



The Additional Principal Chief Conservator of Forest,  
Regional Office (Eastern Central Zone)  
Ministry of Environment, Forests and Climate Change, Govt. of India  
Bungalow No. A-2, Shyamali Colony,  
Ranchi – 834002, Jharkhand.

Ref No. - JMB/ENV/LMSL/60/372/2023

May 29, 2023

Ref.: Environmental Clearance letter No.-J-11015/426/2008-IA.II(M),Dated-27<sup>th</sup> February,2013.

**Sub: Half Yearly Compliance Status Report of Environment Clearance conditions issued by MoEF&CC, New Delhi to Lagla Mahal Sand Lease, Tata Steel Limited, Dhanbad for the period October'22 to March'23**

Dear Sir,

We are enclosing herewith compliance report for the period **October'22 to March'23** for the EC granted vide letter no.- J-11015/426/2008-IA.II (M), Dated-27<sup>th</sup> February,2013 issued by Ministry of Environment, Forest and Climate Change, New Delhi.

We trust the information furnished is in line with your requirement.

Thanking you,

Yours faithfully,

**Head (Planning)**  
**Jharia Division, Tata Steel Ltd.**

Encl: As above.

Copy to: Member Secretary, CPCB, Eastern Zonal Office, Southend Conclave, 502, 5<sup>th</sup> Floor  
1582, Rajdanga Main Road, Kolkata -700107.

Copy to: Member Secretary, JSPCB, T.A. Division Building (Ground Floor), H.E.C, Dhurwa,  
Ranchi - 834004.

Copy to: Regional Officer, JSPCB, HIG-1 Sardar Patel Nagar, Housing Colony, Hirapur, Dhanbad

**HALF YEARLY COMPLIANCE REPORT**  
**(PERIOD: OCTOBER'22 – MARCH'23)**

**LAGLA MAHAL SAND LEASE**  
**(CAPACITY: 0.1 MTPA RIVER BED SAND)**  
**VILLAGE: LAGLA & MAHAL, DIST: BOKARO,**  
**JHARKHAND**



**TATA STEEL LIMITED, JHARIA DIVISION**  
**P.O.- JAMADOBA, DIST. - DHANBAD,**  
**STATE- JHARKHAND, PIN CODE – 828112**

**ENVIRONMENTAL CLEARANCE GRANTED VIDE LETTER NO. - J-  
11015/426/2008-IA.II(M) DATED- 27.02.2013 ISSUED BY GOVT. OF INDIA,  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE, NEW  
DELHI.**

**Compliance status of Environmental Clearance of Lagla and Mahal Sand Lease Mining project of M/s Tata Steel Ltd., Village Lagla and Mahal, dist. Bokaro, Jharkhand vide MoEFCC Letter no J-11015/426/2008-IA.II (M) dated February 27, 2013**

S. No.	Condition	Compliance Status
<b>Specific Condition</b>		
(i)	The project proponent shall obtain Consent to Establish and Consent to Operate from the Jharkhand State Pollution Control Board, and effectively implement all the conditions stipulated therein.	The Consent to Establish has been granted by JSPCB vide letter no. JSPCB/RO/DHN/CTO-9357577/2021/35 dated 25.03.2021. The current CTO is valid till 31.03.2026. All the conditions as stipulated in the consent are being complied with.
(ii)	The project proponent shall comply with section 3 of the Mines Act.	It is being complied.
(iii)	Sand collection shall be done at the middle/ main stream and not at the bank of the river to avoid any change of the river course due to the project.	Sand excavation is done by leaving 1/5th of the width of the river intact for maintaining the embankment. It will be ensured that no change in the river course takes place.
(iv)	Particulate level (PM2.5) shall be monitored regularly and the result placed in the public domain.	Monitoring of PM2.5 has been carried out in this period. The report is given as <b>Annexure-I</b> .
(v)	The project proponent shall identify the degraded area within the mine lease and undertake plantation/afforestation in the area identified by planting the native species.	The mine lease area is a riverbed. Hence, we approach the villagers and assist them in planting the native species as well as fruit plants in the villages. Some of the native species are Pipal, Ber, Jamun, Alostromia, Palash, Karanj, Kadamb etc.
(vi)	Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out of haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	It is being complied. Water spraying is done on the transportation roads on regular basis. The ambient air quality is regularly monitored and analyses by own as well as by NABL and JSPCB recognized lab and conform to the prescribed standards. Reports are enclosed as <b>Annexure-I</b> .
(vii)	The project proponent shall undertake adequate safeguard measures during extraction of river bed material and	The extraction of sand is done with utmost care of the environment. There is no extraction of water as well as no change in

**Compliance status of Environmental Clearance of Lagla and Mahal Sand Lease Mining project of M/s Tata Steel Ltd., Village Lagla and Mahal, dist. Bokaro, Jharkhand vide MoEFCC Letter no J-11015/426/2008-IA.II (M) dated February 27, 2013**

	<p>ensure that due to this activity the hydrogeological regime of the surrounding area shall not be affected. Regular monitoring of ground water level and quality shall be carried out around the mine lease area by establishing a network of existing well and installing new piezometers during the mining operation. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office Bhubaneswar, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.</p>	<p>river course involved hence there will be no impact on the hydrogeological regime. The monitoring report of the ground water level and quality is given as <b>Annexure-I</b>.</p>
<b>(viii)</b>	<p>The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite of water (surface water and groundwater), if any, required for the project.</p>	<p>No water is required for the operation of project. Drinking water required by the workers is arranged by the company.</p>
<b>(ix)</b>	<p>Appropriate mitigative measures shall be taken to prevent pollution of the river in consultation with the State Pollution Control Board. It shall be ensured that there is no leakage of oil and grease in the river from the vehicles used for transportation.</p>	<p>Adequate monitoring of the health of the vehicles used for transportation of sand is ensured to avoid any oil &amp; grease leakage. Higher capacity trucks have been deployed. Without valid fitness certificates and PUC, the vehicles are not allowed to ply, and it is regularly checked.</p>

**Compliance status of Environmental Clearance of Lagla and Mahal Sand Lease Mining project of M/s Tata Steel Ltd., Village Lagla and Mahal, dist. Bokaro, Jharkhand vide MoEFCC Letter no J-11015/426/2008-IA.II (M) dated February 27, 2013**

(x)	Vehicular emissions shall be kept under control and regularly monitored. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.	The vehicles used are regularly checked and maintained. Only vehicles having PUC certificates are allowed. Transportation of sand is always done via tarpaulin-covered trucks which are optimally loaded. This is monitored whenever vehicles enter premises at weighbridge
(xi)	No drilling and blasting operation shall be carried out.	Not applicable as it is a sand mining project.
(xii)	Mineral handling area shall be provided with the adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.	Sand, being coarse in nature and having high moisture content, does not get air borne during gathering & transportation. Sand stored in the sand yards is transferred to underground voids through surface bunkers in a slurry form. However, dust control measures while transporting of sand is in place through water tanker, coverage of trucks and optimal loading.
(xiii)	Periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.	As per our policy, PME's (Periodical Medical Examination) are conducted at regular intervals.
(xiv)	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	The workers are from the neighboring villages and hence new housing facilities are not required.
(xv)	The critical parameters such as RSPM (Particulate matter with size less than 10 micron i.e., PM10) and NOx in the ambient air within the impact zone shall be monitored periodically. Further, quality of discharge water shall also be monitored [(TDS, DO,	The monitoring of the air parameters has been done in this period. There is no use of water for mining operation hence there is no discharge. Details of air quality monitoring are given in <b>Annexure-I</b> . The monitoring reports are regularly uploaded on company's

**Compliance status of Environmental Clearance of Lagla and Mahal Sand Lease Mining project of M/s Tata Steel Ltd., Village Lagla and Mahal, dist. Bokaro, Jharkhand vide MoEFCC Letter no J-11015/426/2008-IA.II (M) dated February 27, 2013**

	PH, Fecal Coliform and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the company in public domain. The Circular No. J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry <a href="http://www.envfor.nic.in">www.envfor.nic.in</a> shall also be referred in this regard for its compliance.	website along with half-yearly EC compliance reports.
(xvi)	The Company shall submit within 3 months their policy towards Corporate Environment Responsibility which should inter-alia provide for (i) Standard operating process / process to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions, (ii) Hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions and (iii) System of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders.	The Company already has an Environment Policy approved by the Managing Director and it addresses all the issues mentioned.  The status of adherence to the policy and compliance to Environmental laws and regulations is regularly discussed at higher levels. Any non-compliance noticed is corrected at divisional level. If any issue is beyond our control, it is brought to the notice of higher management. The environment management cell directly reports to General Manager and it is reviewed on weekly basis. We have an online system to monitor the statutory requirements and compliance in time. This is reviewed by Board of Directors at company's level.

<b>B.</b>	<b>GENERAL CONDITIONS</b>	
(i)	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment and forests.	It is being complied with.
(ii)	No change in the calendar plan including excavation, quantum of sand	It is being complied with.

**Compliance status of Environmental Clearance of Lagla and Mahal Sand Lease Mining project of M/s Tata Steel Ltd., Village Lagla and Mahal, dist. Bokaro, Jharkhand vide MoEFCC Letter no J-11015/426/2008-IA.II (M) dated February 27, 2013**

	from river bed and waste should be made.	
(iii)	Conservation measures for protection of flora and fauna in the core & buffer zone should be drawn up in consultation with the local forest and wildlife department and effectively implemented.	No rare species are found in the area.
(iv)	At least four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10micron i.e., PM10) and NOx monitoring. Location of stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.	The monitoring stations have been established and monitoring jobs are being performed regularly. The ambient air quality analysis reports are attached as <b>Annexure-I</b> .
(v)	Data on ambient air quality [(RSPM(Particulate matter with size less than 10micron i.e., PM10) and NOx] should be regularly submitted to the Ministry including its regional office at Bhubaneswar and to the State Pollution Control Board/ Central Pollution Control Board once in six months.	It is being submitted as <b>Annexure-I</b> in this compliance report.
(vi)	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.	Sand, being coarse in nature and having high moisture content, does not get air borne during gathering & transportation. However, dust control measures while transporting of sand is in place through water tanker, coverage of trucks and optimal loading.
(vii)	Measures should be taken for control of noise levels below 85 dBA in work Environment. Workers engaged in	Proper PPE's are provided to all the workers.

