

BEFORE THE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 693/2023

NEWS ITEM TITLED "POLLUTION CONTROL
BOARDS ARE THE WEAK LINK" APPEARING IN
DECCAN HERALD DATED 24.10.2023

REPORT ON AFFIDAVIT FILED BY THE WEST BENGAL POLLUTION
CONTROL BOARD.

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Filed by

Date:06.01.2026


MADHUMITA BHATTACHARJEE

ADVOCATE for respondent
State of West Bengal

D/2674/1999

con:9811785211



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**NEWS ITEM TITLED "POLLUTION CONTROL
BOARDS ARE THE WEAK LINK" APPEARING IN
DECCAN HERALD DATED 24.10.2023**



**REPORT ON AFFIDAVIT FILED BY THE WEST BENGAL
POLLUTION CONTROL BOARD.**

Most Respectfully Sheweth

I, Debashis Sarkar, son of Late Pabitra Kumar Sarkar, aged about 56 years, by Religion- Hindu, by Occupation- Service, working for gain at West Bengal Pollution Control Board, having office at 10A, Block- LA, Sector- III, Bidhannagar, Kolkata - 700 106, do hereby solemnly declare and say as follows:-

01. That, I am the Chief Engineer, West Bengal Pollution Control Board (hereinafter will be referred to as the 'State Board') and I am well acquainted with the facts and circumstances of the case. I have been duly authorized by the West Bengal Pollution Control Board to affirm this Affidavit on its behalf and as such, I am competent to do so.
02. That, this affidavit is being affirmed in pursuant to the order passed by this Hon'ble Tribunal dated 14.10.2025.
03. That, the Hon'ble National Green Tribunal directed the State Pollution Control Boards (PCB)/PCCs to file affidavits disclosing the progress report on filling up of posts lying vacant in the SPCBs and status of the upgradation of the laboratory infrastructure.
04. That, the status of vacant posts of the West Bengal Pollution Control Board in the category of Engineering, Scientific Officer and Administration with timelines for filing up of the posts is given in the format of Central Pollution Control Board and placed as Annexure R/1.
05. That, the status of Laboratory Infrastructure of West Bengal Pollution Control Board is given in the format of Central Pollution Control Board and placed as Annexure R/2.
- The detail report have been shared with Central Pollution Control Board on 18.12.2025.



05 JAN 2025

06. It is therefore respectfully prayed that Hon'ble Tribunal may pass such order/orders as it deems fit and proper in the interest of justice.

Debashis Sarkar

DEPONENT



05 JAN 2026

VERIFICATION

I, Debashis Sarkar, son of Late Pabitra Kumar Sarkar, aged about 56 years, by Religion- Hindu, by Occupation- Service, working for gain at West Bengal Pollution Control Board, having office at 10A, Block-LA, Sector- III, Bidhannagar, Kolkata - 700 106, do hereby solemnly declare and say as follows:-

1. That, I am the Chief Engineer, West Bengal Pollution Control Board and I am well acquainted with the facts and circumstances of the instant Original Application.

2. That, the statements made in paragraph 1 of this affidavit is true to my knowledge and belief.

3. That, the statements made in paragraphs 2 to 5 of this affidavit are my information derived from the records available in the office of the State Board which I verily believe to be true and the rest are my respectful submission before this Hon'ble Tribunal.

Identified by me

 Advocate, WBPCB


 DEPONENT

Solemnly Affirmed &
 Declared Before Me
 On Identification By.....


 SARBANI MITRA
 NOTARY
 Regd. No.- 5515/08
 Mob.- 8777303277

05 JAN 2026

PART A: STATUS OF FILLING OF VACANT POSTS

Sl. No.	Name of the State Pollution Control Board / Pollution Control Committee	Category of post	Sanctioned	Filled posts as on 30.11.2025	Vacancy as on 30.11.2025	Details of vacancies in number as on 30.11.2025		Action Taken (Approval of the Govt., Engagement agency, Advertisement, Exam date etc.)	The time line by which the vacancy will be filled (in months)
1.	West Bengal Pollution Control Board	Scientific	59	32	27	a) Direct:	22	1) Proposal forwarded to the Govt. for approval for recruitment in 10 posts of Junior Scientist, 3 posts of Environmental Analyst and 2 posts of Laboratory Assistant and 7 posts of Laboratory Attendant.	10 months (Awaiting for approval from State Govt. for 22 posts)
						b) Promotion:	05	1) Filling up of 1 post of Junior Scientist is under process. 2) 4 posts of Environmental Analyst will be filled up from feeder post of Laboratory Assistant after completion of eligibility criteria period i.e. 6 years' experience by the candidates (in February, 2028).	1 month 30 months
						c) Deputation:	---	---	---
		Engineering	79	67	12	a) Direct:	06	1) Proposal forwarded to the Govt. for approval for recruitment in 4 posts of Assistant Environmental Engineer. 2) 1 post of Draftsman & 1 post of Tracer proposed to be surrendered.	10 months (Awaiting for approval from State Govt. for 4 posts) -----



			6		7	b) Promotion:	06	1) Filling up of 1 post of Environmental Engineer is under process. 2) 5 posts of Assistant Environmental Engineer will be filled up from the feeder posts of Junior Environmental Engineer after completion of eligibility criteria i.e. 8 years' experience by the candidates (in February, 2030).	1 month 50 months
						c) Deputation :	---		---
	Administration	171	72	99		a) Direct :	78	1) Proposal forwarded to the Govt. for approval for recruitment 1 post of Assistant Law Officer, 1 post of Programmer, 1 post of Computer Operator, 2 posts of Senior Accounts Clerk, 1 post of Accounts Clerk, 20 posts of Lower Division Assistant, 2 posts of Junior Environmental Assistant, 1 post of Information Officer, 3 posts of Stenographer, 1 post of Librarian & 30 posts of Group D = 63 posts 2) 5 posts of Driver, 4 posts of Typist and 6 posts of Typist-cum-Clerk are proposed to be surrendered =15 posts	10 months (Awaiting for approval from State Govt. for 4 posts) -----
						b) Promotion:	21	1) 1 post of Administrative Officer	3 months



							<p>will be filled up.</p> <p>2) 1 post of Finance & Accounts Officer will be filled up.</p> <p>3) 1 post of Head Clerk will be filled up shortly.</p> <p>3) Filling up of 2 posts of Upper Division Assistant is under process</p> <p>4) 1 post of Upper Division Assistant will be filled up after confirmation in the post of LDA in December 2026.</p> <p>4) 7 posts of Upper Division Assistant will be filled up.</p> <p>5) 3 posts of Lower Division Assistant will be filled up from feeder post of Group - D.</p> <p>6) 1 post of Law Officer & 1 post of System Analyst will be filled up from feeder post of Assistant Law Officer & Programmer.</p> <p>7) 3 posts of Record Supplier is proposed to be surrendered.</p>	<p>8 months</p> <p>1 months</p> <p>1 month</p> <p>15 months</p> <p>After recruitment in basic post i.e. Lower Division Assistant & confirmation in the post.</p> <p>Fulfilment of eligibility criteria for promotion</p> <p>After recruitment in basic post i.e. Assistant Law Officer & Programmer which are under process.</p> <p>-----</p>
						c) Deputation :	---	---



Specific remarks, if any: 105 nos. contractual personnel in Scientific and Technical post and 49 nos. contractual personnel other than Scientific and Technical post are engaged in different projects i.e. NCAP Project/NMCG Project /NAMP Project/Others.

PART A: STATUS OF FILLING OF VACANT POSTS

Name of the Board / Committee:

S. No.	Name of State Pollution Control Board/ Pollution Control Committee	Category of post	Status of Sanctioned posts in Number			Details of current vacancies in number as on 30.11.2025	Action Taken (Approval of the Govt. , Engagement agency, Advertisement, Exam date etc.)	If not, the time line and reason for delay may be mentioned.
			Sanctioned	Vacancy as on 30.11.2025	Filled after 30.11.2025			
	West Bengal 1 Pollution Control Board					a) Direct 22	1) Proposal forward to the Govt. for approval for recruitment in 10 posts of Junior Scientist, 3 posts of Environmental Analyst and 2 posts of Laboratory Assistant and 7 posts for Laboratory Attendant.	10 months (awaiting for approval from the State Government for 22 posts)



a) Scientific	59	27	32	b) Promotion	5	1) Filling up of 1 post of Junior Scientist is under process. 2) 4 posts of Environmental Analyst will be filled up from feeder post of Laboratory Assistant after completion of eligibility criteria period of 6 years of the candidates in February, 2028.	01 months 30 months
				c) Deputation	--	--	--
b) Engineering				a) Direct			
				b) Promotion			
				c) Deputation			
c) Administration				a) Direct			
				b) Promotion			
				c) Deputation		--	--

Specific remarks, if any:



Note: It is requested to please ensure that each sheet is created separately for each laboratory and rename the sheet accordingly . For e.g. Central Laboratory, Regional Laboratory etc

LABORATORY ANALYTICAL FACILITIES

Name of the Board / Committee: Central Laboratory, West Bengal Pollution Control Board

PART I: Facility available for monitoring of environmental parameters:

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
A. Sample Matrix / Group of Water and Wastewater				
(a) Physical Tests				
1	Temperature	Yes		
2	Colour	Yes		
3	pH	Yes		
4	Turbidity	Yes		



5	Conductivity	Yes		
6	Total Solids	Yes		
7	Total Dissolved Solids (TDS)	Yes		
8	Total Suspended Solids (TSS)	Yes		
(b) Inorganic Tests				
(i) General & Non-metallic				
1	Alkalinity	Yes		
2	Chloride	Yes		
3	Cyanide	Yes		
4	Dissolved oxygen	Yes		
5	Nitrite nitrogen	Yes		
6	Nitrate nitrogen	Yes		
7	Ammonical nitrogen	Yes		
8	Fluoride	Yes		
9	Hardness (Total)	Yes		
10	Calcium	Yes		
11	Magnesium	Yes		
12	Phosphate	Yes		
13	Sulphate	Yes		
14	Sulphide	Yes		
15	Total Residual chlorine (TRC)	Yes		
(ii) Trace Metals Tests				
1	Aluminium (Al)	Yes		
2	Arsenic (As) Total	Yes		
3	Barium	Yes		
4	Boron	Yes		
5	Chromium (Cr) Hexavalent	Yes		
6	Chromium (Cr) Total	Yes		
7	Cadmium (Cd)	Yes		
8	Cobalt (Co)	Yes		
9	Copper (Cu)	Yes		
10	Iron (Fe)	Yes		
11	Lead (Pb)	Yes		



12	Manganese (Mn)	Yes		
13	Mercury (Hg)	Yes		
14	Nickel (Ni)	Yes		
15	Potassium (K)	Yes		
16	Sodium (Na)	Yes		
17	Vanadium (V)	No		
18	Zinc (Zn)	Yes		
19	Selenium (Se)	No		
(c) Organics (General) and Trace Organics Tests				
1	Biological Oxygen Demand (BOD)	Yes		
2	Chemical oxygen demand (COD)	Yes		
3	Oil & Grease	Yes		
4	Phenolic Compounds as C ₆ H ₅ OH	Yes		
5	Benzopyrene	No		
6	Pesticides			
6.a	Organochlorine Pesticides (OCPs) Tests			
i	Aldrin	Yes		
ii	Alpha Endosulphan	Yes		
iii	p,p'-DDT	Yes		
iv	Alpha-HCH	Yes		
v	Beta HCH	No		
vi	Beta Endosulphan	Yes		
vii	Gama-HCH	Yes		
viii	o,p'-DDT	Yes		
ix	p,p'-DDE	No		
6.b	Organophosphorus Pesticides (OPPs) Tests			
i	Malathion	Yes		
ii	Methyl parathion	Yes		
iii	Chlorpyrifos	Yes		
iv	Dimethoate	No		



v	Dieldrin	Yes		
vi	Ethion	No		
(d) Microbiological Tests				
1	Total Coliform	Yes		
2	Faecal Coliform	Yes		
3	E. Coli	Yes		
4	Faecal Streptococci	Yes		
(e) Toxicological Tests				
1	Bioassay method for evaluation of toxicity using fish (90% survival of fish after 96 hrs in 100% effluent)	Yes		
B. Sample Matrix / Group of Solid / Solid Waste				
(a) Soil / Sediment / Compost Tests				
1	Cation Exchange Capacity (CEC)	No		
2	Electrical Conductivity (EC)	Yes		
3	Organic carbon (Chemical Method)	No		
4	pH	Yes		
5	Soil moisture	Yes		
6	Total nitrogen	Yes		
7	Metals by digestion (As, Cd, Cr, Pb, Ni etc.)	Yes		
(b) Hazardous Waste (Liquid / Slurry / Sludge / Solid / Semi-Solid) Tests				
1	Corrosivity	No		
2	Ignitability (Flash Point)	Yes		
3	Loss on Drying at 1050C (% Moisture Content)	No		
4	Loss on Drying at 5500C (% Organic Content)	No		
5	pH	Yes		
6	Organic carbon/matter (Chemical Method)	No		



