

The Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Integrated Regional Office, (IRO) - Ranchi 2nd floor, Headquarter, Jharkhand State Housing Board Harmu Chowk, Harmu Housing Colony, Argora, Jharkhand - 834002.

Ref No. - JMB/ENV/LMSL/60/ 708 /2024 November 27<sup>th</sup>, 2024

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

SUB: Half Yearly Compliance Status Report of Environment Clearance conditions issued by MoEFCC, New Delhi to Lagla Mahal Sand Lease, Tata Steel Limited, Dhanbad for the period April-24 to September-24.

Dear Sir,

We are enclosing herewith compliance report for the period April-24 to September-24 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

#### TATA STEEL LIMITED

Jharia Collieries Jamadoba 828 112 Dhanbad India Tel 91 326 2320263/2320265/2320267 Fax 91 326 2320268 Regd. Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001 Tel 91 22 66658282 Fax 91 22 66657724 Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com

Your (Half Yearly Compliance Report) has been Submitted with following details			
Proposal No	IA/JH/MIN/20492/2011		
Compliance ID	111302629		
Compliance Number(For Tracking)	EC/M/COMPLIANCE/111302629/2024		
Reporting Year	2024		
Reporting Period	01 Dec(01 Apr - 30 Sep)		
Submission Date	30-11-2024		
RO/SRO Name	ARTATRANA MISHRA		
RO/SRO Email	jhk109@ifs.nic.in		
State	JHARKHAND		
RO/SRO Office Address	Integrated Regional Offices, Ranchi		
Note:- SMS and E-Mail has been sent to ARTATRANA M	ISHRA, JHARKHAND with Notification to Project Proponent.		

	2 01 Dec(01	ompliance Report 2024 Apr - 30 Sep) Yledgement		
Proposal Name		Lagla and Mahal Sand Lea Steel Ltd., located in Villa Bokaro, Jharkjhand	ase Mining Project of M/s. Tata ge Lagla and Mahal, Dist.	
Name of Entity / Corporat	e Office	Tata Steel Ltd.		
Village(s)		N/A		
District		BOKARO		
Proposal No.	IA/JH/MIN/20492/2011	Category	Non-Coal Mining	
Plot / Survey / Khasra No.	N/A	Sub-District	N/A	
State	JHARKHAND	Entity's PAN	****2803M	
MoEF File No.	J-11015/426/2008- IA.II(M)	Entity name as per PAN	UTSAV KASHYAP	

## **Compliance Reporting Details**

<b>Reporting Year</b>	2024
Remarks (if any)	Half Yearly Compliance Submission for April 2024 to September 2024.
<b>Reporting Period</b>	01 Dec(01 Apr - 30 Sep)

## **Details of Production and Project Area**

Name of Entity / Corporate Office Tata Steel Ltd.

	Project Area as per EC Granted	Actual Project Area in Possession
Private	0	0
Revenue Land	0	0
Forest	0	0
Others	10.92	10.92
Total	10.92	10.92

## **Production Capacity**

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Sand	Million Tons per Annum (MTPA)	N/A	0.1	0	

### Conditions

### **Specific Conditions**

	Condition Type	Condition Details		
1	AIR QUALITY MONITORING AND PRESERVATION	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, be gatherin through	g and transportation. Sand stored i	gh moisture content, does not get air borne during in the sand yards is transferred to underground voids However, dust control measures while transporting of sand of trucks and optimal loading.	Date: 11/11/2024	
2	Human Health Environment	Provision shall be made for the housing of construction within the site with all necessary infrastructure and fact fuel for cooking, mobile toilets, mobile STP, safe drink medical health care, creche etc. The housing may be in temporary structures to be removed after the completion project.	ilities such as ing water, the form of	
	<b>ubmission:</b> Complied kers are from the neighboring vill	ages and hence new housing facilities are not required.	Date: 11/11/2024	
3	Statutory compliance	The critical parameters such as RSPM (Particulate maless than 10 micron i.e., PM10) and NOx in the ambient impact zone shall be monitored periodically. Further, q discharge water shall also be monitored [(TDS, DO, PH Coliform and Total Suspended Solids (TSS)]. The mon shall be uploaded on the website of the company as we on a display board at the project site at a suitable locati main gate of the company in public domain. The Circu 20012/1/2006-IA.II(M) dated 27.05.2009 issued by Mi	t air within t uality of I, Fecal itored data Il as displaye on near the lar No. J-	
		Environment and Forests, which is available on the wel Ministry www.envfor.nic.in shall also be referred in the compliance.	bsite of the	
The more mining of Annexu	operation hence there is no dischar	Ministry www.envfor.nic.in shall also be referred in the	bsite of the	
The more mining of Annexu	nitoring of the air parameters has b operation hence there is no dischar re-I. The monitoring reports are re	Ministry www.envfor.nic.in shall also be referred in the compliance.	Date: 29/11/2024 Correction Date: 29/11/2024 Date: 20/11/2024 Date: 20/11/2024 Date: 20/11/2024 Date: 20/11/2024 Date: 20/11/2024 Date: 20/11/2024 Date: 20/11/2024 Date: 20/11/2024 Date: 20/11/2024 Date: 20/11/2024 Date: 20/11/2024 Date: 20/11/2024 Date: 20/11/2024 Date: 20/10/	

addresses Environr noticed is of higher it is revie	s all the issues mentioned. The status nental laws and regulations is regular s corrected at divisional level. If any i management. The environment mana	licy approved by the Managing Director and it of adherence to the policy and compliance to ly discussed at higher levels. Any non-compliance assue is beyond our control, it is brought to the notice agement cell directly reports to General Manager and line system to monitor the statutory requirements and d of Directors at companies level.	11/11/2024
5	Human Health Environment	Periodical medical examination of the workers engag project shall be carried out and records maintained. For schedule of health examination of the workers should be followed accordingly.	the purpose,
	<b>bmission:</b> Complied ur policy, PME (Periodical Medical E	xamination) are conducted at regular intervals.	Date: 11/11/2024
6	Statutory compliance	The project proponent shall obtain Consent to Establic Consent to Operate from the Jharkhand State Pollution Board, and effectively implement all the conditions stip	Control
The Con 9357577		JSPCB vide letter no. JSPCB/RO/DHN/CTO- ont CTO is valid till 31.03.2026. All the conditions as with.	Date: 11/11/2024
7	Statutory compliance	The project proponent shall comply with section 3 of Act.	the Mines
	<b>bmission:</b> Complied g complied.		Date: 11/11/2024
8	MISCELLANEOUS	Sand collection shall be done at the middle/ main stree the bank of the river to avoid any change of the river co the project.	
Sand exc	<b>bmission:</b> Complied avation is done by leaving 1/5th of th nent. It will be ensured that no change	e width of the river intact for maintaining the e in the river course takes place.	Date: 11/11/2024
9	AIR QUALITY MONITORING AND PRESERVATION	Particulate level (PM2.5) shall be monitored regularly placed in the public domain.	y and the result
	<b>bmission:</b> Complied ng of PM2.5 has been carried out in t	his period. The report is given as Annexure-I.	Date: 29/11/2024
10	GREENBELT	The project proponent shall identify the degraded are mine lease and undertake plantation/afforestation in the identified by planting the native species.	
The mine native sp		pproach the villagers and assist them in planting the ages. Some of the native species are Pipal, Ber, Jamun,	Date: 11/11/2024
11	AIR QUALITY MONITORING AND PRESERVATION	Effective safeguard measures, such as regular water s be carried out in critical areas prone to air pollution and levels of particulate matter such as loading and unloadi	having high