**Compliance status of Environmental Clearance of Lagla and Mahal Sand Lease Mining project of M/s Tata Steel Ltd., Village Lagla and Mahal, dist. Bokaro, Jharkhand vide MoEFCC Letter no J-11015/426/2008-IA.II (M) dated February 27, 2013**

	operations of HEMM, etc. should be provided with ear plugs / muffs.	
(viii)	Industrial waste water (Workshop and Waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422(E) dated 19th May 1993 and 31st December 1993 or as amended from time to time. Oil and Grease trap should be installed before discharge of Workshop effluents.	No waste water generation will take place.
(ix)	Personnel working in dusty area should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspect. Occupational Health Surveillance programme of the worker should be undertaken periodically to observe any contraction due to exposure to dust and take corrective measures, if needed.	It is being complied during operating hours.
(x)	A separate Environmental Management cell with suitable qualified personnel should be set-up under the control of a senior executive, who will report directly to the Head of the Organization.	We have a separate Environmental Management Cell with qualified personnel's. The reporting of Environmental Cell is directly to General Manager of the Division.
(xi)	The funds earmarked for environmental protection measures should be kept in separate A/C and should not be diverted for other purposes. Year wise expenditure should be reported to this ministry and its regional office located at Bhubaneswar.	Expenditure on Environmental Protection measures is monitored separately. It is provided in the Environment Statement every year. The annual expenditure for the financial year 2021-22 is Rs. 0.56 lakhs for water spraying activities on transport road, plantation and environment monitoring.
(xii)	The project authorities should inform to the Regional Office located at Bhubaneswar regarding date of financial closures and final approval of the project by the concerned authorities	The CTE and CTO of the project have been granted by JSPCB. The permission for lifting of sand from the river bed has also been granted by District Mining Officer, Bokaro.



**Compliance status of Environmental Clearance of Lagla and Mahal Sand Lease Mining project of M/s Tata Steel Ltd., Village Lagla and Mahal, dist. Bokaro, Jharkhand vide MoEFCC Letter no J-11015/426/2008-IA.II (M) dated February 27, 2013**

	and the date of start of land development work.	
<b>(xiii)</b>	The regional office of this ministry located at Bhubaneswar shall monitor compliance of the stipulated conditions. The project authorities should extend full co-operation to the officer (s) of the regional office by furnishing the requisite Data/information/ monitoring reports.	It will be complied with.
<b>(xiv)</b>	The project proponent shall submit six monthly reports on the status of compliance of the stipulated environment clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the MoEF, its Regional Office Bhubaneswar, the respective zonal office of CPCB and the SPCB. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF, Bhubaneswar, the respective Zonal Officer of CPCB and the SPCB.	It is being complied with. We are submitting the six-monthly compliance reports to MoEF&CC, its regional office, CPCB and SPCB twice a year. In adherence with the guideline as per notification dt. 26.11.2018, from now onwards, we are sending only soft copy of the compliance status report over mail.
<b>(xv)</b>	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	It has been complied with.
<b>(xvi)</b>	The State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District	The copy of clearance letter has been sent to JSPCB office and its compliance report is also submitted to JSPCB.

**Compliance status of Environmental Clearance of Lagla and Mahal Sand Lease Mining project of M/s Tata Steel Ltd., Village Lagla and Mahal, dist. Bokaro, Jharkhand vide MoEFCC Letter no J-11015/426/2008-IA.II (M) dated February 27, 2013**

	Industry Centre and the Collector's Office / Tehsildar's Office for 30 days.	
(xvii)	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and also be sent to the respective Regional Office of the Ministry on Environment and Forests, Bhubaneswar by e-mail.	The environmental statement for financial year 2021-22 has been submitted to JSPCB on 28 <sup>th</sup> September 2022 vide letter no. JMB/ENV/ESSA/05/722/2022 and it is also uploaded on the company website. The soft copy of Environment Statement is also sent to MOEF by email at ro.ranchi-mef@gov.in.
(xviii)	The project authorities should advertise at least in two local newspapers of the District or State in which the project is located and widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bhubaneswar.	It has been complied with.

### Ambient Air Quality Analysis Report

**Period-** October'22 to December'22

Name of Industry : Lagla Mahal Sand Mining Project

No. of sampling points : 4

Sampling Location	Date of Sampling/ Weather Condition		
	October'22	November'22	December'22
Mahal School Near Izri River	20.10.2022/ Clear	14.11.2022/ Clear	19.12.2022/ Clear
Lagla Gram Panchayat	20.10.2022/ Clear	14.11.2022/ Clear	19.12.2022/ Clear
Bagula School	21.10.2022/ Clear	15.11.2022/ Clear	20.12.2022/ Clear
Shahar Juri School	21.10.2022/ Clear	15.11.2022/ Clear	20.12.2022/ Clear

Location	Latitude/ Longitude	Date	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>
			PM <sub>10</sub> Level : 24 Hourly Limit- 100µg/m <sup>3</sup>	PM <sub>2.5</sub> Level : 24 Hourly Limit-60µg/m <sup>3</sup>	SO <sub>x</sub> Level: 24 Hourly Limit- 80µg/m <sup>3</sup>	NO <sub>x</sub> Level: 24 Hourly Limit- 80µg/m <sup>3</sup>
Mahal School Near Izri River	23°38'06.1"N / 86°23'41.2" E	20.10.2022	64.6	33.4	14.5	15.4
		14.11.2022	66.7	34.2	16.4	17.6
		19.12.2022	67.5	35.6	15.8	16.7
Lagla Gram Panchayat	23°37'21.3" N/ 86°23'35.3" E	20.10.2022	64.3	32.7	14.3	14.8
		14.11.2022	67.5	36.4	15.2	18.2
		19.12.2022	68.4	37.2	16.3	17.8
Bagula School	23°36'27.3" N/ 86°21'59.7" E	21.10.2022	64.7	33.5	14.6	15.2
		15.11.2022	66.5	35.4	16.8	17.3
		20.12.2022	67.6	34.7	17.2	16.8
Shahar Juri School	23°36'26.6" N/ 86°20'58.9" E	21.10.2022	64.8	33.7	14.6	15.5
		15.11.2022	68.7	37.5	17.5	17.6
		20.12.2022	65.6	36.4	16.8	18.4
Minimum			64.3	32.7	14.5	14.8
Maximum			68.4	37.5	17.2	18.4
Average			66.4	35.05	15.83	16.77



**Sr. Manager (Environment)**

## Ambient Air Quality Analysis Report

**Period-** January'23 to March'23

Name of Industry : Lagla Mahal Sand Mining Project

No. of sampling points : 4

Sampling Location	Date of Sampling/ Weather Condition		
	January'23	February'23	March'23
Mahal School Near Izri River	09.01.2023/ Clear	16.02.2023/ Clear	20.03.2023/ Cloudy
Lagla Gram Panchayat	09.01.2023/ Clear	16.02.2023/ Clear	20.03.2023/ Cloudy
Bagula School	10.01.2023/ Clear	17.02.2023/ Clear	21.03.2023/ Clear
Shahar Juri School	10.01.2023/ Clear	17.02.2023/ Clear	21.03.2023/ Clear

Location	Latitude/ Longitude	Date	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>
			PM <sub>10</sub> Level: 24 Hourly Limit-100µg/m <sup>3</sup>	PM <sub>2.5</sub> Level: 24 Hourly Limit- 60µg/m <sup>3</sup>	SO <sub>x</sub> Level: 24 Hourly Limit- 80µg/m <sup>3</sup>	NO <sub>x</sub> Level: 24 Hourly Limit- 80µg/m <sup>3</sup>
Mahal School Near Izri River	23°38'06.1"N / 86°23'41.2" E	09.01.2023	81.6	40.2	18.3	23.6
		16.02.2023	82.4	42.3	19.6	24.5
		20.03.2023	79.3	39.5	16.8	20.5
Lagla Gram Panchayat	23°37'21.3" N/ 86°23'35.3" E	09.01.2023	78.6	38.5	16.7	19.5
		16.02.2023	84.5	43.6	17.4	20.6
		20.03.2023	79.7	37.8	16.5	18.4
Bagula School	23°36'27.3" N/ 86°21'59.7" E	10.01.2023	76.4	36.5	17.2	19.7
		17.02.2023	78.6	38.3	16.4	18.5
		21.03.2023	77.8	37.5	17.6	20.4
Shahar Juri School	23°36'26.6" N/ 86°20'58.9" E	10.01.2023	75.4	36.2	16.7	19.3
		17.02.2023	78.7	38.5	16.8	19.5
		21.03.2023	76.3	35.2	16.3	18.4
Minimum			84.5	44.5	19.6	24.5
Maximum			75.4	36.2	16.3	18.4
Average			79.10	38.67	17.19	20.24



**Sr. Manager (Environment)**

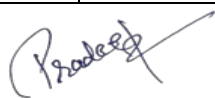
### Ground Water Quality Analysis

#### Ground water level fluctuation in and around Core & Buffer zone area of sand mining lease Post- Monsoon Season- November'22

S.No	Date	Location	Time	Sample Parameter		
				Depth in meter (m)	pH	Electrical Conductivity, $\mu\text{S/m}$
1	17.11.2022	Prem Singhdih	10:40AM	2.25	7.3	587
2	17.11.2022	Lagla	11:45AM	2.18	7.2	492
3	17.11.2022	Alakdih	11:15AM	1.65	7.1	497
4	17.11.2022	Joradih	01:05PM	2.19	7.2	562
5	17.11.2022	SEB Quarters	11:25AM	2.15	7.0	652
6	17.11.2022	Kargali	02:40PM	2.24	7.1	495
7	17.11.2022	Kumargora	01:36PM	1.46	7.3	589
8	17.11.2022	Bhojudih	01:50PM	1.36	7.2	595
9	17.11.2022	Mahal	12:15PM	1.42	7.1	523
10	17.11.2022	Sudamdih	01:57PM	1.62	7.2	597

#### Winter Season- January'23

S.No	Date	Location	Time	Sample Parameter		
				Depth in meter (m)	pH	Electrical Conductivity, $\mu\text{S/m}$
1	12.01.2023	Prem Singhdih	10:25AM	2.42	7.2	621
2	12.01.2023	Lagla	11:42AM	2.25	7.1	510
3	12.01.2023	Alakdih	11:05AM	2.16	7.0	517
4	12.01.2023	Joradih	01:40PM	2.38	7.1	593
5	12.01.2023	SEB Quarters	11:20AM	2.37	7.2	674
6	12.01.2023	Kargali	01:55PM	2.56	7.0	507
7	12.01.2023	Kumargora	11:50PM	1.65	7.1	613
8	12.01.2023	Bhojudih	01:45PM	1.83	7.2	598
9	12.01.2023	Mahal	12:28PM	2.15	7.0	532
10	12.01.2023	Sudamdih	01:50PM	2.23	7.1	595



Sr. Manager (Environment)

## Surface Water Quality Analysis

Sl. No.	Location	Sampling Date	Sampling Time	Temp	pH	TSS	BOD	Oil & Grease
				< 40°C	5.5 - 9.0	100 mg/l	30 mg/l	10 mg/l
1.	River Gowai Up Stream	21.02.2023	10:30 AM	27.5	7.5	22	2.3	0.7
2.	River Damodar Down Stream	21.02.2023	10:45 AM	26.8	7.7	23	2.8	0.8
3.	Laghla (Pond)	21.02.2023	01:20 PM	26.7	7.5	24	3.2	0.2
4.	Alakhdi (Pond)	21.02.2023	01:35 PM	27.4	7.8	23	3.5	0.3
5.	Joradi (Pond)	21.02.2023	11:48 AM	27.6	7.6	24	3.2	0.4
6.	SEB Quarters (Pond)	21.02.2023	11:12 AM	28.3	7.4	22	3.3	0.2
7.	Kargali (Pond)	21.02.2023	12:25 PM	27.5	7.6	24	3.1	0.3
8.	Kumargora (Pond)	21.02.2023	12:58 PM	26.8	7.5	23	3.4	0.2
9.	Bhjudi (Pond)	21.02.2023	12:45 PM	27.3	7.4	22	2.7	0.3



