

Item No. 03

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 565/2022

Ashutosh Mekap

Applicant

Versus

State of Odisha

Respondent

Date of hearing: 29.03.2023

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER  
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER**

**ORDER**

1. Grievance in this application is against industrial pollution at Joda Block of Keonjhar in Odisha. It is stated that river Suna is polluted as slurry pipe is being installed under the river bed of the said river for which heavy machinery is being used to dig up the river for transporting slurry of mines and minerals. Such a step will result in blockage of sewerage and riverine system due to continuous digging and disposal of industrial waste/slurry. Discharge of mineral/slurry will pollute Baitarani and other rivers. Through the iron pipes, there will be export of iron powder to Paradip Port Trust. The applicant has referred to media report dated 10.07.2019 and 12.08.2019 in Orissa Post.

2. Vide order dated 23.08.2022, considering the above, the Tribunal sought a factual report from a joint Committee of Regional Office, MoEF&CC, Bhubneshwar, CPCB, State PCB and District Magistrate, Keonjhar.

3. As per report filed by the State PCB on 24.02.2023, the joint Committee visited the site and made observations and suggestions in the interest of environment. Operative part of the report is as follows:-

**“SALIENT FEATURES OF THE IRON ORE SLURRY PIPE LINE PROJECTS OF KEONJHAR DISTRICT**

*The details of different slurry pipelines operating & under construction for conveying Iron ore fines from Keonjhar to different parts of Odisha in slurry forms are as follows:*

SL No	Name of the Slurry Pipeline Projects	Length of Pipeline in Km	Dia (Ø) of pipe in inch	Project Status	Water Demand in Cusecs	Water Source	Clearance status CTE/CTO/WR Department	No of crossings at Rivers/ water bodies	Leakages if any reported
1	Brahmani River Pellets Ltd., Tanto, Bhadrasahi, Barbil, Keonjhar	212 (Tanto to Kalinga Nagar)	13.00"	Operating (Since June 2013)	4.70	Kanpur Baitarani River	WR Permission dtd 24.06.2010. CTO valid up to 31.03.2025	12 nos	On 10.07.2021 (Near Sona River Joda)
2	Arcelor Mittal Nippon Steel India Ltd, Dabuna, Joda	253 (Dabuna to Paradeep)	20.00"	Operating (Since January 2014)	11.77	Basantapur, Baitarani River	WR Permission dtd 24.12.2009. CTO valid up to 31.03.2025	29 nos	Nil
3	Jindal Steel & Power Ltd, Soyabali, Barbil	202 (Barbil to Anugul)	26.00"	Under construction	23.00	U/S of Kanpur Reservoir, Baitarani River	WR agreement dtd 23.06.2009 CTE granted dtd. 07.01.2022	64 nos	Yet to commission
4	JSW Steel Ltd.	302 (Joda to Paradeep)	32.00"	Under Construction	39.00	U/S of Kanpur Reservoir, Baitarani River	WR approval dtd 29.09.2022 CTE granted dtd. 23.12.2017	57 nos	Yet to commission

**Observations:**

1. The iron ore slurry pipeline projects are coming under Green categories as notified by the SPCB, Odisha vide office order no. 8333/Ind-I-Con-1505, dtd 11.7.2018.
2. River, Stream, Nallah & Other water bodies crossing permission are given by Water Resource Department, Govt. of Odisha & in Keonjhar district, it is the Chief Engineer & Basin Manager, Baitarni Basin.
3. Details of permission given by Water Resources Department for River crossing & water withdrawal from Baitarani River are highlighted in above table.
4. The two operating iron ore slurry pipeline of BRPL & AMNS are commissioned in 2013 & 2014 respectively & crossed major Rivers & streams at many places. During visit to some of river crossing site of those pipe lines, no visible path (Right of way) of Pipe lines was observed as the path was not demarcated. Neither any obstruction of water course nor any adverse impact was observed at crossing sites.
5. As per WR Department agreement with the Project proponent, Slurry Pipe Lines are normally laid at about 3m and more below the River bed (Scouring depth) at crossing site.

6. *WR Department has approved HDD technology for the Slurry pipe lines while crossing of water bodies. In case HDD is not practicable than any other methods with due approval can be followed but not open cut method.*
7. *Laying of Iron Ore Slurry Pipe Lines at crossing of water bodies may have following impacts on water bodies & environment.*
  - i. *Laying of Pipe Lines by Open Cut method, the excavated materials may likely to be washed out if adequate preventive measures are not taken & it may lead to contamination & siltation problem in downstream.*
  - ii. *Further any leakage from pipe line may lead to contamination of water bodies & surrounding land which may cause due to any accident or poor maintenance of the pipe line.*
  - iii. *The water demand of such Pipe lines involve withdrawal of significant quantity of Water from Rivers which follows Once through Process & non-recyclable. Hence there will be strain on water bodies in downstream during Lean period. So the slurry pipe line companies are to make separate arrangements for lean period by constructing their own reservoirs.*
8. *To avoid Leakage & for Leak detection, Pipe lines operators adopted following practices to minimize the adverse impact on surroundings:*
  - i. *Cathodic Protection method to decrease corrosion & increase the life of Pipe line.*
  - ii. *Pressure drop techniques with optical fibers through Supervisory Control And Data Acquisition (SCADA).*
  - iii. *En-capsulisation the Pipe with concrete laid below River bed as additional protective measures at River Crossings.*

*In view of the above observation, allegations made by the petitioner could not be established. However, the committee recommends following action Plan for Environmental friendly operation of iron Ore Slurry Pipe Lines.*

1. *Water Resource Department should ensure that Iron Ore Slurry Pipe Line Projects should strictly follow the approved methods of River/Stream crossing & any violation may be reported for necessary action by appropriate authority.*
2. *Water Resource Department should ensure the Environmental Flow in all streams/Rivers/Nallahs during lean period & water allocation on priority basis as per State Water Policy while granting Water withdrawal permission to such projects.*
3. *Project Proponent has to implement advance Leak detection Technologies for Slurry Pipe Line projects to take immediate corrective measures in case of leakages to minimize adverse impacts on surroundings.*

4. *The Slurry Pipe Line Project integrated with Return Water Pipe Line may be considered as alternative for water scarcity areas.”*

4. In view of above, further action be taken by the concerned Project Proponents and Departments, which may be overseen by the State PCB and District Magistrate, Keonjhar.

The application is disposed of.

A copy of this order be forwarded to the State PCB and District Magistrate, Keonjhar by email for compliance.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

Dr. A. Senthil Vel, EM

March 29, 2023  
Original Application No. 565/2022  
AVT