		parameters conform to the norms prescribed by the Cer Control Board in this regard.	ntral Pollutior
It is be ambier	nt air quality is regularly monitored	one on the transportation roads on regular basis. The d and analyses by own as well as by NABL and JSPCB ibed standards. Reports are enclosed as Annexure-I.	Date: 29/11/2024
12	Statutory compliance	The project proponent shall undertake adequate safeg during extraction of river bed material and ensure that activity the hydrogeological regime of the surrounding be affected. Regular monitoring of ground water level shall be carried out around the mine lease area by estat network of existing well and installing new piezometer mining operation. The periodic monitoring [(at least for year- pre-monsoon (April-May), monsoon (August), pe (November) and winter (January); once in each season carried out in consultation with the State Ground Wate Board/Central Ground Water Authority and the data th may be sent regularly to the Ministry of Environment a its Regional Office Bhubaneswar, the Central Ground Authority and the Regional Director, Central Ground V at any stage, it is observed that the groundwater table i depleted due to the mining activity, necessary corrective shall be carried out.	due to this area shall no and quality blishing a rs during the our times in a ost-monsoon ()] shall be er nus collected and Forests ar Water Water Board. 1 s getting
The ex	as no change in river course invol	est care of the environment. There is no extraction of water lved hence there will be no impact on the hydrogeological	Date: 29/11/2024
regime	. The monitoring report of the grou	und water level and quality is given as Annexure-I.	
regime 13	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall obtain necessary prior per competent authorities for drawl of requisite of water (s and groundwater), if any, required for the project.	
13 PPs S No wat	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall obtain necessary prior per competent authorities for drawl of requisite of water (s	
13 PPs S No wat	WATER QUALITY MONITORING AND PRESERVATION Submission: Complied ter is required for the operation of	The project proponent shall obtain necessary prior per competent authorities for drawl of requisite of water (s and groundwater), if any, required for the project.	Date: 11/11/2024 event pollutio ntrol Board. I
13 <b>PPs S</b> No wat by the 14 <b>PPs S</b> Adequa any oil	WATER QUALITY MONITORING AND PRESERVATION Submission: Complied ter is required for the operation of company. MISCELLANEOUS Submission: Complied ate monitoring of the health of the and grease leakage. Higher capac	The project proponent shall obtain necessary prior per competent authorities for drawl of requisite of water (s and groundwater), if any, required for the project.         project. Drinking water required by the workers is arranged         Appropriate mitigative measures shall be taken to pro of the river in consultation with the State Pollution Conshall be ensured that there is no leakage of oil and greater	Date: 11/11/2024 event pollutio ntrol Board. I
13 <b>PPs S</b> No wat by the 14 <b>PPs S</b> Adequa any oil	WATER QUALITY MONITORING AND PRESERVATION Submission: Complied ter is required for the operation of company. MISCELLANEOUS Submission: Complied ate monitoring of the health of the and grease leakage. Higher capac	The project proponent shall obtain necessary prior per competent authorities for drawl of requisite of water (s and groundwater), if any, required for the project.         project. Drinking water required by the workers is arranged         Appropriate mitigative measures shall be taken to pro of the river in consultation with the State Pollution Conshall be ensured that there is no leakage of oil and great from the vehicles used for transportation.         vehicles used for transportation of sand is ensured to avoid ity trucks have been deployed. Without valid fitness	Date: 11/11/2024 event pollutio ntrol Board. I ase in the rive Date: 11/11/2024 regularly out through the the second

16	AIR QUALITY MONITORING AND PRESERVATION	No drilling and blasting operation shall be carried ou	t.
	<b>Ibmission:</b> Complied icable as it is a sand mining proj	ect	Date: 11/11/2024
neral C	onditions		
Sr.No.	Condition Type	Condition Details	
1	Statutory compliance	No change in mining technology and scope of working made without prior approval of the Ministry of Environ forests.	
	<b>Ibmission:</b> Complied g complied with.		Date: 11/11/2024
2	Statutory compliance	A copy of the clearance letter shall be sent by the pro- concerned Panchayat, Zila Parisad/ Municipal Corpora local Body and the Local NGO, if any, from whom sug representations, if any, were received while processing The clearance letter shall also be put on the website of by the proponent.	tion, Urban ggestions/ the proposal
	<b>Ibmission:</b> Complied en complied with.		Date: 11/11/2024
3	Statutory compliance	The State Pollution Control Board should display a c clearance letter at the Regional Office, District Industr the Collector's Office / Tehsildar's Office for 30 days.	
The copy	<b>Ibmission:</b> Complied y of clearance letter has been sen d to JSPCB.	t to JSPCB office and its compliance report is also	Date: 11/11/2024
4	Statutory compliance	The environmental statement for each financial year March in Form-V as is mandated to be submitted by the proponent to the concerned State Pollution Control Boo prescribed under the Environment (Protection) Rules, amended subsequently, shall also be put on the website company along with the status of compliance of environ clearance conditions and also be sent to the respective Office of the Ministry on Environment and Forests, Bh e-mail.	e project ard as 1986, as of the onmental Regional
The envi Septemb company	er 2024 vide letter no. JMB/ENV	l year 2023-24 has been submitted to JSPCB on 27th //ESSA/05/562/2024 and it is also uploaded on the ronment Statement is also sent to MOEF by email at	Date: 11/11/2024
5	Statutory compliance	The project authorities should advertise at least in two newspapers of the District or State in which the project widely circulated, one of which shall be in the vernacu the locality concerned, within 7 days of the issue of the letter informing that the project has been accorded env clearance and a copy of the clearance letter is available	t is located an lar language e clearance ironmental

		Pollution Control Board and also at website of the Mir Environment and Forests at http://envfor.nic.in and a c same should be forwarded to the Regional Office of th located at Bhubaneswar.	opy of the
	Submission: Complied been complied with.		Date: 11/11/2024
6	Statutory compliance	No change in the calendar plan including excavation sand from river bed and waste should be made.	, quantum of
	Submission: Complied sing complied with.		Date: 11/11/2024
7	MISCELLANEOUS	Conservation measures for protection of flora and fa & buffer zone should be drawn up in consultation with forest and wildlife department and effectively implement	the local
	Submission: Complied e species are found in the area.		Date: 11/11/2024
8	AIR QUALITY MONITORING AND PRESERVATION	At least four ambient air quality-monitoring stations established in the core zone as well as in the buffer zon (Particulate matter with size less than 10micron i.e., Pl monitoring. Location of stations should be decided bas meteorological data, topographical features and enviro ecologically sensitive targets and frequency of monitor undertaken in consultation with the State Pollution Co	the for RSPM M10) and NO and nothe nmentally and ring should be
The m	<b>Submission:</b> Complied onitoring stations have been established nbient air quality analysis reports are att	and monitoring jobs are being performed regularly. tached as Annexure-I.	Date: 29/11/2024
9	AIR QUALITY MONITORING AND PRESERVATION	Data on ambient air quality [(RSPM(Particulate matter less than 10micron i.e., PM10) and NOx] should be re- submitted to the Ministry including its regional office Bhubaneswar and to the State Pollution Control Board Pollution Control Board once in six months.	gularly at
	Submission: Complied sing submitted as Annexure-I in this con	npliance report.	Date: 29/11/2024
10	AIR QUALITY MONITORING AND PRESERVATION	Fugitive dust emissions from all the sources should be regularly. Water spraying arrangement on haul roads, is unloading and at transfer points should be provided an maintained.	oading and
Sand, gather		moisture content, does not get air borne during ontrol measures while transporting of sand is in place optimal loading.	Date: 11/11/2024
11	Noise Monitoring & Prevention	Measures should be taken for control of noise levels in work Environment. Workers engaged in operations should be provided with ear plugs / muffs.	
PPs	Submission: Complied		Date:
		n Ministry of Environment Ecrost and Climate Change	Page

	PPE are provided to all the workers.		11/11/2024
12	WATER QUALITY MONITORING AND PRESERVATION	Industrial waste water (Workshop and Waste water should be properly collected, treated so as to conform prescribed under GSR 422(E) dated 19th May 1993 an December 1993 or as amended from time to time. Oil should be installed before discharge of Workshop effl	to the standard nd 31st and Grease tra
	Submission: Complied ste water generation will take place.		Date: 11/11/2024
13	Human Health Environment	Personnel working in dusty area should wear protect devices and they should also be provided with adequa information on safety and health aspect. Occupational Surveillance programme of the worker should be under periodically to observe any contraction due to exposur take corrective measures, if needed.	te training and Health ertaken
	Submission: Complied ing complied during operating hours.		Date: 11/11/2024
14	MISCELLANEOUS	A separate Environmental Management cell with su personnel should be set-up under the control of a senio who will report directly to the Head of the Organization	or executive,
	Submission: Complied	Cultured, and the descent of the second state of	Date: 11/11/2024
	nmental Cell is directly to General Managen	nent Cell with qualified personnel. The reporting of anager of the Division.	11/11/2024
Enviro			neasures shoul
Enviror 15 PPs S Expend Enviror	nmental Cell is directly to General Ma         MISCELLANEOUS         Submission: Complied         diture on Environmental Protection mental         nment Statement every year. The annu	The funds earmarked for environmental protection r be kept in separate A/C and should not be diverted for Year wise expenditure should be reported to this mini-	neasures shoul other purpose stry and its Date:
Environ 15 PPs S Expend Environ 0.403 1	nmental Cell is directly to General Ma         MISCELLANEOUS         Submission: Complied         diture on Environmental Protection mental         nment Statement every year. The annu	The funds earmarked for environmental protection r be kept in separate A/C and should not be diverted for Year wise expenditure should be reported to this mini- regional office located at Bhubaneswar.	neasures shoul other purpose stry and its Date: 11/11/2024 al Office locate nd final
Environ 15 PPs § Expend Environ 0.403 1 16 PPs § The CT	nmental Cell is directly to General Ma         MISCELLANEOUS         Submission: Complied         diture on Environmental Protection me         nment Statement every year. The annu         akhs for water spraying activities on th         MISCELLANEOUS         Submission: Complied	anager of the Division.The funds earmarked for environmental protection r be kept in separate A/C and should not be diverted for Year wise expenditure should be reported to this mini- regional office located at Bhubaneswar.easures is monitored separately. It is provided in the tal expenditure for the financial year 2023-24 is Rs. ransport road, plantation and environment monitoring.The project authorities should inform to the Regiona at Bhubaneswar regarding date of financial closures at approval of the project by the concerned authorities ar start of land development work.	neasures shoul other purpose stry and its Date: 11/11/2024 al Office locate nd final
Environ 15 PPs § Expend Environ 0.403 1 16 PPs § The CT	nmental Cell is directly to General Ma         MISCELLANEOUS         Submission: Complied         diture on Environmental Protection me         nment Statement every year. The annu         akhs for water spraying activities on the         MISCELLANEOUS         Submission: Complied         Fand CTO of the project have been a	anager of the Division.The funds earmarked for environmental protection r be kept in separate A/C and should not be diverted for Year wise expenditure should be reported to this mini- regional office located at Bhubaneswar.easures is monitored separately. It is provided in the tal expenditure for the financial year 2023-24 is Rs. ransport road, plantation and environment monitoring.The project authorities should inform to the Regiona at Bhubaneswar regarding date of financial closures at approval of the project by the concerned authorities ar start of land development work.	neasures shoul c other purpose stry and its Date: 11/11/2024 al Office locate nd final nd the date of Date: 11/11/2024 aneswar shall project cer (s) of the