7	Calorific Value	Yes		
8	Toxicity Characteristics leaching procedure (TCLP) Leachate and Metals in Leachate (As,Cd,Cr, Pb, Ni)	Yes		
C. Sample Matrix / Group of Analytes: Air				
(a) Ambient Air				
1	Nitrogen dioxide as NO ₂	Yes		
2	Sulphur dioxide (SO ₂)	Yes		
3	Particulate matter (PM ₁₀)	Yes		
4	Particulate matter (PM _{2.5})	Yes		
5	Carbon Monoxide	No		
6	Ozone	No		
7	Benzene	No		
8	Ammonia	No		
9	Metals in Particulate Matter, Pb	Yes		
10	Metals in Particulate Matter, As	Yes		
11	Metals in Particulate Matter, Ni	Yes		
12	Particulate Benzo-a-Pyrene (BaP)	Yes		
(b) Stack Gas / Stationary Source Emission				
1	Particulate Matter	Yes		
2	Sulphur Dioxide	No		
3	Carbon Dioxide	No		
4	Carbon Monoxide (NDIR based Method)	No		
5	Temperature	No		
6	Moisture	No		
7	Oxygen	No		
8	Oxides of Nitrogen	No		
9	Halides (HCL/HF)	Yes		
(c) Noise Level				
1	Ambient Noise level measurement (20 to 140 dB)	Yes		



2	Source Noise Level Measurement (Industrial process, DG set- 20 to 140dB)	Yes		
(d) Meteorological Monitoring				
1	Ambient Temperature	No		
2	Wind direction	No		
3	Wind speed	No		
4	Relative Humidity	No		
5	Mixing Height	No		

Specific remarks, if any:

PART II: Details of Laboratory Infrastructure (Instruments and Equipment)

S. No.	Name of Instrument / Equipments	Available Yes / No	If the Instrument / Equipment is not available, Specify Timeline for procurement of this instrument (in months)	Action Taken for procurement of this Instrument / Equipment (Specification finalized / procurement initiated / work awarded / outsourced)
A. List of Instruments / Equipment for Sampling of Water, Wastewater and Soil / Hazardous Wastes				
a) Mandatory Requirements				
1	Portable / Pen type pH meter / pH strip	Yes (Strip)		
2	Portable Dissolved Oxygen Meter / Field Fixing using chemicals	Field Fixing		



3	Electrical Conductivity meter pen type	No		
4	Flow meter / Physical flow measuring	Physical flow measuring		
5	GPS / Mobile with GPS app	Yes		
6	Ice Box (2 nos.) (150 litre & 100 litre capacities)	Yes		
7	Thermometer	Yes		
8	Stainless steel bucket with nylon rope and mug	Yes		
9	Ground water level measuring device	No		
10	Scoop / shovel	Yes		
11	Auger / core sampler	Yes		
b) Optional Requirements				
1	Bottom Sampler / Depth sampler	Yes		
2	Chloroscope for residual chlorine	Yes		
3	Vandorn or equivalent water sampler (Automatic sampler when composite sampling to be done)	Yes		
4	Ekman Dredge	Yes		
B. List of Instruments / Equipment for Sampling of Ambient Air and Source Emission monitoring				
a) Mandatory Requirements				
1	Fine dust samplers PM2.5 (*4 Nos)	Yes		
2	Respirable Dust Sampler PM 10 (* 4 Nos)	Yes		
3	High Volume Sampler (SPM) (4 Nos)	No		
4	Handy Sampler with set of glass impingers (*2 Nos)	No		
5	Low Volume Sampler (LVS)	No		
6	Tedler bags different sizes	No		



7	Meteorological tower (All in one telescopic Mast) with sensors comprising wind speed, wind direction, ambient temp., Relative humidity, Solar radiation, rainfall etc:	No		
8	Nitrogen Cylinder portable	No		
9	Activated Charcoal tubes/ Tenex	No		
10	Barometer (Digital)	No		
11	Isokinetic Stack Monitoring Kit complete with Stack monitoring instrument panel with inclined cum vertical manometer, Cold Box, Vacuum pump, Glass assembly impingers	No		
12	Modified S type Stainless steel Pitot tube (Standard length) with Assembly	No		
13	Monoblock type, rotary design vacuum pump	No		
14	Orsat Apparatus	No		
15	Source emission monitoring Impingers train set with spare impingers 100 ml & 225 ml capacity	No		
16	Stainless steel heated Sampling Probes with thimble holders short and long	No		
17	Flue Gas analyzer	No		
18	Thermometer/ Thermocouple	No		
19	Calibrator for Noise Meters	Yes		
20	Digital Sound level (Noise) Metres	Yes		
21	Portable TOC Analyzer for emission monitoring.	No		



22	Polyurethane Foam PUF Sampler	No		
b) Optional Requirements				
1	Anemometer	No		
2	Weather Monitoring system	No		
3	Wind speed/wind direction monitor	No		
4	Continuous Ambient Air Monitoring System, Fixed	Yes		
5	Continuous PM10 Analyzer	Yes		
6	Continuous Ambient Air Monitoring System, Mobile	No		
7	Continuous PM2.5 analyzer	Yes		
8	Ambient Nitrogen Oxides (NO-NO2-NOx Analyzer	Yes		
9	Ambient Ozone Analyzer	Yes		
10	Ambient BTEX Analyzer	Yes		
11	Multipoint Gas Calibration system	Yes		
12	Ambient Sulphur Dioxide analyzer	Yes		
13	Ambient Carbon Monoxide & Carbon dioxide analyzer	Yes		
14	Total Hydrocarbon analyzer	Yes		
15	Ambient Ammonia analyzer	Yes		
16	Zero Gas Generator	Yes		
17	Synthetic Air Cylinder	Yes		
18	Calibration Gas Cylinders, SO2, NO, CO, NH3, Benzene and Toluene One each with stainless steel Regulators	Yes		
19	Continuous emission monitoring equipment	No		
20	19 inch Rack mounting system for air analyzers	No		
21	Dry Gas Meter	No		
22	Diesel Exhaust analyzer	No		



23	Exhaust CO/HC analyzer with Sampling Probe	No		
24	Automated Noise Monitoring System	Yes		
25	Integrating Sound level meter	Yes		
26	Continuous PM10& PM2.5 Monitoring Analyzer TEOM system	Yes		
27	Top loading orifice kit for calibration of HVS	Yes		
28	Permeation tubes (SO2, NO-NO2-NOx, NH3, BTX)	Yes		

C. List of Equipment required for processing of Environmental Samples:

a) Mandatory Requirements

1	Accelerated Solvent Extraction (ASE) System	Yes		
2	Ammonia distillation assembly/TKN Analyzer	No		
3	Analytical Balance 4/5 digit & 6 digit (Digital)	Yes		
4	Aquarium for Toxicity bioassay test with complete accessories (*4 Nos)	Yes		
5	Autoclave (*2 Nos)	Yes		
6	Bacteriological Incubators Stainless steel (*2 Nos)	Yes		
7	Bio safety cabinets	Yes		
8	BOD Incubators (2 nos.)	Yes		
9	Centrifuge	Yes		
10	COD Digestion heated Blocks (2) with capacity 16 nos. or more	Yes		
11	Cyanide Distillation Assembly (3)	Yes		
12	Deep Freezer- Capacity 500 litre	No		
13	Laboratory Ball Mill Grinder	No		



14	Laboratory Grinder	Yes		
15	Laminar Flow bench for Microbiological analysis	Yes		
16	Magnetic Stirrer with heating system (*2 Nos)	Yes		
17	Mechanical Shaker	Yes		
18	Membrane Filtration assembly with vacuum pump (2 nos.)	Yes		
19	Microbial culture refrigerator	Yes		
20	Microwave Digester with 16 vessels/ Hot Plate	Yes		
21	Muffle Furnace (*1 Nos), Range 1200 C	Yes		
22	Phenol distillation assembly (3)	Yes		
23	Plate counter, Manual/Automatic	Yes		
24	Digestion Chambers/ Fume hood	Yes		
25	Digital Thermometer & Humidity meter- All lab area	Yes		
26	Dispensers (Various capacities) up to 5, 10, 25 & 50 ml	Yes		
27	Filtration Assembly with vacuum pump	Yes		
28	Fluoride Distillation Assembly (3)	NA		
29	Arsenic / Fluoride Glass Distillation assemblies	NA		
30	Glass Double Distillation Assembly /Water Purification System	Water Purification System		
31	Heating mantles (2 nos.)	Yes		
32	Hot plates (small, Medium and Large) (*2 nos.)	Yes		
33	Thermo Hygrometer	Yes		
34	Imhoff Cone	Yes		



35	Top loading Precision Digital Balance (minimum detection 0.001mg/0.01 mg) with anti-vibration facility- 3 nos. i.e 4/5 Digit (2 nos), - 6 Digit (1 no)	Yes		
36	Refrigerators Big Size 300 litres or more, double door- 2 nos.	Yes		
37	Rotary Evaporator (Buchi type) with water recirculating chiller	Yes		
38	Separating funnel shaker	Yes		
39	Soxhlet Apparatus	Yes		
40	Solid Phase Extraction (SPE) /SPME Extraction system	Yes		
41	Thermometer (Alcohol)	Yes		
42	Dry & wet bulb Thermometer	Yes		
43	Toxicity characteristic leaching procedure (TCLP) Extractors (Zero head and Bottle)	Yes		
44	Ultra sonic water bath- Capacity 3 litre	Yes		
45	Water Bath with temperature control (*2 Nos)	Yes		
46	Water Bath with temp. for mercury sample digestion- 20 BOD Bottles	No		

D. Analytical Instruments at Environmental Laboratories

a) Mandatory Requirements

1	Atomic Absorption spectrometer (AAS)- Flame, Hydride & Graphite Tube Atomizer (GTA)	Yes		
2	Binocular Stereo Zoom Microscope	Yes		
3	Bomb Calorimeter	Yes		



4	BTX Analyzer with BTX calibrator	No		
5	Colony counter	Yes		
6	Conductivity meter- 2 nos.	Yes		
7	Environment conditioning chamber	No		
8	Digital Burettes- 50 ml*2, 100 ml*2	No		
9	Dissolved Oxygen Meter (Bench model)	No		
10	Flame Photometer	Yes		
11	Flash Point Apparatus	Yes		
12	Gas Chromatograph Mass Spectrometer	Yes		
13	High Performance Liquid Chromatograph (HPLC)	Yes		
14	Inductively Coupled Plasma (ICP) Spectrometer-OES	Yes		
15	Ion Chromatograph Anion & Cations	Yes		
16	Methane and Non Methane (NMHC) Analyzer	No		
17	Microscope – 100x	Yes		
18	Microscope Binocular Research	Yes		
19	CO (NDIR based) Analyzer	No		
20	Nephelometer (Turbidity Meter)	Yes		
21	pH-Meter with combined electrode (3 point)- 2 nos.	Yes		
22	Specific ion Analyzer with ion selective electrodes	Yes		
23	Spectrophotometer Visible (Portable)	No		
24	TKN Analyzer semi-automatic with aluminum block digester	No		
25	UV-Vis Spectrophotometer	Yes		
26	Moisture Content Analyzer	Yes		



b) Optional Requirements			
1	Automatic Titration Assembly	No	
2	Carbon, Hydrogen, Nitrogen and Sulphur (CHNS) Elemental Analyzer	No	
3	EDXRF Analyzer/WDXRF Analyzer	Yes	
4	Fourier-transform infrared Spectrometer (FTIR)	No	
5	Flocculator (Jar testing apparatus)	No	
6	Toxic Gas Analyzer	No	
7	Organic Halogen (AOX/TOX) Analyzer	No	
8	TOC Analyzer	No	
9	High Resolution Mass Spectrometer (HRGC-HRMS)	No	
10	Inductively Coupled Plasma Mass (ICP-MS) Spectrometer	No	
11	X Ray Fluorescence (XRF) Spectrometer (Portable)	Yes	

Specific remarks, if any:



Note: It is requested to please ensure that each sheet is created separately for each laboratory and rename the sheet accordingly . For e.g. Central Laboratory, Regional Laboratory etc

LABORATORY ANALYTICAL FACILITIES

Name of the Board / Committee: Barrackpore Regional Laboratory, West Bengal Pollution Control Board

PART I: Facility available for monitoring of environmental parameters:

