

32963

**OFFICE OF THE DEPUTY COMMISSIONER, BOKARO**  
**(Legal Section)**

Letter No.-...../vidhi

From,

Vijaya Jadhav, IAS,  
Deputy Commissioner  
-cum- Chairman,  
DGC, Bokaro.

To,

The Registrar,  
Hon'ble National Green Tribunal,  
Copernicus Marg, New Delhi.  
Email :- judicial-ngt@gov.in

Bokaro, Dated - ...../2024

Sub :- Submission of compliance report in the light of direction of Hon'ble Green Tribunal in OA No.- 200/2014 M.C. Mehta Vs Union of India & Ors. passed on 18.09.2023, 24.11.2023 & 20.02.2024.

Sir,

In light of the order dated – 20.02.2024 in OA No 200/2024 M.C. Mehta Vs Union of India & Ors. passed by the Hon'ble Tribunal a compliance status report of Bokaro district is being submitted herewith.

It is requested that the aforesaid compliance status report may kindly be placed before the Hon'ble Tribunal for consideration. Mr. Saurabh Jain, Advocate has been authorized to represent the district Bokaro in present proceedings and has been instructed accordingly to appear before the Hon'ble Tribunal in terms of the order dated 20.02.2024.

Enclosure : A/a

Yours Faithfully,

  
(Vijaya Jadhav, IAS)  
Deputy Commissioner  
-cum- Chairman,  
DGC, Bokaro.

Memo No.-...501...../vidhi, Dated - 31/03...../2024

Copy for information to :-

1. Mr. Saurabh Jain, Advocate, ([saurabhjain.law@gmail.com](mailto:saurabhjain.law@gmail.com)) for filing and necessary action.
2. The Secretary, Urban Development & Housing Department, Government of Jharkhand.
3. The Principal Secretary, Forest, Environment and Climate Changes, Gov. of Jharkhand, Ranchi.
4. The Chief Secretary, Government of Jharkhand, Ranchi.

  
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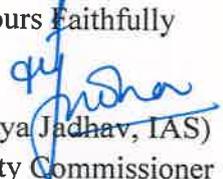
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It is requested that the aforesaid compliance status report may kindly be placed before the Hon'ble Tribunal for consideration. Mr. Saurabh Jain, Advocate has been authorized to represent the district Bokaro in present proceedings and has been instructed accordingly to appear before the Hon'ble Tribunal in terms of the order dated 20.02.2024.

Enclosure : A/a

Yours Faithfully

  
(Vijaya Jadhav, IAS)  
Deputy Commissioner  
-cum- Chairman,  
DGC, Bokaro.

**Compliance Report of directions issued by Hon'ble NGT in the order dated 20-02-2024, 24.11.2023 & 18.09.2023 in the matter of O.A. No. 200/2014 M.C. Mehta Vs. Union of India & Ors :-**

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1. That, In compliance of the directions issued by Hon'ble Green Tribunal vide order dated 20.02.2024 passed in O.A. No. 200/2014 M.C. Mehta Vs. Union of India & Ors. district of Bokaro is filing a compiled report here.
2. That, in the order dated 20.02.2024, the Hon'ble Tribunal has given directions to submit the compliance report of its previous order dated 24.11.2023. In the said order the Hon'ble Tribunal has pointed out its concerns and quarries about the main pollution issues regarding river, the Ganga and its tributaries. The main points as mentioned in the order dated 24.11.2023 are as follows : –
  - i. Sewage
  - ii. Municipal Solid Waste Disposal
  - iii. Construction and Demolition Waste
  - iv. Industrial Effluent Discharge
  - v. Regulation of Flood Plain Zone
  - vi. Bio Medical Waste
  - vii. Mining
3. That, in continuation of the order dated – 24.11.2024, it is very important to mention here about the order of Hon'ble Tribunal dated 18-09-2023. The Hon'ble Tribunal vide its order dated – 18.09.2024, has specifically pointed out the issues related to different districts of Jharkhand viz. Sahebganj, Dhanbad, Bokaro and Ramgarh. Along with these districts of Jharkhand, the specific issues related to Bokaro district has been also described in the said order of the Hon'ble Tribunal.
4. That, specific points and issues related to Bokaro district as mentioned in the order dt.- 18.09.2023 of Hon'ble Tribunal is as follow :-

"8. So far as State of Jharkhand is concerned it has been pointed out that the main stream of river Ganga flows through District Sahibganj and the main tributary Damodar flows through three District viz Ramgarh, Dhanbad and Bokaro. The details of river Ganga and its Tributaries flowing through different districts of State of Jharkhand are as under :-