18	Statutory compliance	of compli- including e-mail) to zonal offi status of o including the same Office of	oject proponent shall submit six monthly repo iance of the stipulated environment clearance g results of monitored data (both in hard copie to the MoEF, its Regional Office Bhubaneswa ice of CPCB and the SPCB. The proponent sl compliance of the environmental clearance co g results of monitored data on their website and periodically. It shall simultaneously be sent to the MoEF, Bhubaneswar, the respective Zon and the SPCB.	conditions es as well as by r, the respectiv hall upload the onditions, ad shall update o the Regional
It is bein	<b>ubmission:</b> Complied ng complied with. We are uploadin ance on PARIVESH Portal.	ng the complian	nce of April 2024 to September 2024 HY	Date: 11/11/2024
		Visit R	Remarks	
ast Site	Visit Report Date:		N/A	
ddition	al Remarks:			

HALF YEARLY COMPLIANCE REPORT (PERIOD: APRIL'24 – SEPTEMBER'24)

# 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.

S. No.	Condition	Compliance Status
Specifi	c Condition	
(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

	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.	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> .
(viii)	shall be carried out. The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite of water (surface water and	No water is required for the operation of project. Drinking water required by the workers is arranged by the company.
	groundwater), if any, required for the project.	
(ix)	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.	Adequate monitoring of the health of the vehicles used for transportation of sand is ensured to avoid any oil & 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.

(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.
( <b>xii</b> )	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

	PH, Fecal Coliform and Total	website along with half-yearly EC
	Suspended Solids (TSS)]. The	compliance reports.
	monitored data shall be uploaded on the	compliance reports.
	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	
	www.envfor.nic.in shall also be	
	referred in this regard for its	
	compliance.	
(xvi)	The Company shall submit within 3	The Company already has an Environment
	months their policy towards Corporate	Policy approved by the Managing Director
	Environment Responsibility which	and it addresses all the issues mentioned.
	should inter-alia provide for (i)	The status of adherence to the policy and
	Standard operating process / process to	compliance to Environmental laws and
	bring into focus any infringement /	regulations is regularly discussed at higher
	deviation / violation of the	levels. Any non-compliance noticed is
	environmental or forest norms /	corrected at divisional level. If any issue is
	conditions, (ii) Hierarchical system or	beyond our control, it is brought to the notice
	Administrative order of the company to	of higher management. The environment
	deal with the environmental issues and	management cell directly reports to General
	for ensuring compliance with the EC	Manager and it is reviewed on weekly basis.
	conditions and (iii) System of reporting	We have an online system to monitor the
	of non-compliances / violations of	statutory requirements and compliance in
	environmental norms to the Board of	time. This is reviewed by Board of Directors
	Directors of the company and / or	at company's level.
	shareholders or stakeholders.	at company 5 level.

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

	from river bed and waste should be	
	made.	
(***)		No man and in the same
(iii)	Conservation measures for protection of flora and fauna in the core & buffer	No fare species are found in the area.
	zone should be drawn up in	
	consultation with the local forest and	
	wildlife department and effectively	
<i>(</i> • )	implemented.	
(iv)	At least four ambient air quality-	The monitoring stations have been
	monitoring stations should be	established and monitoring jobs are being
	established in the core zone as well as	performed regularly. The ambient air quality
	in the buffer zone for RSPM	analysis reports are attached as Annexure-I.
	(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.	
( <b>v</b> )	Data on ambient air quality	It is being submitted as Annexure-I in this
	[(RSPM(Particulate matter with size	compliance report.
	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.	
(vi)	Fugitive dust emissions from all the	Sand, being coarse in nature and having high
	sources should be controlled regularly.	moisture content, does not get air borne
	Water spraying arrangement on haul	during gathering & transportation. However,
	roads, loading and unloading and at	dust control measures while transporting of
	transfer points should be provided and	sand is in place through water tanker,
	properly maintained.	coverage of trucks and optimal loading.
()	Maaguraa ahayid ha tahay farrangta 1. f	Dromon DDE's one superior de des sites and
(vii)	Measures should be taken for control of	Proper PPE's are provided to all the workers.
	noise levels below 85 dBA in work	
	Environment. Workers engaged in	

	operations of HEMM, etc. should be	
	provided with ear plugs / muffs.	
(viii)	Industrial waste water (Workshop and	No waste water generation will take place.
(*111)	Waste water from the mine) should be	No waste water generation will take place.
	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.	
(ix)	Personnel working in dusty area should	It is being complied during operating hours.
(123)	wear protective respiratory devices and	it is being complied during operating nours.
	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.	
(x)	A separate Environmental	We have a separate Environmental
	Management cell with suitable	Management Cell with qualified personnel's.
	qualified personnel should be set-up	The reporting of Environmental Cell is
	under the control of a senior executive,	directly to General Manager of the Division.
	who will report directly to the Head of	
	the Organization.	
(xi)	The funds earmarked for	Expenditure on Environmental Protection
	environmental protection measures	measures is monitored separately. It is
	should be kept in separate A/C and	provided in the Environment Statement every
	should not be diverted for other	year. The annual expenditure for the financial
	purposes. Year wise expenditure	year 2023-24 is Rs. 0.40 lakhs for water
	should be reported to this ministry and	spraying activities on transport road,
	its regional office located at	plantation and environment monitoring.
	Bhubaneswar.	
(	The project authorities should inform	The CTE and CTO of the project have been
(xii)	The project authorities should inform to the Regional Office located at	The CTE and CTO of the project have been granted by JSPCB. The permission for lifting
	Bhubaneswar regarding date of	of sand from the river bed has also been
	financial closures and final approval of	granted by District Mining Officer, Bokaro.
	the project by the concerned authorities	graned by District Willing Officer, Bokalo.
	the project by the concerned authorities	

	and the date of start of land	
(	development work.	
(xiii)	The regional office of this ministry	it will be complied with.
	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.	
(xiv)	The project proponent shall submit six	It is being complied with.
	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.	
(xv)	A copy of the clearance letter shall be	It has been complied with.
	sent by the proponent to concerned	r in the r
	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.	
(xvi)	The State Pollution Control Board	The copy of clearance letter has been sent to
	should display a copy of the clearance	JSPCB office and its compliance report is
	letter at the Regional Office, District	also submitted to JSPCB.
	icuci at the Regional Office, District	

r		
	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	The environmental statement for financial year 2023-24 has been submitted to JSPCB on 27th September 2024 vide letter no. JMB/ENV/ESSA/05/562/2024 and it is also uploaded on the company website. 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.
	environmental clearance conditions and also be sent to the respective Regional Office of the Ministry on Environment and Forests, Bhubaneswar by e-mail.	
(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 http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bhubaneswar.	It has been complied with.

# ANNEXURE-I

RAD SERIE			aboratory CREDITED Quality Council of In	idia)	Plot No I-B-17 (P) Sindri, Industrial Area P.O Domgarh, Dist- Jinarkhand - 828107 Email ID: sindriaditi@ Website: aditimdservi Phone: 0326-2952377 Fax: 0326-2952377 Mobile: 09471358492	Dhanbac gmail.com ces.com 7 (O), 2, 094315
	Ver. NO		T OF AMBIENT A	IR QUALITY	Date: 10.05.202	4
	Na	me of the industry : 1	TATA STEEL JHAR	IA DIVISION		
			TATA STEEL COLL	IERY		
		(	SAND LEASE ARE	A, BHOJUDIH)		
			DIST DHANBAD (	JHARKHAND)		
5	Wo	ork Order Ref. NO. : 4	700092573/932 Dt.	20.07.2021		
	Da	te of Sample Collection : 0	3.05.2024 To 04.05.2	024		
	Da	te of Testing : 0	6.05.2024 To 09.05.2	024		
2			s per IS-5182	125.00		
			TEST RESULTS			
	_		TEOT HEODETO			
		LOCATION -	ANCHYAT			
		Avg. Ambient Tempera	ture 38°C	Avg. Humidi	ty 24%	
	SI No.	Particulars	Value	CPCB ST	ANDARD	
	1.	Particulate Matter (PM10), µg		100	µg/m¹	
	2.	Particulate Matter (PM <sub>2.5</sub> ), µg	/m <sup>3</sup> 35.27	60 µ	ig/m <sup>3</sup>	
	3.	SO <sub>2</sub> , µg/m <sup>3</sup>	16.46	80 µ	ig/m <sup>3</sup>	
	4.	NO <sub>2</sub> , µg/m <sup>3</sup>	28.75	80 µ	g/m <sup>3</sup>	
	5.	Ozone, µg/m <sup>3</sup>	16.15	180	ug/m <sup>3</sup>	
	6.	NH <sub>3</sub> , µg/m <sup>3</sup>	18.23	400	ug/m <sup>3</sup>	
	7.	CO, mg/m <sup>3</sup>	0.42	4 m	g/m <sup>3</sup>	
	8.	Pb, µg/m <sup>3</sup>	BDL	1 µg	g/m <sup>3</sup>	
	9.	As, ng/m <sup>3</sup>	BDL	6 ng		
	10.	Ni, ng/m <sup>3</sup>	BDL	20 n	The second se	
	11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg	and the second se	- 25
	12.	Benzoapyrene ng/m <sup>3</sup>	BDL	1 nç	p/m²	
3		DL - Below Detection Limit			Course à	
	Sr.	Chemist &D Services	-ADITI P		ical Manager 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 measurment.