**Sr. Manager (Environment)**



# ADITI R&D SERVICES

Testing Laboratory

NABL ACCREDITED

(A Constituent Board of Quality Council of India)

ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified

Plot No. - I-B-17 (P)  
Sindri, Industrial Area,  
P.O.- Domgarh, Dist.- Dhanbad  
Jharkhand - 828107  
Email ID: sindriaditi@gmail.com  
Website: aditimdservices.com  
Phone: 0326-2952377 (O)  
Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/22-23/2088

Date: 16.11.2022

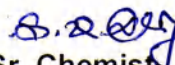
## TEST REPORT OF AMBIENT AIR QUALITY

- Name of the industry : TATA STEEL JHARIA DIVISION  
TATA STEEL COLLIERY  
(SAND LEASE AREA, BHOJUDIH)  
DIST. - DHANBA D (JHARKHAND)
- Work Order Ref. NO.: : 4700092573/932 Dt. 20.07.2021
- Date of Sample Collection : 10.11.2022 to 11.11.2022
- Date of Testing : 12.11.2022 - 14.11.2022
- Test Procedure : As per IS-5182

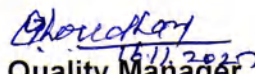
### TEST RESULTS

LOCATION - ICCHAR HIGH SCHOOL				
	Avg. Ambient Temperature	28 <sup>o</sup> C	Avg. Humidity	52%
Sl No.	Particulars	Value	CPCB STANDARD	
1.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	70.49	100 µg/m <sup>3</sup>	
2.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	37.24	60 µg/m <sup>3</sup>	
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	15.27	80 µg/m <sup>3</sup>	
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	28.98	80 µg/m <sup>3</sup>	
5.	Ozone, µg/m <sup>3</sup>	16.52	180 µg/m <sup>3</sup>	
6.	NH <sub>3</sub> , µg/m <sup>3</sup>	18.68	400 µg/m <sup>3</sup>	
7.	CO, mg/m <sup>3</sup>	0.76	4 mg/m <sup>3</sup>	
8.	Pb, µg/m <sup>3</sup>	BDL	1 µg/m <sup>3</sup>	
9.	As, ng/m <sup>3</sup>	BDL	6 ng/m <sup>3</sup>	
10.	Ni, ng/m <sup>3</sup>	BDL	20 ng/m <sup>3</sup>	
11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg/m <sup>3</sup>	
12.	Benzoapyrene ng/m <sup>3</sup>	BDL	1 ng/m <sup>3</sup>	

NOTE: BDL - Below Detection Limit

  
Sr. Chemist  
Aditi R&D Services



  
Quality Manager  
Aditi R&D Services, Sindri

### Statements :

- The test report refers only to the particular item(s) submitted for testing.
- The test results reported in this report are valid at the time of and under the stated condition of measurement.
- This particular test report cannot be reproduced except in full without prior permission of Quality Manager of the laboratory.



# ADITI R&D SERVICES

Testing Laboratory

NABL ACCREDITED

(A Constituent Board of Quality Council of India)

ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified

Plot No. - I-B-17 (P)  
Sindri, Industrial Area,  
P.O.- Domgarh, Dist.- Dhanbad  
Jharkhand - 828107  
Email ID: sindriaditi@gmail.com  
Website: aditimdservices.com  
Phone: 0326-2952377 (O)  
Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/22-23/2089

Date: 16.11.2022

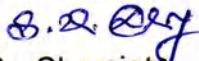
## TEST REPORT OF AMBIENT AIR QUALITY

- Name of the industry : TATA STEEL JHARIA DIVISION  
TATA STEEL COLLIERY  
(SAND LEASE AREA, BHOJUDIH)  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO.: : 4700092573/932 Dt. 20.07.2021
- Date of Sample Collection : 10.11.2022 to 11.11.2022
- Date of Testing : 12.11.2022 - 14.11.2022
- Test Procedure : As per IS-5182

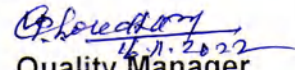
### TEST RESULTS

LOCATION - LAGLA GRAM PANCHYAT				
	Avg. Ambient Temperature	28°C	Avg. Humidity	52%
Sl No.	Particulars	Value	CPCB STANDARD	
1.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	78.22	100 µg/m <sup>3</sup>	
2.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	40.65	60 µg/m <sup>3</sup>	
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	19.80	80 µg/m <sup>3</sup>	
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	30.82	80 µg/m <sup>3</sup>	
5.	Ozone, µg/m <sup>3</sup>	20.65	180 µg/m <sup>3</sup>	
6.	NH <sub>3</sub> , µg/m <sup>3</sup>	21.67	400 µg/m <sup>3</sup>	
7.	CO, mg/m <sup>3</sup>	1.53	4 mg/m <sup>3</sup>	
8.	Pb, µg/m <sup>3</sup>	BDL	1 µg/m <sup>3</sup>	
9.	As, ng/m <sup>3</sup>	BDL	6 ng/m <sup>3</sup>	
10.	Ni, ng/m <sup>3</sup>	BDL	20 ng/m <sup>3</sup>	
11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg/m <sup>3</sup>	
12.	Benzoapyrene ng/m <sup>3</sup>	BDL	1 ng/m <sup>3</sup>	

NOTE: BDL - Below Detection Limit

  
Sr. Chemist  
Aditi R&D Services



  
Quality Manager  
Aditi R&D Services, Sindri

### Statements :

- The test report refers only to the particular item(s) submitted for testing.
- The test results reported in this report are valid at the time of and under the stated condition of measurement.
- This particular test report cannot be reproduced except in full without prior permission of Quality Manager of the laboratory.





# ADITI R&D SERVICES

Testing Laboratory

NABL ACCREDITED

(A Constituent Board of Quality Council of India)

ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified

Plot No. - I-B-17 (P)  
Sindri, Industrial Area,  
P.O. - Domgarh, Dist. - Dhanbad  
Jharkhand - 828107  
Email ID: sindriaditi@gmail.com  
Website: aditimdservices.com  
Phone: 0326-2952377 (O)  
Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/22-23/ 2090

Date: 16.11.2022

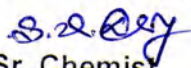
## TEST REPORT OF AMBIENT AIR QUALITY

- Name of the industry : TATA STEEL JHARIA DIVISION  
TATA STEEL COLLIERY  
(SAND LEASE AREA, BHOJUDIH)  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO. : 4700092573/932 Dt. 20.07.2021
- Date of Sample Collection : 10.11.2022 to 11.11.2022
- Date of Testing : 12.11.2022 - 14.11.2022
- Test Procedure : As per IS-5182

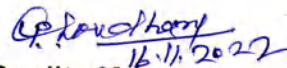
### TEST RESULTS

LOCATION - SAHARJURI SCHOOL				
Avg. Ambient Temperature		28 <sup>o</sup> C	Avg. Humidity	52%
Sl No.	Particulars	Value	CPCB STANDARD	
1.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	78.86	100 µg/m <sup>3</sup>	
2.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	38.65	60 µg/m <sup>3</sup>	
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	18.81	80 µg/m <sup>3</sup>	
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	26.66	80 µg/m <sup>3</sup>	
5.	Ozone, µg/m <sup>3</sup>	14.28	180 µg/m <sup>3</sup>	
6.	NH <sub>3</sub> , µg/m <sup>3</sup>	16.65	400 µg/m <sup>3</sup>	
7.	CO, mg/m <sup>3</sup>	0.73	4 mg/m <sup>3</sup>	
8.	Pb, µg/m <sup>3</sup>	BDL	1 µg/m <sup>3</sup>	
9.	As, ng/m <sup>3</sup>	BDL	6 ng/m <sup>3</sup>	
10.	Ni, ng/m <sup>3</sup>	BDL	20 ng/m <sup>3</sup>	
11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg/m <sup>3</sup>	
12.	Benzoapyrene ng/m <sup>3</sup>	BDL	1 ng/m <sup>3</sup>	

NOTE: BDL - Below Detection Limit

  
Sr. Chemist  
Aditi R&D Services



  
Quality Manager  
Aditi R&D Services, Sindri

### Statements :

- The test report refers only to the particular item(s) submitted for testing.
- The test results reported in this report are valid at the time of and under the stated condition of measurement.
- This particular test report cannot be reproduced except in full without prior permission of Quality Manager of the laboratory.



# ADITI R&D SERVICES

Testing Laboratory

NABL ACCREDITED

(A Constituent Board of Quality Council of India)

ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified

Plot No. - I-B-17 (P)  
Sindri, Industrial Area,  
P.O. - Domgarh, Dist. - Dhanbad  
Jharkhand - 828107  
Email ID: sindriaditi@gmail.com  
Website: aditirdservices.com  
Phone: 0326-2952377 (O)  
Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/22-23/2091

Date: 16.11.2022

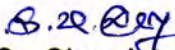
## TEST REPORT OF AMBIENT AIR QUALITY

- Name of the industry : TATA STEEL JHARIA DIVISION  
TATA STEEL COLLIERY  
(SAND LEASE AREA, BHOJUDIH)  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO.: : 4700092573/932 Dt. 20.07.2021
- Date of Sample Collection : 10.11.2022 to 11.11.2022
- Date of Testing : 12.11.2022 – 14.11.2022
- Test Procedure : As per IS-5182

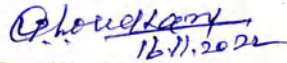
### TEST RESULTS

LOCATION – RAILWAY COLONY , BHOJUDIH				
	Avg. Ambient Temperature	28 <sup>0</sup> C	Avg. Humidity	52%
Sl No.	Particulars	Value	CPCB STANDARD	
1.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	78.53	100 µg/m <sup>3</sup>	
2.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	40.61	60 µg/m <sup>3</sup>	
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	20.27	80 µg/m <sup>3</sup>	
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	31.59	80 µg/m <sup>3</sup>	
5.	Ozone, µg/m <sup>3</sup>	17.61	180 µg/m <sup>3</sup>	
6.	NH <sub>3</sub> , µg/m <sup>3</sup>	21.82	400 µg/m <sup>3</sup>	
7.	CO, mg/m <sup>3</sup>	1.23	4 mg/m <sup>3</sup>	
8.	Pb, µg/m <sup>3</sup>	BDL	1 µg/m <sup>3</sup>	
9.	As, µg/m <sup>3</sup>	BDL	6 µg/m <sup>3</sup>	
10.	Ni, µg/m <sup>3</sup>	BDL	20 µg/m <sup>3</sup>	
11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg/m <sup>3</sup>	
12.	Benzoapyrene µg/m <sup>3</sup>	BDL	1 µg/m <sup>3</sup>	

NOTE: BDL - Below Detection Limit

  
Sr. Chemist  
Aditi R&D Services



  
Quality Manager  
Aditi R&D Services, Sindri

### Statements :

- The test report refers only to the particular item(s) submitted for testing.
- The test results reported in this report are valid at the time of and under the stated condition of measurement.
- This particular test report cannot be reproduced except in full without prior permission of Quality Manager of the laboratory.