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
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A. Sample Matrix / Group of Water and Wastewater

a) Physical Tests

1	Temperature	Yes		
2	Colour	No		
3	pH	Yes		
4	Turbidity	Yes		
5	Conductivity	Yes		
6	Total Solids	Yes		



7	Total Dissolved Solids (TDS)	Yes		
8	Total Suspended Solids (TSS)	Yes		
(b) Inorganic Tests				
(i) General & Non-metallic				
1	Alkalinity	Yes		
2	Chloride	Yes		
3	Cyanide	Yes		
4	Dissolved oxygen	Yes		
5	Nitrite nitrogen	Yes		
6	Nitrate nitrogen	Yes		
7	Ammonical nitrogen	Yes		
8	Fluoride	Yes		
9	Hardness (Total)	Yes		
10	Calcium	Yes		
11	Magnesium	Yes		
12	Phosphate	Yes		
13	Sulphate	Yes		
14	Sulphide	Yes		



15	Total Residual chlorine (TRC)	Yes		
ii) Trace Metals Tests				
1	Aluminium (Al)	Yes		
2	Arsenic (As) Total	Yes		
3	Barium	Yes		
4	Boron	Yes		
5	Chromium (Cr) Hexavalent	Yes		
6	Chromium (Cr) Total	Yes		
7	Cadmium (Cd)	Yes		
8	Cobalt (Co)	Yes		
9	Copper (Cu)	Yes		
10	Iron (Fe)	Yes		
11	Lead (Pb)	Yes		
12	Manganese (Mn)	Yes		
13	Mercury (Hg)	Yes		
14	Nickel (Ni)	Yes		
15	Potassium (K)	Yes		
16	Sodium (Na)	Yes		
17	Vanadium (V)	No		
18	Zinc (Zn)	Yes		
19	Selenium (Se)	No		
c) Organics (General) and Trace Organics Tests				
1	Biological Oxygen Demand (BOD)	Yes		
2	Chemical oxygen demand (COD)	Yes		
3	Oil & Grease	Yes		
4	Phenolic Compounds as C ₆ H ₅ OH	Yes		
5	Benzopyrene	No		
6	Pesticides			



6.a	Organochlorine Pesticides (OCPs) Tests			
i	Aldrin	Yes		
ii	Alpha Endosulphan	Yes		
iii	p,p'-DDT	Yes		
iv	Alpha-HCH	Yes		
v	Beta HCH	Yes		
vi	Beta Endosulphan	Yes		
vii	Gama-HCH	Yes		
viii	o,p'-DDT	Yes		
ix	p,p'-DDE	No		
6.b	Organophosphorus Pesticides (OPPs) Tests			
i	Malathion	Yes		
ii	Methyl parathion	Yes		
iii	Chlorpyrifos	Yes		
iv	Dimethoate	No		
v	Dieldrin	Yes		
vi	Ethion	No		
(d) Microbiological Tests				
1	Total Coliform	Yes		
2	Faecal Coliform	Yes		
3	E. Coli	Yes		
4	Faecal Streptococci	Yes		
(e) Toxicological Tests				
1	Bioassay method for evaluation of toxicity using fish (90% survival of fish after 96 hrs in 100% effluent)	No		
B. Sample Matrix / Group of Solid / Solid Waste				
(a) Soil / Sediment / Compost Tests				
1	Cation Exchange Capacity (CEC)	No		
2	Electrical Conductivity (EC)	Yes		
3	Organic carbon (Chemical Method)	No		



4	pH	Yes		
5	Soil moisture	Yes		
6	Total nitrogen	No		
7	Metals by digestion (As, Cd, Cr, Pb, Ni etc.)	Yes		

b) Hazardous Waste (Liquid / Slurry / Sludge / Solid / Semi-Solid) Tests

1	Corrosivity	No		
2	Ignitability (Flash Point)	No		
3	Loss on Drying at 1050C (% Moisture Content)	No		
4	Loss on Drying at 5500C (% Organic Content)	No		
5	pH	Yes		
6	Organic carbon/matter (Chemical Method)	No		
7	Calorific Value	No		
8	Toxicity Characteristics leaching procedure (TCLP) Leachate and Metals in Leachate (As,Cd,Cr, Pb, Ni)	Yes		

C. Sample Matrix / Group of Analytes: Air
a) Ambient Air

1	Nitrogen dioxide as NO2	Yes		
2	Sulphur dioxide (SO2)	Yes		
3	Particulate matter (PM10)	Yes		
4	Particulate matter (PM2.5)	Yes		
5	Carbon Monoxide	No		
6	Ozone	No		
7	Benzene	No		
8	Ammonia	No		
9	Metals in Particulate Matter, Pb	Yes		
10	Metals in Particulate Matter, As	Yes		



11	Metals in Particulate Matter, Ni	Yes		
12	Particulate Benzo-a-Pyrene (BaP)	Yes		
(b) Stack Gas / Stationary Source Emission				
1	Particulate Matter	Yes		
2	Sulphur Dioxide	No		
3	Carbon Dioxide	No		
4	Carbon Monoxide (NDIR based Method)	No		
5	Temperature	No		
6	Moisture	No		
7	Oxygen	No		
8	Oxides of Nitrogen	No		
9	Halides (HCL/HF)	Yes		
(c) Noise Level				
1	Ambient Noise level measurement (20 to 140 dB)	Yes		
2	Source Noise Level Measurement (Industrial process, DG set- 20 to 140dB)	Yes		
(d) Meteorological Monitoring				
1	Ambient Temperature	No		
2	Wind direction	No		
3	Wind speed	No		
4	Relative Humidity	No		
5	Mixing Height	No		

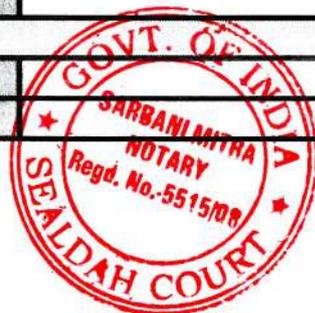
Specific remarks, if any:



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S. No.	Name of Instrument / Equipments	Available Yes / No	If the Instrument / Equipment is not available, Specify Timeline for procurement of this instrument (in months)	Action Taken for procurement of this Instrument / Equipment (Specification finalized / procurement initiated / work awarded / outsourced)
A. List of Instruments / Equipment for Sampling of Water, Wastewater and Soil / Hazardous Wastes				
a) Mandatory Requirements				
1	Portable / Pen type pH meter / pH strip	Yes (strip)		
2	Portable Dissolved Oxygen Meter / Field Fixing using chemicals	Field Fixing		
3	Electrical Conductivity meter pen type	No		
4	Flow meter / Physical flow measuring	Physical flow measuring		
5	GPS / Mobile with GPS app	Yes		
6	Ice Box (2 nos.) (150 litre & 100 litre capacities)	Yes		
7	Thermometer	Yes		
8	Stainless steel bucket with nylon rope and mug	Yes		
9	Ground water level measuring device			
10	Scoop / shovel	Yes		
11	Auger / core sampler	No		
b) Optional Requirements				
1	Bottom Sampler / Depth sampler	Yes		
2	Chloroscope for residual chlorine	Yes		



3	Vandorn or equivalent water sampler (Automatic sampler when composite sampling to be done)	Yes		
4	Ekman Dredge	Yes		

B. List of Instruments / Equipment for Sampling of Ambient Air and Source Emission monitoring
a) Mandatory Requirements

1	Fine dust samplers PM2.5 (*4 Nos)	Yes		
2	Respirable Dust Sampler PM 10 (* 4 Nos)	Yes		
3	High Volume Sampler (SPM) (4 Nos)	No		
4	Handy Sampler with set of glass impingers (*2 Nos)	No		
5	Low Volume Sampler (LVS)	No		
6	Tedler bags different sizes	No		
7	Metecrological tower (All in one telescopic Mast) with sensors comprising wind speed, wind direction, ambient temp., Relative humidity, Solar radiation, rainfall etc.	No		
8	Nitrogen Cylinder portable	No		
9	Activated Charcoal tubes/ Tenex	No		
10	Barometer (Digital)	No		
11	Isokinetic Stack Monitoring Kit complete with Stack monitoring instrument panel with inclined cum vertical manometer, Cold Box, Vacuum pump, Glass assembly impingers	No		
12	Modified S type Stainless steel Pitot tube (Standard length) with Assembly	No		



13	Monoblock type, rotary design vacuum pump	No		
14	Orsat Apparatus	No		
15	Source emission monitoring Impingers train set with spare impingers 100 ml & 225 ml capacity	No		
16	Stainless steel heated Sampling Probes with thimble holders short and long	No		
17	Flue Gas analyzer	No		
18	Thermometer/ Thermocouple	No		
19	Calibrator for Noise Meters	Yes		
20	Digital Sound level (Noise) Metres	Yes		
21	Portable TOC Analyzer for emission monitoring.	No		
22	Polyurethane Foam PUF Sampler	No		
b) Optional Requirements				
1	Anemometer	No		
2	Weather Monitoring system	No		
3	Wind speed/wind direction monitor	No		
4	Continuous Ambient Air Monitoring System, Fixed	Yes		
5	Continuous PM10 Analyzer	Yes		
6	Continuous Ambient Air Monitoring System, Mobile	No		
7	Continuous PM2.5 analyzer	Yes		
8	Ambient Nitrogen Oxides (NO-NO2-NOx) Analyzer	Yes		
9	Ambient Ozone Analyzer	Yes		
10	Ambient BTEX Analyzer	Yes		
11	Multipoint Gas Calibration system	Yes		
12	Ambient Sulphur Dioxide analyzer	Yes		



13	Ambient Carbon Monoxide & Carbon dioxide analyzer	Yes		
14	Total Hydrocarbon analyzer	Yes		
15	Ambient Ammonia analyzer	Yes		
16	Zero Gas Generator	Yes		
17	Synthetic Air Cylinder	Yes		
18	Calibration Gas Cylinders, SO ₂ , NO, CO, NH ₃ , Benzene and Toluene One each with stainless steel Regulators	Yes		
19	Continuous emission monitoring equipment	No		
20	19 inch Rack mounting system for air analyzers	No		
21	Dry Gas Meter	No		
22	Diesel Exhaust analyzer	No		
23	Exhaust CO/HC analyzer with Sampling Probe	No		
24	Automated Noise Monitoring System	Yes		
25	Integrating Sound level meter	Yes		
26	Continuous PM ₁₀ & PM _{2.5} Monitoring Analyzer TEOM system	Yes		
27	Top loading orifice kit for calibration of HVS	Yes		
28	Permeation tubes (SO ₂ , NO-NO ₂ -NO _x , NH ₃ , BTX)	Yes		

C. List of Equipment required for processing of Environmental Samples:

a) Mandatory Requirements

1	Accelerated Solvent Extraction (ASE) System	No		
2	Ammonia distillation assembly/TKN Analyzer	No		



3	Analytical Balance 4/5 digit & 6 digit (Digital)	Yes		
4	Aquarium for Toxicity bioassay test with complete accessories (*4 Nos)	Yes		
5	Autoclave (*2 Nos)	Yes		
6	Bacteriological Incubators Stainless steel (*2 Nos)	Yes		
7	Bio safety cabinets	Yes		
8	BOD Incubators (2 nos.)	Yes		
9	Centrifuge	Yes		
10	COD Digestion heated Blocks (2) with capacity 16 nos. or more	Yes		
11	Cyanide Distillation Assembly (3)	Yes		
12	Deep Freezer- Capacity 500 litre	No		
13	Laboratory Ball Mill Grinder	No		
14	Laboratory Grinder	Yes		
15	Laminar Flow bench for Microbiological analysis	Yes		
16	Magnetic Stirrer with heating system (*2 Nos)	Yes		
17	Mechanical Shaker	Yes		
18	Membrane Filtration assembly with vacuum pump (2 nos.)	Yes		
19	Microbial culture refrigerator	Yes		
20	Microwave Digester with 16 vessels/ Hot Plate	Yes		
21	Muffle Furnace (*1 Nos), Range 1200 C	Yes		
22	Phenol distillation assembly (3)	Yes		
23	Plate counter, Manual/Automatic	Yes		
24	Digestion Chambers/ Fume hood	Yes		
25	Digital Thermometer & Humidity meter All lab area	Yes		



26	Dispensers (Various capacities) up to 5, 10, 25 & 50 ml	Yes		
27	Filtration Assembly with vacuum pump	Yes		
28	Fluoride Distillation Assembly (3)	NA		
29	Arsenic / Fluoride Glass Distillation assemblies	NA		
30	Glass Double Distillation Assembly /Water Purification System	Water purification system		
31	Heating mantles (2 nos.)	Yes		
32	Hot plates (small, Medium and Large) (*2 nos.)	Yes		
33	Thermo Hygrometer	Yes		
34	Imhoff Cone	Yes		
35	Top loading Precision Digital Balance (minimum detection 0.001mg/0.01 mg) with anti-vibration facility- 3 nos. i.e 4/5 Digit (2 nos), - 6 Digit (1 no)	Yes		
36	Refrigerators Big Size 300 litres or more, double door- 2 nos.	Yes		
37	Rotary Evaporator (Buchi type) with water recirculating chiller	Yes		
38	Separating funnel shaker	Yes		
39	Soxhlet Apparatus	Yes		
40	Solid Phase Extraction (SPE) /SPME Extraction system	No		
41	Thermometer (Alcohol)	Yes		
42	Dry & wet bulb Thermometer	Yes		
43	Toxicity characteristic leaching procedure (TCLP) Extractors (Zero head and Bottle)	Yes		