S S	ISO/IE	ADITI R&D Testing La NABL ACCI (A Constituent Board of Q C 17025:2017, ISO 9001:2015,I	boratory REDITED wality Council of Ind	Jh Er W dia) Pl	ot No I-B-17 (P) ndri, Industrial Area, O Domgarh, Dist Dhan iarkhand - 828107 mail ID: sindriadit@gmail. lebsite: aditimdservices.co hone: 0326-2952377 (O). ax: 0326-2952377 obile: 09471358492, 0943
Ref	. No.: -	ARDS/24-25/AAQ/1		Date: 1	10.05.2024
		TEST REPORT	OF AMBIENT AI	R QUALITY	
	Wo Dat Dat	TA (S/ Display="block") rk Order Ref. NO.: : 470 e of Sample Collection : 03. e of Testing : 06. it Procedure : As	TA STEEL JHARI TA STEEL COLLI AND LEASE ARE/ ST. – DHANBA D 00092573/932 Dt. 05.2024 To 04.05.2 05.2024 To 09.05.2 per IS-5182 EST RESULTS	ERY A, BHOJUDIH) (JHARKHAND) 20.07.2021 024	
Γ		LOCATION -	ICCHAR HIGH S	CHOOL	
		Avg. Ambient Temperatu	re 38ºC	Avg. Humidity	/ 24%
5	SI No.	Particulars	Value	CPCB ST/	NDARD
	1.	Particulate Matter (PM10), µg/m	<sup>3</sup> 69.44	100 µ	g/m <sup>3</sup>
	2.	Particulate Matter (PM2.5), µg/n	1 <sup>3</sup> 40.25	60 µg	y/m <sup>3</sup>
	3.	SO <sub>2</sub> , µg/m <sup>3</sup>	19.32	80 µg	y/m <sup>3</sup>
	4.	NO <sub>2</sub> , µg/m <sup>3</sup>	29.88	80 µg	y/m <sup>3</sup>
	5.	Ozone, µg/m <sup>3</sup>	15.65	180 µ	g/m <sup>3</sup>
	6.	NH <sub>3</sub> , µg/m <sup>3</sup>	18.36	400 µ	g/m <sup>3</sup>
	7.	CO, mg/m <sup>3</sup>	0.46	4 mg	
	8.	Pb, µg/m <sup>3</sup>	BDL	1 µg	(m)
	9.	As, ng/m <sup>3</sup>	BDL	6 ng	12.) · · · · · · · · · · · · · · · · · · ·
	10.	Ni, ng/m <sup>3</sup>	BDL	20 ng	
	11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg	
	12.	Benzoapyrene ng/m <sup>3</sup>	BDL	1 ng	/m <sup>3</sup>
NO	E Sr.	L - Below Detection Limit 3. 2. 029 Chemist &D Services	A CONSCIENTS		Alf Anager Services, Sindri

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 measurment.

A R D S		ting Labora ABL ACCREDIN Board of Quality	ntory TED Council of Ind	E <b>5</b> lia)	Piot No I-B-17 (P) Sindri, Industrial Arei P.O Domgarh, Dist. Jharkhand - 828107 Email ID: sindriaditi@ Website: aditirndsen Phone: 0326-2952377 Fax: 0326-2952377 Mobile: 0947135849	- Dhanbad Igmail.com vices.com 77 (O),
Ref. No	.: - ARDS/24-25/ AAQ/3	1		Date	: 10.05.2024	
	TESTR	EPORT OF A	MBIENT AIR	RQUALITY		÷
• 1	Work Order Ref. NO. Date of Sample Collect Date of Testing Test Procedure	(SAND I DIST I : 4700092 ion : 03.05.20 : 06.05.20 : As per IS <u>TEST I</u>	DHANBAD (J 573/932 Dt. 2 24 To 04.05.20 24 To 09.05.20 -5182 RESULTS	A, BHOJUDIH) HARKHAND) 20.07.2021 024 024		T
		-1000 T/	AHARJURI SC			_
	Avg. Ambient T	emperature	38°C	Avg. Humidi	Contraction of the Charles	-
SINC		Feelman A	Value		ANDARD	
1.			63.97		µg/m³	
					0 hðlun	
2.	EQ unimi					-
3.	SO <sub>2</sub> , µg/m <sup>3</sup>		16.95		ig/m <sup>0</sup> •	
3. 4.	NO <sub>2</sub> , µg/m <sup>3</sup>		25.52	80 μ	ıg/m³	
3.	NO <sub>2</sub> , µg/m <sup>3</sup>		1.5.5.5.C.	80 µ 180	ig/iii-	

Pb, µg/m<sup>3</sup> BDL 8. 9. As, ng/m<sup>3</sup> BDL 10. Ni, ng/m<sup>3</sup> BDL 11. BDL Benzene, µg/m<sup>3</sup> 12. Benzoapyrene ng/m<sup>3</sup> BDL NOTE: BDL - Below Detection Limit

Sr. Chemist Aditi R&D Services



Technical Manager Aditi R&D Services, Sindri

1 µg/m<sup>3</sup>

6 ng/m<sup>3</sup>

20 ng/m<sup>3</sup>

5 µg/m<sup>3</sup>

1 ng/m<sup>1</sup>

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 measurment.

A R D S	ADITI R8 Testin NABL (A Constituent Boar ISO/IEC 17025:2017, ISO 9001:	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/24-25/ AAQ/4	Dat	e: 10.05.2024
	TEST REP	ORT 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	: 03.05.2024 To 04.05.2024	*2
	Date of Testing	: 06.05.2024 To 09.05.2024	
٠	Test Procedure	: As per IS-5182	
		TEST RESULTS	
	LOCATION	- RAILWAY COLONY , BHOJUDIH	

	Avg. Ambient Temperature	38°C	Avg. Humidity	24%	
SI No.	Particulars	Value	CPCB STANDA	RD	
1.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	81.54	100 µg/m <sup>3</sup>		
2.	Particulate Matter (PM2.5), µg/m3	47.96	60 µg/m <sup>3</sup>		
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	22.82	80 µg/m <sup>3</sup>		
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	30.12	80 µg/m <sup>3</sup>		
5.	Ozone, µg/m <sup>3</sup>	15.84	180 µg/m <sup>3</sup>		
6.	NH <sub>3</sub> , µg/m <sup>3</sup>	19.63	400 µg/m <sup>3</sup>		
7.	CO, mg/m <sup>3</sup>	0.52	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>1</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



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 measurment.
- 3. This particular test report cannot be reproduced except in full, without prior written permission of Quality Manager of the laboratory.