# ADITI R&D SERVICES

Testing Laboratory

NABL ACCREDITED

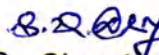
(A Constituent Board of Quality Council of India)

ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified

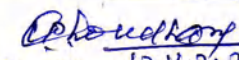
Plot No. - I-B-17 (P)  
Sindri, Industrial Area,  
P.O.- Domgarh, Dist.- Dhanbad  
Jharkhand - 828107  
Email ID: sindriaditi@gmail.com  
Website: aditimdservices.com  
Phone: 0326-2952377 (O)  
Mobile: 09471358492, 09431512608

## TEST REPORT OF NOISE (AMBIENT) LEVEL MONITORING

Ref. No. & Date		NAME AND ADDRESS OF THE CLIENT							
ARDS/22-23/2056 Date: 12.11.2022		TATA STEEL JHARIA DIVISION							
Date of Monitoring		TATA STEEL COLLIERY (SAND LEASE AREA, BHOJUDIH) DIST. - DHANBAD (JHARKHAND)							
10.11.2022 - 11.11.2022		Avg. Ambient Temperature (°C)	Average Humidity (%)	Weather Condition	Status of the plant				
Work Order 4700092573/932 Dt. 20.07.2021		28	59	Clear	Not in Operational				
MONITORING RESULTS									
Sl. No	Place of Monitoring	Day Time (6 AM to 10 PM) Avg. dB(A)			Night Time (10 PM to 6 AM) Avg. dB(A)			Noise level (Ambient standard) for Industrial Area as per CPCB Noise Pollution (Regulation and Control) (Amendment) Rules, 2000 notified vide S.O. 1046(E) Dt. 22.11.2020 Limit in dB(A) Leq	
		MAX	MIN	AVG. dB(A) Leq	MAX	MIN	AVERAGE dB(A) Leq	Day Time Residential Area	Night Time Residential Area
1.	Saharjuri School	56	46	53.4	42	40	41.11	65.00	55.00
2.	Lagla Gram Panchyat	58	48	55.4	40	39	39.53		
3.	Ichhar High School	61	52	58.5	43	41	42.11		
4.	Railway Colony Bhojidih	63	54	60.5	51	47	49.45		

  
Sr. Chemist  
Aditi R&D Services



  
Quality Manager  
Aditi R&D Services, Sindri

### Statements :

1. The test report refers only to the particular item(s) submitted for testing.
2. The test results reported in this report are valid at the time of and under the stated condition of measurement.
3. This particular test report cannot be reproduced except in full without prior permission of Quality Manager of the laboratory.



# ADITI R&D SERVICES

Testing Laboratory

NABL ACCREDITED

(A Constituent Board of Quality Council of India)

ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified

Plot No. - I-B-17 (P)  
Sindri, Industrial Area,  
P.O. - Domgarh, Dist. - Dhanbad  
Jharkhand - 828107  
Email ID: sindriaditi@gmail.com  
Website: aditirndservices.com  
Phone: 0326-2952377 (O)  
Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/22-23/2092

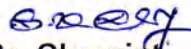
Date: 16.11.2022

## TEST REPORT OF MINERALOGICAL COMPOSITION OF PARTICULATE MATTER

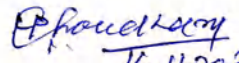
- Name of the industry : TATA STEEL JHARIA DIVISION  
TATA STEEL COLLIERY  
(SAND LEASE AREA, BHOJUDIHI)  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO. : 4700092573/932 Dt. 20.07.2021
- Date of Sample Collection : 11.11.2022
- Date of Testing : 12.11.2022 to 14.11.2022

### TEST RESULTS

Sl No.	Particulars	Mineralogical Composition (%)			
		SiO <sub>2</sub>	FeO	Al <sub>2</sub> O <sub>3</sub>	CaO
1.	Lagala Gram Panchayat	1.62	0.24	1.51	2.10
2.	Saharjuri School	2.6	0.92	1.82	2.74

  
Sr. Chemist  
Aditi R&D Services



  
16.11.2022  
Quality Manager  
Aditi R&D Services, Sindri

#### Statements :

- The test report refers only to the particular item(s) submitted for testing.
- The test results reported in this report are valid at the time of and under the stated condition of measurement.
- This particular test report cannot be reproduced except in full without prior permission of Quality Manager of the laboratory.



# ADITI R&D SERVICES

## Testing Laboratory

NABL ACCREDITED

(A Constituent Board of Quality Council of India)

ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified

Plot No. - I-B-17 (P)  
Sindri, Industrial Area,  
P.O.- Domgarh, Dist.- Dhanbad  
Jharkhand - 828107  
Email ID: sindriaditi@gmail.com  
Website: aditirnds.com  
Phone: 0326-2952377 (O)  
Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/22-23/2124


Date: 19.11.2022

### TEST REPORT OF SURFACE WATER

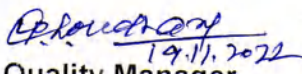
- Name of the industry : TATA STEEL JHARIA DIVISION  
TATA STEEL COLLIERY  
(SAND LEASE AREA, BHOJUDIH)  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO. : 4700092573/932 Dt. 20.07.2021
- Sample Code :
  1. Gowai River (Up Stream)
  2. Gowai River (Dn. Stream)
  3. Izri River (Up Stream)
  4. Izri River (Dn. Stream)
- Date of Sample Collection: 10.11.2022
- Date of Testing : 12.11.2022 to 18.11.2022
- Test : pH, TDS, Turbidity, DO, BOD, C I, F, SO<sub>4</sub>

#### TEST RESULT

Sl. No.	PARAMETERS OF TEST	VALUE				Limit as per IS 2296 Class - C	Test Method
		Gowai River (Up Stream)	Gowai River Dn. Stream	Izri River (Up Stream)	Izri River (Dn. Stream)		
1.	pH,	7.8	7.9	7.8	7.8	8.5	IS-3025 (P-11): 1983
2.	Total Dissolved Solids, mg/l	665	680	670	735	1500 (Max.)	IS-3025 (P-16): 1984
3.	Turbidity, NTU	10.4	11.2	10.4	12.5	-	IS-3025 (P-10):1984
4.	Dissolved Oxygen ,mg/l	6.2	6.0	5.8	5.2	4.0 (Min)	IS-3025 (P-38):1989
5.	Bio chemical Oxygen Demand, mg/l	1.3	2.1	1.6	2.2	3.0	IS-3025 (P-44):1994
6.	Chloride as Cl, mg/l	28	32	52	60	-	IS-3025 (P-32):1988
7.	Fluoride as F, mg/l	0.56	0.58	0.60	0.66	1.5	IS-3025 (P-60):2008
8.	Sulphate as SO <sub>4</sub> , mg/l	52	58	62	66	400	IS-3025 (P-24):1986

  
Sr. Chemist  
Aditi R&D Services



  
19.11.2022  
Quality Manager  
Aditi R&D Services, Sindri

#### Statements :

1. The test report refers only to the particular item(s) submitted for testing.
2. The test results reported in this report are valid at the time of and under the stated condition of measurement.
3. This particular test report cannot be reproduced except in full without prior permission of Quality Manager of the laboratory.



# ADITI R&D SERVICES

Testing Laboratory

NABL ACCREDITED

(A Constituent Board of Quality Council of India)

ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified

Plot No. - I-B-17 (P)  
Sindri, Industrial Area,  
P.O. - Domgarh, Dist. - Dhanbad  
Jharkhand - 828107  
Email ID: sindriaditi@gmail.com  
Website: aditirdservices.com  
Phone: 0326-2952377 (O),  
Fax: 0326-2952377  
Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/22-23/2928

Date: 20.02.2023

## TEST REPORT OF AMBIENT AIR QUALITY

- Name of the industry : TATA STEEL JHARIA DIVISION  
TATA STEEL COLLIERY  
(SAND LEASE AREA, BHOJUDIH)  
DIST. - DHANBA D (JHARKHAND)
- Work Order Ref. NO.: : 4700092573/932 Dt. 20.07.2021
- Date of Sample Collection : 13.02.2023 to 14.02.2023
- Date of Testing : 16.02.2023 - 18.02.2023
- Test Procedure : As per IS-5182

### TEST RESULTS

LOCATION - ICCHAR HIGH SCHOOL				
Avg. Ambient Temperature		27 <sup>o</sup> C	Avg. Humidity	41%
Sl No.	Particulars	Value	CPCB STANDARD	
1.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	73.53	100 µg/m <sup>3</sup>	
2.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	44.12	60 µg/m <sup>3</sup>	
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	21.17	80 µg/m <sup>3</sup>	
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	28.33	80 µg/m <sup>3</sup>	
5.	Ozone, µg/m <sup>3</sup>	15.10	180 µg/m <sup>3</sup>	
6.	NH <sub>3</sub> , µg/m <sup>3</sup>	19.70	400 µg/m <sup>3</sup>	
7.	CO, mg/m <sup>3</sup>	0.44	4 mg/m <sup>3</sup>	
8.	Pb, µg/m <sup>3</sup>	BDL	1 µg/m <sup>3</sup>	
9.	As, ng/m <sup>3</sup>	BDL	6 ng/m <sup>3</sup>	
10.	Ni, ng/m <sup>3</sup>	BDL	20 ng/m <sup>3</sup>	
11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg/m <sup>3</sup>	
12.	Benzoapyrene ng/m <sup>3</sup>	BDL	1 ng/m <sup>3</sup>	

NOTE: BDL - Below Detection Limit

A. Das,

Sr. Chemist  
Aditi R&D Services



Technical Manager  
Aditi R&D Services, Sindri

#### Statements :

- The test report refers only to the particular item(s) submitted for testing.
- The test results reported in this report are valid at the time of and under the stated condition of measurement.
- This particular test report cannot be reproduced except in full, without prior written permission of Quality Manager of the laboratory.



