

**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE KOLKATA BENCH
Original Application No.43 of 2024/EZ.**

Akash Kalo

..... Petitioner / Appellant

Vs.

**M/s. JSW Bhushan Power and
Steel Limited & Ors.**

.....Respondent / Defendant

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1.	Affidavit.	
2.	<u>ANNEXURE-R3/1</u> Photocopy of the letter No.8160 dtd.03.06.2024.	
3.	<u>ANNEXURE-R3/2 Colly</u> Photocopy of the inspection report of the committee carried out on 28.06.2024.	

SPCB Odisha, R.No.3

Through

Kolkata

Date:

Smt Papiya Banerjee Bihani,
Advocates for the Respondent No.3
(State Pollution Control Board, Odisha)
e-mail: pbanerjeebihani@gmail.com
Phone No.:9831493390

BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE KOLKATA BENCH
Original Application No.43 of 2024/EZ.

Akash Kalo

..... Petitioner / Appellant

Vs.

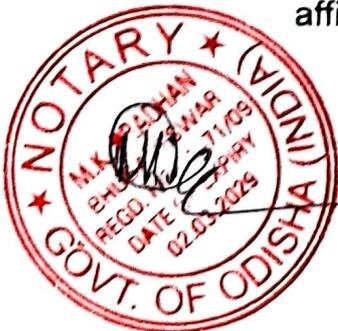
M/s. JSW Bhushan Power and
Steel Limited & Ors.

.....Respondent / Defendant

AFFIDAVIT ON BEHALF OF STATE POLLUTION
CONTROL BOARD, RESPONDENT NO.3.

I, Dr. Kailasam Murugesan, IFS, son of late Paramasivam Kailasam aged around 56 years, at present working as Member Secretary, State Pollution Control Board, having my office at Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, P.O. Nayapalli, Bhubaneswar, Dist – Khurda, Odisha-751012, do hereby solemnly affirm and state as under:

1. That I am the Member Secretary of the Respondent No.3 Board and, as such, am well-acquainted with the facts and circumstances with the case and competent to swear this affidavit.



09 JUL 2024

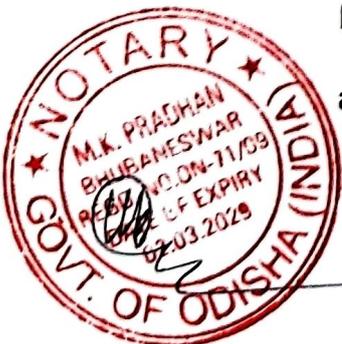
MANJULA KUMAR PRADHAN
NOTARY PUBLIC
BHUBANESWAR
REGD.NO.ON-71/2009
PH:-9437627119 (M)

29/02/24

2. That the OA has been filed alleging illegal deposition of raw iron dust over the forest land by constructing a pond-cum-stock yard and operating the same in the highly risky level near Bisadihi, Dist-Sambalpur, Odisha by M/s. JSW Bhushan Power & Steel Ltd., who has been impleaded as R.No.1.
3. That this Hon'ble Tribunal vide their order dtd.12.03.2024 while adjudicating the OA at para-14 has been pleased to constitute a committee to visit the site in question and submit its report on affidavit with regard to the allegations made in the OA comprising of the following members:

- (i) Senior Scientist, Odisha State Pollution Control Board.
- (ii) Senior Scientist, Central Pollution Control Board;
- (iii) Collector-cum-District Magistrate, Sambalpur or his representative not below the rank of Addl. District Magistrate.

The District Collector, Sambalpur has been declared as the Nodal Office for all logistic purposes and the R.No.3 Board has been directed to file the committee report on affidavit.



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BHUBANESWAR
REGD.NO.ON-71/2009
PH:-9437627119 (M)



4. That it is humbly submitted that although the Id. Counsel of the applicant has been directed by the Hon'ble Tribunal vide order dtd.12.03.2024 to serve copy of the OA along with all its annexures to our counsel but the same has not been served which has been placed before the Hon'ble Tribunal on 02.05.2024 during hearing of this case. The R.No.3 Board has nominated Dr. Satyanarayan Nanda, Regional Officer, Sambalpur to represent the committee on behalf of the Board and communicated the same to the Collector –cum – District Magistrate, Sambalpur vide Board's letter No.8160 dtd.03.06.2024. A copy of the letter dtd.03.06.2024 is annexed to this affidavit and marked as ANNEXURE – R3/1.



5. That the Id. Counsel of the appellant has served a copy of the OA on the counsel of the Board during last week of June, 2024 and in the meantime, the committee constituted by the Hon'ble Tribunal has carried out joint enquiry on 28.06.2024 and submitted a detail report. During visit of the members of the committee, the officials and representative of the R.No.1 unit indicated in the committee report at page-1 have also accompanied the joint committee during the visit. In the

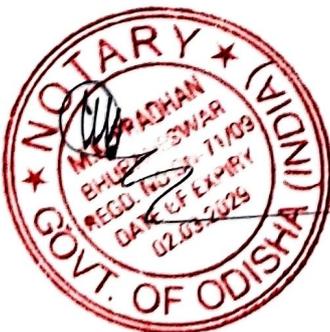


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NOTARY PUBLIC
BHUBANESWAR
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report, the committee has given some recommendations. Copy of the inspection report of the committee along with its annexures is annexed to this affidavit and marked as **ANNEXURE – R3/2 Colly.**

6. That this affidavit is filed to bring on record the inspection report of the committee in compliance to direction dtd.12.03.2024 of this Hon'ble Tribunal.
7. That the Respondent No.3 Board craves the leave of this Hon'ble Tribunal to file further affidavit if necessary for proper adjudication of the case.
8. That the annexures annexed to the present affidavit are true and correct copies of their originals.
9. That the contents of the above paragraphs are true and correct to the best of my knowledge, as derived from the official records, and that nothing material has been concealed therefrom.




DEPONENT
Member Secretary
State Pollution Control Board
Odisha, Bhubaneswar

MANJULA KUMAR PRADHAN
NOTARY PUBLIC
BHUBANESWAR
REGD. NO. ON-71/2009
PH: -9437627119 (M)

09/07/24

VERIFICATION:

I, the above named deponent, do hereby verify that the contents of the above affidavit are true and correct to the best of my knowledge, as derived from official records, and that nothing material has been concealed therefrom.

Verified at Bhubaneswar on this the 9th day of July, 2024.

SWORN BEFORE ME


DEPONENT
Member Secretary
State Pollution Control Board
Odisha, Bhubaneswar



MANJULA KUMAR PRADHAN
NOTARY PUBLIC
BHUBANESWAR
REGD. NO. ON-71/2009
PH: -9437627119 (M)

09/07/24



EPABX: 2561909/2562847
Tel: 2562822, 2560955
Email: Paribesh1@ospcboard.org
Website: www.ospcboard.org

STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST AND ENVIRONMENT, GOVERNMENT OF ODISHA]
Paribesh Bhawan, A/118, Nilakanthanagar, Unit - VIII,
Bhubaneswar - 751 012, INDIA

No. 8160
VII - L - Misc - 1083

Date: 03/06/2024

E-mail/Speed Post

To

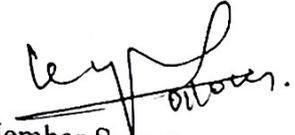
The Collector & District Magistrate
Sambalpur

Sub: OA No.43/2024/EZ - Akash Kalo v. M/s. JSW Bhusan Power & Steel Ltd. & Others.

Sir,

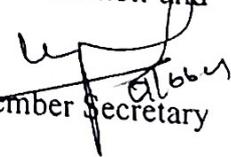
The Hon'ble Tribunal vide their order dtd.12.3.2024 at para-14 has constituted a committee comprising Sr.Scientist of SPCB and other members indicated therein. Although the matter was taken up for hearing on 02.05.2024 and it is submitted on behalf of the Board that the copy of OA has not yet been served by the Id. Counsel of the applicant, the Hon'ble Tribunal has directed for service of the same within the course of the day but we have not received the copy of OA from our Advocate. But since the Hon'ble Tribunal has constituted the committee declaring the District Magistrate, Sambalpur as Nodal Office for all logistic purposes, it has been decided to nominate Dr.Satyanarayan Nanda, Regional Officer, SPCB (Mob-9437158608), Sambalpur to represent the committee on behalf of the Board.

Yours faithfully,


Member Secretary
E-mail

Memo No. 8161 / Date: 03/06/2024

Copy forwarded to the Regional Officer, SPC Board, Sambalpur for information and necessary action.


Member Secretary

Inspection report of Joint Committee visit regarding unauthorized dumping of waste materials by M/s. JSW Bhusan Power and Steel Limited, At- Thelkoloji, PO- Lapanga, Dist.- Sambalpur, Odisha

In pursuance of the order dtd. 12.03.2024 of the Hon'ble NGT, EZB, Kolkata in the matter of O.A. No. 43/2024/EZ – Akash Kalo & others – Vrs. JSW (BPSL) Power and Steel Limited &Ors., CPCB, Regional Directorate, Kolkata, West Bengal vide their letter CM-13014/15/2024-LAB-RD/KOLKATA/RD (Kolkata) dtd. 18.03.2024, SPCB, Odisha, Head Office, SPCB vide letter no. 8160,dtd. 03.06.2024, Office of the District Magistrate & Collector, Sambalpur vide letter no. 1254,dtd. 21.06.2024 the committee conducted the joint inquiry on 28.06.2024 as per the scheduled date fixed by Collector & District Magistrate, Sambalpur vide his letter no. 12287,dtd. 19.06.2024.

The following members were present during the joint committee visit.

1. Sri Ajambar Mohanty, OAS, (S) Addl. District Magistrate, Sambalpur
2. Sri. Sandeep Roy, Scientist-D, CPCB, Regional Directorate, Kolkata
3. Dr.Satya Narayana Nanda, Regional Officer, SPC Board, Sambalpur

Also, the following officials and industry representatives have accompanied the joint committee during the visit.

1. Er. Rakesh Ku. Panda, Asst. Env. Engineer, SPCB, Sambalpur.
2. Sri Manoranjan Pradhan, Asst. Env. Scientist, SPCB, Sambalpur.
3. Sri Sadakar Kumbhar, Tahasildar, Rengali, Sambalpur.
4. Ms. Rajashree Tirkey, ACF, Sambalpur Forest Division.
5. Sri Janaranjan Samal, Dy. Director, Fisheries, Sambalpur Zone.
6. Sri Umashankar Mishra, Agricultural District Officer, Sambalpur.
7. Dr. Girija Shankar Mohanty, ADVO, O/O-CDVO, Sambalpur.
8. Dr.Khirod Chandra Patel, Dy, Director(I/c), District Veterinary, Hospital, Sambalpur.
9. Sri Akul Senapati, DGM-Environment, M/s. JSW Bhusan Power & Steel Ltd., Sambalpur
10. Sri Niranjan Parida, Sr. Mgr, Environment, M/s JSW Bhusan Power & Steel Ltd., Sambalpur



Regional Officer
State Pollution Control Board
Regional Office, Sambalpur

Additional District Magistrate
Sambalpur

During the visit, the following villagers alongwith the petitioner Sri Akash Kalo were present:

1. Sri Sudarshan Sahoo
2. Sri Niranjan Kadi
3. Sri Pintu Rout
4. Sri Bikisha Raut
5. Sri S. Kisan
6. Sri A Panigrahi
7. Sri Satia Mirdha
8. Sri AntaryamiChhatria
9. Sri Saran Padhan
10. Sri Bablu Kisan
11. Sri Jogeswar Kisan

Other villagers also interacted with the committee. A detailed discussion was made point to point as reflected in the petition of Akash Kalo & Others. Observations made during the visit were as follows;

Background of the industry:

M/s. Bhushan Power & Steel Limited, Sambalpur is operating an integrated steel plant of capacity 4.5 MTPA with a captive power plant of 506 MW at village Thekoloji, PO- Lapanga, Tahasil: Rengali under Sambalpur district. The Company has valid consent to operate issued by OSPCB vide letter no. 3439/IND-I-CON-4650, dated 12.03.2024 valid till 31.03.2025. Copy Enclosed as **Annexure-I**.

Tailing is a mixture of crushed rock and processing fluids from mills washeries or concentrators that remain after the extraction of economic metals from the mine source. It is the by-product of iron ore beneficiation. The tailing contains mainly silica, alumina, iron oxide, and calcium oxide and a small fraction of metal oxide like magnesium oxide, sodium oxide, potassium oxide, titanium oxide, etc. Tailings are heterogeneous in nature. There are 14 nos. of Tailing ponds. The tailings from the iron ore beneficiation process come into the paste thickener and the high molecular weight polymer is added into the paste thickener to concentrate the tailings and clarified water from the paste thickener is taken back into the beneficiation process. The tailings stored in the tailing ponds are sun-dried and taken back into both the




Regional Officer
State Pollution Control Board
Regional Office, Sambalpur


Additional District Magistrate

sinter plants and small amounts of water from the tailing yard is taken back into the beneficiation plant.