44	Ultra sonic water bath- Capacity 3 litre	Yes		
45	Water Bath with temperature control (*2 Nos)	Yes		
46	Water Bath with temp. for mercury sample digestion- 20 BOD Bottles	No		

D. Analytical Instruments at Environmental Laboratories

a) Mandatory Requirements

1	Atomic Absorption spectrometer (AAS)- Flame, Hydride & Graphite Tube Atomizer (GTA)	Yes		
2	Binocular Stereo Zoom Microscope	Yes		
3	Bomb Calorimeter	No		
4	BTX Analyzer with BTX calibrator	No		
5	Colony counter	Yes		
6	Conductivity meter- 2 nos.	Yes		
7	Environment conditioning chamber	No		
8	Digital Burettes- 50 ml*2, 100 ml*2	No		
9	Dissolved Oxygen Meter (Bench model)	No		
10	Flame Photometer	Yes		
11	Flash Point Apparatus	No		
12	Gas Chromatograph Mass Spectrometer	Yes		
13	High Performance Liquid Chromatograph (HPLC)	No		
14	Inductively Coupled Plasma (ICP) Spectrometer-OES	No		
15	Ion Chromatograph Anion & Cations	No		
16	Methane and Non Methane (NMHC) Analyzer	No		
17	Microscope – 100x	Yes		



18	Microscope Binocular Research	Yes		
19	CO (NDIR based) Analyzer	No		
20	Nephelometer (Turbidity Meter)	Yes		
21	pH-Meter with combined electrode (3 point)- 2 nos.	Yes		
22	Specific ion Analyzer with ion selective electrodes	Yes		
23	Spectrophotometer Visible (Portable)	No		
24	TKN Analyzer semi-automatic with aluminum block digester	No		
25	UV-Vis Spectrophotometer	Yes		
26	Moisture Content Analyzer	No		
b) Optional Requirements				
1	Automatic Titration Assembly	No		
2	Carbon, Hydrogen, Nitrogen and Sulphur (CHNS) Elemental Analyzer	No		
3	EDXRF Analyzer/WDXRF Analyzer	No		
4	Fourier-transform infrared Spectrometer (FTIR)	No		
5	Flocculator (Jar testing apparatus)	No		
6	Toxic Gas Analyzer	No		
7	Organic Halogen (AOX/TOX) Analyzer	No		
8	TOC Analyzer	No		
9	High Resolution Mass Spectrometer (HRGC-HRMS)	No		
10	Inductively Coupled Plasma Mass (ICP-MS) Spectrometer	No		
11	X Ray Fluorescence (XRF) Spectrometer (Portable)	Yes		

Specific remarks, if any:



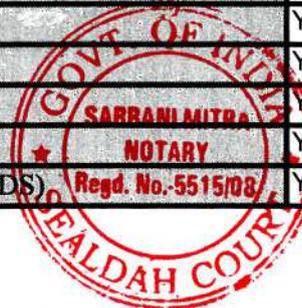
Note: It is requested to please ensure that each sheet is created separately for each laboratory and rename the sheet accordingly . For e.g. Central Laboratory, Regional Laboratory etc

LABORATORY ANALYTICAL FACILITIES

Name of the Board / Committee: Haldia Regional Laboratory, West Bengal Pollution Control Board

PART I: Facility available for monitoring of environmental parameters:

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
A. Sample Matrix / Group of Water and Wastewater				
(a) Physical Tests				
1	Temperature	Yes		
2	Colour	No		
3	pH	Yes		
4	Turbidity	Yes		
5	Conductivity	Yes		
6	Total Solids	Yes		
7	Total Dissolved Solids (TDS)	Yes		



8	Total Suspended Solids (TSS)	Yes		
(b) Inorganic Tests				
(i) General & Non-metallic				
1	Alkalinity	Yes		
2	Chloride	Yes		
3	Cyanide	Yes		
4	Dissolved oxygen	Yes		
5	Nitrite nitrogen	Yes		
6	Nitrate nitrogen	Yes		
7	Ammonical nitrogen	Yes		
8	Fluoride	Yes		
9	Hardness (Total)	Yes		
10	Calcium	Yes		
11	Magnesium	Yes		
12	Phosphate	Yes		
13	Sulphate	Yes		
14	Sulphide	Yes		
15	Total Residual chlorine (TRC)	Yes		
(ii) Trace Metals Tests				
1	Aluminium (Al)	No		
2	Arsenic (As) Total	No		
3	Barium	No		
4	Boron	No		
5	Chromium (Cr) Hexavalent	No		
6	Chromium (Cr) Total	No		
7	Cadmium (Cd)	No		
8	Cobalt (Co)	No		
9	Copper (Cu)	No		
10	Iron (Fe)	No		
11	Lead (Pb)	No		
12	Manganese (Mn)	No		
13	Mercury (Hg)	No		
14	Nickel (Ni)	No		



15	Potassium (K)	No		
16	Sodium (Na)	No		
17	Vanadium (V)	No		
18	Zinc (Zn)	No		
19	Selenium (Se)	No		
(c) Organics (General) and Trace Organics Tests				
1	Biological Oxygen Demand (BOD)	Yes		
2	Chemical oxygen demand (COD)	Yes		
3	Oil & Grease	Yes		
4	Phenolic Compounds as C ₆ H ₅ OH	Yes		
5	Benzopyrene	No		
6	Pesticides			
6.a	Organochlorine Pesticides (OCPs) Tests			
i	Aldrin	No		
ii	Alpha Endosulphan	No		
iii	p,p'-DDT	No		
iv	Alpha-HCH	No		
v	Beta HCH	No		
vi	Beta Endosulphan	No		
vii	Gama-HCH	No		
viii	o,p'-DDT	No		
ix	p,p'-DDE	No		
6.b	Organophosphorus Pesticides (OPPs) Tests			
i	Malathion	No		
ii	Methyl parathion	No		
iii	Chlorpyrifos	No		
iv	Dimethoate	No		
v	Dieldrin	No		
vi	Ethion	No		
(d) Microbiological Tests				
1	Total Coliform	Yes		
2	Faecal Coliform	Yes		



3	E. Coli	Yes		
4	Faecal Streptococci	Yes		
(e) Toxicological Tests				
1	Bioassay method for evaluation of toxicity using fish (90% survival of fish after 96 hrs in 100% effluent)	No		
B. Sample Matrix / Group of Solid / Solid Waste				
(a) Soil / Sediment / Compost Tests				
1	Cation Exchange Capacity (CEC)	No		
2	Electrical Conductivity (EC)	No		
3	Organic carbon (Chemical Method)	No		
4	pH	No		
5	Soil moisture	No		
6	Total nitrogen	No		
7	Metals by digestion (As, Cd, Cr, Pb, Ni etc.)	No		
(b) Hazardous Waste (Liquid / Slurry / Sludge / Solid / Semi-Solid) Tests				
1	Corrosivity	No		
2	Ignitability (Flash Point)	No		
3	Loss on Drying at 1050C (% Moisture Content)	No		
4	Loss on Drying at 5500C (% Organic Content)	No		
5	pH	No		
6	Organic carbon/matter (Chemical Method)	No		
7	Calorific Value	No		
8	Toxicity Characteristics leaching procedure (TCLP) Leachate and Metals in Leachate (As,Cd,Cr, Pb, Ni)	No		
C. Sample Matrix / Group of Analytes: Air				
(a) Ambient Air				
1	Nitrogen dioxide as NO2	Yes		
2	Sulphur dioxide (SO2)	Yes		
3	Particulate matter (PM10)	Yes		



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4	Particulate matter (PM2.5)	Yes		
5	Carbon Monoxide	No		
6	Ozone	No		
7	Benzene	No		
8	Ammonia	No		
9	Metals in Particulate Matter, Pb	No		
10	Metals in Particulate Matter, As	No		
11	Metals in Particulate Matter, Ni	No		
12	Particulate Benzo-a-Pyrene (BaP)	No		
(b) Stack Gas / Stationary Source Emission				
1	Particulate Matter	Yes		
2	Sulphur Dioxide	No		
3	Carbon Dioxide	No		
4	Carbon Monoxide (NDIR based Method)	No		
5	Temperature	No		
6	Moisture	No		
7	Oxygen	No		
8	Oxides of Nitrogen	No		
9	Halides (HCL/HF)	No		
(c) Noise Level				
1	Ambient Noise level measurement (20 to 140 dB)	Yes		
2	Source Noise Level Measurement (Industrial process, DG set- 20 to 140dB)	Yes		
(d) Meteorological Monitoring				
1	Ambient Temperature	No		
2	Wind direction	No		
3	Wind speed	No		
4	Relative Humidity	No		
5	Mixing Height	No		

Specific remarks, if any:



LABORATORY ANALYTICAL FACILITIES

Name of the Board / Committee: Durgapur Regional Laboratory, West Bengal Pollution Control Board

PART I: Facility available for monitoring of environmental parameters:

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
A. Sample Matrix / Group of Water and Wastewater				
(a) Physical Tests				
1	Temperature	Yes		
2	Colour	No		
3	pH	Yes		
4	Turbidity	Yes		
5	Conductivity	Yes		
6	Total Solids	Yes		
7	Total Dissolved Solids (TDS)	Yes		
8	Total Suspended Solids (TSS)	Yes		
(b) Inorganic Tests				
(i) General & Non-metallic				
1	Alkalinity	Yes		
2	Chloride	Yes		
3	Cyanide	Yes		
4	Dissolved oxygen	Yes		
5	Nitrite nitrogen	Yes		
6	Nitrate nitrogen	Yes		
7	Ammonical nitrogen	Yes		
8	Fluoride	Yes		
9	Hardness (Total)	Yes		
10	Calcium	Yes		
11	Magnesium	Yes		
12	Phosphate	Yes		
13	Sulphate	Yes		
14	Sulphide	Yes		
15	Total Residual chlorine (TRC)	Yes		
(ii) Trace Metals Tests				
1	Aluminium (Al)	Yes		
2	Arsenic (As) Total	Yes		
3	Barium	Yes		
4	Boron	Yes		
5	Chromium (Cr) Hexavalent	Yes		
6	Chromium (Cr) Total	Yes		



7	Cadmium (Cd)	Yes		
8	Cobalt (Co)	Yes		
9	Copper (Cu)	Yes		
10	Iron (Fe)	Yes		
11	Lead (Pb)	Yes		
12	Manganese (Mn)	Yes		
13	Mercury (Hg)	Yes		
14	Nickel (Ni)	Yes		
15	Potassium (K)	Yes		
16	Sodium (Na)	Yes		
17	Vanadium (V)	No		
18	Zinc (Zn)	Yes		
19	Selenium (Se)	No		
(c) Organics (General) and Trace Organics Tests				
1	Biological Oxygen Demand (BOD)	Yes		
2	Chemical oxygen demand (COD)	Yes		
3	Oil & Grease	Yes		
4	Phenolic Compounds as C ₆ H ₅ OH	Yes		
5	Benzopyrene	Yes		
6	Pesticides			
6.a	Organochlorine Pesticides (OCPs) Tests			
i	Aldrin	Yes		
ii	Alpha Endosulphan	Yes		
iii	p,p'-DDT	Yes		
iv	Alpha-HCH	Yes		
v	Beta HCH	Yes		
vi	Beta Endosulphan	Yes		
vii	Gama-HCH	Yes		
viii	o,p'-DDT	Yes		
ix	p,p'-DDE	Yes		
6.b	Organophosphorus Pesticides (OPPs) Tests			
i	Malathion	Yes		
ii	Methyl parathion	Yes		
iii	Chlorpyrifos	Yes		
iv	Dimethoate	No		
v	Dieldrin	Yes		
vi	Ethion	Yes		
(d) Microbiological Tests				
1	Total Coliform	Yes		
2	Faecal Coliform	Yes		
3	E. Coli	Yes		
4	Faecal Streptococci	Yes		
(e) Toxicological Tests				
1	Bioassay method for evaluation of toxicity using fish (90% survival of fish after 96 hrs in 100% effluent)	No		
B. Sample Matrix / Group of Solid / Solid Waste				



(a) Soil / Sediment / Compost Tests			
1	Cation Exchange Capacity (CEC)	No	
2	Electrical Conductivity (EC)	Yes	
3	Organic carbon (Chemical Method)	No	
4	pH	Yes	
5	Soil moisture	Yes	
6	Total nitrogen	Yes	
7	Metals by digestion (As, Cd, Cr, Pb, Ni etc.)	Yes	