River	District	Issues
Ganga	Sahebganj	<ul style="list-style-type: none"> <li>• Brick kilns on floodplain</li> <li>• Illegal mining of sand, clay, stone</li> <li>• Sewerage from drains</li> <li>• River island cultivation</li> </ul>
Damodar (Origin-Palamu, Bihar)	Ramgarh Dhanbad Bokaro	<ul style="list-style-type: none"> <li>• Industrial towns- pollution from industrial effluents and hazardous waste.</li> </ul>
		<ul style="list-style-type: none"> <li>• Some ETPs non- performance and bypass into drain.</li> </ul>
		<ul style="list-style-type: none"> <li>• Mine water discharges</li> </ul>
		<ul style="list-style-type: none"> <li>• Fly ash from TPP (eg. Bokaro)</li> </ul>
		<ul style="list-style-type: none"> <li>• Coal washeries- consumption of water and discharge of liquid effluents.</li> </ul>
		<ul style="list-style-type: none"> <li>• Coke oven plants- produce tar oil, cyanide, ammonia and phenol.</li> </ul>
		<ul style="list-style-type: none"> <li>• The Bokaro steel and IISCO drain their effluents directly into the river Damodar.</li> </ul>
		<ul style="list-style-type: none"> <li>• Sindri (fertiliser and other chemical units)</li> </ul>
		<ul style="list-style-type: none"> <li>• Sewage discharge (mixed drain/ kucha drain contamination)</li> </ul>
		<ul style="list-style-type: none"> <li>• Municipal waste/ Biomedical waste/ Hazardous waste/ legacy waste disposal detailed status required as the three are major industrial town with dense population, health infrastructure and industries)</li> </ul>

River	Districts	Issues
		<ul style="list-style-type: none"> <li>• Groundwater in critical @ Ramgarh and Dhanbad</li> </ul>
Tributaries of Damodar Sufi River		
Nalkari		The main industrial units on this river are the BASL (steel) at Patratu and the

		Patratu Thermal Power Station (PTPS) that are polluting in nature
Bhairavi		
Konar		
Jamunia		
Bokaro	It passes through the West Bokaro and East Bokaro coalfields. Flows into the Konar River shortly before the later flows into the Damodar River.	Polluted with industrial as domestic effluents.
Khadia		Nitrate pollution
Haharo		
Ghari		
Barakar		Fluoride contamination

9. The industrial profile of Damodar River Basin in the State of Jharkhand is as under:-

#### INDUSTRIAL PROFILE OF DAMODAR RIVER BASIN

District	Industries	Status/Issues
Bokaro	Bokaro Steel Plant, BS City BTPS Bokaro Thermal Power Plant Usha Martin Ltd TPP Tenughat TPP Chandrapura TPP Bokaro Power Supply Co TATA Steel TPP Kathara TPP SAIL Elecrot steel Ltd (Now Vedanta)	Discharges into Ganga River (BSP) EC imposed

District	Industries	Status
Dhanbad	Coking plants, coal washeries, Chemicals, Cement, Distillery, Explosive factory and ancillary units. Maithan Power Ltd TPP Moonidih CPP BCCL.	No CETP in Dhanbad EC levied on polluters No closure order for establishment operating without STPs and damaging Damodar river. (pg. 23798, Affidavit)

Ramgarh	Ramgarh is an important industrial district of Jharkhand. Several mineral based industries like steel, sponge iron, cement, refractory and thermal power plant etc. are established due to availability of coal and other minerals. Patratu TPP Inland Power Ltd.	
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10. The key pollution issues as relating to the State of Jharkhand disclosed in the written synopsis of the petitioner are as under :-

**KEY POLLUTION ISSUES**

- i. *Illegal sand, clay and stone mining in the Ganga River and Damodar River Basins*
- ii. *Industrial pollution in Dhanbad, Bokaro, Sindri and Ramgarh*
- iii. *Sewage discharge from Sahibganj, Rajamahar, Dhanbad, Bokaro and other cities/ towns in the catchment are polluting the River Ganga and Damodar.*
- iv. *Floodplain encroachment*
- v. *River island encroachment (eg.Sahibganj)*
- vi. *ETPs under or non- performance. Not all units have installed ETPs and STPs*
- vii. *Mine water discharge- Ministry of Environment and Forest (MoEF), Government of India (GoI) based on Comprehensive Environmental Pollution Index (CEPI) declared (January 2010) Dhanbad as a critically polluted area and identified four blocks of Dhanbad district viz. Dhanbad Sadar, Jharia, Govindpur and Nirsa as critically polluted. The predominant sources of pollutants in Dhanbad are Mines, Industries, Bio-medical waste as well as sewage and sullage of municipal areas and the townships of the aforesaid mines and industries.*
- viii. *Disposal of Fly ash from TPP (e.g. Bokaro)*
- ix. *The over burden (OB) of mines, the rejects of coal washeries and ash of Thermal Power Plants are kept either on the river bed or near the river, which sooner or later go to the river. Further, the 11 sewage of towns, townships and suburbs finds way to downstream through septic tanks and soak pits.*