Observations:

Following observations were made by the committee during joint enquiry,

Sl.no.	Description	Observations
1.	The allegation of the Application in the present Original Application is that Respondent No. 1, M/s JSW Bhusan Power and Steel Limited, is causing illegal deposition of raw iron dust over the forest land by constructing a pond-cum-stockyard and operating the same in the highly risky level near village Bisadihi, District-Sambalpur, Odisha.	The tailings which are the by-product of iron-ore beneficiation process are stored in thickened slurry form in the tailing ponds which are constructed in the own land of industry. The Land Schedule is enclosed.(Annexure-II). As per guidelines of SPCB, to regulate, accumulate and reuse of water, a garland drain at toe is made.
2.	It is stated that the Respondent No. 1 industry has been established with the objective of operating manufacturing production of Iron, Sponge iron, Steel Etc. by burning huge quantities of coal situated at Thelkoloi, PO – Lapanga, Dist-Sambalpur, Odisha. It is also stated that for production of iron materials the Respondent Nos. 1 & 2 are supposed to keep the raw iron in the stockyard-cum-iron pond by mixing it with water.	M/s JSW Bhusan Power & Steel Limited is an integrated steel plant to manufacture iron, sponge iron, and steel. For this purpose, coal is used for the manufacturing process of steel and power generation. The iron ore as raw material is stored in raw material stockyard inside the plant premises. The iron ore tailings after thickening in a paste thickener are pumped to tailing pond and the supernatant water are again recycled back into the beneficiation process. The sun-dried tailings are recycled back to sinter plant 1 & 2 blending with fresh iron ore.



3.	It is further stated that the iron pond having been constructed by Respondent Nos. 1 is about 200 meters from the Applicant's village and there is no green belt surrounding the area nor any boundary or polythene sheet has been installed before depositing the raw iron dust after digging 50 feet near the Village- Bisadihi and the underground water is also contaminated with crude iron and turned in red colour.	The unit planted a few saplings near the tailing pond in February 2024 as intimated by the plant representative. The respondent's village is situated about 310m in distance towards the east direction from the boundary of the tailing pond. The tailing ponds are lined with HDPE sheets. One no. sample of groundwater has been collected from the tube well of Bisadihi Village near the residence of Sri Santosh Kalo.
4.	It is stated that construction of raw iron pond-cum iron stockyard was stated in the month of November, 2022 and due to heavy dust pollution and contamination of ground water, the applicant and other villagers submitted the representation on 14.07.2023 (Annexure-B (colly), before the Respondent No. 4 Collector and District Magistrate, Sambalpur, but no action has been taken till date.	A public complaint was received by the Regional Office, SPCB, Sambalpur vide Head Office Letter no. 12203,dtd. 03.08.2023 from Akash Kalo of Village -Bisadihi, PS – Lapanga, Dist. Sambalpur, and an inspection was conducted on 18.08.2023 and the report was sent vide Regional Office, SPCB letter no. 3075,dtd. 31.08.2023 (Report attached). Annexure-III

Remarks:

1. The iron ore tailings are pumped to the tailing ponds in highly concentrated slurry form. However, after drying of the iron ore tailing, it is transported back to the industry through heavy vehicles. The industry has provided mobile water tankers and multi-utility vehicles for dust suppression on the bund road and approach road to the industry. In addition to that, 15 nos of fixed type 360 deg. Rotation water sprinklers are installed on the bund of the tailing pond towards the Bisadihi village.


 Regional Officer
 State Pollution Control Board
 Regional Office, Sambalpur


 Regional Officer
 State Pollution Control Board
 Regional Office, Sambalpur


 Additional District Magistrate
 Sambalpur

2. Three nos. of water samples were collected from Village Pond no. 1 & 2 (surface water) and groundwater from tubewell near the residence of Sri Santosh Kalo. The water samples were collected and sealed in the presence of the petitioner and other villagers and were sent to Central Laboratory, SPCB, Bhubaneswar for analysis. **The analysis reports are enclosed. The analysis reports reveal that the Iron (Fe) of the groundwater sample taken near the residence of Sri Santosh Kalo exceeds the standard parameter of the Board which is unsuitable for drinking purposes. (Annexure IV). The concentration of Iron in the village pond is within the permissible limit.**

Some Photographs taken during the visit to Bisadihi Village

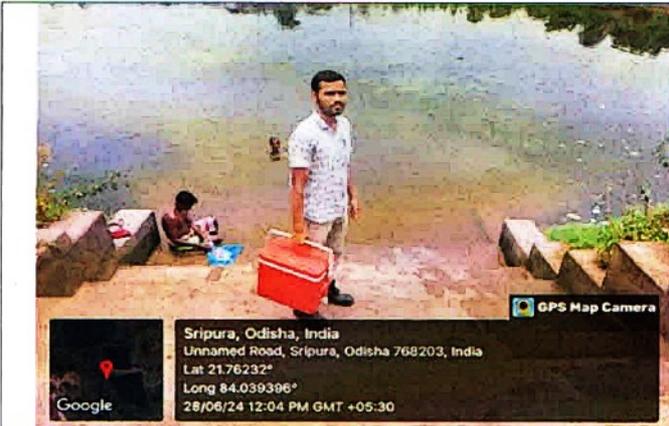


Committee interaction with the Petitioners and Other villagers

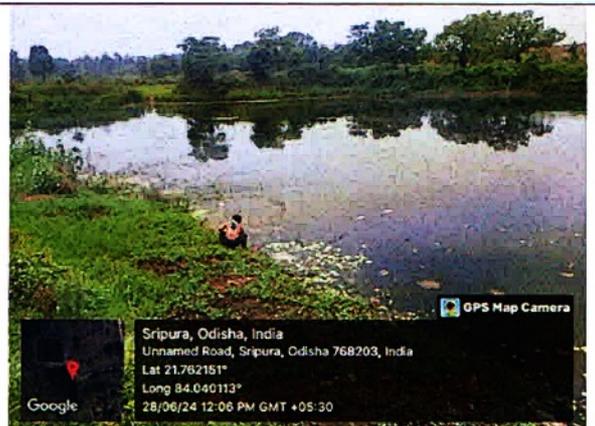
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 Regional Officer
 State Pollution Control Board
 Regional Office, Sambalpur

[Handwritten signature]
 Additional District Magistrate
 Sambalpur



Surface water sample collection from Pond No. 1 of Bisadihi Village



Surface water sample collection from Pond No. 2 of Bisadihi Village



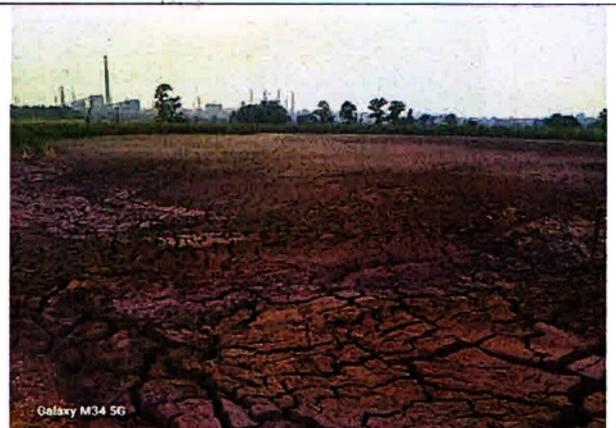
Groundwater sample collection From tubewell near the residence of Sri Santosh kalo of Bisadihi Village



Sealing of water samples in the presence of the Petitioner and other villagers



Active tailing pond showing inlet of thickened iron ore tailing



Sun dried iron ore tailing

Regional Officer
 State Pollution Control Board
 Regional Office, Sambalpur

Additional District Magistrate
 Sambalpur

	
<p>Multi-utility vehicle for dust suppression on bund road</p>	<p>Google image showing the proximity of Bisadihi village from tailing pond</p>
	
<p>Construction of concrete garland drain</p>	<p>Supernatant collection pit</p>

Recommendations:

1. The industry shall construct stone pitching around the tailing pond facing towards the Pond of village Bisadihi to protect any spillage towards the village Pond.
2. The water from the tube well near the residence of Sri Santosh Kalo shall not be used by the villagers for drinking purposes as Iron (Fe) content is high. Proper advisory shall be given to the villagers.
3. The industry shall engage an accredited organization for carrying periodical monitoring of groundwater and Pond, dug well, and tube well of the alleged village as well as ambient air quality monitoring at the dump site and the report shall be submitted to the Board.
4. The industry shall be advised to plant more trees besides the tailing pond towards the Bisadihi village.
5. The industry shall engage a third party to study the environmental impact of the iron ore tailing pond around a 10 km radius of the Tailing Pond in consultation with the State Pollution Control Board.


Regional Officer
SPC Board, Sambalpur
 Regional Officer
 State Pollution Control Board
 Regional Office, Sambalpur


Scientist-D,
RD, CPCB, Kolkata


Addl. Dist. Magistrate
 Additional District Magistrate
 Sambalpur



CONSENT ORDER

Annexure-1

STATE POLLUTION CONTROL BOARD, ODISHA
(DEPT., OF FOREST ENVIRONMENT & CLIMATE CHANGE, GOVT. OF ODISHA)

A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012

Phone-2561909/ EPABX : 2561909/2562847

E-mail: cto17category@ospcboard.org / Website: www.ospcboard.org

No. 3439 / IND-I-CON-4650

Dt. 12.03.2024

CONSENT ORDER

Sub: Consent for Existing / New operation of the plant under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 and under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981.

Ref: Your online application ID No 5145549, dtd. 18.10.2023

The Consent is hereby granted under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act, 1981 and rules framed there under to

Name of the Industry: M/s. BHUSHAN POWER & STEEL LTD.,

At- Thelkoloi, PO- Lapanga, Rengali, Dist - Sambalpur

Name of the Occupier & Designation: Shri Anil Kumar Singh, President and Whole Time Director

Address: At- Thelkoloi, PO- Lapanga, Rengali, Dist - Sambalpur-768 232

This consent order is valid for the period upto 31.3.2025

This consent order is valid for the product quantity, specified outlets, discharge quantity and quality, specified chimney/stack, emission quantity and quality of emissions as specified below. This consent is granted subject to the general and special conditions stipulated therein.

A. Details of Products Manufactured

Sl. No.	Product	Quantity
01.	Sponge Iron (DRI Kilns-I,II,III,IV,V,VI,VII,VIII,IX, X, XI, XII-12x500 TPD)	2.0 MTPA
02.	Coal Washeries (1.0 MTPA + 1x3.5 MTPA)	4.5 MTPA
03.	Steel Melting Shop (SMS-1) & Casting Unit i) Electric Arc Furnace ii) Ladle Furnace iii) Billet Caster iv) Single continuous thin Slab Caster v) VD / AOD	4 x 105 T 4 x 105 T 1 x 4 Strand 2 x 1 Strand 2 x 100 T
04.	Steel Melting Shop (SMS-2) & Casting Unit i) Electric Arc Furnace (EAF) ii) Zero Power Furnace (ZPF) iii) Ladle Furnace iv) Billet Caster v) VD / AOD	1 x 75 T 1 x 75 T 2 x 75 T 1 x 3 Strand + 1 x 4 Strand 2 x 75 T



CONSENT ORDER

2

05.	Captive Power Plants (CPP) (a) 3x130 MW (4x210 TPH Boiler + 1x390 TPH Boiler + 1x340 TPH Boiler) (b) 2x8 MW (WRHB of Coke Oven) 1x75 TPH AFBC Boiler + 150 TPH AFBC Boiler (c) 250 TPH CFBC Boiler (using Coal and MBF Gas)	506 MW
06	Blast Furnace -I (1x1008 m ³)	0.80 Million Tons / Annum
07	Blast Furnace-II (1 x 2015m ³)	1.55 Million Tons/Annum
08	Sinter Plant - I & II	1x105 m ² & 1 x 450 m ²
09	Coke Oven Plant-1 (Non-Recovery Type)	0.45 MTPA
10	Coke Oven Plant -2 (Recovery Type)	1.2 MTPA
11	Oxygen Plants	1x 400 TPD + 1x660 TPD+ 3x200 TPD (VPSA) + 1000 TPD
12	CSP (HRM)	4.0 MTPA
13	Lime & Dolo Plant	3 x 300 TPD + 3 x 600 TPD
14	Wire / Rod Mill Complex (WRM)	0.6 MTPA
	Wire / Rod Mill and Heavy Bar	0.6 MTPA
15	Pipe & Tube Mill	0.8 MTPA
16	Iron ore beneficiation plant	1200 TPH
17	Pellet Plant	4.0 MTPA
18	Deep Bed Pest Thickener	200 TPH
19	Slag Processing Unit	300 TPH
20	Cold Rolling Mill (CRM)	2.5 MTPA
	a) Galvanizing	0.70 MTPA
	b) Glavolume Unit	0.60 MTPA
	c) Colour Coating Mill	0.70 MTPA