(b) Hazardous Waste (Liquid / Slurry / Sludge / Solid / Semi-Solid) Tests

1	Corrosivity	No	
2	Ignitability (Flash Point)	No	
3	Loss on Drying at 1050C (% Moisture Content)	No	
4	Loss on Drying at 5500C (% Organic Content)	No	
5	pH	Yes	
6	Organic carbon/matter (Chemical Method)	No	
7	Calorific Value	No	
8	Toxicity Characteristics leaching procedure (TCLP) Leachate and Metals in Leachate (As,Cd,Cr, Pb, Ni)	No	

C. Sample Matrix / Group of Analytes: Air

(a) Ambient Air

1	Nitrogen dioxide as NO ₂	Yes	
2	Sulphur dioxide (SO ₂)	Yes	
3	Particulate matter (PM ₁₀)	Yes	
4	Particulate matter (PM _{2.5})	Yes	
5	Carbon Monoxide	No	
6	Ozone	No	
7	Benzene	No	
8	Ammonia	No	
9	Metals in Particulate Matter, Pb	No	
10	Metals in Particulate Matter, As	No	



11	Metals in Particulate Matter, Ni	No		
12	Particulate Benzo-a-Pyrene (BaP)	No		
(b) Stack Gas / Stationary Source Emission				
1	Particulate Matter	Yes		
2	Sulphur Dioxide	No		
3	Carbon Dioxide	No		
4	Carbon Monoxide (NDIR based Method)	No		
5	Temperature	No		
6	Moisture	No		
7	Oxygen	No		
8	Oxides of Nitrogen	No		
9	Halides (HCL/HF)	Yes		
(c) Noise Level				
1	Ambient Noise level measurement (20 to 140 dB)	Yes		
2	Source Noise Level Measurement (Industrial process, DG set- 20 to 140dB)	Yes		
(d) Meteorological Monitoring				
1	Ambient Temperature	No		
2	Wind direction	No		
3	Wind speed	No		
4	Relative Humidity	No		
5	Mixing Height	No		

Specific remarks, if any:

PART II: Details of Laboratory Infrastructure (Instruments and Equipment)

S. No.	Name of Instrument / Equipments	Available Yes / No	If the Instrument / Equipment is not available, Specify Timeline for procurement of this instrument (in months)	Action Taken for procurement of this Instrument / Equipment (Specification finalized / procurement initiated / work awarded / outsourced)
A. List of Instruments / Equipment for Sampling of Water, Wastewater and Soil / Hazardous Wastes				
a) Mandatory Requirements				
1	Portable / Pen type pH meter / pH strip	Yes (Strip)		



2	Portable Dissolved Oxygen Meter / Field Fixing using chemicals	Field fixing		
3	Electrical Conductivity meter pen type	No		
4	Flow meter / Physical flow measuring	Physical Flow Measuring		
5	GPS / Mobile with GPS app	Yes		
6	Ice Box (2 nos.) (150 litre & 100 litre capacities)	Yes		
7	Thermometer	Yes		
8	Stainless steel bucket with nylon rope and mug	Yes		
9	Ground water level measuring device	No		
10	Scoop / shovel	Yes		
11	Auger / core sampler	Yes		
b) Optional Requirements				
1	Bottom Sampler / Depth sampler	Yes		
2	Chloroscope for residual chlorine	Yes		
3	Vandorn or equivalent water sampler (Automatic sampler when composite sampling to be done)	Yes		
4	Ekman Dredge	Yes		
B. List of Instruments / Equipment for Sampling of Ambient Air and Source Emission monitoring				
a) Mandatory Requirements				
1	Fine dust samplers PM2.5 (*4 Nos)	Yes		
2	Respirable Dust Sampler PM 10 (* 4 Nos)	Yes		
3	High Volume Sampler (SPM) (4 Nos)	No		
4	Handy Sampler with set of glass impingers (*2 Nos)	No		
5	Low Volume Sampler (LVS)	No		
6	Tedler bags different sizes	No		



7	Meteorological tower (All in one telescopic Mast) with sensors comprising wind speed, wind direction, ambient temp., Relative humidity, Solar radiation, rainfall etc.	No		
8	Nitrogen Cylinder portable	No		
9	Activated Charcoal tubes/ Tenex	No		
10	Barometer (Digital)	No		
11	Isokinetic Stack Monitoring Kit complete with Stack monitoring instrument panel with inclined cum vertical manometer, Cold Box, Vacuum pump, Glass assembly impingers	No		
12	Modified S type Stainless steel Pitot tube (Standard length) with Assembly	No		
13	Monoblock type, rotary design vacuum pump	No		
14	Orsat Apparatus	No		
15	Source emission monitoring Impingers train set with spare impingers 100 ml & 225 ml capacity	No		
16	Stainless steel heated Sampling Probes with thimble holders short and long	No		
17	Flue Gas analyzer	No		
18	Thermometer/ Thermocouple	No		
19	Calibrator for Noise Meters	No		
20	Digital Sound level (Noise) Metres	Yes		
21	Portable TOC Analyzer for emission monitoring.	No		
22	Polyurethane Foam PUF Sampler	No		



b) Optional Requirements			
1	Anemometer	No	
2	Weather Monitoring system	No	
3	Wind speed/wind direction monitor	No	
4	Continuous Ambient Air Monitoring System, Fixed	Yes	
5	Continuous PM10 Analyzer	Yes	
6	Continuous Ambient Air Monitoring System, Mobile	No	
7	Continuous PM2.5 analyzer	Yes	
8	Ambient Nitrogen Oxides (NO-NO2-NOx Analyzer	Yes	
9	Ambient Ozone Analyzer	Yes	
10	Ambient BTEX Analyzer	Yes	
11	Multipoint Gas Calibration system	Yes	
12	Ambient Sulphur Dioxide analyzer	Yes	
13	Ambient Carbon Monoxide & Carbon dioxide analyzer	Yes	
14	Total Hydrocarbon analyzer	Yes	
15	Ambient Ammonia analyzer	Yes	
16	Zero Gas Generator	Yes	
17	Synthetic Air Cylinder	Yes	
18	Calibration Gas Cylinders, SO2, NO, CO, NH3, benzene and Toluene One each with stainless steel Regulators	Yes	
19	Continuous emission monitoring equipment	No	
20	19 inch Rack mounting system for air analyzers	No	
21	Dry Gas Meter	No	
22	Diesel Exhaust analyzer	No	



23	Exhaust CO/HC analyzer with Sampling Probe	No		
24	Automated Noise Monitoring System	Yes		
25	Integrating Sound level meter	Yes		
26	Continuous PM10& PM2.5 Monitoring Analyzer TEOM system	Yes		
27	Top loading orifice kit for calibration of HVS	Yes		
28	Permeation tubes (SO ₂ , NO-NO ₂ -NO _x , NH ₃ , BTX)	Yes		

C. List of Equipment required for processing of Environmental Samples:

a) Mandatory Requirements

1	Accelerated Solvent Extraction (ASE) System	No		
2	Ammonia distillation assembly/TKN Analyzer	No		
3	Analytical Balance 4/5 digit & 6 digit (Digital)	Yes		
4	Aquarium for Toxicity bioassay test with complete accessories (*4 Nos)	No		
5	Autoclave (*2 Nos)	Yes		
6	Bacteriological Incubators Stainless steel (*2 Nos)	Yes		
7	Bio safety cabinets	Yes		
8	BOD Incubators (2 nos.)	Yes		
9	Centrifuge	Yes		
10	COD Digestion heated Blocks (2) with capacity 16 nos. or more	Yes		
11	Cyanide Distillation Assembly (3)	Yes		
12	Deep Freezer- Capacity 500 litre	No		
13	Laboratory Ball Mill Grinder	No		
14	Laboratory Grinder	No		



15	Laminar Flow bench for Microbiological analysis	Yes		
16	Magnetic Stirrer with heating system (*2 Nos)	Yes		
17	Mechanical Shaker	Yes		
18	Membrane Filtration assembly with vacuum pump (2 nos.)	Yes		
19	Microbial culture refrigerator	Yes		
20	Microwave Digester with 16 vessels/ Hot Plate	Yes		
21	Muffle Furnace (*1 Nos), Range 1200 C	Yes		
22	Phenol distillation assembly (3)	Yes		
23	Plate counter, Manual/Automatic			
24	Digestion Chambers/ Fume hood	Yes		
25	Digital Thermometer & Humidity meter- All lab area	Yes		
26	Dispensers (Various capacities) up to 5, 10, 25 & 50 ml	Yes		
27	Filtration Assembly with vacuum pump	Yes		
28	Fluoride Distillation Assembly (3)	NA		
29	Arsenic / Fluoride Glass Distillation assemblies	NA		
30	Glass Double Distillation Assembly /Water Purification System	Water Purification System		
31	Heating mantles (2 nos.)	Yes		
32	Hot plates (small, Medium and Large) (*2 nos.)	Yes		
33	Thermo Hygrometer	Yes		
34	Imhoff Cone	Yes		



35	Top loading Precision Digital Balance (minimum detection 0.001mg/0.01 mg) with anti-vibration facility- 3 nos. i.e 4/5 Digit (2 nos), - 6 Digit (1 no)	No		
36	Refrigerators Big Size 300 litres or more, double door- 2 nos.	Yes		
37	Rotary Evaporator (Buchi type) with water recirculating chiller	Yes		
38	Separating funnel shaker	No		
39	Soxhlet Apparatus	Yes		
40	Solid Phase Extraction (SPE) /SPME Extraction system	No		
41	Thermometer (Alcohol)	Yes		
42	Dry & wet bulb Thermometer	Yes		
43	Toxicity characteristic leaching procedure (TCLP) Extractors (Zero head and Bottle)	Yes		
44	Ultra sonic water bath- Capacity 3 litre	No		
45	Water Bath with temperature control (*2 Nos)	Yes		
46	Water Bath with temp. for mercury sample digestion- 20 BOD Bottles	No		

D. Analytical Instruments at Environmental Laboratories

a) Mandatory Requirements

1	Atomic Absorption spectrometer (AAS)- Flame, Hydride & Graphite Tube Atomizer (GTA)	Yes		
2	Binocular Stereo Zoom Microscope	No		
3	Bomb Calorimeter	No		



4	BTX Analyzer with BTX calibrator	No		
5	Colony counter	No		
6	Conductivity meter- 2 nos.	Yes		
7	Environment conditioning chamber	No		
8	Digital Burettes- 50 ml*2, 100 ml*2	No		
9	Dissolved Oxygen Meter (Bench model)	No		
10	Flame Photometer	Yes		
11	Flash Point Apparatus	No		
12	Gas Chromatograph Mass Spectrometer	No		
13	High Performance Liquid Chromatograph (HPLC)	No		
14	Inductively Coupled Plasma (ICP) Spectrometer-OES	No		
15	Ion Chromatograph Anion & Cations	No		
16	Methane and Non Methane (NMHC) Analyzer	No		
17	Microscope – 100x	No		
18	Microscope Binocular Research	No		
19	CO (NDIR based) Analyzer	No		
20	Nephelometer (Turbidity Meter)	Yes		
21	pH-Meter with combined electrode (3 point)- 2 nos.	Yes		
22	Specific ion Analyzer with ion selective electrodes	Yes		
23	Spectrophotometer Visible (Portable)	Yes		
24	TKN Analyzer semi-automatic with aluminum block digester	No		
25	UV-Vis Spectrophotometer	Yes		
26	Moisture Content Analyzer	No		



b) Optional Requirements				
1	Automatic Titration Assembly	No		
2	Carbon, Hydrogen, Nitrogen and Sulphur (CHNS) Elemental Analyzer	No		
3	EDXRF Analyzer/WDXRF Analyzer	No		
4	Fourier-transform infrared Spectrometer (FTIR)	No		
5	Flocculator (Jar testing apparatus)	No		
6	Toxic Gas Analyzer	No		
7	Organic Halogen (AOX/TOX) Analyzer	No		
8	TOC Analyzer	No		
9	High Resolution Mass Spectrometer (HRGC-HRMS)	No		
10	Inductively Coupled Plasma Mass (ICP-MS) Spectrometer	No		
11	X Ray Fluorescence (XRF) Spectrometer (Portable)	No		

Specific remarks, if any:



LABORATORY ANALYTICAL FACILITIES

Name of the Board / Committee: Siliguri Regional Laboratory, West Bengal Pollution Control Board

PART I: Facility available for monitoring of environmental parameters:

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
A. Sample Matrix / Group of Water and Wastewater				
(a) Physical Tests				
1	Temperature	Yes		
2	Colour	No		
3	pH	Yes		
4	Turbidity	Yes		
5	Conductivity	Yes		
6	Total Solids	Yes		
7	Total Dissolved Solids (TDS)	Yes		