*✓*

- x. *Coal washeries- consumption of fresh water and discharge of liquid effluents.*
  - xi. *Coke oven plants- produce tar oil, cyanide, ammonia and phenol.*
  - xii. *The Bokaro steel and IISCO drain and other industries polluting river Damodar.*
  - xiii. *Municipal waste/ Bio-medical waste/ Hazardous waste disposal and related pollution.*
  - xiv. *Groundwater is critical @ Ramgarh and Dhanbad (over exploited).*
  - xv. *Diseases- As per the CAG Audit Report on General, Social and Economic (Non-PSUs) Sectors, 31 March 2014- NPCDCS was launched (2010-11) by Ministry of Health and Family Welfare (MH&FW), GoI, in 100 districts of 21 States which included three districts (Bokaro, Dhanbad and Ranchi) of Jharkhand for reducing the burden of Non-Communicable Diseases (NCDs) such as cancer, diabetes, cardiovascular diseases and stroke."*
5. That, in the light of order dt.- 18.09.2023 of the Hon'ble Tribunal, a meeting have been organized under the chairmanship of the Deputy Commissioner, Bokaro and by the order of Deputy Commissioner, Bokaro another supervision meeting was organized by the Divisional Forest Officer, Bokaro on dated – 24.02.2024 and 09.03.2024 respectively. In the said meetings all the departments concerned and authorities of the industrial units of Bokaro District were given directions to furnish the reports as per direction of the Hon'ble Green Tribunal.
- (Minutes of the meeting dated- 24.02.2024 and 09.03.2024 as Annexure-I series.)*
6. That, reports have been submitted by the concerned departments and the industrial units of the Bokaro in the light of the direction given in the meetings.
7. That, Regional Director, Jharkhand State Pollution Control Board, Dhanbad has also been given direction to co-ordinate and monitor the reports submitted by the department concerned and the industrial units.
8. The, factory inspector of the area has also been given direction to submit the requisite reports as per the direction of the Hon'ble Tribunal.
9. That, the reports received from different departments and industries a compiled report is

prepared as under.

**The compiled report of the Bokaro District is as follows:-**

That the point wise Compliance Report along with the progress status of the directions passed by the Hon'ble Tribunal vide order dated 18.09.2023 is as follows-

**A. Industrial towns- pollution from industrial effluents and hazardous waste.**

River Name	District Name	Town/ULB Name	Description	Remarks
River Damodar	Bokaro District	Chas Nagar Nigam	<ul style="list-style-type: none"> <li>12.44 MLD (million litre per day) waste water from 70 small and medium drains falls into Garga river.</li> </ul>	<ul style="list-style-type: none"> <li>DPR has been prepared for STP pending with urban and Housing department for approval.</li> </ul>
		Phusro Nagar Parishad	<ul style="list-style-type: none"> <li>Nagar Parishad Phusro has three natural drains (nallahs) which flow into the Damodar also, carrying mixed urban sewage.</li> <li>Sewage treatment plants of 10 MLD and 4 MLD are under construction along with interception and diversion structures.</li> <li>The respective sites are in Dhorikhas Ward No. 28 on Joria Nallah and Bermo Seam Ward No. 01 on Bodi Nallah.</li> </ul>	<ul style="list-style-type: none"> <li>Work is initiated.</li> <li>Sequencing Batch Reactor construction at foundation stage is going on.</li> </ul>
		Bokaro Steel Plant	<ul style="list-style-type: none"> <li>Bokaro Steel is having, lagoon based STP for treatment of sewage water from plant as well as township, which is established system for treatment of sewage.</li> <li>The sewage quality is being regularly monitored through in-house environmental laboratory of BSL and 3<sup>rd</sup> party monitoring through NABL accredited and MoEFCC recognized laboratory.</li> </ul>	<ul style="list-style-type: none"> <li>The treatment facility is working effectively and the discharge quality is well within the applicable standards as certified by the unit. <b>(annexure attached)</b></li> </ul>
		BIADA	<ul style="list-style-type: none"> <li>BIADA now known as JIADA is not touching the Damodar River as such there is no way to drain ETPs non-performance by-pass into drain.</li> </ul>	<ul style="list-style-type: none"> <li>As such there is no probability of pollution in the Damodar River owing to JIADA and no waste water is going in the river.</li> </ul>

*(Report provided by BSL / ULBs / BIADA are attached as Annexure-II, III & IV resp.)*