B. Discharge permitted through the following outlet subject to the standard

Outlet No.	Description of outlet	Point of discharge	Quantity of discharge	Prescribed standard							
				pH	SS (mg/l)	TDS (mg/l)	COD (mg/l)	BOD (mg/l)	O&G (mg/l)	Fe (mg/l)	FC MPN/100ml
1	Domestic effluent of the township treated in STP	No discharge. Treated water shall be used for plantation purposes	No discharge	6.5 to 9.0	100	--	--	30	--	---	1000



CONSENT ORDER

2.	Domestic wastewater (plant)	Soak pit via septic tank	No discharge	--	--	--	--	--	--	--	--																								
3.	Cooling water	To be completely recycled	No discharge	--	--	--	--	--	--	--	--																								
4.	Washery effluent	To be completely recycled	No discharge	--	--	--	--	--	--	--	--																								
5.	Effluent from Iron ore beneficiation plant	To be completely recycled	No discharge	--	--	--	--	--	--	--	--																								
6.	Treated storm water drain outlet near plaza gate (Outlet No.1) Outlet of WTP-III	Bheden river after utilizing to the maximum extent (Monsoon period)	Discharge only in monsoon.	6.5 to 9.0	100	2100	250	--	10	1.0	--																								
7.	Treated surface runoff near Thelkoli High school culvert SH-10 (Outlet No.2) Outlet of WTP-I & II	Local nallah leading to river Bheden after utilizing to the maximum extent (Monsoon period)	Discharge only in monsoon	6.5 to 9.0	100	2100	250	--	10	1.0	--																								
8.	BOD plant outlet	No discharge to outside. To be reused completely.	--	<table border="1"> <tr> <th>pH</th> <th>TSS (mg/l)</th> <th>Phenol (mg/l)</th> <th>Cyanide (mg/l)</th> <th>BOD (mg/l)</th> <th>COD (mg/l)</th> </tr> <tr> <td>5.5-9.0</td> <td>100</td> <td>1.0</td> <td>0.2</td> <td>30</td> <td>250</td> </tr> <tr> <th>NH3 N2 (mg/l)</th> <th>O & G (mg/l)</th> <th>TDS (mg/l)</th> <th>Iron (as Fe) (mg/l)</th> <th colspan="2">Total Chromium (mg/l)</th> </tr> <tr> <td>50</td> <td>10</td> <td>2100</td> <td>3.0</td> <td colspan="2">20</td> </tr> </table>								pH	TSS (mg/l)	Phenol (mg/l)	Cyanide (mg/l)	BOD (mg/l)	COD (mg/l)	5.5-9.0	100	1.0	0.2	30	250	NH3 N2 (mg/l)	O & G (mg/l)	TDS (mg/l)	Iron (as Fe) (mg/l)	Total Chromium (mg/l)		50	10	2100	3.0	20	
pH	TSS (mg/l)	Phenol (mg/l)	Cyanide (mg/l)	BOD (mg/l)	COD (mg/l)																														
5.5-9.0	100	1.0	0.2	30	250																														
NH3 N2 (mg/l)	O & G (mg/l)	TDS (mg/l)	Iron (as Fe) (mg/l)	Total Chromium (mg/l)																															
50	10	2100	3.0	20																															

C. Emission permitted through the following stack subject to the prescribed standard

Chimney / Stack No.	Description of Stack	Stack height (m)	Quantity of emission (Nm ³ /hr)	Prescribed Standard mg/Nm ³	
				PM mg/Nm ³	CO (vol/vol)
1.	DRI Kilns Stack attached to				
	(i) De-dusting ESP of Kiln -I & II	45	350000	50	1%
	(ii) De-dusting ESP of Kiln -III & IV	45	350000	50	
	(iii) De-dusting ESP of Kiln-V & VI	45	350000	50	
	(iv) De-dusting ESP of Kiln - VII & VIII	45	350000	50	
	(v) De-dusting ESP of Kiln - IX & X	45	350000	50	
(vi) De-dusting ESP of kiln -XI & XII	45	350000	50		
2.	Blast Furnace Complex -1 Stack attached to				
	(i) GCP of Blast furnace	30	180000	50	
	(ii) Bag filter of stock house	35	220000	50	
	(iii) Bag house of Gas cleaning stack	45	108000	50	



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3	Blast Furnace Complex -2				
	Stack attached to (i) RMHS and Stock House (ii) Cast House	30 30	6,10,000 8,50,000	50 50	
4.	Sinter Plant - 1				
	Stack attached to (i) ESP of Charging Stack (ii) ESP of Discharging Stack (iii) Bag filter of De-dusting Stack	60 40 40	570000 450000 190000	50 50 50	
	Sinter Plant - 2				
5.	Stack attached to ESP of Sinter Process	120	700000	50	
	Stack attached to ESP of Sinter Plant De-dusting	60	600000	50	
6.	SMS-1 Area				
	Stack Attached to (i) Bag filter of EAF -I (FTP-1) (ii) Bag filter of EAF -II (FTP-2) (iii) Bag filter of EAF -III (FTP-3) (iv) Bag filter of EAF -IV (FTP-4)	60 50 50 60	13,95,000 14,31,000 14,31,000 13,95,000	50 50 50 50	
	SMS-2 Area				
	Stack Attached (i) FTP of EAF and LF (ii) ZPF FTP (iii) ZPF Raw Material Handling	50 60 40	13,64,000 10,00,000 5,50,000	50 30 30	
8.	CSP Plant				
	Bag filter stack attached to Tunnel Furnace (Line A Process Stack-I) Tunnel Furnace (Line A Process Stack-II) Tunnel Furnace (Line A Process Stack-III) Tunnel Furnace (Line B Process Stack-I) Tunnel Furnace (Line B Process Stack-II) Tunnel Furnace (Line B Process Stack-III)	60 60 60 60 60 60	34,800 23,600 9,700 34,800 23,600 9,700	50 50 50 50 50 50	
	Raw Material Preparation Plant				
	Bag filter stack attached to RMP Stack -I	30	50000	50	
	10.	Lime Dolo Plant (3 x 300 TPD)			
		Bag filter stack attached to Lime Plant -Kiln -I Lime Plant - Kiln -II Dolo Plant	50 50 50	50,000 50,000 50,000	50 50 50
Lime Dolo Plant (3 x 600 TPD)					
Stack attached to lime plant of Process Bag Filter LCP - 4 Dedusting bag filter 1 Dedusting bag filter 2 Dedusting bag filter 3 Dedusting bag filter 4		49 35 35 38 35	1,20,000 27,800 58,400 46,400 8,000	50 50 50 50 50	
11.		Process Bag Filter LCP - 5	40	1,20,000	30
12.		Process bag filter LCP - 6	49	1,20,000	30



13.	Coke Oven Plant-1 (Non-Recovery type)			
	Bag filter stack attached to			
	Coke Oven Plant (Stack -I)	70	81,535	50
	Coke Oven Plant (Stack -II)	70	81,535	50
	Coke Oven Plant (Stack -III)	70	81,535	50
	Coke Oven Plant (Stack -IV)	70	81,535	50
14.	Coke Oven -2 (Recovery type)			
	i. Process stack	144	1,50,000	50
	ii. Pushing Emission Control System	45	5,04,000	50
	iii. DE system for pre crusher building	30	28,000	30
	iv. DE System for blending bin building	30	40,000	30
	v. DE system for coal crushing building	30	25,000	30
	vi. DE system for coal mixing building	30	3500	30
	vii. DE system for coke treatment building	30	50,000	30
15.	<u>Cold Rolling Mill</u>			
	Acid Re-Generation Plant -I	34	20,000	50
	Acid Re-Generation Plant -II	34	20,000	50
	Acid Re-Generation Plant -III	34	20,000	50
	Acid Re-Generation Plant -IV	34	20,000	50
	Pickling Plant -I (Stack -I)	32	15,716	50
	Pickling Plant -I (Stack -II)	32	15,716	50
	Pickling Plant -II (Stack -I)	32	15,716	50
	Pickling Plant -II (stack -II)	32	15,716	50
	16.	<u>Bar & Wire Rod Mill</u>		
Bag filter stack attached to				
Wire Rod Mill (Reheating Furnace Stack) Wire Rod Mill (De-dusting stack)		85 34	10,000 15,000	50 50
17.	<u>WRM & Heavy Bar Mill</u>			
	i. Stack attached to Reheating Furnace	60	40,000	30
	ii. WRM Bar to Bar drawing stack	34	15,000	30
	iii. Bar rod mill reheating furnace	78	40,000	30
18.	<u>Iron ore pellet plant</u>			
	Stack attached to			
	(i) ESP of wind box and hood exhaust (ii) ESP of de-dusting unit	85 50	13,95,000 2,40,000	50 50



19.	Captive Power Plant Stack Attached to :	Stack height	Quantity of emission (Nm ³ /hr)	PM	SO ₂	NO _x	Hg
		(i) ESP of AFBC (40 MW)	75	143000	30	600	450
(ii) ESP of AFBC (60 MW)	95	286000	50	600	450	0.03	
(iii) Common stack of ESP of Unit-1 Boiler -I & II (1x130 MW)	120	650000	50	600	450	0.03	
(iv) Common stack of ESP of Unit-2 of Boiler -III & IV (1x130 MW)	120	650000	50	600	450	0.03	
(v) ESP of Unit-3 Boiler -V (1x130 MW)	120	650000	50	600	450	0.03	
(vi) ESP of Unit-3 Boiler -VI (1x130 MW)	120	650000	50	600	450	0.03	
(vii) ESP of 250 TPH CFBC Boiler	105	576792	30	100	100	0.03	
(viii) ESP of WHRB of Kiln -I	76	210000	50	--	--	--	
(ix) ESP of WHRB of Kiln -II	76	210000	50	--	--	--	
(x) ESP of WHRB of Kiln -III	76	210000	50	--	--	--	
(xi) ESP of WHRB of Kiln -IV	76	210000	50	--	--	--	
(xii) ESP of WHRB of Kiln -V	76	210000	50	--	--	--	
(xiii) ESP of WHRB of Kiln -VI	76	210000	50	--	--	--	
(xiv) ESP of WHRB of Kiln -VII	76	210000	50	--	--	--	
(xv) ESP of WHRB of Kiln -VIII	76	210000	50	--	--	--	
(xvi) ESP of WHRB of Kiln -IX	76	210000	50	--	--	--	
(xvii) ESP of WHRB of Kiln -X	76	210000	50	--	--	--	
(xviii) ESP of WHRB of Kiln -XI & XII	76	210000	50	--	--	--	

D. Disposal of solid waste permitted in the following manner

Sl. No.	Type of Solid waste	Quantity generated (TPA)	Quantity to be reused on site (TPA)	Quantity to be reused off site (TPA)	Quantity disposed off (TPA)	Description of disposal site.
1.	DRI Hot ESP dust and WTP sludge	237250	237250	--	--	Will be stored in designated area and disposed
2.	Char of the DRI Section	2,53,400	2,53,400	--	---	Used in the AFBC/CFBC Boilers
3.	Kiln Accretion	18,000	---	---	18,000	To be used in quarry and low land filling.
4.	Slag from SMS	949400	949400	--	--	Metallic part to be reused in sinter plant and remaining to be stored inside the premises and used for road making.
5.	Fly ash and Bottom ash from the AFBC & CFBC Boiler (CPP)	12,04500	--	--	12,04500	Disposed as per Fly ash Notification, Dec, 2021
6.	Granulated slag of blast furnace plant	1127850	-	--	11,27,850	Sold to cement plant



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7.	Mill scales,Dust from APC devices of SMS,BF,Sinter Plant and Pellet Plant	182500	182500	-	--	Reused in Sinter plant and Pellet Plant
8.	Sludge from the STP	45	45	---	---	Mix with soil and used in horticulture application