# ADITI R&D SERVICES

Testing Laboratory

NABL ACCREDITED

(A Constituent Board of Quality Council of India)

ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified

Plot No. - I-B-17 (P)  
Sindri, Industrial Area,  
P.O. - Domgarh, Dist. - Dhanbad  
Jharkhand - 828107  
Email ID: sindriaditi@gmail.com  
Website: aditimdservices.com  
Phone: 0326-2952377 (O),  
Fax: 0326-2952377  
Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/22-23/2929

Date: 20.02.2023

## TEST REPORT OF AMBIENT AIR QUALITY

- Name of the industry : TATA STEEL JHARIA DIVISION  
TATA STEEL COLLIERY  
(SAND LEASE AREA, BHOJUDIH)  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO.: : 4700092573/932 Dt. 20.07.2021
- Date of Sample Collection : 13.02.2023 to 14.02.2023
- Date of Testing : 16.02.2023 - 18.02.2023
- Test Procedure : As per IS-5182

### TEST RESULTS

LOCATION - LAGLA GRAM PANCHYAT					
Avg. Ambient Temperature		27°C	Avg. Humidity		41%
Sl No.	Particulars	Value	CPCB STANDARD		
1.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	91.95	100 µg/m <sup>3</sup>		
2.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	55.18	60 µg/m <sup>3</sup>		
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	19.78	80 µg/m <sup>3</sup>		
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	29.17	80 µg/m <sup>3</sup>		
5.	Ozone, µg/m <sup>3</sup>	15.88	180 µg/m <sup>3</sup>		
6.	NH <sub>3</sub> , µg/m <sup>3</sup>	20.22	400 µg/m <sup>3</sup>		
7.	CO, mg/m <sup>3</sup>	0.63	4 mg/m <sup>3</sup>		
8.	Pb, µg/m <sup>3</sup>	BDL	1 µg/m <sup>3</sup>		
9.	As, ng/m <sup>3</sup>	BDL	6 ng/m <sup>3</sup>		
10.	Ni, ng/m <sup>3</sup>	BDL	20 ng/m <sup>3</sup>		
11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg/m <sup>3</sup>		
12.	Benzoapyrene ng/m <sup>3</sup>	BDL	1 ng/m <sup>3</sup>		

NOTE: BDL - Below Detection Limit

A. Das,

Sr. Chemist

Aditi R&D Services



Technical Manager  
Aditi R&D Services, Sindri

#### Statements :

- The test report refers only to the particular item(s) submitted for testing.
- The test results reported in this report are valid at the time of and under the stated condition of measurement.
- This particular test report cannot be reproduced except in full, without prior written permission of Quality Manager of the laboratory.



# ADITI R&D SERVICES

Testing Laboratory

NABL ACCREDITED

(A Constituent Board of Quality Council of India)

ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified

Plot No. - I-B-17 (P)  
Sindri, Industrial Area,  
P.O. - Domgarh, Dist. - Dhanbad  
Jharkhand - 828107  
Email ID: sindriaditi@gmail.com  
Website: aditimdservices.com  
Phone: 0326-2952377 (O),  
Fax: 0326-2952377  
Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/22-23/ 2930

Date: 20.02.2023

## TEST REPORT OF AMBIENT AIR QUALITY

- Name of the industry : TATA STEEL JHARIA DIVISION  
TATA STEEL COLLIERY  
(SAND LEASE AREA, BHOJUDI H)  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO. : 4700092573/932 Dt. 20.07.2021
- Date of Sample Collection : 13.02.2023 to 14.02.2023
- Date of Testing : 16.02.2023 – 18.02.2023
- Test Procedure : As per IS-5182

### TEST RESULTS

LOCATION – SAHARJURI SCHOOL

LOCATION – SAHARJURI SCHOOL				
	Avg. Ambient Temperature	27 <sup>0</sup> C	Avg. Humidity	41%
Sl No.	Particulars	Value	CPCB STANDARD	
1.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	89.08	100 µg/m <sup>3</sup>	
2.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	53.38	60 µg/m <sup>3</sup>	
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	19.18	80 µg/m <sup>3</sup>	
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	28.19	80 µg/m <sup>3</sup>	
5.	Ozone, µg/m <sup>3</sup>	17.60	180 µg/m <sup>3</sup>	
6.	NH <sub>3</sub> , µg/m <sup>3</sup>	15.48	400 µg/m <sup>3</sup>	
7.	CO, mg/m <sup>3</sup>	0.79	4 mg/m <sup>3</sup>	
8.	Pb, µg/m <sup>3</sup>	BDL	1 µg/m <sup>3</sup>	
9.	As, ng/m <sup>3</sup>	BDL	6 ng/m <sup>3</sup>	
10.	Ni, ng/m <sup>3</sup>	BDL	20 ng/m <sup>3</sup>	
11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg/m <sup>3</sup>	
12.	Benzoapyrene ng/m <sup>3</sup>	BDL	1 ng/m <sup>3</sup>	

NOTE: BDL - Below Detection Limit

A. Das,

Sr. Chemist  
Aditi R&D Services



Technical Manager  
Aditi R&D Services, Sindri

#### Statements :

- The test report refers only to the particular item(s) submitted for testing.
- The test results reported in this report are valid at the time of and under the stated condition of measurement.
- This particular test report cannot be reproduced except in full, without prior written permission of Quality Manager of the laboratory.





# ADITI R&D SERVICES

Testing Laboratory

NABL ACCREDITED

(A Constituent Board of Quality Council of India)

ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified

Plot No. - I-B-17 (P)  
Sindri, Industrial Area,  
P.O. - Domgarh, Dist. - Dhanbad  
Jharkhand - 828107  
Email ID: sindriaditi@gmail.com  
Website: aditimdservices.com  
Phone: 0326-2952377 (O),  
Fax: 0326-2952377  
Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/22-23/2931

Date: 20.02.2023

## TEST REPORT OF AMBIENT AIR QUALITY

- Name of the industry : TATA STEEL JHARIA DIVISION  
TATA STEEL COLLIERY  
(SAND LEASE AREA, BHOJUDIH)  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO.: : 4700092573/932 Dt. 20.07.2021
- Date of Sample Collection : 13.02.2023 to 14.02.2023
- Date of Testing : 16.02.2023 – 18.02.2023
- Test Procedure : As per IS-5182

### TEST RESULTS

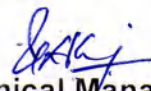
LOCATION – RAILWAY COLONY , BHOJUDIH			
	Avg. Ambient Temperature	27°C	Avg. Humidity
SI No.	Particulars	Value	CPCB STANDARD
1.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	84.71	100 µg/m <sup>3</sup>
2.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	50.83	60 µg/m <sup>3</sup>
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	19.94	80 µg/m <sup>3</sup>
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	28.14	80 µg/m <sup>3</sup>
5.	Ozone, µg/m <sup>3</sup>	15.44	180 µg/m <sup>3</sup>
6.	NH <sub>3</sub> , µg/m <sup>3</sup>	19.32	400 µg/m <sup>3</sup>
7.	CO, mg/m <sup>3</sup>	0.36	4 mg/m <sup>3</sup>
8.	Pb, µg/m <sup>3</sup>	BDL	1 µg/m <sup>3</sup>
9.	As, µg/m <sup>3</sup>	BDL	6 µg/m <sup>3</sup>
10.	Ni, µg/m <sup>3</sup>	BDL	20 µg/m <sup>3</sup>
11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg/m <sup>3</sup>
12.	Benzoapyrene µg/m <sup>3</sup>	BDL	1 µg/m <sup>3</sup>

NOTE: BDL - Below Detection Limit

A. Das,

Sr. Chemist  
Aditi R&D Services



  
Technical Manager  
Aditi R&D Services, Sindri

#### Statements :

- The test report refers only to the particular item(s) submitted for testing.
- The test results reported in this report are valid at the time of and under the stated condition of measurement.
- This particular test report cannot be reproduced except in full, without prior written permission of Quality Manager of the laboratory.



# ADITI R&D SERVICES

Testing Laboratory

NABL ACCREDITED

(A Constituent Board of Quality Council of India)

ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified

Plot No. - I-B-17 (P)  
Sindri, Industrial Area,  
P.O. - Domgarh, Dist. - Dhanbad  
Jharkhand - 828107  
Email ID: sindriaditi@gmail.com  
Website: aditirnds.com  
Phone: 0326-2952377 (O),  
Fax: 0326-2952377  
Mobile: 09471358492, 09431512608

## TEST REPORT OF NOISE (AMBIENT) LEVEL MONITORING

Ref. No. & Date	NAME AND ADDRESS OF THE CLIENT			
ARDS/22-23/2844 Date: 11.02.2023	TATA STEEL JHARIA DIVISION			
Date of Monitoring	TATA STEEL COLLIERY (SAND LEASE AREA, BHOJUDIH) DIST. - DHANBAD (JHARKHAND)			
08.02.2023 - 09.02.2023	Avg. Ambient Temperature (°C)	Average Humidity (%)	Weather Condition	Status of the plant
Work Order 4700092573/932 Dt. 20.07.2021	27	41	Clear	Not in Operational

### MONITORING RESULTS

Sl. No	Place of Monitoring	Day Time (6 AM to 10 PM) Avg. dB(A)			Night Time (10 PM to 6 AM) Avg. dB(A)			Noise level (Ambient standard) for Industrial Area as per CPCB Noise Pollution (Regulation and Control) (Amendment) Rules, 2000 notified vide S.O. 1046(E) Dt. 22.11.2020 Limit in dB(A) Leq							
		MAX	MIN	AVG. dB(A) Leq	MAX	MIN	AVERAGE dB(A) Leq	Day Time	Night Time						
LOCATION		SAND LEASE AREA						Residential Area	Residential Area						
1.	Saharjuri School							59	49	56.4	42	38	40.45	65.00	55.00
2.	Lagla Gram Panchyat							56	46	53.4	37	33	35.45		
3.	Ichchar High School							54	42	51.26	44	38	41.96		
4.	Railway Colony Bhojidih							52	44	49.63	42	36	39.96		

A. Das,

Sr. Chemist  
Aditi R&D Services



Technical Manager  
Aditi R&D Services, Sindri

#### Statements :

1. The test report refers only to the particular item(s) submitted for testing.
2. The test results reported in this report are valid at the time of and under the stated condition of measurement.
3. This particular test report cannot be reproduced except in full, without prior written permission of Quality Manager of the laboratory.



# ADITI R&D SERVICES

Testing Laboratory

NABL ACCREDITED

(A Constituent Board of Quality Council of India)

ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified

Plot No. - I-B-17 (P)  
Sindri, Industrial Area,  
P.O. - Domgarh, Dist. - Dhanbad  
Jharkhand - 828107  
Email ID: sindriaditi@gmail.com  
Website: aditimdservices.com  
Phone: 0326-2952377 (O),  
Fax: 0326-2952377  
Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/22-23/2914

Date: 18.02.2023

## TEST REPORT OF MINERALOGICAL COMPOSITION OF PARTICULATE MATTER

- Name of the industry : TATA STEEL JHARIA DIVISION  
TATA STEEL COLLIERY  
(SAND LEASE AREA, BHOJUDIH)  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO. : 4700092573/932 Dt. 20.07.2021
- Date of Sample Collection : 14.02.2023
- Date of Testing : 15.02.2023 to 17.02.2023

### TEST RESULTS

Sl No.	Particulars	Mineralogical Composition (%)			
		SiO <sub>2</sub>	FeO	Al <sub>2</sub> O <sub>3</sub>	CaO
1.	Icchar High School	1.66	0.09	1.18	2.2
2.	Railway Colony Bhojudih	1.9	0.16	1.26	2.58

A. Das,

Sr. Chemist  
Aditi R&D Services



  
Technical Manager  
Aditi R&D Services, Sindri

#### Statements :

- The test report refers only to the particular item(s) submitted for testing.
- The test results reported in this report are valid at the time of and under the stated condition of measurement.
- This particular test report cannot be reproduced except in full, without prior written permission of Quality Manager of the laboratory.