**B. Some ETPs Non-Performance and By-pass into Drain.**

S.No.	District Name	Compliance Status/Remarks
1	Bokaro District	<ul style="list-style-type: none"> <li>▪ BIADA now known as JIADA is not touching the Damodar River as such there is no way to drain ETPs non-performance by-pass into drain. As such there is no probability of pollution in the Damodar River owing to JIADA and no waste water is going in the river.</li> <li>▪ Phusro Nagar Parishad is a small town and there is no registered industrial unit in the Nagar Parishad area.</li> <li>▪ Chas Municipal Corporation is a small town and there is no registered industrial unit in the Nagar Parishad area.</li> <li>▪ Bokaro Steel Plant is using lagoon based STP for the plant as well as the township, which is monitored regularly through in house lab of BSL and 3<sup>rd</sup> party monitoring through NABL and then only is discharged well within the applicable standards.</li> </ul>

*(Report provided by BSL, ULBs & BIADA has been attached as Annexure- II, III & IV resp.)*

**C. Mine Water Discharges.**

S.No.	District Name	Compliance Status/Remarks
1	Bokaro District	<ul style="list-style-type: none"> <li>▪ The water discharge from Mines and Washeries of the Kathara Area is within the permissible limit as per the environmental regulations and standards set forth by the governing authorities.</li> <li>▪ The water discharged from the Kathara undergoes a comprehensive treatment process, which includes the utilization of well-established settling ponds, efficient Effluent Treatment Plants (ETPs), and strategically designed water sumps.</li> <li>▪ The water consumption of both washeries i.e Kathara washery and Sawang washery are 963.96 KLD and 547 KLD respectively and the both washeries are functioning on closed water circuit system.</li> <li>▪ The mine water from BCCL is being for sprinkling purpose in the mines, watering of the plants and after treatment from 2 pressure filters waters is supplied to colonies and villages.</li> <li>▪ Most of the mine water of CCL B&amp;K Area Kargaliis being used for sprinkling purpose for dust suppression and for watering of plants and whatsoever water discharged out of mines, undergoes comprehensive treatment which passes through strategically designed mine sumps and settling tanks/ponds.</li> </ul>

(Report provided by CCL Kathara, B&K Kargali, & BCCL has been attached as Annexure-V, VI & VII resp.)

**D. Fly ash from TPP (e.g. Bokaro).**

S.No.	District Name	Compliance Status/Remarks
1	Bokaro District	<ul style="list-style-type: none"> <li>▪ Dry fly ash is collected in two numbers of silos of capacity 2x1200 MT. Pond ash is being utilized in filling low lying areas in Khutri near, Jenamore, JIADA/BIADA and NHAI.</li> <li>▪ Fly ash from TTPS is poured into ash pond through ash pipelines, this ash has been used for filling low land areas of TTPS and after filling it is covered with soil. One silo is installed for dry fly ash and another silo is in the final stage of testing/ commissioning, work order for collection and disposal of dry fly ash from silo has already been placed.</li> <li>▪ CTPS generates 2300-2500 MT of fly ash on daily basis which is sold to M/S ACC Ltd., Sindri &amp; M/S Dalmia Cement, Bokaro also, Silo is installed. Rest Fly ash is transported to ash pond through running slurry which is evacuated by Hyva on daily basis for utilization of filling mines and NHAI uses.</li> <li>▪ BPSCL uses fly ash stored ash pond for construction of road/ back filling of low-lying areas. MoU has been signed with NHAI for utilization of the pond ash. It is also being used for back filling of low-lying areas of BSL. Fly ash is being supplied to M/S Dalmia Cement as per their requirements. Fly ash bricks manufacturing machines are installed for in-house brick manufacturing for internal use of BPSCL &amp; BSL.</li> <li>▪ Power plant fly ash from Vedanta Ltd. is sold to M/S Dalmia Cement Ltd., Bokaro. Dry fly ash is sold to M/S N.R. Construction Pvt. Ltd., M/s Aadishan Industries, M/S Eco Industries, M/S ACC Ltd. and Bed Ash is sold to M/S Shagan Commercials.</li> </ul>

(Report provided by Factory Inspector has been attached as Annexure-VIII.)