E. GENERAL CONDITIONS FOR ALL UNITS

1. The consent is given by the Board in consideration of the particulars given in the application. Any change or alternation or deviation made in actual practice from the particulars furnished in the application will also be the ground liable for review/variation/revocation of the consent order under section 27 of the Act of Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 and to make such variations as deemed fit for the purpose of the Acts.
2. The industry would immediately submit revised application for consent to operate to this Board in the event of any change in the quantity and quality of raw material / and products / manufacturing process or quantity /quality of the effluent rate of emission / air pollution control equipment / system etc.
3. The applicant shall not change or alter either the quality or quantity or the rate of discharge or temperature or the route of discharge without the previous written permission of the Board.
4. The application shall comply with and carry out the directives/orders issued by the Board in this consent order and at all subsequent times without any negligence on his part. In case of non-compliance of any order/directives issued at any time and/or violation of the terms and conditions of this consent order, the applicant shall be liable for legal action as per the provisions of the Law/Act.
5. The applicant shall make an application for grant of fresh consent at least 90 days before the date of expiry of this consent order.
6. The issuance of this consent does not convey any property right in either real or personal property or any exclusive privileges nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State laws or regulation.
7. This consent does not authorize or approve the construction of any physical structure or facilities or the undertaking of any work in any natural water course.
8. The applicant shall display this consent granted to him in a prominent place for perusal of the public and inspecting officers of this Board.
9. An inspection book shall be opened and made available to Board's Officers during their visit to the factory.
10. The applicant shall furnish to the visiting officer of the Board any information regarding the construction, installation or operation of the plant or of effluent treatment system / air pollution control system / stack monitoring system any other particulars as may be pertinent to preventing and controlling pollution of Water / Air.
11. Meters must be affixed at the entrance of the water supply connection so that such meters are easily accessible for inspection and maintenance and for other purposes of the Act provided that the place where it is affixed shall in no case be at a point before which water has been taped by the consumer for utilization for any purposes whatsoever.
12. Separate meters with necessary pipe-line for assessing the quantity of water used for each of the purposes mentioned below:
 - a) Industrial cooling, spraying in mine pits or boiler feed,
 - b) Domestic purpose
 - c) Process
13. The applicant shall display suitable caution board at the lace where the effluent is entering into any water-body or any other place to be indicated by the Board, indicating therein that the area into which the effluents are being discharged is not fit for the domestic use/bathing.
14. Storm water shall not be allowed to mix with the trade and/or domestic effluent on the upstream of the terminal manholes where the flow measuring devices will be installed.
15. The applicant shall maintain good house-keeping both within the factory and the premises. All pipes, valves, sewers and drains shall be leak-proof. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas.
16. The applicant shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems install or used by him to achieve with the term(s) and conditions of the consent.
17. Care should be taken to keep the anaerobic lagoons, if any, biologically active and not utilized as mere stagnation ponds. The anaerobic lagoons should be fed with the required nutrients for effective digestion. Lagoons should be constructed with sides and bottom made impervious.
18. The utilization of treated effluent on factory's own land, if any, should be completed and there should be no possibility of the effluent gaining access into any drainage channel or other water courses either directly or by overflow.
19. The effluent disposal on land, if any, should be done without creating any nuisance to the surroundings or inundation of the lands at any time.



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20. If at any time the disposal of treated effluent on land becomes incomplete or unsatisfactory or create any problem or becomes a matter of dispute, the industry must adopt alternate satisfactory treatment and disposal measures.
 21. The sludge generated from treatment units shall be dried in sludge drying beds and the drained liquid shall be taken to equalization tank of treatment plant.
 22. The effluent treatment units and disposal measures shall become operative at the time of commencement of production.
 23. The applicant shall provide port holes for sampling the emissions and access platform for carrying out stack sampling and provide electrical outlet points and other arrangements for chimneys/stacks and other sources of emissions so as to collect samples of emission by the Board or the applicant at any time in accordance with the provision of the Act or Rules made therein.
 24. The applicant shall provide all facilities and render required assistance to the Board staff for collection of samples / stack monitoring / inspection.
 25. The applicant shall not change or alter either the quality or quantity or rate of emission or install, replace or alter the air pollution control equipment or change the raw material or manufacturing process resulting in any change in quality and/or quantity of emissions, without the previous written permission of the Board.
 26. No control equipments or chimney shall be altered or replaced or as the case may be erected or re-erected except with the previous approval of the Board.
 27. The liquid effluent arising out of the operation of the air pollution control equipment shall be treated in the manner to meet the prescribed standards by the Board in accordance with the provisions of Water (Prevention and Control of Pollution) Act, 1974 (as amended).
 28. The stack and ambient monitoring system installed by the applicant shall be opened for inspection to this Board at any time.
 29. There shall not be any fugitive or episodal discharge from the premises.
 30. In case of such episodal discharge/emissions the industry shall take immediate action to bring down the emission within the limits prescribed by the Board in conditions/stop the operation of the plant. Report of such accidental discharge /emission shall be brought to the notice of the Board within 24 hours of occurrence.
 31. The applicant shall keep the premises of the industrial plant and air pollution control equipment clean and make all hoods, pipes, valves, stacks/chimneys leak proof. The air pollution control equipment, location, inspection chambers, sampling port holes shall be made easily accessible at all times.
 32. Any upset condition in any of the plant/plants of the factory which is likely to result in increased effluent discharge/emission of air pollutants and / or result in violation of the standards mentioned above shall be reported to the Headquarters and Regional Office of the Board by fax / speed post within 24 hours of its occurrence.
 33. The industry has to ensure that minimum three varieties of indigenous species of trees are planted at the density of not less than 1000 trees per acre. The trees may be planted along boundaries of the industries or industrial premises. This plantation is stipulated over and above the bulk plantation of trees in that area.
 34. The solid waste such as sweeping, wastage packages, empty containers residues, sludge including that from air pollution control equipments collected within the premises of the industrial plants shall be disposed off scientifically to the satisfaction of the Board, so as no to cause fugitive emission, dust problems through leaching etc., of any kind.
 35. All solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by :
 - i) Land fill in case of inert material, care being taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.
 - ii) Controlled incineration, wherever possible in case of combustible organic material.
 - iii) Composting, in case of bio-degradable material.
 36. Any toxic material shall be detoxicated if possible, otherwise be sealed in steel drums and buried in protected areas after obtaining approval of this Board in writing. The detoxication or sealing and burying shall be carried out in the presence of Board's authorized persons only. Letter of authorization shall be obtained for handling and disposal of hazardous wastes.
 37. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard, vary all or any of such condition and thereupon the applicant shall be bound to comply with the conditions so varied.
 38. The applicant, his/heirs/legal representatives or assignees shall have no claim whatsoever to the condition or renewal of this consent after the expiry period of this consent.
 39. The Board reserves the right to review, impose additional conditions or condition, revoke change or alter the terms and conditions of this consent.
 40. Notwithstanding anything contained in this conditional letter of consent, the Board hereby reserves to it the right and power under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 to review any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Act by the Board.
 41. The conditions imposed as above shall continue to be in force until revoked under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 and section 21 A of Air (Prevention & Control of Pollution) Act, 1981.
 42. The industry shall comply to all the conditions stipulated under Charter on Corporate Responsibility for Environmental Protection (CREP) guidelines in a time bound manner as envisaged there in. (if applicable)
 43. The industry shall comply to the conditions stipulated in CTE order issued by ODISHA State Pollution Control Board.
 44. The industry shall abide by E(P) Act, 1986 and Rules framed there-under
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45. In case the consent fee is revised upward or the fees paid is found to be inadequate for any reason during this period, the industry shall pay the differential fees to the Board (for the remaining years) to keep the consent order in force. If they fail to pay the adequate amount within the period stipulated by the Board the consent order will be revoked without prior notice.
46. The Board reserves the right to revoke/refuse consent to operate at any time during period for which consent is granted in case any violation is observed and to modify/ stipulate additional conditions as deemed appropriate

GENERAL CONDITIONS FOR UNITS WITH INVESTMENT OF MORE THAN Rs 50 CRORES, AND 17 CATEGORIES OF HIGHLY POLLUTING INDUSTRIES (RED A).

1. The applicant shall analyze the effluent / emissions and Ambient Air Quality every month through approved laboratory for the parameters indicated in TABLE- 'B', 'C' & Part -'B' as mentioned in this order and shall furnish the report thereof to the Board on monthly basis.
 2. The following information shall be forwarded to the Member Secretary on or before 10th of every month.
 - a) Performance / progress of the treatment plant.
 - b) Monthly statement of daily discharge of domestic and/or trade effluent.
 3. Non-compliance with effluent limitations
 - a) If for any reason the applicant does not comply with or is unable to comply with any effluent limitations specified in this consent, the applicant shall immediately notify the consent issuing authority by telephone and provide the consent issuing authority with the following information in writing within 5 days of such notification.
 - i) Causes of non-compliance
 - ii) A description of the non-compliance discharge including its impact on the receiving waters.
 - iii) Anticipated time of continuance of non-compliance if expected to continue or if such condition has been corrected the duration or period of non-compliance.
 - iv) Steps taken by the applicant to reduce and eliminate the non-complying discharge and
 - v) Steps to be taken by the applicant too prevent the condition of non-compliance.
 - b) The applicant shall take all reasonable steps to minimize any adverse impact to natural waters resulting from non-compliance with any effluent limitation specified in this consent including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.
 - c) Nothing in this consent shall be construed to relieve the applicant from civil or criminal penalties for non-compliance whether or not such non-compliance is due to factors beyond his control, such as break-down, electric failure, accident or natural disaster.
 4. Proper housekeeping shall be maintained inside the factory premises including process areas by a dedicated team.
 5. The industry must constitute a team of responsible and technically qualified personnel who will ensure continuous operation of all pollution control devices round the clock (including night hours) and should be in a position to explain the status of operation of the pollution control measures to the inspecting officers of the Board at any point of time. The name of these persons with their contact telephone numbers shall be intimated to the concerned Regional Officer and Head Office of the Board and in case of any change in the team it shall be intimated to the Board immediately.
 6. The industry shall engage dedicated qualified manpower to ensure continuous and effective operation of online stack / Ambient Air Quality / Effluent monitoring stations for maintenance of database, real time data transfer to SPCB server, data analysis and co-ordination with concerned personnel of process units for taking corrective measures in case of non-compliances and to respond to the instructions of SPCB in this matter.
 7. All employees of the industry including officers, staff, workers, contract workers involved in operation/maintenance/ supervision of process area, pollution control areas, raw material and waste handling areas shall undergo short term training at least twice in a year in the field of pollution control and environment protection to create awareness and develop green skill. The report on the activities along with details and photographs shall be submitted to the Board on annual basis by end of June for previous financial year.
 8. ISO auditing reports of the industry in the field of environment shall be submitted to the Board every year on annual basis.
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9. The environmental cell shall be established and upgraded effectively to guide, monitor the pollution control and environmental protection activities inside the industries on day to day basis to ensure that the conditions stipulated in the consent to establish/operate order of the SPCB and conditions imposed in EC and provisions of various environmental acts and rules are complied with and the report returns, compliances are submitted to the Board in due time.
10. Adequate numbers of scientific / technical persons having qualification in environmental engineering/ environmental science from recognized institution/ university must be engaged or appointed along with other interdisciplinary qualified persons to effectively implement and monitor different areas of environment management and regulatory compliances including air pollution control, water pollution control, online monitoring, real time data transmission, management of solid waste, hazardous waste, E-waste, plastic waste etc. The Head of the environmental cell should be a senior level official, who will directly report to the plant head to ensure that environmental management is performed effectively to ensure compliance to the environmental norms on priority basis.
11. Energy consumption data of different pollution control devices like ESP/ Bag filter/ Scrubber/ Cyclone/ Gas cleaning plant/ Fume treatment plant/ ETP/STP/Flow meters (treated effluent recycling) shall be collected online on real time centralized platform/ dashboard with data storage facility and generate tamperproof monthly / periodic reports, which shall be analysed by Energy Auditor, certified by Bureau of Energy Efficiency and accordingly the Energy Management / preventive maintenance of Pollution Control equipment shall be adopted. The energy management of process and pollution control devices shall be practiced to record the progressive achievements to minimize energy consumption in order to reduce greenhouse gas emission.
12. The post EIA monitoring schedule should be strictly followed for different parameters around the plant for the units is covered under EIA notification. The industry shall also conduct noise level study in the core zone and buffer zone of the industry and submit 6 monthly report to the Board.