# ADITI R&D SERVICES

Testing Laboratory

NABL ACCREDITED

(A Constituent Board of Quality Council of India)

ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified

Plot No. - I-B-17 (P)  
Sindri, Industrial Area,  
P.O. - Domgarh, Dist. - Dhanbad  
Jharkhand - 828107  
Email ID: sindriaditi@gmail.com  
Website: aditirndservices.com  
Phone: 0326-2952377 (O),  
Fax: 0326-2952377  
Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/22-23/2923

Date: 20.02.2023

## TEST REPORT OF SURFACE WATER

- Name of the industry : TATA STEEL JHARIA DIVISION  
TATA STEEL COLLIERY  
(SAND LEASE AREA, BHOJUDIHI)  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO. : 4700092573/932 Dt. 20.07.2021
- Sample Code :
  1. Gowai River (Up Stream)
  2. Gowai River (Dn. Stream)
  3. Izri River (Up Stream)
  4. Izri River (Dn. Stream)
- Date of Sample Collection: 13.02.2023
- Date of Testing : 14.02.2023 to 18.02.2023
- Test : pH, TDS, Turbidity, DO, BOD, C I, F, SO<sub>4</sub>

### TEST RESULT

Sl. No.	PARAMETERS OF TEST	VALUE				Limit as per IS 2296 Class - C	Test Method
		Gowai River (Up Stream)	Gowai River Dn. Stream	Izri River (Up Stream)	Izri River (Dn. Stream)		
1.	pH	7.6	7.7	7.2	7.4	6.5 - 8.5	IS-3025 (P-11): 1983
2.	Total Dissolved Solids, mg/l	340	325	389	378	1500 (Max.)	IS-3025 (P-16): 1984
3.	Turbidity, NTU	02	03	01	01	-	IS-3025 (P-10):1984
4.	Dissolved Oxygen, mg/l	5.2	6.4	6.2	5.8	4.0 (Min)	IS-3025 (P-38):1989
5.	Bio chemical Oxygen Demand, mg/l	2.2	2.0	1.4	1.6	3.0	IS-3025 (P-44):1994
6.	Chloride as Cl, mg/l	54	51.05	69.9	67.9	-	IS-3025 (P-32):1988
7.	Fluoride as F, mg/l	0.64	0.67	0.56	0.60	1.5	IS-3025 (P-60):2008
8.	Sulphate as SO <sub>4</sub> , mg/l	64	65	58	52	400	IS-3025 (P-24):1986

A. Das,

Sr. Chemist  
Aditi R&D Services



Technical Manager  
Aditi R&D Services, Sindri

#### Statements :

1. The test report refers only to the particular item(s) submitted for testing.
2. The test results reported in this report are valid at the time of and under the stated condition of measurement.
3. This particular test report cannot be reproduced except in full, without prior written permission of Quality Manager of the laboratory.

## Executive Summery

Tata Steel Foundation is focused upon co-creating solutions, with tribal and excluded communities, to address their development challenges. Working for the overall development of community through its interventions in Health, livelihood, Education and Skill development.

Followings are the key highlights of the work carried out by Tata Steel Foundation in FY'23:

- In Public Health camp, 24968 villagers from 35 villages got free health check-up and medicines.
- A total of 79 camps were organized for Non communicable diseases (hypertension, diabetes, breast, and oral cancers) in which 2,296 beneficiaries got screened and were provided health services.
- Under the Ni-kshya Mitra program, 673 food packets were provided in Baghmara block.
- Under Cataract, 85 Nukar natak were organised to create awareness among villagers on blindness and a total of Eight camps organized in which 1,021 surgeries were successfully done.
- In Nutritional Garden, TSF Jamadoba distributed seed, plants and Agri materials to 1500 Households and wall paintings around nutrition were done at 180 places in different villages.
- Tata Steel started SPARSH centre with technical collaboration with LEPRASociety in which 1570 patients got benefitted.
- Under RISHTA project, TSF Jamadoba is working with 1465 beneficiaries through Pre and post-test.
- Total number of students enrolled in Pre-Matriculation Couching in FY'23 is 2378 in 18 centres.
- TSF Jamadoba has recently organized the `placement-drives for the job-openings at Tata Electronics Private Limited (TEPL) in which 24 candidates joined Tata Electronics.
- The total enrolment of the candidates in Community Youth coaching program for Uniform services is 64.
- Tata Steel Foundation (TSF), in collaboration with NIIT Foundation (NF), has been offering IT and English Courses in which total enrolment is 755.
- To promote paddy cultivation a total of 92 farmers (36 from Jamadoba and 56 from Sijua) of the leasehold area were supported with paddy seeds having acreage of 92 acres.
- 20 acre of horticulture plantation has been done through providing plants of Banana, papaya, Mango, coconut, guava, and lemon.
- TSF Jamadoba is supporting 140 landless families with critical inputs around various types of micro enterprises.
- Gender and Leadership for Disha, in which 240 women leaders are being developed. Out of 240, 60 women have completed training till module 4.
- Tata feeder centre, training of budding sports talent in three sporting segments i.e., Football, Archery and Athletics. As of now the total intake of the players under these sporting segments is 188.

## Index Page

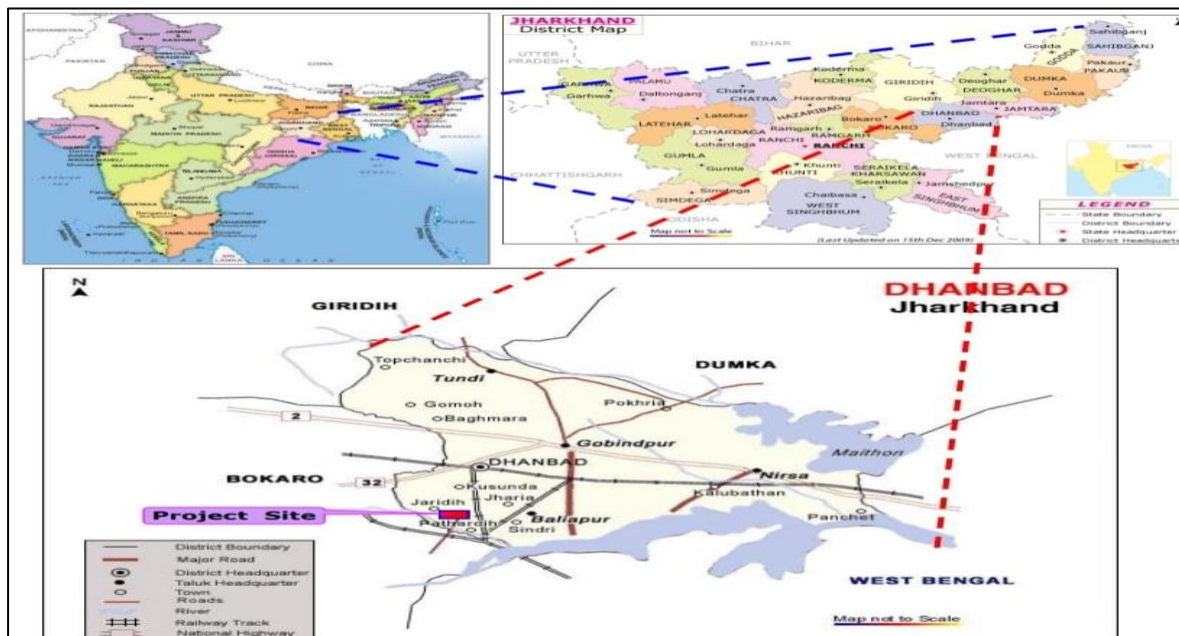
S. No.	Particulars	Page No.	No. of Beneficiary
1.	Introduction	3	
2.	<b>Public Health</b>	4-9	
2.1	Major Achievement	4	
2.2	Nutritional Garden	4-5	1500
2.3	Cataract	5-6	1021
2.4	RISHTA	6-7	1465
2.5	SPARSH	7-10	1570
3	<b>Education</b>	10-11	
3.1	Pre-Matriculation Coaching	10	2378
3.2	Jyoti Fellowship Scholarship	10	346
3.3	Tribal Language	11	71
4.	<b>Employability</b>	11-12	
4.1	Placement Drive	11	24
4.2	Uniform Services	11-12	64
4.3	Skill Development Centre	12	755
5.	<b>Livelihood Enhancement</b>	12-15	
5.1	Support to farmers during kharif season	12	92
5.2	Horticulture Development	13	142
5.3	Leveraging Government Resources	13	946
5.4	Distribution of Micro-Enterprise Toolkit	14	140
5.5	Promoting fish farming	14	208
6.	<b>Livelihood Empowerment</b>	15	240
7.	<b>Sports</b>	15-16	188
8.	<b>Infrastructure</b>	17-18	29,149

## INTRODUCTION

Tata Steel Foundation (the Foundation), a wholly owned subsidiary of Tata Steel Limited, was incorporated on August 16, 2016, under Section 8 of the Companies Act 2013. The Foundation is focused upon co-creating solutions, with tribal and excluded communities, to address their development challenges. During this process of co-creation, the Foundation endeavours to develop and implement change models that are replicable at a national scale, enable significant and lasting betterment in the well-being of communities proximate to the Company's operating locations and embed a societal perspective in key business decisions. The Foundation strives for excellence by ensuring that all programmes are aligned with community needs and focus on national priority areas enabling communities to access and control resources to improve the quality of their lives with dignity.



TSF, Jamadoba is working in 44 villages of three blocks (Jharia, Dhanbad and Baghmara). Working in different areas like Health, Livelihood, Education, and Infrastructural development for livelihood enhancement and make community self-sufficient.



## PUBLIC HEALTH

Tata Steel provides both curative and preventive healthcare services to improve levels of health amongst the community. Tata Steel Foundation is committed to provide best health care facility to people in Tata Steel leasehold area. TSF Jamadoba, acts as strengthening agency for awareness generation, promotion of good health and hygiene, and bridge gap between community and government health facilities.

### **Major Achievement:**

- In Public Health camp, 24968 villagers from 35 villages got free health check-up and medicines.
- Focussing the preventive aspects of public health, a total of 79 camps were organized for Non communicable diseases (hypertension, diabetes, breast, and oral cancers) in which 2296 beneficiaries got screened and were provided health services.
- Under the Ni-kshya Mitra program, 673 food packets were provided in Baghmara block.

### **Nutritional Garden:**

The kitchen/home gardens have been found to play an important role in improving food security for the poor rural household. Keeping in view the importance of vegetables in daily diets and its low availability, TSF Jamadoba has started Nutritional Garden program for villagers of Tata Steel lease hold area. TSF Jamadoba, provides seed, plants and Agri materials to villagers for Kitchen Garden and have the benefits of good quality of food without using external fertilizer or chemicals.

TSF Jamadoba, distributed seed, plants and Agri materials to 1500 Households and wall paintings around nutrition were done at 180 places in different villages.