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8	Total Suspended Solids (TSS)	Yes		
(b) Inorganic Tests				
(i) General & Non-metallic				
1	Alkalinity	Yes		
2	Chloride	Yes		
3	Cyanide	Yes		
4	Dissolved oxygen	Yes		
5	Nitrite nitrogen	Yes		
6	Nitrate nitrogen	Yes		
7	Ammonical nitrogen	Yes		
8	Fluoride	Yes		
9	Hardness (Total)	Yes		
10	Calcium	Yes		
11	Magnesium	Yes		
12	Phosphate	Yes		
13	Sulphate	Yes		
14	Sulphide	Yes		

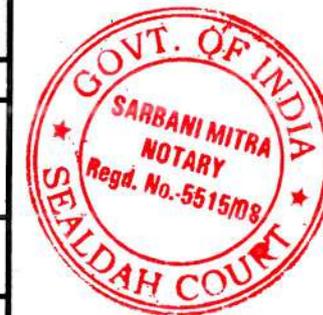


15	Total Residual chlorine (TRC)	Yes		
(ii) Trace Metals Tests				
1	Aluminium (Al)	No		
2	Arsenic (As) Total	No		
3	Barium	No		
4	Boron	No		
5	Chromium (Cr) Hexavalent	No		
6	Chromium (Cr) Total	No		
7	Cadmium (Cd)	No		
8	Cobalt (Co)	No		
9	Copper (Cu)	No		
10	Iron (Fe)	No		
11	Lead (Pb)	No		
12	Manganese (Mn)	No		
13	Mercury (Hg)	No		
14	Nickel (Ni)	No		
15	Potassium (K)	No		
16	Sodium (Na)	Yes		



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17	Vanadium (V)	No		
18	Zinc (Zn)	No		
19	Selenium (Se)	No		
(c) Organics (General) and Trace Organics Tests				
1	Biological Oxygen Demand (BOD)	Yes		
2	Chemical oxygen demand (COD)	Yes		
3	Oil & Grease	Yes		
4	Phenolic Compounds as C ₆ H ₅ OH	Yes		
5	Benzopyrene	No		
6	Pesticides			
6.a	Organochlorine Pesticides (OCPs) Tests			
i	Aldrin	No		
ii	Alpha Endosulphan	No		
iii	p,p'-DDT	No		
iv	Alpha-HCH	No		
v	Beta HCH	No		
vi	Beta Endosulphan	No		



vii	Gama-HCH	No		
viii	o,p'-DDT	No		
ix	p,p'-DDE	No		
6.b	Organophosphorus Pesticides (OPPs) Tests			
i	Malathion	No		
ii	Methyl parathion	No		
iii	Chlorpyrifos	No		
iv	Dimethoate	No		
v	Dieldrin	No		
vi	Ethion	No		
(d) Microbiological Tests				
1	Total Coliform	Yes		
2	Faecal Coliform	Yes		
3	E. Coli	Yes		
4	Faecal Streptococci	Yes		
(e) Toxicological Tests				



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1	Bioassay method for evaluation of toxicity using fish (90% survival of fish after 96 hrs in 100% effluent)	No		
B. Sample Matrix / Group of Solid / Solid Waste				
(a) Soil / Sediment / Compost Tests				
1	Cation Exchange Capacity (CEC)	No		
2	Electrical Conductivity (EC)	No		
3	Organic carbon (Chemical Method)	No		
4	pH	Yes		
5	Soil moisture	No		
6	Total nitrogen	No		
7	Metals by digestion (As, Cd, Cr, Pb, Ni etc.)	No		
(b) Hazardous Waste (Liquid / Slurry / Sludge / Solid / Semi-Solid) Tests				
1	Corrosivity	No		
2	Ignitability (Flash Point)	No		



3	Loss on Drying at 1050C (% Moisture Content)	No		
4	Loss on Drying at 5500C (% Organic Content)	No		
5	pH	Yes		
6	Organic carbon/matter (Chemical Method)	No		
7	Calorific Value	No		
8	Toxicity Characteristics leaching procedure (TCLP) Leachate and Metals in Leachate (As,Cd,Cr, Pb, Ni)	No		
C. Sample Matrix / Group of Analytes: Air				
(a) Ambient Air				
1	Nitrogen dioxide as NO ₂	Yes		
2	Sulphur dioxide (SO ₂)	Yes		
3	Particulate matter (PM ₁₀)	Yes		



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4	Particulate matter (PM2.5)	Yes		
5	Carbon Monoxide	No		
6	Ozone	No		
7	Benzene	No		
8	Ammonia	No		
9	Metals in Particulate Matter, Pb	No		
10	Metals in Particulate Matter, As	No		
11	Metals in Particulate Matter, Ni	No		
12	Particulate Benzo-a-Pyrene (BaP)	No		
(b) Stack Gas / Stationary Source Emission				
1	Particulate Matter	Yes		
2	Sulphur Dioxide	No		
3	Carbon Dioxide	No		



4	Carbon Monoxide (NDIR based Method)	No		
5	Temperature	No		
6	Moisture	No		
7	Oxygen	No		
8	Oxides of Nitrogen	No		
9	Halides (HCL/HF)	No		
(c) Noise Level				
1	Ambient Noise level measurement (20 to 140 dB)	Yes		
2	Source Noise Level Measurement (Industrial process, DG set- 20 to 140dB)	Yes		
(d) Meteorological Monitoring				
1	Ambient Temperature	No		
2	Wind direction	No		
3	Wind speed	No		
4	Relative Humidity	No		
5	Mixing Height	No		



Specific remarks, if any:

PART II: Details of Laboratory Infrastructure (Instruments and Equipment)

S. No.	Name of Instrument / Equipments	Available Yes / No	If the Instrument / Equipment is not available, Specify Timeline for procurement of this instrument (in months)	Action Taken for procurement of this Instrument / Equipment (Specification finalized / procurement initiated / work awarded / outsourced)
A. List of Instruments / Equipment for Sampling of Water, Wastewater and Soil / Hazardous Wastes				
a) Mandatory Requirements				
1	Portable / Pen type pH meter / pH strip	Yes (Strip)		
2	Portable Dissolved Oxygen Meter / Field Fixing using chemicals	Field Fixing		
3	Electrical Conductivity meter pen type	No		
4	Flow meter / Physical flow measuring	Physical Flow Measuring		
5	GPS / Mobile with GPS app	Yes		



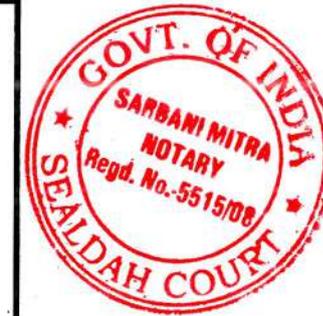
6	Ice Box (2 nos.) (150 litre & 100 litre capacities)	Yes		
7	Thermometer	Yes		
8	Stainless steel bucket with nylon rope and mug	Yes		
9	Ground water level measuring device	No		
10	Scoop / shovel	Yes		
11	Auger / core sampler	Yes		
b) Optional Requirements				
1	Bottom Sampler / Depth sampler	Yes		
2	Chloroscope for residual chlorine	Yes		



3	Vandorn or equivalent water sampler (Automatic sampler when composite sampling to be done)	Yes		
4	Ekman Dredge	Yes		
B. List of Instruments / Equipment for Sampling of Ambient Air and Source Emission monitoring				
a) Mandatory Requirements				
1	Fine dust samplers PM2.5 (*4 Nos)	Yes		
2	Respirable Dust Sampler PM 10 (* 4 Nos)	Yes		
3	High Volume Sampler (SPM) (4 Nos)	No		
4	Handy Sampler with set of glass impingers (*2 Nos)	No		
5	Low Volume Sampler (LVS)	No		
6	Tedler bags different sizes	No		



7	Meteorological tower (All in one telescopic Mast) with sensors comprising wind speed, wind direction, ambient temp., Relative humidity, Solar radiation, rainfall etc.	No		
8	Nitrogen Cylinder portable	No		
9	Activated Charcoal tubes/ Tenex	No		
10	Barometer (Digital)	No		
11	Isokinetic Stack Monitoring Kit complete with Stack monitoring instrument panel with inclined cum vertical manometer, Cold Box, Vacuum pump, Glass assembly impingers	No		



12	Modified S type Stainless steel Pitot tube (Standard length) with Assembly	No		
13	Monoblock type, rotary design vacuum pump	No		
14	Orsat Apparatus	No		
15	Source emission monitoring Impingers train set with spare impingers 100 ml & 225 ml capacity	No		
16	Stainless steel heated Sampling Probes with thimble holders short and long	No		
17	Flue Gas analyzer	No		
18	Thermometer/ Thermocouple	No		
19	Calibrator for Noise Meters	No		
20	Digital Sound level (Noise) Metres	Yes		



21	Portable TOC Analyzer for emission monitoring.	No		
22	Polyurethane Foam PUF Sampler	No		
b) Optional Requirements				
1	Anemometer	No		
2	Weather Monitoring system	No		
3	Wind speed/wind direction monitor	No		
4	Continuous Ambient Air Monitoring System, Fixed	Yes		
5	Continuous PM10 Analyzer	Yes		
6	Continuous Ambient Air Monitoring System, Mobile	No		
7	Continuous PM2.5 analyzer	Yes		
8	Ambient Nitrogen Oxides (NO-NO2-NOx Analyzer	Yes		



9	Ambient Ozone Analyzer	Yes		
10	Ambient BTEX Analyzer	Yes		
11	Multipoint Gas Calibration system	Yes		
12	Ambient Sulphur Dioxide analyzer	Yes		
13	Ambient Carbon Monoxide & Carbon dioxide analyzer	Yes		
14	Total Hydrocarbon analyzer	Yes		
15	Ambient Ammonia analyzer	Yes		
16	Zero Gas Generator	Yes		
17	Synthetic Air Cylinder	Yes		
18	Calibration Gas Cylinders, SO ₂ , NO, CO, NH ₃ , Benzene and Toluene One each with stainless steel Regulators	Yes		



19	Continuous emission monitoring equipment	No		
20	19 inch Rack mounting system for air analyzers	No		
21	Dry Gas Meter	No		
22	Diesel Exhaust analyzer	No		
23	Exhaust CO/HC analyzer with Sampling Probe	No		
24	Automated Noise Monitoring System	Yes		
25	Integrating Sound level meter	Yes		
26	Continuous PM10& PM2.5 Monitoring Analyzer TEOM system	Yes		
27	Top loading orifice kit for calibration of HVS	No		
28	Permeation tubes (SO ₂ , NO-NO ₂ -NO _x ,NH ₃ , BTX)	No		



C. List of Equipment required for processing of Environmental Samples:				
a) Mandatory Requirements				
1	Accelerated Solvent Extraction (ASE) System	No		
2	Ammonia distillation assembly/TKN Analyzer	No		
3	Analytical Balance 4/5 digit & 6 digit (Digital)	Yes		
4	Aquarium for Toxicity bioassay test with complete accessories (*4 Nos)	No		
5	Autoclave (*2 Nos)	Yes		
6	Bacteriological Incubators Stainless steel (*2 Nos)	Yes		
7	Bio safety cabinets	Yes		
8	BOD Incubators (2 nos.)	Yes		
9	Centrifuge	Yes		



10	COD Digestion heated Blocks (2) with capacity 16 nos. or more	Yes		
11	Cyanide Distillation Assembly (3)	No		
12	Deep Freezer- Capacity 500 litre	No		
13	Laboratory Ball Mill Grinder	No		
14	Laboratory Grinder	Yes		
15	Laminar Flow bench for Microbiological analysis	Yes		
16	Magnetic Stirrer with heating system (*2 Nos)	Yes		
17	Mechanical Shaker	Yes		
18	Membrane Filtration assembly with vacuum pump (2 nos.)	Yes		
19	Microbial culture refrigerator	Yes		
20	Microwave Digester with 16 vessels/ Hot Plate	No		



21	Muffle Furnace (*1 Nos), Range 1200 C	Yes		
22	Phenol distillation assembly (3)	No		
23	Plate counter, Manual/Automatic	No		
24	Digestion Chambers/ Fume hood	No		
25	Digital Thermometer & Humidity meter- All lab area	Yes		
26	Dispensers (Various capacities) up to 5, 10, 25 & 50 ml	Yes		
27	Filtration Assembly with vacuum pump	Yes		
28	Fluoride Distillation Assembly (3)	NA		
29	Arsenic / Fluoride Glass Distillation assemblies	NA		
30	Glass Double Distillation Assembly /Water Purification System	Water Purification System		
31	Heating mantles (2 nos.)	Yes		