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**E. Coal Washeries- Consumption of Water and Discharge of Liquid Effluents.**

S.No.	District Name	Compliance Status/Remarks
1	Bokaro District	<ul style="list-style-type: none"> <li>▪ Currently no washery is active in B&amp;K Area, CCL. The only washery i.e. Kargali washery that exists, is closed since 2019 and is going to be dismantled soon as per company rules.</li> <li>▪ The water consumption of both washeries i.e. Kathara washery and Sawang washery are 963.96 KLD and 547 KLD respectively and the both washeries are functioning on closed water circuit system.</li> <li>▪ The mine water from BCCL is being for sprinkling purpose in the mines, watering of the plants and after treatment from 2 pressure filters waters is supplied to colonies and villages.</li> </ul>

*(Report provided by CCL Kathara, B&K Kargali, & BCCL has been attached as Annexure-V, VI & VII resp.)*

**F. Coke Oven Plants- Produce Tar Oil, Cyanide, Ammonia and Phenol.**

S.No.	District Name	Compliance Status/Remarks
1	Bokaro District	<ul style="list-style-type: none"> <li>▪ SAIL is operating with valid Hazardous Waste Authorization. The effluent generated from the Coke Oven is treated in BOD Plant and the treated effluent is being recycled &amp; reused in the process.</li> <li>▪ Tar Oil, Cyanide, Ammonia and Phenol are produced in byproduct recovery type coke oven. Vedanta Ltd. Bokaro has installed non-byproduct recovery type coke oven. Heat generated in coke oven is utilized in power generation from Waste Heat Recovery Boilers (WHRB). Hence there is no pollution from Coke oven.</li> </ul>

*(Report provided by BSL & Vedanta Ltd. has been attached as Annexure II & IX resp.)*

**G. The Bokaro steel and IISCO drain their effluents directly into the river Damodar.**

S.No.	District Name	Compliance Status/Remarks
1	Bokaro District	<ul style="list-style-type: none"> <li>▪ All the ETPs installed at SAIL including ETPS installed at Outfall 1 and 2, Coke Oven and CRM 3 is working satisfactory and no effluent is discharged in the drain or Damodar River without treatment. BSL has been designed with a central re-circulation system where the effluent discharged from various shops are treated locally in the shop and then recycled back through sludge compartment and cooling pond for treatment plants at Outfall 1 &amp; 2 of 1500 m<sup>3</sup>/hr capacity each for treatment and sent back to Cooling pond for BSL reuse.</li> </ul>

*(Report provided by BSL has been attached as Annexure II.)*

**H. Sewage Discharge (Mixed Drain/ Kucha Drain Contamination).**

S.No.	District Name	Compliance Status/Remarks
1	Bokaro District	<ul style="list-style-type: none"> <li>▪ 12.44 MLD (million liters per day) waste water from 70 small and medium drains of Chas Nagar Nigam falls into Garga River. DPR has been prepared for STP pending with for approval.</li> <li>▪ Nagar Parishad Phusro has three natural drains (nallahs) which flow into the Damodar also, carrying mixed urban sewage. Sewage treatment plants of 10 MLD and 4 MLD are under construction along with Interception and diversion structures. The respective sites are in Dhori Khas Ward No. 28 on Joria Nallah and Bermo Seam Ward No. 01 on Bodi Nallah. Sequencing Batch Reactor construction at foundation stage.</li> <li>▪ BIADA now known as JIADA is not touching the Damodar River as such there is no way to drain ETPs non-performance by-pass into drain. As such there is no chance of pollution in Damodar River due to JIADA and no wastage is going in the river.</li> </ul>

*(Report provided by ULBs & BIADA has been attached as Annexure- III & IV resp.)*

**I. Municipal Waste/ Biomedical Waste/ Hazardous Waste/ Legacy Waste Disposal Detailed Status.**

S.No.	District Name	Compliance Status/Remarks
1	Bokaro District	<ul style="list-style-type: none"> <li>▪ Door to Door waste collection being executed by Phusro Solid Waste Management Pvt Ltd., a joint venture between N.P Phusro, Cube Bio Energy. Total waste generated from the Phusro Nagar Parishad as per DPR is 42 TPD. The main components of the processing facility in the DPR includes: Mechanical segregation facility, wet waste processing facility, material recovery facility, construction and demolition waste facility, landfill facility for 15% of daily waste generation, storage of hazardous waste &amp; incineration facility with a leachate tank. Solid Waste Management Plant is under construction at Upar Dhoura Makoli, Ward No. 08. Boundary wall work for SWM site is ongoing. Currently, waste segregation in practice is negligible in the Phusro Nagar Parishad.</li> <li>▪ Incinerator facility available for biomedical waste at Central Hospital Dhori. Mini Incinerators installed for disposal of sanitary waste in 13 community toilets and 04 public toilets.</li> <li>▪ 12.44 MLD (million liters per day) waste water from 70 small and medium drains of Chas Nagar Nigam falls into Garga River. DPR has been prepared for STP pending with department for approval. Under Chas Nagar Nigam remediation of legacy waste is in process and 65%</li> </ul>