F. SPECIAL CONDITIONS:

AIR POLLUTION CONTROL

1. All the air pollution control devices like ESPs / GCPs / Bag filters/ Ventury scrubbers installed at various process units and their raw material feeding and product handling sections shall be maintained, operated efficiently and continuously so that particulate matter emission from the stack shall meet the prescribed standard of the Board as indicated in 'Table-C'. The industry shall ensure continuous and effective operation of all the APC devices through preventive maintenance.
 2. All the potential fugitive dust generating areas of all the process units shall be covered with the adequate suction points. Fume generated from the ladle furnaces, and other process units of Steel Melting Shops (SMS) shall be collected through adequately designed fume extraction system. The collected dust / fumes shall be treated in the GCPs / bag filters/ scrubbers.
 3. The raw material handling yards shall be provided with adequate water sprinkling facilities so as to prevent fugitive dust generation during raw material handling and vehicle movement. All the raw material processing units and their transfer points shall be provided with adequate network of dry fog nozzles. The dust suppression system shall be operated continuously and effectively to avoid dust nuisance in the area.
 4. There shall be no leakage of flue gas through the emergency caps, slip rings or any other process areas of DRI kilns except during exigencies.
 5. There shall not be any leakages from flanges and pipes and gas conveyance system of the Blast furnaces and such leakages if any shall be immediately attended.
 6. Appropriate air pollution control devices shall be installed to collect and treat the secondary emissions from tapping area and casting areas of Blast furnaces.
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7. All the online continuous stack emission monitoring systems (CEMS) for measurement of particulate matter and gaseous pollutants shall be operated effectively & uninterruptedly and real time monitoring data so generated shall be transmitted directly to RT-DAS server of the Board without passing through any local PC or server.
 8. The industry shall strictly follow the guidelines of CPCB dated July, 2018 for Online Continuous Effluent Monitoring Systems (OCEMS) and Guidelines for continuous Emission Monitoring Systems of August, 2018 for PM and other gaseous pollutants.
 9. The industry shall ensure tampered proof real time transmission of online monitoring data to the server of CPCB and SPCB and maintain the health of the analyzers and data connectivity through valid AMC.
 10. Online monitoring system for PM, SO₂, NO_x, Hg for thermal power plants as per CPCB guideline for CEMS, July 2017 and Standards prescribed for these parameters by MoEF & CC Dt 7.12.2015 shall be complied.
 11. All the online continuous ambient air quality monitoring stations (CAAQMS) shall be operated effectively & uninterruptedly and the online monitoring data so generated shall be transmitted directly to RT-DAS server of the Board without passing through any local PC or server.
 12. Steps shall be taken for regular monitoring of Mercury (Hg) in the stack of AFBC & CFBC boiler and submit data to the Board.
 13. The unit shall provide low NO_x burners to reduce NO_x emission to keep the level within the prescribed standard by MoEF & CC vide Notification dtd. 07.12.2015.
 14. Steps shall be taken for installation of Flue Gas Desulphurisation (FGD) system in future if required to keep the SO₂ level within 600mg/Nm³ to confirm the MoEF & CC Notification dtd. 07.12.2015. This shall also include management and disposal of effluent / solid waste to be generated from FGD system.
 15. The Pneumatic Dust Handling system installed at the hoppers of all the ESPs and bag filters shall be operated continuously and effectively so that no fugitive dust nuisance is created.
 16. The performance evaluation of ESP, bag filter, air pollution control devices, online CEMS, CAAQMS & surveillance cameras shall be conducted by a reputed institute like NIT/IIT and annual report shall be submitted to the Board by end of June for the previous financial year.
 17. The digital display board installed at the main gate shall be of minimum size of 6ft x 4ft as stipulated by CPCB with provision of display of real time data online analysers (CEMS, CAAQMS & CEQMS), so that the public can visualize the actual emission and the values of parameters displayed at the gate. Outdoor LED video screens should be preferred for digital display of environmental parameters, CTO and authorization conditions and awareness clippings on environment at the main gate, colony area and process area.
 18. Online CO / Ammonia/ Chlorine and such other gas monitoring system shall be installed in every process area where such toxic gas are expected to be generated and in the plant premises along with alarm system to avoid accidental hazards due to gas leakage.
 19. Green belt shall be properly designed and developed with plantation of suitable local species and species prescribed by CPCB.
 20. Telescopic chute shall be installed at the bottom of hoppers/silo wherever applicable to prevent emission of fugitive dust during material transfer/unloading.
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21. Adequate no. of Carbon Monoxide (CO) detectors shall be installed near Gas Cleaning Plant area of the blast furnaces and those shall be in operation all the time. Appropriate and adequate alarm provision shall also be made.
22. Adequate measures shall be taken to control acid fumes in the shop floor of pickling lines.
23. Iron ore and coal used in the plant shall be stored under covered shed. Material storage area of the plant, approach roads shall be covered with adequate sprinkling facility. The water sprinkling system shall be kept operational all the time to avoid any fugitive dust nuisance.
24. The unit shall submit fly ash utilization status to the Board annually and shall comply to the provisions of revised fly ash Notification No. SO.5481(E), dt. 31.12.2021 of MoEF & CC, Govt. of India.
25. Dust suppression facilities by provision of adequate water sprinkling shall be made at the active dumping area and roads to prevent dust nuisance in the area.
26. The industry shall comply with all the stipulations contained in the Gazette Notification of Govt. of India vide No. 155, dtd. 31.03.2012. For emission standard, the details of 'Table-C' of this order is applicable.
27. Accumulation of dust and other solid waste in the work zone and non-dumping areas inside the factory premises shall be avoided. The work zone shall be properly cleaned either manually or mechanically every day and the dust so collected shall be disposed off in the designated dump site.
28. The approach roads and all the internal roads shall be fully concreted / blacktopped. All the roads shall be cleaned periodically to avoid accumulation of dust. Adequate sprinkling facility, preferably by fixed water sprinklers shall be provided alongside all the internal roads to prevent generation of fugitive dust during vehicular movement.
29. D.G. sets should be acoustically enclosed with anti-vibration measures and equipped with A.M.F. (Auto Mains Failure Device) for auto changeover of power supply from grid to D.G. in the event of power failure. The AMF Panel should preferably be PLC (Programmable Logic Control) based. Dedicated D.G. sets of adequate capacity shall be installed to ensure adequate standby power supply to run all pollution control devices of the plant in the event of power failure.
30. The installed HD IP camera shall be operated continuously so that video streaming shows in server of the Board on interruptedly.
31. The industry shall put up sign Boards at appropriate places with nomenclature of the stacks in consultation with Regional Officer of the Board. It shall install electronic display Board in front of main gate to display the monitoring data, prescribed standard for public information.
32. The ambient air quality shall confirm to the National Ambient Air Quality standard as per the notification of MoEF dated 16 Nov 2009 (Annexed).

WATER POLLUTION CONTROL

1. Specific water consumption in the power plant shall be limited within 3.5m³/MWh by 6th Dec, 2017 as per MoEF & CC vide Notification dtd. 07.12.2015.
 2. Under no circumstances there shall be discharge of any effluent to outside the factory premises. Water used for cooling purposes shall be fully recycled. Water used in various processes shall be suitably treated at source and recycled in those processes.
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3. The wastewater generated from the Coke Oven-II and their respective coal chemical departments shall be adequately treated in the BOD plant and the treated effluent after confirming to the prescribed standard shall be utilized in coke quenching in coke oven, slag granulation in blast furnaces and dust suppression. Under no circumstances, there shall be any diversion of effluent from coke oven and byproduct plant into any other drains or discharge system.
 4. Wastewater generated from the pickling lines Cold Rolling Mill shall be treated in the modified ETP and the treated water shall be reused. Care shall be taken to avoid spillage of the pickling acids.
 5. Waste water generated from raw water treatment system and back wash of filtration plant shall be properly treated and taken to guard pond and reused.
 6. Water used for cooling purposes in sinter plant shall be fully recycled in a closed loop. The periodical cooling blow down shall be treated in existing RO plant and reuse.
 7. Blow down from WHRB boiler / AFBC / CFBC boilers and all the cooling towers shall meet the following standards before it is discharged to the common monitoring basin and shall be used for dust suppression;
 - a. For boiler blow down: SS-100mg/l, O&G-20mg/l, Cu(Total)-1.0mg/l, Fe(Total)-1.0mg/l
 8. For cooling tower blow down: Free available chlorine-0.5mg/l, Zn-1.0mg/l, Cr (Total)-2.0mg/l, Phosphate-2.0mg/l.
 9. The unit shall recover moisture from the tailings generated from iron ore beneficiation plant through deep bed paste thickener as a water conservation measures.
 10. The unit shall convey the tailings from iron ore beneficiation plant to the deep paste thickener through closed pipe line.
 11. The water recovered from the tailings through thickener shall be return back to iron ore beneficiation plant for use in beneficiation through a closed loop.
 12. The tailings after recovery of moisture shall be taken through closed pipe line to tailing pond located at Sripura mouza.
 13. The unit shall maintain Zero Liquid discharge from the deep bed paste thickener and there shall not be any discharged to outside plant premises.
 14. Domestic solid waste generated from colony, canteen, office complex etc. shall be operated through mechanically operated waste convertors with facility for recovery of useful products like oil/ gas/ carbon/ metal/ compost etc. The products to be used by the industry or sold and the inorganic residues is to be used for captive consumption/ sold/ disposed in sanitary landfill developed inside the premises.
 15. The industry shall operate mechanized wheel washing system along with effluent treatment and recycling facilities for the raw material / product /solid waste transport vehicles at the exit point of the industry.
 16. The domestic effluent generated from colony shall be treated in STP and shall meet the standards prescribed by MoEF & CC vide notification G.S.R 1265(E) dtd. 13th October 2017 as follows; pH - 6.5-9.0, BOD - less than 30mg/l TSS - less than 100mg/l and Fecal Coliform (FC) MPN/100ml<1000.
 17. Online and continuous effluent monitoring system (CEQMS) shall be operated effectively & uninterruptedly and the online monitoring data so generated shall be transmitted directly to RT-DAS server of the Board without passing through any local PC or server.
-



18. The runoff water from the whole factory premises including solid waste dumping area shall be collected through dedicated garland drains and shall be adequately treated in the wastewater treatment plant (WTP-I, WTP-II and WTP-III). The treated effluent from the WTP-II & WTP-III shall be treated in RO plant and treated wastewater shall be reused in power plant. The treated effluent from WTP-I, II & III shall be meet prescribed standard for discharge into inland surface water and shall be reused to maximum extent and excess if any shall be discharged to outside in rainy season only.
19. The Effluent Treatment Plant (ETP) and the Sewage Treatment Plant (STP) shall be operated effectively and continuously through a dedicated experienced team, so as to confirm to the prescribed norms.
20. The performance evaluation of ETP, STP, online CEQMS & Web cameras, flow meter shall conducted by a reputed institute like NIT/IIT and annual report shall be submitted to the Board by end of June for previous financial year.
21. Flow meter and level sensors with telemetry system should be installed in the bore wells as stipulated by Central Ground Water Authority/ Water Resources Department.
22. The industry shall conduct surface run off management study and develop rain water harvesting structures and surface runoff treatment systems inside the premises.
23. Dumping of solid waste shall be made at designated locations in a systematic manner with proper engineering applications by providing proper slope, angle, berms, height, toe wall, retaining wall and road network. The active dumping area shall be kept at minimum. The exhausted dump area shall be technically reclaimed by spreading a layer of soil with proper compaction and consolidation. Biological reclamation of the same shall be made by planting saplings of appropriate species. Adequate provision for watering of plants and protection of trees shall be made.
24. The industry shall have adequate space at point of time for waste disposal at least for a period of next year. Before using any new patch of land / site for solid waste dumping, the industry shall obtain prior consent to establish of the Board.
33. Ash generated from Power plant shall be disposed off as per fly ash Notification No. SO.5481(E),dt. 31.12.2021 of MoEF & CC, Govt. of India.
25. ESP dust from DRI Kilns and other non hazardous solid waste generated from factory shall be disposed in designated areas at abandoned stone quarry and low land filling with permission from the Board in environmentally sound manner without causing any environmental impact in that area.
26. Iron ore tailing generated from the iron ore beneficiation plant shall be disposed at earmarked tailing disposal site at Siripura village in an environmentally sound manner without causing any environmental impact in that area.
27. Consent to operate is subject to availability of all other statutory clearances required under relevant Acts / Rules and fulfillment of required procedural formalities.

H. ADDITIONAL CONDITIONS:

- 1) The unit shall maintain the existing FTPS at SMS-I to control PM emission in the stack as well as roof top emission within prescribed norms.
 - 2) The unit shall complete the FTP-5 & FTP – 6 at SMS – I by 31st March, 2025 as per Bank Guarantee.
-



CONSENT ORDER

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- 3) The unit shall complete the RO Plant for further treatment of treated water of BOD Plant of Coke Oven Plant-2 to maintain ZLD with mechanical vapour re-compressor system (MVR) for complete evaporation of RO reject by 31st March, 2025.

The occupier must comply with the conditions stipulated in section A, B, C, D E, F, G & H to keep this consent order valid.