O/IEC 17025	onstitu 2017, IS	NAB ent Boa	ng Lal L ACCF ard of Q 1:2015,I	nality	Coun HSAS	cil of ) 4500	1:2018 Certif	P.O Don Jharkhan Email ID: Website: Phone: 0 Fax: 0326 Mobile: 0	Justrial Aréa, ngarh, Dist Dhanb d - 828107 sindriaditi@gmail.c aditimdservices.co 326-2952377 (O), 5-2952377 9471358492, 0943
Pof N	o & Date				_	NAME		SS OF THE CL	ENT
			5.2024					the second s	and the second se
Date of I	Monitori	ng			(	and the			DIH)
_				_	1	DIST.		and the second se	NAME AND ADDRESS OF TAXABLE PARTY.
03.05.2024	To 04.0	5.2024		Ar	nbient		Average Humidity (%)	Weather Condition	Status of the plant
			1		38		24	Clear	Not in operational
			MON	NITOF	RING	RESU	ILTS		
No Monitoring (6 AM		6 AM to	M to 10 PM)		Night Time (10 PM to 6 AM) Avg. dB(A)		standard) fo as per CPCB (Regulation (Amendmer notified vid Dt. 23 Limit in	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 Day Time Night Time	
CATION	MAX	MIN			MAX	MIN		Residential	Residential • Area
	-		0	2				Afea	• Area
	52	44	49.6	3	47	32	44.12	65.00	55.00
	56	40	53.1	10	44	37	41.78	_	
olony,	59	46	56.2	20	45	32	42.20	_	1.10
Sr. Chemi	sł		State and State		STERVICE.	· Jo u			
	TEST Ref. No /24-25/ NOIS Date of I 03.05.2024 Work Order Dt. 20 Place of Monitoring Place of Monitoring CATION LEASE AREA agla Gram anchayat school cchar High cchool cchar High cchool cchar High cchool	TEST REPO         Ref. No. & Date         Ref. No. & Date         /24-25/ NOISE/1 Dat         Date of Monitoria         03.05.2024 To 04.03         Work Order 4700092 Dt. 20.07.2021         Place of Monitoring       MAX         DCATION       MAX         LEASE AREA       55         agla Gram Panchayat       55         School       56         School       59	TEST REPORT OF         Ref. No. & Date         Ref. No. & Date         /24-25/ NOISE/1 Date:06.05         Date of Monitoring         03.05.2024       To         03.05.2024       To         040092573/932         Dt       20.07.2021         Place of Monitoring       Day T         (6 AM to Avg. d)         CATION       MAX         LEASE AREA       MIN         LEASE AREA       55         agla Gram       55         scharjuri       52         chool       56         scharjuri       56         school       59         Sr. Chemist       Sr. Chemist	TEST REPORT OF NOIS         Ref. No. & Date         /24-25/ NOISE/1 Date:06.05.2024         Date of Monitoring         03.05.2024 To 04.05.2024         Work Order 4700092573/932 Dt. 20.07.2021         MOR         Place of Monitoring       Day Time (6 AM to 10 PM) Avg. dB(A)         DCATION       MAX       MIN       AvG. d Lease agla Gram ranchayat         55       47       52.6         adharjuri cchool       56       40       53.1         chool       56       40       53.1         chool       59       46       56.2         Sr. Chemist       59       46       56.2	TEST REPORT OF NOISE (A         Ref. No. & Date         /24-25/ NOISE/1 Date:06.05.2024         Date of Monitoring         03.05.2024 To 04.05.2024       Au         03.05.2024 To 04.05.2024       Au         Work Order 4700092573/932 Dt. 20.07.2021       MONITOF         Place of Monitoring       Day Time         (6 AM to 10 PM) Avg. dB(A)       MAX       MIN       AvG. dB(A)         DCATION       MAX       MIN       AvG. dB(A)         LEASE AREA       55       47       52.63         adatarjuri chool       56       40       53.10         Char High chool       59       46       56.20         Sr. Chemist       59       46       56.20	TEST REPORT OF NOISE (AMBIE         Ref. No. & Date         Z4-25/ NOISE/1 Date:06.05.2024       Date of Monitoring       ()         Date of Monitoring       ()       ()         03.05.2024 To 04.05.2024       Avg. Ambient Temperatu (°C)         Work Order 4700092573/932 Dt 20.07.2021       38         MONITORING         Place of Monitoring       Day Time (6 AM to 10 PM) Avg. dB(A)       MAX         DCATION       MAX       MIN       Avg. dB(A)       MAX         CATION       MAX       MIN       Avg. dB(A)       MAX         Casharjuri S5       47       52.63       48         agla Gram S55       47       52.63       48         asharjuri S2       44       49.63       47         School       56       40       53.10       44         School       59       46       56.20       45         School       59       46       56.20       45	TEST REPORT OF NOISE (AMBIENT)         Ref. No. & Date       NAME         /24-25/ NOISE/1 Date:06.05.2024       TAT/         Date of Monitoring       (SANI         03.05.2024 To 04.05.2024       Avg.         03.05.2024 To 04.05.2024       Avg.         03.05.2024 To 04.05.2024       Avg.         Work Order 4700092573/932       38         Dt 20.07.2021       MONITORING RESU         Place of Monitoring       Day Time       Nigh         (6 AM to 10 PM)       (10 PM)         Avg. dB(A)       MAX       MIN         Avg. dB(A)       MAX       MIN         CATION       MAX       MIN       Avg. dB(A)         CATION       MAX       MIN       Avg. dB(A)         CATION       MAX       MIN       Avg. dB(A)         Cast Area       55       47       52.63       48       38         Schar High       56       40       53.10       44       37         Cation       59       46       56.20       45       32         School       59       46       56.20       45       32         School       59       46       56.20       45       32 </td <td>TEST REPORT OF NOISE (AMBIENT) LEVEL MO           Ref. No. &amp; Date         NAME AND ADDRES           /24-25/ NOISE/1 Date:06.05.2024         TATA STEEL JH           Date of Monitoring         TATA STEEL (SAND LEASE AF           03.05.2024 To 04.05.2024         Avg. Average           Monitoring         Average           03.05.2024 To 04.05.2024         Avg. Average           Monitoring         Average           Monitoring         Average           Monitoring         Average           Monitoring         Bay Time           NIGH Time         Night Time           (6 AM to 10 PM)         (10 PM to 6 AM)           Avg. dB(A)         Avg. dB(A)           Avg. dB(A)         Average           Baay Time         Night Time           (10 PM to 6 AM)         Average           Avg. dB(A)         Avg. dB(A)           Avg. dB(A)         Avg. dB(A)           Avg. dB(A)         Avg. dB(A)           Avg. dB(A)         Avg. dB(A)           Avg. dB(A)         At1.12           Cohool<td>ONEC 17025:2017, ISO 9001:2015,ISO (OHSAS) 45001:2018 Certified</td></td>	TEST REPORT OF NOISE (AMBIENT) LEVEL MO           Ref. No. & Date         NAME AND ADDRES           /24-25/ NOISE/1 Date:06.05.2024         TATA STEEL JH           Date of Monitoring         TATA STEEL (SAND LEASE AF           03.05.2024 To 04.05.2024         Avg. Average           Monitoring         Average           03.05.2024 To 04.05.2024         Avg. Average           Monitoring         Average           Monitoring         Average           Monitoring         Average           Monitoring         Bay Time           NIGH Time         Night Time           (6 AM to 10 PM)         (10 PM to 6 AM)           Avg. dB(A)         Avg. dB(A)           Avg. dB(A)         Average           Baay Time         Night Time           (10 PM to 6 AM)         Average           Avg. dB(A)         Avg. dB(A)           Avg. dB(A)         Avg. dB(A)           Avg. dB(A)         Avg. dB(A)           Avg. dB(A)         Avg. dB(A)           Avg. dB(A)         At1.12           Cohool <td>ONEC 17025:2017, ISO 9001:2015,ISO (OHSAS) 45001:2018 Certified</td>	ONEC 17025:2017, ISO 9001:2015,ISO (OHSAS) 45001:2018 Certified

S S S			ing Laborato	Dry D ouncil of India	)	Sindri, P.O I Jharkh Email Websi Phone Fax: 0	o I-B-17 (P) Industrial Area, Xomgarh, Dist Dhant and - 828107 ID: sindriaditi@gmail. e: aditimdservices.co : 0326-2952377 (O), 326-2952377 : 09471358492, 0943
Ref. N	lo.: - /	ARDS/24-25/MINER./	1			Date: 09.0	5.2024
		TEST REPOR	T OF MINERA	LOGICAL	OMPOS	SITION	
		<u>c</u>	F PARTICUL		R		
			DI31 DI	IANBAD (JH	ANNIA		
	Date	k Order Ref. NO. e of Sample Collectic e of Testing	on : 04.05.2024	To 08.05.202			
•	Date Date	of Sample Collection	on : 04.05.2024 : 06.05.2024	To 08.05.202	4	Compositi	on (%)
• • SI 1	Date	of Sample Collection	on : 04.05.2024 : 06.05.2024	To 08.05.202	4	Compositi Al <sub>2</sub> O <sub>3</sub>	on (%) CaO
	Date Date	of Sample Collection	on : 04.05.2024 : 06.05.2024 <u>TEST RE</u>	To 08.05.202 ESULTS Miner	4 ralogical (		
	Date Date	of Sample Collection of Testing Particulars	on : 04.05.2024 : 06.05.2024 <u>TEST RE</u>	To 08.05.202 <u>ESULTS</u> <u>Miner</u> SiO <sub>2</sub>	4 ralogical ( FeO	Al <sub>2</sub> O <sub>1</sub>	CaO

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 measurment.

H D S	E)	Testing NABL	g Labor ACCRED d of Qualit	<b>atory</b> ITED y Council o		Sind P.O Jhan Ema Web Phor Fax:	No I-B-17 (P) n. Industrial Area, - Domgarh, Dist Dhanbad khand - 628107 il ID: sindriaditi@gmail.com site: aditimdservices.com ne: 0326-2952377 (O), 0326-2952377 iie: 09471358492, 094315126
F	Ref. No.: - ARDS/24-25	/SW/1				Da	ate: 10.05.2024
		TEST RE	PORT O	F SURFA	CE WA	TER	
	<ul> <li>Name of the ind</li> <li>Work Order Re</li> </ul>		TATA S	STEEL CO LEASE A DHANBA	ARIA DIVI DLLIERY REA, BHO D (JHARK Dt. 20.07	JUDIH) HAND)	
	<ul> <li>Sample Code</li> <li>Date of Sample</li> <li>Date of Testing</li> <li>Test</li> </ul>		2. 3. 4. : 04 : 06	Gowai Riv Izri River Izri River .05.2024 i.05.2024	ver (Up Str ver (Dn. St (Up Strear (Dn. Strea To 09.05.2 rbidity, D0	ream) n) m)	F, SO4
		1.10	TEST	RESULT	a		
SI.	PARAMETERS		VALUE			Limit as	Test
No.	OF TEST	Gowai River (Up Stream)	Gowai River (Dn. Stream)	Izri River (Up Stream)	Izri River (Dn. Stream)	per IS 2296 Class - C	Method
1.	рН	8.2	8.2	7.8	7.9	6.5 - 8.5	IS-3025 (P-11): 1983
2.	Total Dissolved Solids, mg/l	526	540	645	668	1500 (Max.)	IS-3025 (P-16): 1984
3.	Turbidity, NTU	1.7	2.0	2.4	3.0		IS-3025 (P-10):1984
4.	Dissolved Oxygen	5.3	4.7	5.8	5.4	4.0 (Min)	IS-3025 (P-38):1989
5.	,mg/l Bio chemical Oxygen Demand, mg/l	1.7	2.1	1.9	2.1	3.0	IS-3025 (P-44):1994
6.	Chloride as CI, mg/l	65.9	69.8	168.7	176.5	600 (Max.)	IS-3025 (P-32):1988
7.	Fluoride as F, mg/l	0.60	0.65	0.56	0.64	1.5	IS-3025 (P-60):2008
8,	Sulphate as SO <sub>4</sub> , mg/l	49.3	54	38.1	39.8	400	IS-3025 (P-24):1986
	Sr. Chemist Aditi R&D Service	s	and the second second	A COMMAND	A		Manager Wices, Sindri
	8			- MAN			