		<p>work is complete. Biomedical waste from some hospitals/ dispensaries is collected by an independent agency of Dhanbad in Chas Municipal Area. Chas Municipal Corporation does not collect and dispose Biomedical waste. All hospitals/clinics are instructed to execute MoU with agencies for collection of biomedical waste.</p> <ul style="list-style-type: none"> <li>▪ Across Bokaro Township waste is being collected with the help of 157 tri-cycles, 2 compactors, 650 bins, 1 JCB, 1 Dumper Placer &amp; 177 health workers with budget of Rs 6.70 Crores. This includes waste collection, segregation, and recycling, proper waste disposal. Also, facility of generation of Bio-Gas is being conceptualized from Municipal Solid Waste and DPR has been prepared. All the biomedical waste generated by BGH is properly collected, segregated and disposed off as per the provisions of Biomedical Waste Management Rules 2016.</li> <li>▪ Biomedical waste from 144 Government establishments is kept in colour coded buckets and is disposed in deep burial pits, sharp pits and placenta pits accordingly.</li> </ul>
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*(Report provided by SAIL, ULB's & Civil Surgeon has been attached as Annexure-II, III & Xresp.)*

#### **J. Groundwater in critical @ Ramgarh and Dhanbad.**

S. No.	District Name	Compliance Status/Remarks
1	Bokaro District	<ul style="list-style-type: none"> <li>▪ The issue was related to critical groundwater level at Ramgarh and Dhanbad as over exploited against which it has been certified by Divisional Minor Irrigation Department, Bokaro the issue is not related to the district of Bokaro. <i>(Annexure XI attached)</i></li> </ul>

#### **K. Polluted with Industrial as Domestic Effluents.**

S. No.	District Name	Compliance Status/Remarks
1	Bokaro District	<ul style="list-style-type: none"> <li>▪ Gram Panchayats/ villages on the bank of Konar River, Bokaro River and Damodar River have open defecation free villages. Every HH has Individual House Hold Latrine (IHHL). Waste water from house hold goes to their kitchen garden and soak pit. A certificate/ declaration from Mukhiya/PRI members/ VWSC are attached. Raw water sample of Bokaro River, Konar River and Damodar River are taken at different locations. Those water samples are tested in District Level Water Testing Laboratory, Chas (NABL accredited) of different parameters and it result are within permissible limit.</li> </ul>

*(Report from Drinking Water & Sanitation Division, Chas/Tenughat has been attached Annexure XII)*

## The Key Pollution issues related to Bokaro district:-

### i. Illegal sand, clay and stone mining in the Ganga River and Damodar River Basins.

- No stone or clay mining lease has been granted in the river bed or flood plain zone of the tributaries of river Ganga falling in the district of Bokaro.
- District Survey Report (Sand) has been prepared for the district of Bokaro in terms of Enforcement of EMGSM 2020 and sustainable and mining management guidelines, 2016. As per the DSR (Sand) there are 06 categories I sand ghats and Category II sand ghats in the district of Bokaro.
- The financial bidding of Category II sand ghats has been completed by the district level committee and the proposal has been sent to Jharkhand State Mineral Development Corporation for further action. Environmental clearance certificate has not been issued for the Category II sand ghats in absence of the SEIAA/SEAC committee for the State of Jharkhand.
- Action is taken against instance of illegal mining, transportation and storage of minor mineral sand by the District Task Force constituted under the chairmanship of Deputy Commissioner.
- The details of action taken against illegal mining, transportation and storage of minor mineral sand are enumerated below:

Financial Year	Name of Mineral	Qty. of Mineral In Tones	No. of Vehicles Seized	No. of FIR	Penalty Realized
2021-22	Sand	449.20	115	11	12,79,000
2022-23	Sand	12142.80	126	81	61,85,000
2023-24 (till Feb,24)	Sand	4420	96	46	46,66,000

- In addition to this, Confiscation proceedings have been initiated against vehicles found involved in illegal, mining, transporting and storage of minor mineral sand. In order to prevent illegal mining, storage of minerals various check posts were established vide memo no. 1668, dated 31/05/2022, at the identified routes and Magistrates deputed to keep strict vigil and to take action against such instances.

*(Report provided by DMO, Bokaro has been attached as Annexure-XIII.)*

### ii. Industrial pollution in Dhanbad, Bokaro, Sindri and Ramgarh.

Reports related to the pollution of industries have been provided by the industrial units and Factory Inspector, Bokaro and is attached in the form of *annexure VIII* with this report.

### iii. Sewage discharge from Sahibganj, Rajamahar, Dhanbad, Bokaro and other cities/towns in the catchment are polluting the River Ganga and Damodar.