To,

The President and Whole Time Director,
M/s. Bhushan Power & Steel Ltd.,
At- Thekoloi, PO - Lapanga,
Rengali, Dist - Sambalpur - 768 232

Encl : As above


MEMBER SECRETARY

STATE POLLUTION CONTROL BOARD, ODISHA

Memo No. 3440

/Dt. 12.03.2024

Copy forwarded to :

- i) Regional Officer, State Pollution Control Board, Sambalpur
- ii) District Collector, Sambalpur
- iii) D.F.O, Sambalpur
- iv) Director of Mines, Odisha, Bhubaneswar
- v) Director Factories & Boiler, Bhubaneswar
- vi) Consent Register / HWM Cell, Bhubaneswar




CHIEF ENV. ENGINEER

STATE POLLUTION CONTROL BOARD, ODISHA





General Standards for discharge of environment pollutants PART-A:EFFLUENTS

Sl.No.	Parameters	Standards			
		Inland surface	Public sewers	Land for irrigation	Marine Coastal Areas
		(a)	(b)	(c)	(d)
1.	Colour & odour	Colourless/Odourless as far as practicable	-----	See 6 of Annex-1	See 6 of Annex-1
2.	Suspended Solids (mg/l)	100	600	200	For process wastewater – 100 b. For cooling water effluent 10% above total suspended matter of influent.
3.	Particular size of SS	Shall pass 850	----	-----	
5.	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
6.	Temperature	Shall not exceed 5°C above the receiving water temperature	-----	-----	Shall not exceed 5°C above the receiving water temperature
7.	Oil & Grease mg/l max.	10	20	10	20
8.	Total residual chlorine	1.0	----	-----	1.0
9.	Ammonical nitrogen (as N) mg/l max.	50	50	-----	50
10.	Total Kjeldahl nitrogen (as NH ₃) mg/1 max.	100	----	-----	100
11.	Free ammonia (as NH ₃) mg/1 max.	5.0	----	-----	5.0
12.	Biochemical Oxygen Demand (5 days at 20°C) mg/1 max.	30	350	100	100
13.	Chemical Oxygen Demand, mg/1 max.	250	----	-----	250
14.	Arsenic (as As) mg/1 max.	0.2	0.2	0.2	0.2
15.	Mercury (as Hg) mg/1 max.	0.01	0.01	-----	0.001
16.	Lead (as pb) mg/1 max.	01.	1.0	-----	2.0



CONSENT ORDER

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17.	Cardmium (as Cd) mg/1 max.	2.0	1.0	-----	2.0
18.	Hexavalent Chromium (as Cr + 6) mg/l max.	0.1	2.0	-----	1.0
19.	Total Chromium (as Cr) mg/l max.	2.0	2.0	-----	2.0
20.	Copper (as Cu) mg/l max.	3.0	3.0	-----	3.0
21.	Zinc (as Zn) mg/l max.	5.0	15	-----	15
22.	Selenium (as Sc) mg/l max.	0.05	0.05	-----	0.05
23.	Nickel (as Nil) mg/l max.	3.0	3.0	-----	5.0
24.	Cyanide (as CN) mg/l max.	0.2	2.0	0.2	0.02
25.	Fluoride (as F) mg/l max.	2.0	15	-----	15
26.	Dissolved Phosphates (as P) mg/l max.	5.0	-----	-----	-----
27.	Sulphide (as S) mg/l max.	2.0	-----	-----	5.0
28.	Phenolic compounds as (C ₆ H ₅ OH) mg/l max.	1.0	5.0	-----	5.0
29.	Radioactive materials a. Alpha emitter micro curle/ml. b. Beta emitter micro curle/ml.	10 ⁷ 10 ⁶	10 ⁷ 10 ⁶	10 ⁸ 10 ⁷	10 ⁷ 10 ⁶
30.	Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
31.	Manganese (as Mn)	2 mg/l	2 mg/l	-----	2 mg/l
32.	Iron (Fe)	3 mg/l	3 mg/l	-----	3 mg/l
33.	Vanadium (as V)	0.2 mg/l	0.2 mg/l	-----	0.2 mg/l
34.	Nitrate Nitrogen	10 mg/l	-----	-----	20 mg/l

**PART -B : NATIONAL AMBIENT AIR QUALITY STANDARDS**

Sl. No.	Pollutants	Time Weighed Average	Concentrate of Ambient Air		
			Industrial Residential, Rural and other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1.	Sulphur Dioxide (SO ₂), µg/m ³	Annual * 24 Hours **	50 80	20 80	-Improved west and Gacke - Ultraviolet fluorescence
2.	Nitrogen Dioxide (NO ₂), µg/m ³	Annual * 24 Hours **	40 80	30 80	- Modified Jacob & Hochheiser (Na-Arsenite) - Chemiluminescence
3.	Particulate Matter (size less than 10µm) or PM ₁₀ µg/m ³	Annual * 24 Hours **	60 100	60 100	-Gravimetric - TOEM - Beta Attenuation
4.	Particulate Matter (size less than 2.5µm) or PM _{2.5} µg/m ³	Annual * 24 Hours **	40 60	40 60	-Gravimetric - TOEM - Beta Attenuation
5.	Ozone (O ₃) µg/m ³	8 Hours ** 1 Hours **	100 180	100 180	- UV Photometric - Chemiluminescence - Chemical Method
6.	Lead (Pb) µg/m ³	Annual * 24 Hours **	0.50 1.0	0.50 1.0	-AAS/ICP method after sampling on EMP 2000 or equivalent filter paper. - ED-XRF using Teflon filter
7.	Carbon Monoxide (CO) mg/m ³	8 Hours ** 1 Hours **	02 04	02 04	- Non Dispersive Infra Red (NDIR) Spectroscopy
8.	Ammonia (NH ₃) µg/m ³	Annual* 24 Hours**	100 400	100 400	-Chemiluminescence - Indophenol Blue Method
9.	Benzene (C ₆ H ₆) µg/m ³	Annual *	05	05	-Gas Chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10.	Benzo (a) Pyrene (BaP)-Particulate phase only, ng/m ³	Annual*	01	01	-Solvent extraction followed by HPLC/GC analysis
11.	Arsenic (As), ng/m ³	Annual*	06	06	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper
12.	Nickel (Ni),ng/m ³	Annual*	20	20	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper

** Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year, 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

ଖତିୟାନ

ମୌଜା : ଶ୍ରୀପୁର
 ଥାନା : ଝାରସୁଗୁଡ଼ା
 ଥାନା ନମ୍ବର : 38

ତହସିଲ : ଝାରସୁଗୁଡ଼ା
 ତହସିଲ ନମ୍ବର : 203
 ଜିଲ୍ଲା : ଝାରସୁଗୁଡ଼ା

ଜମିଦାରଙ୍କ ନାମ ଓ ଖେତ୍ର ବା ଖତିୟାନର କ୍ରମିକ ନମ୍ବର		ଓଡ଼ିଶା ସରକାର ।				
1) ଖତିୟାନର କ୍ରମିକ ନମ୍ବର		157/470				
2) ପ୍ରଜାର ନାମ, ପିତାର ନାମ, ଜାତି ଓ ବାସସ୍ଥାନ		ଭୂଷଣ ଷ୍ଟିଲ ଏଣ୍ଡ ପାବର ଲିମିଟେଡ଼ ତରଫରୁ ରିଶି ପାଲ ପି:ଠାକୁର ଦାଶ ଜା: ବ୍ରାହ୍ମଣ ବା: ଠେଲକୋଲୋଇ, ଭୂଷଣ ଚାଉନସିପ, ଥା: କଟରବଗା, ଜି: ସମ୍ବଲପୁର				
3) ସ୍ୱତ୍ୱ	ରକ୍ଷିତ					
4) ଦେୟ :	ଜଳକର	ଖଜଣା	ସେସ୍	ନିଷ୍କାର ସେସ୍ ଓ ଅନ୍ୟାନ୍ୟ ସେସ୍ ଯଦି କିଛି ଥାଏ	ମୋଟ	5) କ୍ରମବର୍ଦ୍ଧନଶୀଳ ଖଜଣାର ବିବରଣୀ
		5856.00	4392.00		10248.00	OLR w/s 8(A) 6କ ନଂ 582/12 ମତେ ଜମା ବୁଦ୍ଧି କରାଗଲା ।
6) ବିଶେଷ ଅନୁସଙ୍ଗ ଯଦି କିଛି ଥାଏ		ମୁ୍ୟ କେ ନଂ 224/2011 ତା 17-10-2011 ଆଦେଶ ମତେ ଖା ନଂ 157/322 ରୁ ଖାରଜ କରି ଦରଜ କରାଗଲା ।				
BLANK SPACE FOR STAMPING						
ଅନ୍ତିମ ପ୍ରକାଶନ ତାରିଖ -						
ଖଜଣା ଧାର୍ଯ୍ୟ ତାରିଖ -						

ଖତିୟାନର କ୍ରମିକ ନଂ : 157/470		ମୌଜା : ଶ୍ରୀପୁରା			ଜିଲ୍ଲା : ଖାରସୁଗୁଡ଼ା	
ପ୍ଲଟ ନମ୍ବର ଓ ଚକର ନାମ	କିସମ୍ପା ଓ ପୁଚର ଖଜଣା	କିସମ୍ପା ବିସ୍ତାରିତ ବିବରଣୀ ଓ ଚୌହଦି	ରକବା			ମିଶ୍ରଣ
			ଏ.	ଡି.	ହେକ୍ଟର	
7	8	9	10	11	12	
2120	ଘରବାରି		1	5200	0.6151	OLR w/s 8(A) କେ ନଂ 582/12, ମିଶ୍ର କିସମ୍ପା ପରିବର୍ତ୍ତନ କରାଗଲା, ।
2123	ଘରବାରି		1	4100	0.5706	
2124	ଘରବାରି		1	6600	0.6718	
2127	ଘରବାରି		1	3500	0.5463	
2128	ଘରବାରି		1	9900	0.8053	
2130	ଘରବାରି		1	7300	0.7001	
2131	ଘରବାରି		2	4500	0.9915	
2132	ଘରବାରି		5	5000	2.2258	
2119/2399	ଘରବାରି		1	0500	0.4249	
2116/3032	ଘରବାରି		0	8600	0.3480	
10 plots			19	5200	7.8994	

Khatiyan

Annexure-II

Mouza: Sripura
Station: Jharusguda
Police Station
No.38

Tahsali: Jharsuguda
Tehsali No. 203
District: Jharsuguda

Name of the Land Owner and Remarks or Record of Rights Number.		Odisha Govt 1				
1) Khatiyan No.		157/470				
2) Name of the Tenant, Father's Name, Caste and Residence		On behalf of Bhusan Steel & Power Limited, Rishi Pal, Father: Thakur das, caste: Vaishnav, Residence: Thelkoloji, Bhusan Township, Police Station: Katarbaga, District: Sambalpur				
3) Swatwa	Rayati					
4) Due:	Water Tax	Tax	Cess	Complete Cess & Miscellaneous Cess	Total	5) Recorded Under
		5856.00	4392.00		10248.00	OLR u/s 8(A) Item No. 582/12 Deposited.
6) Special Condition if any		Mutation Case no. 224/2011 dtd. 17.10.2011: The record from record no. 157/322 has been nullified and recorded.				
BLANK SPACE FOR STAMPING						
Last publication date-						
Tax paid date-						

Attested

 Regional Officer
 State Pollution Control Board
 Regional Office, Sambalpur

Khatiyon No:157/470		Mouza: Sripura			Dist: Jharsuguda	
Plot name & Chaka name	Type of Land & Tax details	Complete details of Type of Land	Rakaba			Opinion
			Acre	Dec.	Hectare.	
7	8	9	10	11	12	
2120	Gharabari		1	5200	0.6151	OLR u/s 8(A) Case No 582/12, Land type changed.
2123	Gharabari		1	4100	0.5706	
2124	Gharabari		1	6600	0.6718	
2127	Gharabari		1	3500	0.5463	
2128	Gharabari		1	9900	0.8053	
2130	Gharabari		1	7300	0.7001	
2131	Gharabari		2	4500	0.9915	
2132	Gharabari		5	5000	2.2258	
2119/2399	Gharabari		1	0500	0.4249	
2116/3032	Gharabari		0	8600	0.3480	
10 plots	Gharabari		19	5200	7.8994	