32	Hot plates (small, Medium and Large) (*2 nos.)	Yes		
33	Thermo Hygrometer	Yes		
34	Imhoff Cone	Yes		
35	Top loading Precision Digital Balance (minimum detection 0.001mg/0.01 mg) with anti-vibration facility- 3 nos. i.e 4/5 Digit (2 nos), - 6 Digit (1 no)	Yes		
36	Refrigerators Big Size 300 litres or more, double door- 2 nos.	Yes		
37	Rotary Evaporator (Buchi type) with water recirculating chiller	No		
38	Separating funnel shaker	No		
39	Soxhlet Apparatus	No		



40	Solid Phase Extraction (SPE) /SPME Extraction system	No		
41	Thermometer (Alcohol)	Yes		
42	Dry & wet bulb Thermometer	Yes		
43	Toxicity characteristic leaching procedure (TCLP) Extractors (Zero head and Bottle)	No		
44	Ultra sonic water bath- Capacity 3 litre	No		
45	Water Bath with temperature control (*2 Nos)	Yes		
46	Water Bath with temp. for mercury sample digestion- 20 BOD Bottles	No		
D. Analytical Instruments at Environmental Laboratories				
a) Mandatory Requirements				



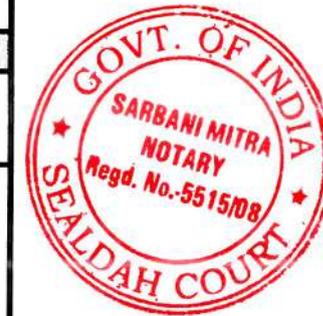
1	Atomic Absorption spectrometer (AAS)- Flame, Hydride & Graphite Tube Atomizer (GTA)	No		
2	Binocular Stereo Zoom Microscope	No		
3	Bomb Calorimeter	No		
4	BTX Analyzer with BTX calibrator	No		
5	Colony counter	No		
6	Conductivity meter- 2 nos.	Yes		
7	Environment conditioning chamber	No		
8	Digital Burettes- 50 ml*2, 100 ml*2	No		
9	Dissolved Oxygen Meter (Bench model)	No		
10	Flame Photometer	Yes		
11	Flash Point Apparatus	No		
12	Gas Chromatograph Mass Spectrometer	No		



13	High Performance Liquid Chromatograph (HPLC)	No		
14	Inductively Coupled Plasma (ICP) Spectrometer-OES	No		
15	Ion Chromatograph Anion & Cations	No		
16	Methane and Non Methane (NMHC) Analyzer	No		
17	Microscope – 100x	No		
18	Microscope Binocular Research	No		
19	CO (NDIR based) Analyzer	No		
20	Nephelometer (Turbidity Meter)	Yes		
21	pH-Meter with combined electrode (3 point)- 2 nos.	Yes		



22	Specific ion Analyzer with ion selective electrodes	Yes		
23	Spectrophotometer Visible (Portable)	No		
24	TKN Analyzer semi-automatic with aluminum block digester	No		
25	UV-Vis Spectrophotometer	Yes		
26	Moisture Content Analyzer	No		
b) Optional Requirements				
1	Automatic Titration Assembly	No		
2	Carbon, Hydrogen, Nitrogen and Sulphur (CHNS) Elemental Analyzer	No		
3	EDXRF Analyzer/WDXRF Analyzer	No		
4	Fourier-transform infrared Spectrometer (FTIR)	No		



5	Flocculator (Jar testing apparatus)	No		
6	Toxic Gas Analyzer	No		
7	Organic Halogen (AOX/TOX) Analyzer	No		
8	TOC Analyzer	No		
9	High Resolution Mass Spectrometer (HRGC-HRMS)	No		
10	Inductively Coupled Plasma Mass (ICP-MS) Spectrometer	No		
11	X Ray Fluorescence (XRF) Spectrometer (Portable)	No		

Specific remarks, if any:



LABORATORY ANALYTICAL FACILITIES

Name of the Board / Committee: Malda Regional Laboratory, West Bengal Pollution Control Board

PART I: Facility available for monitoring of environmental parameters:

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
A. Sample Matrix / Group of Water and Wastewater				
(a) Physical Tests				
1	Temperature	Yes		
2	Colour	No		
3	pH	Yes		
4	Turbidity	Yes		
5	Conductivity	Yes		
6	Total Solids	Yes		
7	Total Dissolved Solids (TDS)	Yes		
8	Total Suspended Solids (TSS)	Yes		
(b) Inorganic Tests				
(i) General & Non-metallic				
1	Alkalinity	Yes		
2	Chloride	Yes		
3	Cyanide			
4	Dissolved oxygen	Yes		
5	Nitrite nitrogen	Yes		
6	Nitrate nitrogen	Yes		
7	Ammonical nitrogen	Yes		
8	Fluoride	Yes		
9	Hardness (Total)	Yes		
10	Calcium	Yes		
11	Magnesium	Yes		
12	Phosphate	Yes		
13	Sulphate	Yes		
14	Sulphide	Yes		
15	Total Residual chlorine (TRC)	Yes		
(ii) Trace Metals Tests				
1	Aluminium (Al)	No		
2	Arsenic (As) Total	No		
3	Barium	No		
4	Boron	No		
5	Chromium (Cr) Hexavalent	No		
6	Chromium (Cr) Total	No		
7	Cadmium (Cd)	No		
8	Cobalt (Co)	No		
9	Copper (Cu)	No		



10	Iron (Fe)	No		
11	Lead (Pb)	No		
12	Manganese (Mn)	No		
13	Mercury (Hg)	No		
14	Nickel (Ni)	No		
15	Potassium (K)	No		
16	Sodium (Na)	No		
17	Vanadium (V)	No		
18	Zinc (Zn)	No		
19	Selenium (Se)	No		
(c) Organics (General) and Trace Organics Tests				
1	Biological Oxygen Demand (BOD)	Yes		
2	Chemical oxygen demand (COD)	Yes		
3	Oil & Grease	Yes		
4	Phenolic Compounds as C ₆ H ₅ OH	No		
5	Benzopyrene	No		
6	Pesticides			
6.a	Organochlorine Pesticides (OCPs) Tests			
i	Aldrin	No		
ii	Alpha Endosulphan	No		
iii	p,p'-DDT	No		
iv	Alpha-HCH	No		
v	Beta HCH	No		
vi	Beta Endosulphan	No		
vii	Gama-HCH	No		
viii	o,p'-DDT	No		
ix	p,p'-DDE	No		
6.b	Organophosphorus Pesticides (OPPs) Tests			
i	Malathion	No		
ii	Methyl parathion	No		
iii	Chlorpyriphos	No		
iv	Dimethoate	No		
v	Dieldrin	No		
vi	Ethion	No		
(d) Microbiological Tests				
1	Total Coliform	Yes		
2	Faecal Coliform	Yes		
3	E. Coli	Yes		
4	Faecal Streptococci	Yes		
(e) Toxicological Tests				
1	Bioassay method for evaluation of toxicity using fish (90% survival of fish after 96 hrs in 100% effluent)	No		
B. Sample Matrix / Group of Solid / Solid Waste				
(a) Soil / Sediment / Compost Tests				



1	Cation Exchange Capacity (CEC)	No		
2	Electrical Conductivity (EC)	No		
3	Organic carbon (Chemical Method)	No		
4	pH	Yes		
5	Soil moisture	No		
6	Total nitrogen	No		
7	Metals by digestion (As, Cd, Cr, Pb, Ni etc.)	No		

(b) Hazardous Waste (Liquid / Slurry / Sludge / Solid / Semi-Solid) Tests

1	Corrosivity	No		
2	Ignitability (Flash Point)	No		
3	Loss on Drying at 1050C (% Moisture Content)	No		
4	Loss on Drying at 5500C (% Organic Content)	No		
5	pH	Yes		
6	Organic carbon/matter (Chemical Method)	No		
7	Calorific Value	No		
8	Toxicity Characteristics leaching procedure (TCLP) Leachate and Metals in Leachate (As,Cd,Cr, Pb, Ni)	No		

C. Sample Matrix / Group of Analytes: Air**(a) Ambient Air**

1	Nitrogen dioxide as NO ₂	Yes		
2	Sulphur dioxide (SO ₂)	Yes		
3	Particulate matter (PM ₁₀)	Yes		
4	Particulate matter (PM _{2.5})	Yes		
5	Carbon Monoxide	No		
6	Ozone	No		
7	Benzene	No		
8	Ammonia	No		
9	Metals in Particulate Matter, Pb	No		
10	Metals in Particulate Matter, As	No		



11	Metals in Particulate Matter, Ni	No		
12	Particulate Benzo-a-Pyrene (BaP)	No		
(b) Stack Gas / Stationary Source Emission				
1	Particulate Matter	Yes		
2	Sulphur Dioxide	No		
3	Carbon Dioxide	No		
4	Carbon Monoxide (NDIR based Method)	No		
5	Temperature	No		
6	Moisture	No		
7	Oxygen	No		
8	Oxides of Nitrogen	No		
9	Halides (HCL/HF)	No		
(c) Noise Level				
1	Ambient Noise level measurement (20 to 140 dB)	Yes		
2	Source Noise Level Measurement (Industrial process, DG set-20 to 140dB)	Yes		
(d) Meteorological Monitoring				
1	Ambient Temperature	No		
2	Wind direction	No		
3	Wind speed	No		
4	Relative Humidity	No		
5	Mixing Height	No		

Specific remarks, if any:



PART II: Details of Laboratory Infrastructure (Instruments and Equipment)

S. No.	Name of Instrument / Equipments	Available Yes / No	If the Instrument / Equipment is not available, Specify Timeline for procurement of this instrument (in months)	Action Taken for procurement of this Instrument / Equipment (Specification finalized / procurement initiated / work awarded / outsourced)
A. List of Instruments / Equipment for Sampling of Water, Wastewater and Soil / Hazardous Wastes				
a) Mandatory Requirements				
1	Portable / Pen type pH meter / pH strip	Yes (Strip)		

2	Portable Dissolved Oxygen Meter / Field Fixing using chemicals	Field Fixing		
3	Electrical Conductivity meter pen type	No		
4	Flow meter / Physical flow measuring	Physical Flow Measuring		
5	GPS / Mobile with GPS app	Yes		
6	Ice Box (2 nos.) (150 litre & 100 litre capacities)	Yes		
7	Thermometer	Yes		
8	Stainless steel bucket with nylon rope and mug	Yes		
9	Ground water level measuring device	No		
10	Scoop / shovel	Yes		
11	Auger / core sampler	Yes		
b) Optional Requirements				
1	Bottom Sampler / Depth sampler	Yes		
2	Chloroscope for residual chlorine	Yes		
3	Vandorn or equivalent water sampler (Automatic sampler when composite sampling to be done)	Yes		
4	Ekman Dredge	Yes		
B. List of Instruments / Equipment for Sampling of Ambient Air and Source Emission monitoring				
a) Mandatory Requirements				
1	Fine dust samplers PM2.5 (*4 Nos)	Yes		
2	Respirable Dust Sampler PM 10 (* 4 Nos)	Yes		
3	High Volume Sampler (SPM) (4 Nos)	No		
4	Handy Sampler with set of glass impingers (*2 Nos)	No		
5	Low Volume Sampler (LVS)	No		
6	Tedler bags different sizes	No		



7	Meteorological tower (All in one telescopic Mast) with sensors comprising wind speed, wind direction, ambient temp., Relative humidity, Solar radiation, rainfall etc.	No		
8	Nitrogen Cylinder portable	No		
9	Activated Charcoal tubes/ Tenex	No		
10	Barometer (Digital)	No		
11	Isokinetic Stack Monitoring Kit complete with Stack monitoring instrument panel with inclined cum vertical manometer, Cold Box, Vacuum pump, Glass assembly impingers	No		
12	Modified S type Stainless steel Pitot tube (Standard length) with Assembly	No		
13	Monoblock type, rotary design vacuum pump	No		
14	Orsat Apparatus	No		
15	Source emission monitoring Impingers train set with spare impingers 100 ml & 225 ml capacity	No		
16	Stainless steel heated Sampling Probes with thimble holders short and long	No		
17	Flue Gas analyzer	No		
18	Thermometer/ Thermocouple	No		
19	Calibrator for Noise Meters	No		
20	Digital Sound level (Noise) Metres	Yes		



21	Portable TOC Analyzer for emission monitoring.	No		
22	Polyurethane Foam PUF Sampler	No		
b) Optional Requirements				
1	Anemometer	No		
2	Weather Monitoring system	No		
3	Wind speed/wind direction monitor	No		
4	Continuous Ambient Air Monitoring System, Fixed	No		
5	Continuous PM10 Analyzer	No		
6	Continuous Ambient Air Monitoring System, Mobile	No		
7	Continuous PM2.5 analyzer	No		
8	Ambient Nitrogen Oxides (NO-NO2-NOx Analyzer	No		
9	Ambient Ozone Analyzer	No		
10	Ambient BTEX Analyzer	No		
11	Multipoint Gas Calibration system	No		
12	Ambient Sulphur Dioxide analyzer	No		
13	Ambient Carbon Monoxide & Carbon dioxide analyzer	No		
14	Total Hydrocarbon analyzer	No		
15	Ambient Ammonia analyzer	No		
16	Zero Gas Generator	No		
17	Synthetic Air Cylinder	No		
18	Calibration Gas Cylinders, SO2, NO, CO, NH3B, benzene and Toluene One each with stainless steel Regulators	No		