As both the ULBs in Bokaro i.e. Phusro Nagar Parishad and Chas Municipal Corporation are small towns and there are no registered industrial units in the area hence the discharge of sewage is not generated from industries. 12.44 MLD (million litre per day) waste water from 70 small and medium drains falls into Garga river for which DPR has been prepared for STP pending with department for approval. Nagar Parishad Phusro has three natural drains (nallahs) which flow into the Damodar also, carrying mixed urban sewage. Sewage treatment plants of 10 MLD and 4 MLD are under construction along with interception and diversion structures.

**iv. Floodplain encroachment.**

Not Applicable to the district of Bokaro.

**v. River island encroachment.**

The report regarding the Demarcation of flood plain zones and preventing encroachments thereof will be provided by Additional Collector, Bokaro after compilation of report and verification from all the Circle Officers of Bokaro District. Timeline of 2 months has been decided for the exercise of the same.

**vi. ETPs under or non- performance. Not all units have installed ETPs and STPs.**

The industrial units of SAIL, Vedanta Ltd, Bokaro, BPSCL, TTPS, BTPS and related establishments provided by Factory Inspector, Bokaro.

*(Report provided by Factory Inspector has been attached as Annexure-VIII)*

**vii. Mine water discharge- Ministry of Environment and Forest (MoEF), Government of India (GoI) based on Comprehensive Environmental Pollution Index (CEPI) declared (January 2010) Dhanbad as a critically polluted area and identified four blocks of Dhanbad district viz. Dhanbad Sadar, Jharia, Govindpur and Nirsa as critically polluted. The predominant sources of pollutants in Dhanbad are Mines, Industries, Bio-medical waste as well as sewage and sullage of municipal areas and the townships of the aforesaid mines and industries.**

The water discharged from the Kathara undergoes a comprehensive treatment process, which includes the utilization of well-established settling ponds, efficient Effluent Treatment Plants (ETPs), and strategically designed water sumps. The mine water from BCCL is being for sprinkling purpose in the mines, watering of the plants and after treatment from 2 pressure filters waters is supplied to colonies and villages. Most of the mine water of CCL B&K Area

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Kargali is being used for sprinkling purpose for dust suppression and for watering of plants and whatsoever water discharged out of mines, undergoes comprehensive treatment which passes through strategically designed mine sumps and settling tanks/ponds.

**viii. Disposal of Fly ash from TPP (e.g. Bokaro).**

The details regarding the disposal of Fly Ash from TPP from Bokaro district has been described above in *point C* of Fly Ash from TPP and has been attached as *Annexure VII*.

**ix. The over burden (OB) of mines, the rejects of coal washeries and ash of Thermal Power Plants are kept either on the river bed or near the river, which sooner or later go to the river. Further, the 11 sewage of towns, townships and suburbs finds way to downstream through septic tanks and soak pits.**

The report regarding the over burden of mines, reject of coal washeries and ash disposal of TPP have already been discussed in the above points and have been attached in the form of *annexure II, V, VI, VII, VIII & IX*.

**x. Coal washeries- consumption of fresh water and discharge of liquid effluents.**

Currently no washery is active in B&K Area, CCL. The only washery i.e. Kargali washery that exists, is closed since 2019 and is going to be dismantled soon as per company rules. The water consumption of both washeries i.e. Kathara washery and Sawang washery are 963.96 KLD and 547 KLD respectively and the both washeries are functioning on closed water circuit system. The mine water from BCCL is being for sprinkling purpose in the mines, watering of the plants and after treatment from 2 pressure filters waters is supplied to colonies and villages.

**xi. Coke oven plants- produce tar oil, cyanide, ammonia and phenol.**

The current situation regarding the Coke oven plants- produce tar oil, cyanide, ammonia and phenol has been provided by SAIL/BSL and Vedanta Ltd. Bokaro. SAIL is operating with valid Hazardous Waste Authorization. The effluent generated from the Coke Oven is treated in BOD Plant and the treated effluent is being recycled & reused in the process. (Tar Oil, Cyanide, Ammonia and Phenol are produced in byproduct recovery type coke oven.) Vedanta Ltd. Bokaro has installed non- byproduct recovery type coke oven. Heat generated in coke oven is utilized in power generation from Waste Heat Recovery Boilers (WHRB). Hence there is no pollution from Coke oven.

**xii. The Bokaro steel and IISCO drain and other industries polluting river Damodar.**

All the ETPs installed at SAIL including ETPS installed at Outfall 1 and 2, Coke Oven and

CRM 3 is working satisfactory and no effluent is discharged in the drain or Damodar River without treatment. BSL has been designed with a central re-circulation system where the effluent discharged from various shops are treated locally in the shop and then recycled back through sludge compartment and cooling pond for treatment plants at Outfall 1 & 2 of 1500 m<sup>3</sup>/hr capacity each for treatment and sent back to cooling pond for BSL reuse.