Attested

Regional Officer
State Pollution Control Board
Regional Office, Sambalpur

ଖତିୟାନ

ମୌଜା : ଶ୍ରୀପୁରା
ଥାନା : ଝାରସୁଗୁଡ଼ା
ଥାନା ନମ୍ବର : 38

ତହସିଲ : ଝାରସୁଗୁଡ଼ା
ତହସିଲ ନମ୍ବର : 203
ଜିଲ୍ଲା : ଝାରସୁଗୁଡ଼ା

ଜମିଦାରଙ୍କ ନାମ ଓ ଖେତାଟ ବା ଖତିୟାନର କ୍ରମିକ ନମ୍ବର		ଓଡ଼ିଶା ସରକାର ।				
1) ଖତିୟାନର କ୍ରମିକ ନମ୍ବର		157/466				
2) ପ୍ରଜାର ନାମ, ପିତାର ନାମ, ଜାତି ଓ ବାସସ୍ଥାନ		ଭୂଷଣ ପାବାର ଏଣ୍ଡ ଷ୍ଟିଲ ଲିମିଟେଡ଼ ଚରଫରୁ ବି. ଏମ୍. ଶର୍ମା ପି.କାଶ୍ମିରି ଲାଲ ବା: ଠେଲକୋଲଭ, ଥା: କରତବଗା, ଜି: ସମ୍ବଲପୁର				
3) ସ୍ୱତ୍ୱ	ରୟତି					
4) ଦେୟ :	ଜଳକର	ଖଜଣା	ସେସ୍	ନିଷ୍କାର ସେସ୍ ଓ ଅନ୍ୟାନ୍ୟ ସେସ୍ ଯଦି କିଛି ଥାଏ	ମୋଟ	5) କ୍ରମବର୍ଦ୍ଧନଶୀଳ ଖଜଣାର ବିବରଣୀ
		5631.00	4223.25		9854.25	OLR w/s 8(A) କେ ନଂ 583/12 ମତେ ଜମା ବୁଦ୍ଧି କରାଗଲା ।
6) ବିଶେଷ ଅନୁସଙ୍ଗ ଯଦି କିଛି ଥାଏ		ମୁ୍ୟ କେ ନଂ 226/2011 ତା 17-10-2011, ମୁ୍ୟ କେ ନଂ 228/2011 ତା 27-10-2011, ମୁ୍ୟ କେ ନଂ 2307/2011, 2308/2011, 2309/2011, 2310/2011 ଓ 2311/2011 ତା 31-10-2011 ଆଦେଶ ମତେ ଖା ନଂ 122 173, 121, 157/96, 174, 114, 63 ଓ 166 ରୁ ଖାରଜ କରି ଦରଜ କରାଗଲା । ମୁ୍ୟ ଅପିଲ କେ ନଂ 6/2013 ଆଦେଶ ମତେ ପୁଟ ନଂ 2148 ଖା ନଂ 157/541 କୁ ଗଲା				
BLANK SPACE FOR STAMPING						
ଅନ୍ତିମ ପ୍ରକାଶନ ତାରିଖ -						
ଖଜଣା ଧାର୍ଯ୍ୟ ତାରିଖ -						

ଖତିୟାନର କ୍ରମିକ ନଂ : 157/466		ମୌଜା : ଶ୍ରୀପୁରୀ			ଜିଲ୍ଲା : ଝାରସୁଗୁଡ଼ା	
ପ୍ଲଟ ନମ୍ବର ଓ ଚକର ନାମ	କିସମ ଓ ପ୍ଲଟର ଖଜଣା	କିସମର ବିସ୍ତାରିତ ବିବରଣୀ ଓ ଚୌହଦି	ରକବା			ମନ୍ତବ୍ୟ
			ଏ.	ଡି.	ହେକ୍ଟର	
7	8	9	10	11	12	
2066	ଘରବାରି		1	8300	0.7406	OLR w/s 8(A) କେ ନଂ 583/12, ମତେ କିସମ ପରିବର୍ତ୍ତନ କରାଗଲା, ।
2068	ଘରବାରି		2	3200	0.9389	
2089	ଘରବାରି		0	8000	0.3237	
2090	ଘରବାରି		0	1300	0.0526	
2092	ଘରବାରି		0	2400	0.0971	
2096	ଘରବାରି		0	7200	0.2914	
2097	ଘରବାରି		1	0300	0.4168	
2098	ଘରବାରି		0	3000	0.1214	
2101	ଘରବାରି		0	1200	0.0486	
2110	କଟାଆଡି		0	6100	0.2469	
2134	ଘରବାରି		6	2900	2.5455	
2138	ଘରବାରି		1	3500	0.5463	
2140	ଘରବାରି		0	9300	0.3764	
2141	ଘରବାରି		0	2600	0.1052	
2156	ଘରବାରି		1	5200	0.6151	
2095/2441	ଘରବାରି		0	1300	0.0526	
2069/2797	ଘରବାରି		0	8000	0.3237	
17 plots			19	3800	7.8428	

Khatiyon

Mouza: Sripura
Station: Jharusguda
Police Station
No.38

Tahsali: Jharsuguda
Tehsali No. 203
District: Jharsuguda

Name of the Land Owner and Remarks or Record of Rights Number.		Odisha Govt 1				
1) Khatiyon No.		157/466				
2) Name of the Tenant, Father's Name, Caste and Residence		On behalf of Bhusan Steel & power Limited, B. M. Sharma, Father: Kashmiri Lal, Residence: Thelkoloi, Police Station: Katarbaga, District: Sambalpur				
3) Swatwa	Rayati					
4) Due:	Water Tax	Tax	Cess	Complete Cess & Miscellaneous Cess	Total	5) Recorded Under
		5631.00	4223.25		9854.25	OLR u/s 8(A) Case No. 583/12 Deposited.
6) Special Condition if any		Mutation Case no. 226/2011 dtd. 17.10.2011, Mutation Case no. 228/2011 dtd. 27.10.2011, Mutation Case no. 2307/2011, 2308/2011, 2309/2011, 2310/2011 and 2311/2011 dtd. 31.10.2011 by the order khata no. 122 173, 121, 157/96, 174, 114, 63 and 166 has declared as nullified and recorded. Mutation appeal case no.6/2013 and by the order the plot no. 2148 has transferred to khata no. 157/541.				
BLANK SPACE FOR STAMPING						
Last publication date-						
Tax paid date-						

A. Hegde

Regional Officer
State Pollution Control Board
Regional Office, Sambalpur

Khatiyon No:157/466		Mouza: Sripura				Dist: Jharsuguda
Plot name & Chaka name	Type of Land & Tax details	Complete details of Type of Land	Rakaba			Opinion
			Acre	Dec.	Hectare.	
7	8	9	10	11	12	
2026	Gharabari		1	8300	0.7406	OLR u/s 8(A) Case No 583/12, Land type changed.
2068	Gharabari		2	3200	0.9389	
2089	Gharabari		0	8000	0.3237	
2090	Gharabari		0	1300	0.0526	
2092	Gharabari		0	2400	0.0971	
2096	Gharabari		0	7200	0.2914	
2097	Gharabari		1	0300	0.4168	
2098	Gharabari		0	3000	0.1214	
2101	Gharabari		0	1200	0.0486	
2110	Gharabari		0	6100	0.2469	
2134	Gharabari		6	2900	2.5455	
2138	Gharabari		1	3500	0.5463	
2140	Gharabari		0	9300	0.3764	
2141	Gharabari		0	2600	0.1052	
2156	Gharabari		1	5200	0.6151	
2195/2441	Gharabari		0	1300	0.0526	
2069/2797	Gharabari		0	8000	0.3237	
17 plots			19	3800	7.8428	

A. Kesava

Regional Officer
State Pollution Control Board
Regional Office, Sambalpur

Tel: 0663-2950151

Email: rospcb.sambalpur@ospcboard.org

Website: www.ospcboard.org



OFFICE OF THE REGIONAL OFFICE, SAMBALPUR
STATE POLLUTION CONTROL BOARD, ODISHA
 [DEPARTMENT OF FOREST & ENVIRONMENT, GOVERNMENT OF ODISHA]
 1070, Hospital Road, Modipara, Sambalpur-768002

No. 3075/1

IV Misc-04/2021-22

Date: 31.08.2023

From:

Dr. S.N.Nanda
 Regional Officer

To

The Chief Environmental Engineer,
 State Pollution Control Board,
 Bhubaneswar

Sub:- Submission of inspection report with respect to the complaint filed by Sri Akash Kalo and others of Village- Bisadihi, GP/PO- Ghichamura, PS- Thelokoi, Dist. -Sambalpur regarding unauthorized dumping of waste materials by M/s. Bhushan Power and Steel Limited, At- Thelkoloi, PO- Lapanga, Dist.- Sambalpur, Odisha- Reg.

Ref: - Your Office Letter No. 12203/ Publ.Comp./Misc.340, Dtd. 03.08.2023

Sir,

With reference to the subject above, the alleged site in Bisadihi village of Ghichamura Gram Panchayat was inspected on dtd **18.08.2023** in connection with the complaint petition filed by Sri Akash Kalo and others of Village- Bisadihi, GP/PO- Ghichamura, PS- Thelokoi, Dist. -Sambalpur regarding unauthorized dumping of waste materials by M/s. Bhushan Power and Steel Limited, At- Thelkoloi, PO- Lapanga, Dist. - Sambalpur, Odisha. The inspection and analysis reports are hereby enclosed for your kind information and necessary action.

Yours faithfully

Encl: as above.

OC *SR*
 Regional Officer

Memo No. 3076 /Dt. 31.08.2023 Speed Post/Email

Copy forwarded to the Private Secretary of the Chairman, State Pollution Control Board, A/118, Nilakantha Nagar, Unit-VIII, Paribesh Bhawan, Bhubaneswar for kind information.

OC *SR*
 Regional Officer

Memo.No. 3077 /Dt. 31.08.2023 Speed Post/Email

Copy forwarded to the Sr. Law Officer, Level-1, State Pollution Control Board, A/118, Nilakantha Nagar, Unit-VIII, Paribesh Bhawan, Bhubaneswar for kind information and necessary action.

OC *SR*
 Regional Officer

Inspection report on complaint petition received from Head office filed by Sri Akash Kalo and others of Village- Bisadihi, GP/PO- Ghichamura, PS- Thelokoi, Dist. - Sambalpur regarding unauthorized dumping of waste materials by M/s. Bhushan Power and Steel Limited, At- Thelkoloi, PO- Lapanga, Dist.- Sambalpur, Odisha

A complaint petition regarding unauthorized dumping of waste materials by M/s. Bhushan Power and Steel Limited, At- Thelkoloi, PO- Lapanga, Dist.- Sambalpur has been filed by Sri Akash Kalo & others of Village- Bisadihi, GP/PO- Ghichamura, PS- Thelkoloi, Dist.- Sambalpur, which is forwarded from Head Office vide letter no. 12203/Publ.Comp./Misc.340, dt. 03.08.2023, wherein it has been alleged the following point(s) related to pollution:

1. The tailing pond of the industry is about 500 m from the village habitation. The wastewater coming from the tailing pond is being discharged to two numbers of ponds of the village. The village people are depending for bathing and agricultural purposes on these ponds. Due to wastewater discharged into these ponds the villagers are suffering from different diseases.
2. The wastewaters from tailing ponds are discharged into the nearby agricultural paddy fields of the villagers. Hence the crops are damaged and resulting in lesser yield.
3. As the tailing pond is about 500 m from the village there is air pollution in the village.

In this regard an inspection of the alleged site has been conducted on dtd. 18.08.2023 and also interacted with the complainant and other villagers at Village- Bisadihi. Sri Akash Kalo, complainant of Village- Bisadiha, Sri Bipin Bhoi, complainant of Village- Bisadiha, Sri Niranjan Parida, Manager (Environment) of M/s. Bhushan Power and Steel Limited, Thelkoloi, Sri Nishikanta Pattanaik, Sr. Manager of M/s. Bhushan Power and Steel Limited, Thelkoloi and Sri Ranjeet Singh, Officer of M/s. Bhushan Power and Steel Limited, Thelkoloi were present during inspection.

Consent to operate status of M/s. Bhushan Power and Steel Limited, At- Thelkoloi, PO- Lapanga, Dist.- Sambalpur: The consent to operate of the industry is valid up to 31.03.2024, vide letter no. 4429/IND-I-CON-4650, dtd. 22.03.2023.

Observations during visit:

1. The alleged site is located at a distance of approx. 500 m from the boundary of tailing ponds.
2. Sri Akash Kalo, complainant of Village- Bisadiha showed two numbers of ponds and alleged that wastewater has been discharged from the tailing pond to these ponds. One number of pond (say Pond No.1) appears muddy and light brown in colour (Fig.1) and

the other pond appears to be used by the villagers (say Pond No.2), the water appears to be clear (Fig. 2). Water samples have been collected from both the ponds. The analysis report reveals that all the parameters are within the prescribed standard of the Board. The analysis report is enclosed.