### **Case Study of Mrs. Dhani Devi**

“Connecting with nature is connecting with God” is the story of Dhani Devi (Age -29) wife of Mr. Devan Kalindi, and resident of Harijan Tola of Patia Panchayat. TSF Jamadoba reached her during seed distribution campaign in her village. During the home visit TSF Jamadoba team came to know that they have to rely on daily wages for their livelihood as they are landless. After monitoring the troublesome and pathetic condition of the family during home visit. Mrs. Dhani Devi was suggested to do kitchen gardening and explained about the benefits of kitchen garden. Which will not only increase her family nutritional intake but also save money which they spend on buying vegetable or for medical purpose which arises due to malnourishment. Kitchen garden will also help her generate additional income if the produce is high through selling of vegetable.

She decided to own an uncultivated and useless land in her village with the consent of community and SHG members. The issue was discussed in front of village community, and she got a small piece of land. TSF Jamadoba has supported her with seed, plants and Agri materials and provided one day training session.



Now after three months, she has done one of the best kitchen gardens and promised to continue it in near future. Mrs. Dhani Devi thanked TSF Jamadoba team for their effort and handholding support.



## **CATARACT**

Tata steel has collaborated with Shankar Netralaya during the year 2017-18 to do cataract camps through Mobile Eye surgical unit (MESU) which carries out operations for the cataract infected patients. Under the program for preventable blindness a total of 85 Nukar natak were organised to create awareness among villagers on blindness because of cataract in Tata Steel lease hold area villages and a total of Eight camp organised (2 at Baghmara CHC, Rajganj, 2 at Bhelatand and 3 at Digwadih) in which 1441 patient were screened, and total surgery done is 1,021.

### **Case Study of Mr. Niranjan Mahato:**

It has been correctly said “I have a very poor eyesight, and I can’t imagine a world without my glasses or contacts”. Mr. Niranjan Mahato of Nunidih Basti, was working as a helper at Tata Steel canteen, he uses to put coal in the cooking stove. During his mid-forties he notice that his vision is getting blur. He started wearing spectacles for clear vision. His right eye vision deteriorated dramatically.

He gets to know about Tata Steel Foundation, Eye check-up camp from one of the beneficiaries residing near his house. So, he visited the camp and diagnosed with cataract. After all the screening done by doctors, operation date was given. But on the date of operation, he was diagnosed with Hypertension and was referred to TSF Medical department. He visited TSF, Jamadoba and the medical team provided all the necessary support and medicines. The next day he visited again as per the advice of TSF medical team, and he was found normal and sent for cataract surgery.

On 20.09.2022, Cataract surgery was done. And now he can see the world clearly and does all his work without any support from others. He expresses his happiness and gratitude to Tata Steel Foundation.



## RISHTA

Regional Initiative for Safe Sexual Health by Today's Adolescents, formally known as "Project RISHTA" is a consortium project on Adolescents' Reproductive and Sexual Health, which aims "to improve the sexual and reproductive health and wellbeing of adolescents in Jharia Division.

RISHTA project aims at empowering adolescents to know and exercise their adolescent rights and be sensitive to issues of adolescent health (preventive and curative). Furthermore, pregnancy during adolescence is associated with higher risk of health problems like anaemia, sexually transmitted infections, unsafe abortion, and mental disorders (like depression). Pregnant adolescents also bear negative social consequences and often have to leave school reducing their employability leading to long-term economic implications. Unmet needs for family planning especially for spacing are high among adolescents.

### Key objectives of RISHTA project

- Enable adolescents to take right decision with right information for their future.
- Inculcating the importance of adolescents' health, which otherwise remains ignored.
- Reduce Early Age of Marriage across the block
- Inducing the importance of life skills in adolescents as catalysts to cater to their life approach in a more progressive manner.
- Orienting the adolescents with adolescent rights which are powerful tools for them to exercise.



- Number of adolescents reached through ARSH sessions -1465.
- 4 number of National/International Day observed in which 567 number of participants participated.
- 4 Kishor Navdampatti samaroh was organized with 56 adolescent couple participation.



- Total 123 meeting with AWW, Asha and PRI member with 1470 participants.
- Total 3 Child marriage delayed.
- 135 Sathiya were trained around various aspects of sexual and reproductive health
- Total 13 no. of pregnancy delayed.

### **Case Study of Mohini Kumari Khetrpal**

Mohini Kumari Khetrpal is 20 years (DOB – 11/11/2002) old girl who believes that education and hard work never goes in vain. Her father Mr. Deepak Kumar Khetrpal is a daily wage labor, and her mother Mrs. Anjana Devi is a house manager. She has one younger sibling, who works as a daily wage laborer with his father. The monthly income of the family was Rs. 8000 /-. And the financial condition was not good.

She is associated with RISHTA team for last 4 years. She has completed her intermediate and wanted to help her family financially. One day Mohini came to attend RISHTA meeting in which one of the TSF staff was discussing on F&B training which is given by PACE Centre Jamshedpur. She found this training fruitful for her career growth and to make her family financial stable.



She contacted RISHTA team after few days of training to know the procedure of selection in F&B course and wanted RISHTA team to convince her parents. The team visited her house and counselled her parents and convinced them.

The team lined up with PACE training Centre for F&B training and Mohini got admission in 2 months training program. After successful completion of her training, she got placed at Ramada Hotel Jamshedpur. Now she is earning Rs. 14,500/- per month with free accommodation, which enabled her to take care of both her and her family financial need.

With regular guidance of TSF RISHTA team, she completed her graduation and now enrolled herself in Hotel Management course for departmental promotion. She and her family are very thankful to TSF Jamadoba and RISHTA team for all the support and guidance.

### **SPARSH**

In 2005, India was declared with leprosy eliminated. Vertical system comprising Non-Medical Assistants and Supervisors were abolished. Health personals dedicated for NLEP2 have been deployed in other health vertical. Rigorous screening and monitoring system became poor post 2005. Considering the fact of high endemicity in Dhanbad (adjacent to

Purulia), a joint venture namely “SPARSH centre- A healing Touch” had been started in 2009.

Above all, new cases have been found in special pockets of India through Leprosy Case Detection Campaign by NLEP, GoI (14th September to 4th October 2016). According to WHO report, India accounts for 60% of total new cases of Leprosy across the world. Many new cases have been found in Bihar, Jharkhand, and Chhattisgarh.

Tata Steel started SPARSH centre with technical collaboration with LEPRO Society, for the benefit of the Leprosy affected persons in the year 2009 (26th October) and the reconstructive surgery unit started during the year 2017. This reconstructive surgery unit which is one-of-its-kind in Eastern India will play a major role in the leprosy eradication programmes, benefitting the patients from the States of Jharkhand and Bihar.



### **Coverage Area**

The SPARSH centre caters to the patients from Jharkhand and Bihar. Till today patients from 13 blocks have been able to access health services.

### **Objective of SPARSH Centre**

- Provide healthcare facilities to leprosy affected people and helping them to cope up with the societal stigma attached to the disease.
- To correct the deformities of people suffering from Leprosy, so that they come in the mainstream society.
- Restoring livelihood opportunities for those who have undergone reconstructive surgery.

### **Services offered**

- OPD services for patients suffering from leprosy
- Providing specially designed footwear to the patients
- Raising awareness regarding leprosy through a Mobile IEC Van in 200 villages in Dhanbad district
- Capacity building of health officials in leprosy

### **Key achievements during this period**

- A total of 1570 persons suffering from leprosy and related illness were provided health facilities.

- 1,53,500 persons were covered under the IEC campaign which creates awareness around the early identification and treatment of leprosy in 200 villages of the Dhanbad district.
- 454 MCR footwear manufactured for person affected of Leprosy.
- Reconstructive surgery to correct deformity was organised in which total 23 RCS was done.

### **Case Study of Mr. Prahalad Mahato:**

Mr. Prahalad Mahato (Age – 26 years) son of Ramlochan Mahto, Resident of Nischitpur village, Baghmara. He lives in his sister's house in Baghara village due to leprosy. His wife and son left him and his father lives alone at Nischitpur village, where he works as a daily wage worker.

He was referred by PHC Baghmara for reconstructive surgery at SPARSH centre to correct left claw hand after one year treatment from MDT. During examination, SPARSH Doctors found that he is suffering with Type II(ENL) reaction with right Ulnar, bilateral lateral popliteal and posterior tibial neuritis.

Prahalad Mahato was suffering from Leprosy for last 4 year and started his treatment at Nirmal Leprosy Hospital, Gobindpur for one year. During his treatment he get Lepra reaction. Then he started his treatment at MDT, PHC Baghmara.



After examination and diagnose at SPARSH centre, the treatment started with Storied therapy for a period of one month. The reaction was subsided, and muscle power improved. Again, he gets recurrent reaction. The centre started second line drug for Lepra rection with clofazimine therapy with proper counselling for a period of 4 month. He was declared cured of ENL reaction.

The reason of reaction was psychological problem caused due to disease, family, and future. The centre counsels Prahalad and his family time to time for proper case holding and management. Finally, he copped and accepted mental health treatment and case management of SPARSH centre.



The reason of reaction was psychological problem caused due to disease, family, and future. The centre counsels Prahalad and his family time to time for proper case holding and management. Finally, he copped and accepted mental health treatment and case management of SPARSH centre.

Now he is doing good and works as a daily wage worker with his father at his hometown. He believes that his deformity will correct, and his family will live together after surgery. He is very thankful to TSF Jamadoba and SPARSH team.

## EDUCATION

### **Pre-Matriculation coaching:**

PMC (Pre-Matriculation Coaching) classes have been running since 2012 in government and private (J.A.C. Board) schools for class VI to X in the leasehold areas of Jamadoba and Sijua. PMC was started in 2011-12 with 1,025 students at 11 centres, especially for the poor students, who cannot afford private tuition classes for bringing improvement in their studies. Pre- Matriculation coaching classes have been operated in two parts from Class VIII - X and Preparatory classes for classes VI to VII.

Total number of students enrolled last year (FY22) was 1548 in 09 centres. The Pre-Matriculation Coaching class is a boon for the students as it has been observed that the students have gained a lot from this program. Due to this program, they have been able to score good marks in their academic exams. According to the survey done before starting of PMC class, the passing % of the class 10th was 70%. In FY 22, TSF Jamadoba has achieved 100% result in the matriculation exam.

The purpose of running this Pre-Matriculation Coaching class is to provide quality tuitions to the poor students in English, Math, and Science. The total number of teachers in one centre is 5 - two teachers for Classes VI-VII and three teachers for classes VIII-X. The teachers are being paid through the school committees or the SHGs (Self Help Group).

In FY 23, TSF Jamadoba have conducted PMC classes at 18 centres covering 2378 students.



### **Jyoti Fellowship Programme:**

As part of affirmative action policy and effort towards inclusive growth and development of Scheduled Caste and Scheduled Tribe community. Tata Steel Foundation awarded Jyoti Fellowship to 346 meritorious students of Jamadoba region. Total scholarship amount is Rs. 17,98,750/-.

The objective of Tata Steel Jyoti Fellowship is to ensure that meritorious student from economically- challenged SC/ ST families have an opportunity to continue and pursue their

educational goals and fulfil career aspirations. Tata Steel's Tribal Cultural Society (TCS) identifies deserving candidates from operational areas of the company on the merit-based test.