**xiii. Municipal waste/ Bio-medical waste/ Hazardous waste disposal and related pollution.**

Report regarding the Municipal waste/ Bio-medical waste/ Hazardous waste disposal has been provided by SAIL, ULB's & Civil Surgeon has been attached as *Annexure- II, III & X* respectively.

**xiv. Groundwater is critical @ Ramgarh and Dhanbad (over exploited).**

The issue was related to critical groundwater level at Ramgarh and Dhanbad as over exploited against which it has been certified by Divisional Minor Irrigation Department, Bokaro the issue is not related to the district of Bokaro. (*Annexure XI attached*)

**xv. Diseases- As per the CAG Audit Report on General, Social and Economic (Non-PSUs) Sectors, 31 March 2014- NPCDCS was launched (2010-11) by Ministry of Health and Family Welfare (MH&FW), GoI, in 100 districts of 21 States which included three districts (Bokaro, Dhanbad and Ranchi) of Jharkhand for reducing the burden of Non-Communicable Diseases (NCDs) such as cancer, diabetes, cardiovascular diseases and stroke.**

The report by the Office of Civil Surgeon has been depicted in the table below:

Sl. No.	F.Y.	Total Screening (HTN & DM)	Hypertension patient on Treatment	Diabetes patient on Treatment	HTN & DM patient on Treatment	CVD in CCU Bokaro	Stroke	Breast Cancer Screening	Cervical Cancer Screening
1.	2018-19	76286	2040	2326	786	CCU facilities were not available in this period.		1123	1882
2.	2019-20	91946	2390	2894	970			156	1364
3.	2020-21	76010	1881	1738	730			61	557
4.	2021-22	166872	4241	3535	662	408	0	4	365
5.	2022-23	243607	3224	3019	925	83	40	73	883
6.	2023-24	271597	2141	2009	804	64	37	60	814

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10. That, apart from all it is also relevant to mention here about the commitment of Bokaro district towards the monitoring of issues of pollution related with the river Damodar and its tributaries. The District Ganga Committee constituted under chairmanship of Deputy Commissioner, Bokaro and convenor Divisional Forest Officer, Bokaro is regularly keeping eyes on the conduct of the industrial units of Bokaro and townships with coordination of Jharkhand State Pollution Control Board, Dhanbad. Regular meetings of District Ganga Committee are organized on 2<sup>nd</sup> Friday of every Month and related issues are thoroughly discussed to overcome the problems raised in these meetings.
11. That, district Bokaro is also committed to implement the action plan given by the National Mission for Clean Ganga, Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, Government of India. The awareness programmes related to the Namami Gange are organized regularly which includes special campaign like Ganga Run, marathon cycling, Swachhta Pakhwada, Ganga Utsav/ River Festival, Swachhta Hi Seva, etc. with the coordination of school and college students, youth, women, local public, etc.

*(Minutes of meetings of Dist. Ganga Committee and Photographs of Programs related to NMCG has been attached Annexure XIV)*

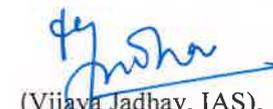
12. That it is further submitted that Bokaro District has great regard towards the directions of Hon'ble Tribunal and also committed, to ensure the compliance of orders of the Hon'ble Tribunal.

The above compliance report is being placed for consideration of this Hon'ble Tribunal.

BOKARO

DATED:.....

  
(Rajnish Kumar, IFS)  
Divisional Forest Officer  
-cum- Convenor  
DGC, Bokaro

  
(Vijaya Jadhav, IAS).  
Deputy Commissioner  
-cum- Chairman  
DGC, Bokaro

**List of Annexure:-**

<b>Sl. No</b>	<b>Annexure No.</b>	<b>Details of Annexure:</b>
1.	Annexure I	Minutes of meetings dated 24.02.2024 & 09.03.2024.
2.	Annexure II	Report of SAIL/BSL
3.	Annexure III	Report of Chas Municipal Corporation and Phusro Nagar Parishad (ULB's)
4.	Annexure IV	Report of BIADA, Bokaro
5.	Annexure V	Report of CCL, Kathara
6.	Annexure VI	Report of CCL, B&K Area, Kargali
7.	Annexure VII	Report of BCCL, Damoda Colliery, Barora Area
8.	Annexure VIII	Report of Factory Inspector, Bokaro
9.	Annexure IX	Report of Report of Vedanta Ltd. Bokaro
10.	Annexure X	Report of Civil Surgeon, Bokaro
11.	Annexure XI	Report of Minor Irrigation Division, Bokaro
12.	Annexure XII	Report of Drinking Water & Sanitation Division, Bokaro
13.	Annexure XIII	Report of District Mining Officer, Bokaro
14	Annexure XIV	Photographs of Programs related to NMCG