3. Sri Bipin Bhoi, complainant of Village- Bisadihi showed the affected alleged agricultural field (Fig. 3). It appears to be muddy and light brown in colour like pond no. 1 as the water from the paddy field goes to pond no. 1. Water sample from the agricultural paddy field has been collected. The analysis report reveals that all the parameters are within the prescribed standard of the Board. The analysis report is enclosed.
4. The tailing pond was also inspected to find the source of the alleged complaint and it was observed that the tailings were thickened in a paste thickener and pumped to the tailing ponds through disposal pipe. The supernatant of the active tailing pond are being collected in the supernatant pond through pipe by the help of gravity and due to heavy rainfall there was discharge from this supernatant pond from the emergency discharge pipe (Fig. 4) to outside of the tailing pond area which runs to nearby agricultural field and pond no. 1 and visible by the red trail of the discharge route (fig. 5). On the day of inspection, there was no discharge from the supernatant pond or active tailing pond.
5. The tailings were collected in the tailing pond in liquid form so there is no fugitive emission observed from the tailing pond to the Bisadihi village.

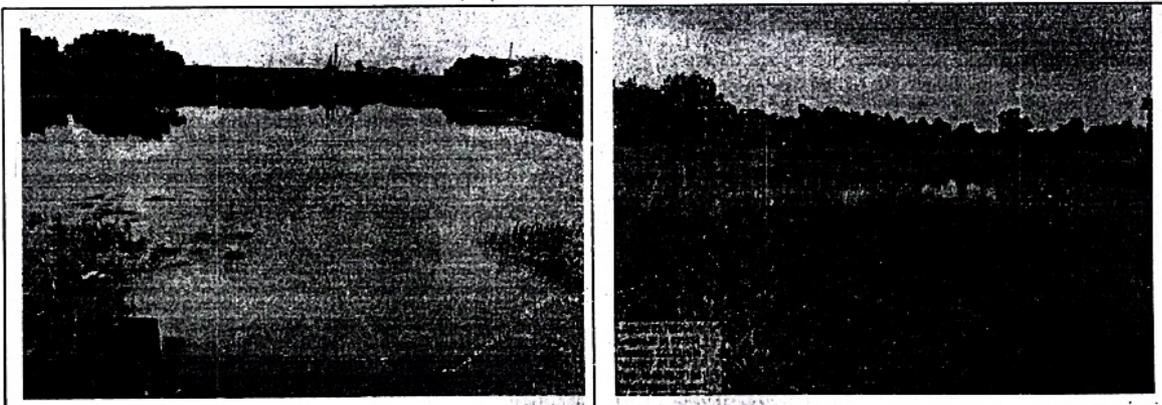
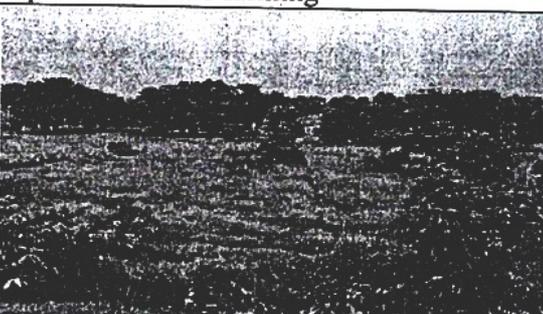
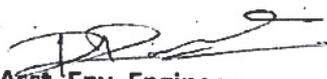


Fig. 1. Pond no.1 appears muddy and light brown in colour

	
<p>Fig 2. Pond no.2 appears to be clear</p>	<p>Fig 3. Agricultural paddy field where Sri Bipin Bhoi do the farming</p>
	
<p>Fig 4. The discharge pipe of the supernatant pond to outside appears to have discharge the supernatant liquid during heavy rainfall</p>	<p>Fig 5. The red trail of the discharge connecting to pond no.1 and agricultural paddy fields formed during heavy rainfall.</p>

Remarks:

1. In view of the above, the industry may be directed to construct the boundary wall immediately.
2. The industry should ensure that there should not be any discharge of wastewater from tailing ponds to outside even on heavy rainfall.


 Asst. Env. Engineer
 S.P.C. Board, Sambalpur
 Asst. Environmental Engineer
 State Pollution Control Board
 Regional Office, Sambalpur


 Dy. Env. Engineer
 S.P.C. Board, Sambalpur
 Deputy Env. Engineer
 SPC Board, Sambalpur



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Email : rospcb.sambalpur@ospcboard.org
Website : www.ospcboard.org

OFFICE OF THE REGIONAL OFFICE, SAMBALPUR
STATE POLLUTION CONTROL BOARD, ODISHA
[DEPARTMENT OF FOREST & ENVIRONMENT, GOVERNMENT OF ODISHA]
1070, Hospital Road, Modipara, Sambalpur-768002

Lab. Ref. No. OW/115/08/2023-24

Date: 24.08.2023

ANALYSIS REPORT OF WATER SAMPLE

Name & Address of the Industry / Source : Other water sample from Bisadihi village, At: Bisadihi, PO: Lapanga, P.S: Thekoloii, Dist.: Sambalpur

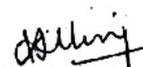
Date of Sample Collection/ : 18.08.2023

Submitted on : 19.08.2023

Sample Collected by/ Submitted by : Er. B. Pradhan, DEE & Er. R.K. Panda, AEE

Sl. No.	Location of sampling point	pH	TSS (mg/l)	BOD (mg/l)	COD (mg/l)	Fe (mg/l)	Oil & Grease (mg/l)
1	Water sample from pond no.-1 of Bisadihi village	6.3	86	12	96	0.23	ND
2	Water sample from pond no.-2 of Bisadihi village	8.5	42	10	80	0.04	ND
3	Water sample from nearby agricultural paddy field of Bisadihi village	6.2	74	10	64	0.26	ND
Prescribed Standard		6.5-9.0	100.0	30.0	250.0	3.0	10.0


ANALYSED BY:
Regional Office of State Pollution Control Board, Sambalpur


DY. ENV. SCIENTIST
Deputy Environmental Scientist
Regional Office of State Pollution Control Board, Sambalpur



**CENTRAL LABORATORY
STATE POLLUTION CONTROL BOARD, ODISHA**

Plot No. B-59/2 & 59/3, Chandaka Industrial Estate, Patia,
Bhubaneswar - 751 024

E-mail: centrallab@ospboard.org



TEST REPORT

Page 1 of 1

1. ULR No. : TC127402400000403F
 2 (i). Report No. : OS/556/07/2024
 3 (i) Date : 02.07.2024
 4. Sample Submitted By : Sri S.S. Patra, JSA,
 (Name and address) Regional Office, SPCB, Odisha, Sambalpur
 5. Reference Letter No. : 2079/ VI -Lab(Misc) -13/2018-19 dt.28.06.2024
 6. Date of sample receipt : 29.06.2024
 7. Sample Description :

- 2(ii). Amendment No : ---
 3(ii) Amendment Date : ---

- (i) Discipline : Chemical Testing
 (Biological Testing,
 Chemical testing)
- (ii) Group : Water
 (Water/ Pollution and Environment
 / Atmospheric Pollution/ Soil and
 Hazardous Waste)
- (iii) Sub Group : Surface water
 (Surface water/ Ground water/ Drinking
 water / Wastewater/ Effluent/ Ambient Air/
 Stack/ Soil and Hazardous Waste)

8. Analysis Starting Date-Analysis Completion Date : 29.06.2024 – 02.07.2024

9. If uncertainty is desired by Customer : No

10. Analysis Results :

(Attach separate sheet if necessary)

Sl. No.	Parameter, Unit	Standards/ Regulatory Limits		Test Method	Sample collected from Water body near iron ore tailing pond of M/s Bhushan Power & Steel Ltd., (BPSL) Theikoloi, Lapanga, Sambalpur	
		Applicable for Sl. No. Others/June - 24/SW/1024 & Others/June -24/ SW/1025			Others/June - 24/ SW/1024	Others/June - 24/ SW/1025
		IS : 2296, (1982) Class -B *	G.S.R.742 (E) **		Sample from Bisadihi village pond no.1 near iron ore tailing pond of M/s BPSL, Theikoloi, Sambalpur	Sample from Bisadihi village pond no.2 near iron ore tailing pond of M/s BPSL, Theikoloi, Sambalpur
1.	pH	6.5-8.5	6.5-8.5	4500-H ⁺ -B, APHA, 23 rd Edn., 2017	Results	
2.	Total Dissolved Solids (TDS), mg/L	-	-	2540 C, APHA, 23 rd Edn., 2017	7.2	6.9
3.	Biochemical Oxygen Demand (BOD, 3 days at 27° C), mg/L	3, max	3 mg/L or less	IS 3025 : Part 44 (1999)	392.0	828.0
4.	Chemical Oxygen Demand (COD), mg/L	-	-	5220 B, APHA, 23 rd Edn., 2017	1.1	1.4
5.	Total Hardness (TH), as CaCO ₃ mg/L	-	-	2340 C, APHA, 23 rd Edn., 2017	7.5	11.0
6.	Iron (Fe), mg/L	-	-	3500 Fe - B, APHA, 23 rd Edn., 2017	136.0	320.0
					0.38	0.295

* Tolerance limit for inland surface water subject to pollution (IS : 2296-1982), for Class 'B' (Outdoor bathing)

** Primary water quality criteria for bathing water (water used for organised outdoor bathing)

11. Deviation from Test Method , if any :
 12. If Sampling Conducted by the Central Laboratory, Yes/ No. - No
 If Yes,

- (a) Date of Sampling : (b) Method Used* :
 (c) Name of Sampler with Designation :

-----End of Test Report-----

Usharani Patnaik
 Authorised Signatory
 (Water/wastewater)

(Dr. (Mrs)Usharani Patnaik, Addl. Chief Env. Scientist)

Niranjan Mallick
 Board Analyst

(Mr. Niranjan Mallick, Chief Env. Scientist)

- Note :**
 (i) The results stated above relate only to the items tested.
 (ii) This report shall not be reproduced in full or in part without written approval from the In-charge of the Central Laboratory.
 (iii) The laboratory is not responsible for the authenticity of photocopied Test Reports.
 (iv) The Test Item will not be retained for more than 15 days from the date of issue of Test Report except in case as required by applicable Regulation.



**CENTRAL LABORATORY
STATE POLLUTION CONTROL BOARD, ODISHA**

Plot No. B-59/2 & 59/3, Chandaka Industrial Estate, Patia,
Bhubaneswar - 751 024

E-mail: centrallab@ospboard.org



TC-12740

TEST REPORT

Page 1 of 1

1. ULR No. : TC127402400000417F
- 2 (i). Report No. : OS/584/07/2024
- 3 (i) Date : 04.07.2024
4. Sample Submitted By : Sri S.S. Patra, JSA,
(Name and address) Regional Office, SPCB, Odisha, Sambalpur
5. Reference Letter No. : 2079/ VI -Lab(Misc) -13/2018-19 dt.28.06.2024
6. Date of sample receipt : 29.06.2024
7. Sample Description :

(i) Discipline : Chemical Testing (Biological Testing, Chemical testing)	(ii) Group : Water (Water/ Pollution and Environment / Atmospheric Pollution/ Soil and Hazardous Waste)	(iii) Sub Group : Ground water (Surface water/ Ground water/ Drinking water / Wastewater/ Effluent/ Ambient Air/ Stack/ Soil and Hazardous Waste)
--	--	--
8. Analysis Starting Date-Analysis Completion Date : 03.07.2024 – 03.07.2024
9. If uncertainty is desired by Customer : No
10. Analysis Results :
(Attach separate sheet if necessary)

Sl. No.	Parameter, Unit	Standards/ Regulatory Limits		Test Method	Sample collected from Water body near iron ore tailing pond of M/s Bhushan Power & Steel Ltd., (BPSL) Thekoloi, Lapanga, Sambalpur
		Requirement (Acceptable limit)	Permissible limit in the absence of alternate source		
		IS 10500: 2012 *			Others/June - 24/ GW/1039
					Tube well water from Bisadihi village
					Results
1.	Iron (Fe), mg/L	1.0	No relaxation	3500 Fe - B, APHA, 23 rd Edn., 2017	1.788

* Drinking water specification, IS 10500: 2012, (Amendment No. 1, June 2025)

11. Deviation from Test Method, if any :
12. If Sampling Conducted by the Central Laboratory, Yes/ No. - No
If Yes,

(a) Date of Sampling :	(b) Method Used* :
(c) Name of Sampler with Designation :	

-----End of Test Report-----

Usharani Patnaik
04.7.2024
Authorised Signatory
(Water/wastewater)

(Dr. (Mrs)Usharani Patnaik, Addl. Chief Env. Scientist)

M. Niranjan Mallick
4/7/24
Board Analyst
(Mr. Niranjan Mallick, Chief Env. Scientist)

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Head Office: State Pollution Control Board, Odisha, Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII, Bhubaneswar - 751 012, FAX: 2562822/2560955
TEL: 2564033/2563294 EPABX: 2561909/2562847, E-mail: paribesh1@ospboard.org Website: www.ospboard.org