Testing Laboratory NABL ACCREDITED

(A Constituent Board of Quality Council of India) ISO/IEC 17025:2017, ISO 9001:2015,ISO (OHSAS) 45001:2018 Certified

### Ref. No.: - ARDS/24-25/AAQ/1

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

Date: 23.08.2024

### TEST REPORT OF AMBIENT AIR QUALITY

•	Name of the industry	: TATA STEEL JHARIA DIVISION
	52	TATA STEEL COLLIERY
		(SAND LEASE AREA, BHOJUDIH)
		DIST. – DHANBA D (JHARKHAND)
•	Work Order Ref. NO.:	: 4700126557/932 Date:- 29/05/2024

- Date of Sample Collection : 16/08/2024 To 17/08/2024 : 19/08/2024 To 22/08/2024
- Date of Testing
- **Test Procedure**

#### TEST RESULTS

: As per IS-5182

	LOCATION - ICCHAR HIGH SCHOOL						
	Avg. Ambient Temperature	30°C	Avg. Humidity	82%			
SI No.	Particulars	Value	CPCB STAND	ARD			
1.	Particulate Matter (PM10), µg/m3	60.47	100 µg/m <sup>3</sup>	1			
2.	Particulate Matter (PM2.5), µg/m3	32.34	60 µg/m <sup>3</sup>				
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	16.36	80 µg/m³				
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	27.62	80 µg/m <sup>3</sup>				
5.	Ozone, µg/m³	15.68	180 µg/m <sup>3</sup>				
6.	NH3, µg/m3	14.56	400 µg/m <sup>3</sup>				
7.	CO, mg/m <sup>3</sup>	0.38	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/m³				
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

**Technical Manager** Aditi R&D Services, Sindri

Statements :

1. 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.

3. This particular test report cannot be reproduced except in full without prior permission of Quality Manager of the laboratory.

e



Testing Laboratory NABL ACCREDITED

(A Constituent Board of Quality Council of India) ISO/IEC 17025:2017, ISO 9001:2015,ISO (OHSAS) 45001:2018 Certified

### Ref. No.: - ARDS/24-25/ AAQ/2

Plot No. - I-B-17 (P) Sindri, Industrial Area P.O.- Domgarh, Dist.- Dhanbied Jharkhand - 828107 Email ID: sindriadit/@gmail.com Website: aditirndservices.com Phone: 0326-2952377 (O) Mobile: 09471358492, 09431512508

#### Date: 23.08.2024

### 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.	: 4700126557/932 Date:- 29/05/2024
•	Date of Sample Collection	: 16/08/2024 To 17/08/2024
٠	Date of Testing	: 19/08/2024 To 22/08/2024
•	Test Procedure	: As per IS-5182
		TEST RESULTS

LOCATION - LAGLA GRAM PANCHYAT						
	Avg. Ambient Temperature	30°C	Avg. Humidity	82%		
SI No.	Particulars	Value	CPCB STAND	ARD		
1.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	59.60	100 µg/m <sup>1</sup>	e.		
2.	Particulate Matter (PM2.5), µg/m3	33.45	60 µg/m <sup>3</sup>			
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	15.84	80 µg/m <sup>3</sup>			
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	27.26	80 µg/m <sup>3</sup>			
5.	Ozone, µg/m³	14.44	180 µg/m <sup>3</sup>			
6.	NH <sub>3</sub> , µg/m <sup>3</sup>	15.26	400 µg/m <sup>3</sup>			
7.	CO, mg/m <sup>3</sup>	0.32	4 mg/m <sup>3</sup>			
8.	Pb, µg/m <sup>3</sup>	BDL	1 µg/m³			
9.	As, ng/m <sup>3</sup>	BDL	6 ng/m <sup>3</sup>			
10.	Ni, ng/m <sup>3</sup>	BDL	20 ng/m3			
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



.

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.



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-8-17 (P) Sindri, Industrial Area P.O.- Domgarh, Dist - Dhanbad Jharkhand - 828107 Email ID: sindriaditi@gmail.com Website: aditindservices.com Phone: 0326-2952377 (O) Mobile: 09471358492, 09431512608

### Ref. No.: - ARDS/24-25/ AAQ/3

### Date: 23.08.2024

### TEST REPORT OF AMBIENT AIR QUALITY

•	Name of the industry	TATA STEEL JHARIA DIVISIO	NC
		TATA STEEL COLLIERY	
		(SAND LEASE AREA, BHOJI	JDIH)
		DIST DHANBAD (JHARKH	AND)
•	Work Order Ref. NO.	4700126557/932 Date:- 29/05/2	024
•	Date of Sample Collection	16/08/2024 To 17/08/2024	
•	Date of Testing	19/08/2024 To 22/08/2024	

- Test Procedure
- : As per IS-5182

### TEST RESULTS

LOCATION - SAHARJURI SCHOOL					
	Avg. Ambient Temperature	30°C	Avg. Humidity	82%	
SI No.	Particulars	Value	CPCB STAND	ARD	
1.	Particulate Matter (PM10), µg/m3	60.82	100 µg/m <sup>3</sup>	1	
2.	Particulate Matter (PM2.5), µg/m3	34.16	60 µg/m <sup>3</sup>		
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	15.08	80 µg/m <sup>3</sup>		
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	26.32	80 µg/m <sup>3</sup>		
5.	Ozone, µg/m³	14.38	180 µg/m <sup>3</sup>		
6.	NH <sub>3</sub> , µg/m <sup>3</sup>	12.98	400 µg/m <sup>3</sup>		
7.	CO, mg/m <sup>3</sup>	0.28	4 mg/m <sup>3</sup>		
8.	Pb, µg/m³	BDL	1 µg/m³		
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/m³		
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



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 permission of Quality Manager of the laboratory.

.



Testing Laboratory NABL ACCREDITED

(A Constituent Board of Quality Council of India) Phone: 0326-2952377 (O) ISO/IEC 17025:2017, ISO 9001:2015,ISO (OHSAS) 45001:2018 Certified Mobile: 09471358492, 09431512508

Plot No. - I-8-17 (P) Sindri, Industrial Area, P.O.- Domgarh, Dist.- Dhanbed Jharkhand - 828107 Email ID: sindriad@@gmail.com Website: aditirndservices.com Phone: 0326-2952377 (O) Mobile: 05471358492, 09431512508

#### Ref. No.: - ARDS/24-25/ AAQ/4

Date: 23.08.2024

### TEST REPORT OF AMBIENT AIR QUALITY

•	Name of the industry	3	TATA STEEL JHARIA DIVISION
			TATA STEEL COLLIERY
			(SAND LEASE AREA, BHOJUDIH)
			DIST DHANBAD (JHARKHAND)
•	Work Order Ref. NO .:	:	4700126557/932 Date:- 29/05/2024
•	Date of Sample Collection	:	16/08/2024 To 17/08/2024
•	Date of Testing	:	19/08/2024 To 22/08/2024
٠	Test Procedure	:	As per IS-5182

### TEST RESULTS

	LOCATION - RAILWAY COLONY, BHOJUDIH										
2	Avg. Ambient Temperature	30°C	Avg. Humidity	82%							
SI No.	Particulars	Value	CPCB STAND	ARD							
1.	Particulate Matter (PM10), µg/m3	76.84	100 µg/m <sup>3</sup>	1							
2.	Particulate Matter (PM2.5), µg/m3	43.76	60 µg/m <sup>3</sup>								
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	18.48	80 µg/m <sup>3</sup>								
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	28.26	80 µg/m <sup>3</sup> "								
5.	Ozone, µg/m³	15.12	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>	0.48	4 mg/m <sup>3</sup>								
8.	Pb, µg/m <sup>3</sup>	BDL	1 µg/m³								
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/m³								
12.	Benzoapyrene ng/m <sup>3</sup>	BDL	1 ng/m <sup>3</sup>								

NOTE: BDL - Below Detection Limit

0 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.