19	Continuous emission monitoring equipment	No		
20	19 inch Rack mounting system for air analyzers	No		
21	Dry Gas Meter	No		
22	Diesel Exhaust analyzer	No		
23	Exhaust CO/HC analyzer with Sampling Probe	No		
24	Automated Noise Monitoring System	Yes		
25	Integrating Sound level meter	Yes		
26	Continuous PM10& PM2.5 Monitoring Analyzer TEOM system	No		
27	Top loading orifice kit for calibration of HVS	No		
28	Permeation tubes (SO ₂ , NO-NO ₂ -NO _x , NH ₃ , BTX)	No		

C. List of Equipment required for processing of Environmental Samples:

a) Mandatory Requirements

1	Accelerated Solvent Extraction (ASE) System	No		
2	Ammonia distillation assembly/TKN Analyzer	No		
3	Analytical Balance 4/5 digit & 6 digit (Digital)	Yes		
4	Aquarium for Toxicity bioassay test with complete accessories (*4 Nos)	No		
5	Autoclave (*2 Nos)	Yes		
6	Bacteriological Incubators Stainless steel (*2 Nos)	Yes		
7	Bio safety cabinets	Yes		
8	BOD Incubators (2 nos.)	Yes		
9	Centrifuge	No		



10	COD Digestion heated Blocks (2) with capacity 16 nos. or more	Yes		
11	Cyanide Distillation Assembly (3)	No		
12	Deep Freezer-Capacity 500 litre	No		
13	Laboratory Ball Mill Grinder	No		
14	Laboratory Grinder	Yes		
15	Laminar Flow bench for Microbiological analysis	No		
16	Magnetic Stirrer with heating system (*2 Nos)	Yes		
17	Mechanical Shaker	No		
18	Membrane Filtration assembly with vacuum pump (2 nos.)	No		
19	Microbial culture refrigerator	Yes		
20	Microwave Digester with 16 vessels/ Hot Plate	No		
21	Muffle Furnace (*1 Nos), Range 1200 C	Yes		
22	Phenol distillation assembly (3)	No		
23	Plate counter, Manual/Automatic	No		
24	Digestion Chambers/ Fume hood	No		
25	Digital Thermometer & Humidity meter- All lab area	Yes		
26	Dispensers (Various capacities) up to 5, 10, 25 & 50 ml	Yes		
27	Filtration Assembly with vacuum pump	No		
28	Fluoride Distillation Assembly (3)	No		
29	Arsenic / Fluoride Glass Distillation assemblies	No		



30	Glass Double Distillation Assembly /Water Purification System	Water Purification System		
31	Heating mantles (2 nos.)	Yes		
32	Hot plates (small, Medium and Large) (*2 nos.)	Yes		
33	Thermo Hygrometer	Yes		
34	Imhoff Cone	No		
35	Top loading Precision Digital Balance (minimum detection 0.001mg/0.01 mg) with anti-vibration facility- 3 nos. i.e 4/5 Digit (2 nos), - 6 Digit (1 no)	No		
36	Refrigerators Big Size 300 litres or more, double door- 2 nos.	Yes		
37	Rotary Evaporator (Buchi type) with water recirculating chiller	No		
38	Separating funnel shaker	No		
39	Soxhlet Apparatus	No		
40	Solid Phase Extraction (SPE) /SPME Extraction system	No		
41	Thermometer (Alcohol)	Yes		
42	Dry & wet bulb Thermometer	Yes		
43	Toxicity characteristic leaching procedure (TCLP) Extractors (Zero head and Bottle)	No		
44	Ultra sonic water bath- Capacity 3 litre	No		
45	Water Bath with temperature control (*2 Nos)	Yes		



46	Water Bath with temp. for mercury sample digestion- 20 BOD Bottles	No		
D. Analytical Instruments at Environmental Laboratories				
a) Mandatory Requirements				
1	Atomic Absorption spectrometer (AAS)- Flame, Hydride & Graphite Tube Atomizer (GTA)	No		
2	Binocular Stereo Zoom Microscope	No		
3	Bomb Calorimeter	No		
4	BTX Analyzer with BTX calibrator	No		
5	Colony counter	No		
6	Conductivity meter- 2 nos.	Yes		
7	Environment conditioning chamber	No		
8	Digital Burettes- 50 ml*2, 100 ml*2	No		
9	Dissolved Oxygen Meter (Bench model)	No		
10	Flame Photometer	No		
11	Flash Point Apparatus	No		
12	Gas Chromatograph Mass Spectrometer	No		
13	High Performance Liquid Chromatograph (HPLC)	No		
14	Inductively Coupled Plasma (ICP) Spectrometer-OES	No		
15	Ion Chromatograph Anion & Cations	No		
16	Methane and Non Methane (NMHC) Analyzer	No		
17	Microscope - 100x	No		
18	Microscope Binocular Research	No		
19	CO (NDIR based) Analyzer	No		



20	Nephelometer (Turbidity Meter)	Yes		
21	pH-Meter with combined electrode (3 point)- 2 nos.	Yes		
22	Specific ion Analyzer with ion selective electrodes	Yes		
23	Spectrophotometer Visible (Portable)	No		
24	TKN Analyzer semi-automatic with aluminum block digester	No		
25	UV-Vis Spectrophotometer	Yes		
26	Moisture Content Analyzer	No		
b) Optional Requirements				
1	Automatic Titration Assembly	No		
2	Carbon, Hydrogen, Nitrogen and Sulphur (CHNS) Elemental Analyzer	No		
3	EDXRF Analyzer/WDX RF Analyzer	No		
4	Fourier-transform infrared Spectrometer (FTIR)	No		
5	Flocculator (Jar testing apparatus)	No		
6	Toxic Gas Analyzer	No		
7	Organic Halogen (AOX/TOX) Analyzer	No		
8	TOC Analyzer	No		
9	High Resolution Mass Spectrometer (HRGC-HRMS)	No		
10	Inductively Coupled Plasma Mass (ICP-MS) Spectrometer	No		
11	X Ray Fluorescence (XRF) Spectrometer (Portable)	No		



Specific remarks, if any:

PART III: DETAILS OF LABORATORIES ESTABLISHED UNDER THE WATER (P & CP) ACT, 1974

Laboratory established by the Board, as per Section 17 (2) of Water Act - Nos.				Laboratories / Institutes specified by State Govt., as State Water Laboratory as per Section 52 (1) of Water Act (other than those set up by Board) - Nos								NABL Accreditation		EPA Recognition			
No. of Laboratories established / recognised	No. of Laboratories (out of those given in column No. (1)) notified in Official Gazette	No. of remaining Laboratories Planned for Notification (out of those laboratories given in column No.(1)).	Time line required for notification of Laboratories given in column No. (3) (in months)	No. of Laboratories established / specified		No. of Laboratories (out of those given in column No. (5 & 6)) notified in Official Gazette		No. of remaining Laboratories Planned for Notification (out of those laboratories given in column No. (5 & 6)).		Time line required for notification of Laboratories given in column No. (9 & 10) (in months)		No. of Board's Laboratories 17 (2)	No. of State Water Laboratories 52(1)		No. of Board's Laboratories 17 (2)	No. of State Water Laboratories 52(1)	
				Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.		Govt.	Pvt.		Govt.	Pvt.
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18
												2			0		

Note: The list of the laboratory may be attached separately (Board, State Govt. and Private)

Specific remarks, if any:



PART IV: DETAILS OF LABORATORIES ESTABLISHED UNDER THE AIR (P & CP) ACT, 1981

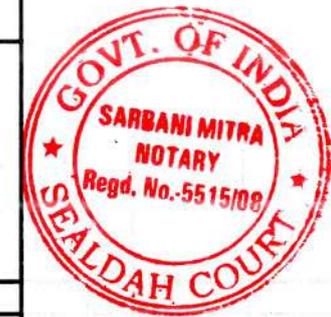
Laboratory established by the Board, as per Section 17 (2) of Air Act - Nos.				Laboratories / Institutes specified by State Govt., as State Air Laboratory as per Section 28 (1) of Air Act (other than those set up by Board) - Nos								NABL Accreditation		EPA Recognition			
No. of Laboratories established / recognised	No. of Laboratories (out of those given in column No. (1)) notified in Official Gazette	No. of remaining Laboratories Planned for Notification (out of those laboratories given in column No.(1)).	Time line required for notification of Laboratories given in column No. (3) (in months)	No. of Laboratories established / specified		No. of Laboratories (out of those given in column No. (5 & 6)) notified in Official Gazette		No. of remaining Laboratories Planned for Notification (out of those laboratories given in column No. (5 & 6)).		Time line required for notification of Laboratories given in column No. (9 & 10) (in months)		No. of Board's Laboratories 17 (2)	No. of State Water Laboratories 28(1)		No. of Board's Laboratories 17 (2)	No. of State Water Laboratories 28(1)	
				Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.		Govt.	Pvt.		Govt.	Pvt.
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18
												2			0		

Note: The list of the laboratory may be attached separately (Board, State Govt. and Private)

Specific remarks, if any:

PART V: DETAILS OF LABORATORIES PARTICIPATED ON ANALYTICAL QUALITY CONTROL AND QUALITY ASSURANCE CONDUCTED BY CPCB IN RESPECT OF WATER QUALITY PARAMETERS

S. No.	Name of the Laboratory with address	No. of Parameters in AQC Exercise				Number of Parameters Attempted				% Parameters Successful			
		33rd Exercise	34th Exercise	35th Exercise	36th Exercise	33rd Exercise	34th Exercise	35th Exercise	36th Exercise	33rd Exercise	34th Exercise	35th Exercise	36th Exercise
1	Central Laboratory, Paribesh Bhawan, 10A, LA Block, Sector-III, Salt Lake, Kolkata-700 106	9	11	..	18	9	11	..	18	55.56	63.64	..	83.33
2	Barrackpur Regional Laboratory, Panpore More, Kalyani Expressway, Vill.Panpur, P.O.Narayanpur, Dist: 24-Parganas (N), Pin-743 126	9	11	Not participated	18	9	11	Not participated	18	100	86.36	Not participated	94.44
3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA



Note: 33rd Exercise (Metals) held in 2020-2021,

34th Exercise (General and Physico-Chemical parameters) held in 2021-2022

35th Exercise (Pesticides) held in 2023

36th Exercise (General and Physico-Chemical parameters) held in 2023-2024

Provide details of each Laboratories (Central, Regional/Zonal, District) in separate Row

Specific remarks, if any:

PART VI: DETAILS OF LABORATORIES PARTICIPATED ON PROFICIENCY TESTING (PT) PERFORMANCE
(Information to be given for last 3 years)

S. No.	Name of Laboratory with address	Year of PT participation	PT Sample Provider (Name and Address)	Number of Parameters in Accreditation Scope	Number of Parameters for which Laboratory participated in PT exercise	Number of Parameter with Satisfactory Results
1	Central Laboratory, Paribesh Bhawan, 10A, LA Block, Sector-III, Salt Lake, Kolkata-700 106	2022	Global Lab Solutions, D-29, 3rd Floor, Acharya Niketan, Mayur Vihar, PH-1, Delhi - 110091	0	3	3
		2023	1. Green Economy Initiative Pvt.Ltd., 215, Silver City (Main), Amabala Chandigarh Express Way (NH-22), Punjab - 140603	50	50	50
			2. Global Lab Solutions, D-29, 3rd Floor, Acharya Niketan, Mayur Vihar, PH-1, Delhi - 110091	3	3	3



		2024	Green Economy Initiative Pvt.Ltd., 215, Silver City (Main), Amabala Chandigarh Express Way (NH-22), Punjab - 140603	20	20	20	
2	Barrackpur Regional Laboratory, Panpore More, Kalyani Expressway, Vill.Panpur, P.O.Narayanpur, Dist: 24-Parganas (N), Pin-743 126		1. Green Economy Initiative Pvt.Ltd., 215, Silver City (Main), Amabala Chandigarh Express Way (NH-22), Punjab - 140603				
		2022		-	-	-	
		2023		39	51	51	
		2024	39	5	4		
			2. Global Lab Solutions, D-29, 3rd Floor, Acharya Niketan, Mayur Vihar, PH-1, Delhi - 110091				
		2022		2	4	4	
2023	2	4		4			
2024	2	4	3				



Note: Provide details of each Laboratory (Central, Regional/Zonal, District) in separate Row

Specific remarks, if any: