coke Oven, District: Paschim Bardhaman, Pin-713201	22/03/2021



## West Bengal Pollution Control Board

(Department of Environment, Government of West Bengal)

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