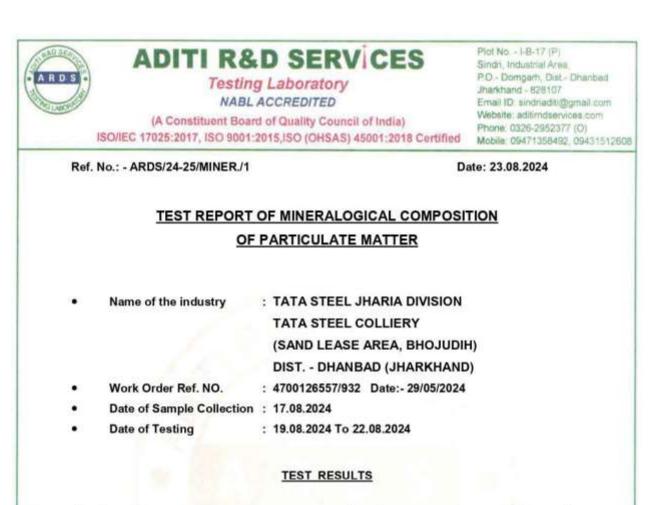
Testing Laboratory NABL ACCREDITED Plot No. - I-8-17 (P) Sindri, Industrial Area P.O.- Domgarh, Dist - Dhanbad Jharkhand - 828107 Email ID: sindriaditi@gmail.com Website: aditindservices.com Phone: 0326-2952377 (O) Mobile: 09471358492, 09431512608

(A Constituent Board of Quality Council of India) ISO/IEC 17025:2017, ISO 9001:2015,ISO (OHSAS) 45001:2018 Certified

### TEST REPORT OF NOISE (AMBIENT) LEVEL MONITORING

Ref. No. & Date					TATA STEEL JHARIA DIVISION					
ARI	ARDS/24-25/ NOISE/1 Date:23.08.2024 Date of Monitoring									
						T	ATA STEEL	COLLIERY		
						SAND	LEASE AR	REA, BHOJU	DIH)	
						DIST.	- DHANBAD	) (JHARKHA	ND)	
	16.08.2024	To 17.0	8.2024	Те	Avg. Ambien mperate (°C)	t	Average Humidity (%)	Weather Condition	Status of the plant	
	Work Order	4700126	557/932		30		82	Clear	Not in	
	Date:- 2	29/05/202	24						operational	
				MONIT	ORING	RESU	LTS			
SI. No	Place of Monitoring	¢	Day Ti 6 AM to Avg. d	10 PM)		(10 PM	Time to 6 AM) dB(A)	standard) fo as per CPCB (Regulation (Amendmen notified vio Dt. 22 Limit in	vel (Ambient r Industrial Area Noise Pollution n and Control) nt) Rules, 2000 le S.O. 1046(E) 2.11.2020 dB(A) Leq	
-	LOCATION	MAX	MIN	AVG. dB(A)	MAX	MIN	AVERAGE	Day Time Residential	Night Time Residential	
SAN	D LEASE AREA			Leq			dB(A) Leq	Area	Area	
1.	Lagla Gram Panchayat	56	48	53.63	49	30	46.04			
2.	Saharjuri School	60	46	57.16	38	32	35.96	65.00	55.00	
3.	lcchar High School	65	42	62.01	38	30	35.63			
4.	Railway Colony, Bhojudih	60	58	59.11	56	40	53.1			
				101.000	P.D. P.D. DOMGARAD DHANBAD			Jaci echnical Ma R&D Servic		

2. The test results reported in this report are valid at the time of and under the stated condition of measurement.



SI No.	Particulars	Mineralogical Composition (%)					
	-	SiO2	FeO	Al <sub>2</sub> O <sub>3</sub>	CaO		
1.	Icchar High School	1.81	0.03	1.09	2.8		
2.	Railway Colony, Bhojudih	1.93	0.11	1.20	2.52		

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.

R D S	ADIT	Testing	g Labora	atory TED		Sindh P.OI Jharki Email Webs	o - I-B-17 (P) Industrial Area, Domgarh, Dist Dhanbad tand - 826107 ID: sindriad@gmail.com te: aditirndservices.com
	ISO/IEC 17025:2017				the second se	1.1.87	x 0326-2952377 (O) x 09471358492, 09431512
F	Ref. No.: - ARDS/24-25	/SW/1				Da	ate: 24.08.2024
		TEST RE	PORT O	F SURFA	ACE WA	TER	
	<ul> <li>Name of the ind</li> <li>Work Order Re</li> </ul>		TATA : (SAND DIST	STEEL CO LEASE A DHANBA	ARIA DIVI DLLIERY REA, BHO D (JHARK Date:- 29	JUDIH) HAND)	
	<ul> <li>Sample Code</li> <li>Date of Sample</li> </ul>	Collection	2. 3. 4.	Gowai Riv Izri River	ver (Up Str ver (Dn. St (Up Strear (Dn. Strea	ream) n)	
	<ul> <li>Date of Sample</li> <li>Date of Testing</li> </ul>		10 103		To 23.08.	2024	
	• Test		: pł	H, TDS, Tu	rhidity D	BOD CI	E SO.
			101	.,,	indiancy, De	J, DOD, C I,	1, 304
			1000000		n an an an an an <del>an</del> an	, вов, с <b>і</b> ,	r, 304
SI.	PARAMETERS		TEST	<u>RESULT</u>	n an an an an an <del>an</del> an	Limit as	Test
1.002.00	PARAMETERS OF TEST	Gowai River (Up Stream)	TEST VA Gowai River (Dn.	RESULT	n an an an an an <del>an</del> an		
SI. No.		River (Up	TEST VA Gowai River	RESULT	Izri River (Dn.	Limit as per IS 2296	Test Method
No. 1. 2.	PH Total Dissolved Solids, mg/l	River (Up Stream) 7.8 141	TEST VA Gowai River (Dn. Stream) 7.9 165	RESULT LUE Izri River (Up Stream) 8.2 160	Izri River (Dn. Stream) 8.0 155	Limit as per IS 2296 Class - C 6.5 - 8.5 1500 (Max.)	Test Method IS-3025 (P-11): 1983 IS-3025 (P-16): 1984
No. 1. 2. 3.	pH Total Dissolved Solids, mg/l Turbidity, NTU	River (Up Stream) 7.8 141 4	TEST VA Gowai River (Dn. Stream) 7.9 165 4	RESULT LUE Izri River (Up Stream) 8.2 160 3	Izri River (Dn. Stream) 8.0 155 3	Limit as per IS 2296 Class - C 6.5 - 8.5 1500 (Max.)	Test Method IS-3025 (P-11): 1983 IS-3025 (P-16): 1984 IS-3025 (P-10):1984
No. 1. 2.	PH Total Dissolved Solids, mg/l	River (Up Stream) 7.8 141	TEST VA Gowai River (Dn. Stream) 7.9 165	RESULT LUE Izri River (Up Stream) 8.2 160	Izri River (Dn. Stream) 8.0 155	Limit as per IS 2296 Class - C 6.5 - 8.5 1500 (Max.)	Test Method IS-3025 (P-11): 1983 IS-3025 (P-16): 1984
No. 1. 2. 3.	PH Total Dissolved Solids, mg/l Turbidity, NTU Dissolved Oxygen ,mg/l Bio chemical Oxygen	River (Up Stream) 7.8 141 4	TEST VA Gowai River (Dn. Stream) 7.9 165 4	RESULT LUE Izri River (Up Stream) 8.2 160 3	Izri River (Dn. Stream) 8.0 155 3	Limit as per IS 2296 Class - C 6.5 - 8.5 1500 (Max.)	Test Method IS-3025 (P-11): 1983 IS-3025 (P-16): 1984 IS-3025 (P-10):1984 IS-3025 (P-38):1989
No. 1. 2. 3. 4.	pH Total Dissolved Solids, mg/l Turbidity, NTU Dissolved Oxygen ,mg/l	River (Up Stream) 7.8 141 4 5.2	TEST VA Gowai River (Dn. Stream) 7.9 165 4 5.2	RESULT LUE Izri River (Up Stream) 8.2 160 3 5.4	Izri River (Dn. Stream) 8.0 155 3 5.4	Limit as per IS 2296 Class - C 6.5 - 8.5 1500 (Max.) - 4.0 (Min)	Test Method IS-3025 (P-11): 1983 IS-3025 (P-16): 1984 IS-3025 (P-10):1984
No. 1. 2. 3. 4. 5.	PH Total Dissolved Solids, mg/l Turbidity, NTU Dissolved Oxygen ,mg/l Bio chemical Oxygen Demand, mg/l	River (Up Stream) 7.8 141 4 5.2 2.8	TEST VA Gowai River (Dn. Stream) 7.9 165 4 5.2 2.7	RESULTLUEIzri River (Up Stream)8.216035.42.1	Izri River (Dn. Stream) 8.0 155 3 5.4 2.0	Limit as per IS 2296 Class - C 6.5 - 8.5 1500 (Max.) - 4.0 (Min) 3.0	Test Method IS-3025 (P-11): 1983 IS-3025 (P-16): 1984 IS-3025 (P-10):1984 IS-3025 (P-38):1989 IS-3025 (P-44):1994
No. 1. 2. 3. 4. 5. 6.	DF TEST pH Total Dissolved Solids, mg/l Turbidity, NTU Dissolved Oxygen ,mg/l Bio chemical Oxygen Demand, mg/l Chloride as CI, mg/l	River (Up Stream) 7.8 141 4 5.2 2.8 12	TEST VA Gowai River (Dn. Stream) 7.9 165 4 5.2 2.7 2.7 14.0	RESULT LUE Izri River (Up Stream) 8.2 160 3 5.4 2.1 10.0	Izri River (Dn. Stream) 8.0 155 3 5.4 2.0 14.0	Limit as per IS 2296 Class - C 6.5 - 8.5 1500 (Max.) - 4.0 (Min) 3.0 600 (Max.)	Test Method IS-3025 (P-11): 1983 IS-3025 (P-16): 1984 IS-3025 (P-10):1984 IS-3025 (P-38):1989 IS-3025 (P-44):1994 IS-3025 (P-32):1988

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.