### **Language Classes:**

Language classes on `Ol-chiki` script was started for the Santali communities residing in and around Tata Steel leasehold areas that is Bhowra-parsiabad village (Jamadoba) and Bhelatand Majhi tola (Sijua location). The classes are held during the weekend. The total enrolment is 71 (JMB- 33 students and Sijua- 38 students).



## **Employability Programme**

### **Placement Drives**

With an objective to provide employment opportunity for youths. TSF Jamadoba has recently organized the `placement-drives (for the job-openings at Tata Electronics Private Limited (TEPL) in collaboration with the Model Career Centre, Jamshedpur.

The placement –drive was specially meant for the local female candidates who are aged between 18-20 years (21 for the SC/ST category) and have passed out their intermediate exam during the year 2021 and 2022.

This placement drive was attended by total 128 candidates out of which 64 were shortlisted and finally 24 female candidates from Tata Steel leasehold areas have joined Tata Electronics.



### **Community Youth coaching program for Uniform services:**

With an objective to support the youth prepare for entry into uniformed services, TSF Jamadoba is running ``Community Youth Coaching Program`` for the local youths. The coaching is provided to prepare for written as well as physical tests for clearing various competitive exam(s) of the Uniformed Services like State Police, CMPF like BSF, CRPF, ITBP, Coast Guards, Army, Navy, and Air Force etc.

As of now, the total enrolment of the candidates is 64 (31 at Jamadoba and 33 at Sijua). While this coaching program, the enrolled candidates have started appearing at the competitive exam related to the Uniformed Services.

Total 29 candidates (11 from Jamadoba, 18 from Sijua) have appeared at the SSC GD EXAM-2022 which was held in January`23. The SSC has declared the results of SSC GD Exam on 08th April,2023. Total 9 candidates (6 from Sijua and 3 from Jamadoba) have cleared the

written exam of SSC GD. The physical exam is likely to be held soon for the candidates who have cleared the written exam of SSC GD-2022.



### **Skill development centre:**

Tata Steel Foundation (TSF), in collaboration with NIIT Foundation (NF), has been offering IT and English Courses in small towns and interior villages of the Company's operational areas since FY15. This program was initiated in response to the high demand for these skills among youth. The goal is to empower communities within Tata Steel operational areas by developing IT (Information Technology) and English capabilities among them. This would include youths, women (SHG, ANM, Asha, etc), adolescents and migrant laborers.

### **Progress made during the period**

- A total of 755 enrolment has been done for FY'23.
- Out of 755 – 375 enrolled in Jamadoba and 380 in Sijua centre.
- A total of 677 students completed their course – 330 at Jamadoba and 347 at Sijua.



## **LIVELIHOOD ENHANCEMENT**

### **Support to farmers during kharif season:**

To promote paddy cultivation a total of 92 farmers (36 from Jamadoba and 56 from Sijua) of the leasehold area were supported with paddy seeds having acreage of 92 acres. The improved varieties of seeds promoted were KV21 and Purnima Gold. The farmers contributed 50% of the cost of seeds and each farmer was supported with a maximum of 1 acre. A total of 200 kg of seeds were promoted (164 kg of Purnima Gold seeds and 36 kg of KV2 seeds).



## Horticulture Development:

Horticulture development is a very useful method of income augmentation for the farmers. During the year 20 acre of horticulture plantation has been done through providing plants of Banana, papaya, Mango, coconut, guava, and lemon. Out of which the district horticulture department has also supported in this initiative by providing plants for 10 acres. In which total of 142 farmers got benefited.



## Leveraging Government Resources:

Community mobilization has been done by raising awareness levels of the farmers so that they can access the agriculture related schemes. During the year following progress has been made:

- 13 farmers have received 5350 banana and papaya plant from District Horticulture Department Dhanbad having an acreage of 6 acre of land.
- 4 animal health camps have been organized with support of district animal husbandry department in which a total of 1414 animal received medical check-up.
- TSF Jamadoba in collaboration with MSME Dhanbad has organised 30 days stitching training program in Petia Panchyat Bhawan, Petiya.
- FLD project of District Horticulture Department is being implemented in Tundi.
- 15 Diesel pump sets and 2 tractors was lesioned with govt. on 90% subsidiary under which 15 farmers got benefitted.
- 331 farmers got free elephant yam seed from District Horticulture Department.
- 160 women attended 3 days training on mushroom farming and received free Mushroom spawn.



### **Distribution of Micro-Enterprise Toolkit:**

Micro-Enterprise businesses not only help in promoting quality of life for business runners but also add value to the local economy. They produce numerous jobs at small-scale, improve income, and boost purchasing power.

TSF Jamadoba is supporting 140 landless families with critical inputs around various types of micro enterprises which will help them in self-employment and entrepreneurship.



### **Promoting Fish Farming:**

“Promoting fish farming” is one of the key initiatives towards improving the livelihood of the people living in Tata Steel leasehold area. During the FY’23, total 52 ponds were supported with fingerlings having 208 beneficiaries. Total 312 kg of fingerlings were distributed. The fingerlings were provided at 50% contribution from the pond-beneficiaries.

Besides providing fingerlings to the pond beneficiaries and build their capacities, much emphasis is given on improving the feeding practice. In this respect, TSF Jamadoba is facilitating farmers in getting proper-feed packets from the District Fishery Department at 50% subsidy.

### **Case Study of Mr. Abhimanyu Mahato:**

A young farmer Mr. Abhimanyu Mahato (Age 35), his father’s name Mr. Shankar Mahato resident of Patia Panchayat of Dhanbad district. Just a matric pass is growing rapidly with increase interest in the field of fish production. It is correctly said “The capacity to learn is a gift; the ability to learn is a skill; the willingness to learn is a choice.” With his willingness and support from TSF Jamadoba, made him earn his livelihood with dignity.

He used to support his family by doing agriculture which was not sufficient for overall development and give a dignified life to his family. Then he comes to know about Tata Steel Foundation and about its programmes from his friend. With keen interest in fish farming, he reached TSF Jamadoba office. And after knowing that TSF Jamadoba is supporting with fingerlings and capacity building on fish farming.

On the next day he meets TSF field staff and gives the application for fish farming. After that he received 5 days training on fish farming from Government Fishery Department at Ranchi.

When he returned from training, decided to start his own business of fish production. Mr. Abhimanyu Mahato improved his pond by expanding the area of pond to 1.5 acer and cleaned grass under water that can harm fishes. Then the TSF provided 100 kg fingerlings at 50% subsidy. Currently his annual income is one Lakh from Fish farming.

Mr. Abhimanyu Mahato is very happy with the support provided by TSF and said that now he can send his children for higher education and live his life with dignity. The help from TSF Jamadoba made him economically as well as socially strong.

## LIVELIHOOD EMPOWERMENT

### Disha Training:

The primary objective of Disha project is to enable women leaders through social-political empowerment by making systematic investments in community-based organizations to enhance their participation and productivity, and to create and sustain model of rural women. The project has an objective to increase knowledge, awareness, and income of women through capacity building.

Training of active SHG members on Gender and Leadership for Disha, in which 240 women leaders are being developed. Out of 240, 60 women have completed training till module 4.



## SPORTS

Organising sporting events/activities etc. has been a key strategy for ensuring the community engagement and to nurture the local young talents across Tata Steel leasehold areas. The children from the leasehold-villages will be given opportunities to take part in various sporting events/ activities towards shaping their future career in the Sports field.



During this year in the feeder centre training of budding sports talent is being done in three sporting segments i.e., Football, Archery and Athletics. As of now the total intake of the players under these sporting segments is 188.

Major achievement in Sports:

#### Achievement in Archery

S. No.	Name	Village	Medal	Event
1	Ms. Nazia Parween	Digwadih No.10	Selected	Centre for excellence (Govt. of Jharkhand), U-16
2	Ms. Madhu Kumari	Patherdih	Selected	Centre for excellence (Govt. of Jharkhand), U-16
3	Ms. Riya Kumari	Digwadih No.10	Selected	Centre for excellence (Govt. of Jharkhand), U-16
4	Ms. Pinky Kumari	Jealgora	Selected	Centre for excellence (Govt. of Jharkhand), U-16
5	Ms. Simran Kumari	Jealgora	Selected	Centre for excellence (Govt. of Jharkhand), U-16
6	Ms. Versha Chakroborty	Noonidih	Selected	Centre for excellence (Govt. of Jharkhand), U-16
7	Khusi Kumari	Digwadih	Gold	NTPC Mini National Archery Competition
8	Md. Adil	Digwadih	Selected	Tata Archery Academy

#### Achievement in Football

S. No.	Name	Village	Selection	Event
9	Mr. Pankaj Basti	Bhowra -36 No. PO Bhowra	Selected	National Camp at Bhubneshwar
10	Mr. Mrinal	Jealgora Basti	Selected	National Camp at Bhubneshwar
11	Mr. Prashant Diger	Nagina Bazar, Mohalbani	Selected	Residential sports training centre, Kumaitha Stadium Deoghar
12	Ms. Anju Sharma	Domgarh	Selected	Jharkhand state team camp u-17 at Chaibasa
13	Master Narayan Mahato	Digwadih No.10	Selected	SAIL Football Academy, Bokaro
14	Raj Kr. Mahato	Upper Dungri	Selected	CISF Delhi
15	Md. Irfan	Bhaga	Selected	Kuljeet Football Academy, Punjab
16	Mr. Vishnu Hajari	Noonidih Basti	Selected	Kuljeet Football Academy, Punjab
17	Mr. Vikky Kr. Mahato	Dumariatand	Selected	Kuljeet Football Academy, Punjab

## INFRASTRUCTURE

- 7600 people got benefitted through construction of 6,193 mts. long roads in 10 villages (Sijua 12 no., Dukhitdih, Rampur 2, Chetudih, Kanchanpur Bauritola, Upper dungri, Petiya, Banskapuria, Suyakanali, Malkera) and drain of length 1,552 mts were constructed in (Belubakhar, Lahargora, Purnadih, Sundarpur, Petiya, Kalimela, Lower Dungri, Upper Dungri, Digwadih Mahato basti, Kasiatand, Fatehpur, Rampur, Barughutu, Malkera illages) of Tata Steel intervention area.



- 1000 people got benefitted through repair of 4 deep bore well in 4 villages ((Lower Dungri, Rampur Md tola, Kapuria, Kanchanpur)



- In 11 villages (Debogram harijan tola, Debogram bangali tola, Banskapuria, Azadnagar, Belubakhar, Suyakanali, Upper dungri, Dungri no.3, Dungri no.7, Digwadih Majhi basti, Sunderpur) of Tata Steel leasehold area, 11,435 people got benefitted through installation of 8,878 mts. long piped drinking water supply.



- Renovation and construction of 282 mts long irrigation drain which is benefitting 34 farmers in 5 villages (Chattand, Petiya, Chaitudih, Kasiatand, Lower Dungri).



- In 4 villages of Sijua (Banskapuria, Rampur, Debogram, Sawaldih) deepening of 4 ponds is done to solve water crises at village level.



- 9080 people got benefitted through construction of 39 Rural infrastructure like pond steps (17), sitting platform (15), community center (3), culvert (1), community shed (2), Biswanath club.