### Ambient Air Quality Analysis Report

Period- April'24 to June'24

Name of Industry : Lagla Mahal Sand Mining Project

No. of sampling points : 4

Sampling Logation	Date of Sampling/ Weather Condition					
Sampling Location	April'24	May'24	June'24			
Mahal School Near Izri River	18.04.2024/ Clear	21.05.2024/ Clear	27.06.2024/ Clear			
Lagla Gram Panchayat	18.04.2024/ Clear	21.05.2024/ Clear	27.06.2024/ Clear			
Bagula School	19.04.2024/ Clear	22.05.2024/ Clear	28.06.2024/ Clear			
Shahar Juri School	19.04.2024/ Clear	22.05.2024/ Clear	28.06.2024/ Clear			

	Latitude/		PM 10	PM 2.5	$SO_2$	NOx
Location	Longitude	Date	PM 10 Level : 24 Hourly Limit-	PM <sub>2.5</sub> Level : 24 Hourly Limit-60µg/m <sup>3</sup>	SOx Level: 24 Hourly Limit- 80µg/m <sup>3</sup>	NOx Level: 24 Hourly Limit- 80µg/m <sup>3</sup>
			$100 \mu g/m^3$	Emit ooµg/m	00μ <u>g</u> /m	00µg/m
Mahal	23°38'06.1'N /	18.04.2024	67.5	38.6	16.4	20.4
School	86°23'41.2" E	21.05.2024	72.4	41.5	15.2	18.7
Near Izri River		27.06.2024	73.5	42.4	17.3	20.6
Lagla	23°37'21.3" N/	18.04.2024	75.2	42.6	16.2	20.3
Gram	86°23'35.3" E	21.05.2024	72.6	41.4	16.5	22.4
Panchayat		27.06.2024	74.2	43.2	18.5	24.6
Bagula	23°36'27.3" N/	19.04.2024	76.5	42.2	16.8	19.5
School	86°21'59.7" E	22.05.2024	72.2	43.4	17.5	21.6
		28.06.2024	78.2	42.6	19.6	25.4
Shahar Juri	23°36'26.6" N/	19.04.2024	72.8	43.4	17.5	21.6
School	86°20'58.9" E	22.05.2024	73.4	42.6	18.7	22.4
		28.06.2024	77.3	44.8	19.5	23.7
	Minimum		67.5	38.6	15.2	18.7
	Maximum		77.3	44.8	19.6	25.4
	Average		73.74	42.31	17.44	21.77

Readsed

Area Manager (Environment)

# Ambient Air Quality Analysis Report

### Period- July'24 to September'24

Name of Industry : Lagla Mahal Sam	nd Mining Project	No. of sampling	points : 4
Someling Logation	Date of	f Sampling/ Weather Condi	ition
Sampling Location	July'24	August'24	September'24
Mahal School Near Izri River	11.07.2024/ Cloudy	28.08.2024/ Clear	23.09.2024/ Cloudy
Lagla Gram Panchayat	11.07.2024/ Cloudy	28.08.2024/ Clear	23.09.2024/ Cloudy
Bagula School	12.07.2024/ Cloudy	29.08.2024/ Cloudy	24.09.2024/ Cloudy
Shahar Juri School	12.07.2024/ Cloudy	29.08.2024/ Cloudy	24.09.2024/ Cloudy

	Latitude/		PM 10	PM <sub>2.5</sub>	$SO_2$	NOx
Location	Longitude	Date	PM 10 Level:	PM 2.5 Level: 24	SOx Level: 24	NOx Level: 24
			24 Hourly	Hourly Limit-	Hourly Limit-	Hourly Limit-
			Limit-100µg/m <sup>3</sup>	60µg/m <sup>3</sup>	$80\mu g/m^3$	80µg/m <sup>3</sup>
Mahal	23°38'06.1'N /	11.07.2024	62.4	35.7	15.2	18.2
School	86°23'41.2" E	28.08.2024	64.5	34.4	13.5	16.5
Near Izri		23.09.2024	62.7	33.6	12.9	17 4
River		25.09.2024	62.7	55.0	12.8	17.4
Lagla	23°37'21.3" N/	11.07.2024	65.2	35.2	14.3	19.8
Gram	86°23'35.3" E	28.08.2024	66.3	33.5	13.5	18.4
Panchayat		23.09.2024	63.2	34.4	12.8	16.7
Bagula	23°36'27.3" N/	12.07.2024	67.5	35.7	16.7	19.8
School	86°21'59.7" E	29.08.2024	64.3	34.8	14.2	18.6
		24.09.2024	62.5	35.4	13.5	16.3
Shahar Juri	23°36'26.6" N/	12.07.2024	64.6	34.6	15.3	21.3
School	86°20'58.9" E	29.08.2024	65.8	32.4	13.4	18.2
		24.09.2024	63.4	36.5	12.7	17.4
	Minimum		62.4	32.4	12.8	16.3
	Maximum		67.5	36.5	16.7	21.3
	Average		64.37	34.68	13.99	18.22

Redsed

Area Manager (Environment)

### **Ground Water Quality Analysis**

### Ground water level fluctuation in and around Core & Buffer zone area of sand mining lease Pre- Monsoon Season- May'24

				Sample Parameter				
S.No	Date	Location	Time	Depth in meter (m)	рН	Electrical Conductivity, µS/m		
1	22.05.2024	Premsinghdih	10:32AM	7.6	7.3	596		
2	22.05.2024	Lagla	11:45AM	7.7	7.2	627		
3	22.05.2024	Alakdih	11:25AM	7.5	7.4	663		
4	22.05.2024	Joradih	12:42PM	7.8	7.0	587		
5	22.05.2024	SEB Quarters	12:15PM	7.5	7.2	635		
6	22.05.2024	Kargali	02:30PM	7.2	7.3	625		
7	22.05.2024	Kumargora	01:55PM	7.4	7.0	610		
8	22.05.2024	Bhojudih	01:25PM	7.3	7.2	593		
9	22.05.2024	Mahal	12:25PM	7.5	7.1	605		
10	22.05.2024	Sudamdih	01:53PM	7.7	7.3	598		

### Monsoon Season - August'24

					Sample P	arameter
S.No	Date	Location	Time	Depth in meter (m)	рН	Electrical Conductivity, µS/m
1	29.08.2024	Premsinghdih	9:30AM	2.55	7.2	621
2	29.08.2024	Lagla	11:40AM	2.15	7.1	627
3	29.08.2024	Alakdih	11:00AM	2.32	7.1	664
4	29.08.2024	Joradih	01:55PM	2.68	7.3	620
5	29.08.2024	SEB Quarters	11:25AM	2.42	7.2	632
6	29.08.2024	Kargali	01:52PM	2.26	7.0	626
7	29.08.2024	Kumargora	11:35PM	2.12	7.2	643
8	29.08.2024	Bhojudih	12:40PM	2.13	7.1	597
9	29.08.2024	Mahal	12:20PM	1.88	7.0	624
10	29.08.2024	Sudamdih	12:15PM	2.32	7.2	642

Readsed

Area Manager (Environment)

SI.	Location	Sampling	Sampling	Тетр	рН	TSS	BOD	Oil & Grease
No.	Location	Date	Time	< 40°C	5.5 - 9.0	100 mg/l	30 mg/l	10 mg/l
1.	River Gowai Up Sttream	24.09.2024	10:40 AM	26.3	7.5	28	2.5	03
2.	River Damodar Down Stream	24.09.2024	11.15 AM	25.8	7.4	26	3.2	0.4
3.	Lagla (Pond)	24.09.2024	01:55PM	24.6	7.3	25	2.7	0.4
4.	Alakhdih(Pond)	24.09.2024	02.:10 PM	25.2	7.6	25	3.4	0.3
5.	Joradih (Pond)	24.09.2024	11:55 AM	24.3	7.5	24	3.2	0.3
6.	SEB Quarters (Pond)	24.09.2024	11:20 AM	25.7	7.4	25	2.8	0.4
7.	Kargali (Pond)	24.09.2024	12:30 PM	23.5	7.3	24	3.2	0.3
8.	Kumargora (Pond)	24.09.2024	12:50 PM	24.2	7.4	25	3.4	0.4
9.	Bhojudih (Pond)	24.09.2024	12:25 PM	24.6	7.5	24	2.6	0.3

### **Surface Water Quality Analysis**

Readsed

Area Manager (Environment)