TARINI MINERALS PVT. LTD.

(A UNIT OF D.R. PATNAIK & ALTRADE GROUP)

Ref. No.: DIOM/TM/EC-COMP/21-22- 83

Date: 15.11.2021

The Member Secretary,
State Environment Impact Assessment Authority, Odisha
(Ministry of Environment, Forests & Climate Change)
Government of India,
Qr. No-5RF-2/1, Unit-IX
Bhubaneswar -751 022.
E Mail: seigaorissa@amail.com

Sub: Half yearlyEnvironmental Clearance Compliance Report of Deojhar Iron Ore Mining Project of M/s. Tarini Minerals Pvt.Ltd. for the period, April-2021 to September- 2021.

Ref: 1. SEIAA Clearance letter no. SEIAA/26/9, dated 27.11.2009 & 3427/SEIAA, dt: 30.05.2015

2. SEIAA (Odisha) Ref no. 3427/SEIAA, dated 30.05.2015

3. MoEF&CC notification no. 4624 (Published in Gazette of India) dt. 26.11.2018

Dear Sir,

With reference to the above-cited subject and gazette notification, we are herewith sending the six-monthly compliance report in soft copy by Email i.e. roez.bsr-mef@nic.in&seiaaorissa@gmail.com, and also uploading the same in our company website i.e. www.diom-tm.com with comprehensive data analysis reports (supporting photographs and monitoring reports) for the period April to September 2021 in respect of Deohjhar Iron Ore Mines of M/s Tarini Minerals Pvt. Ltd.

This for your kind information, please.

Yours Faithfully

For M/s. Tarini Minerals Pvt. Ltd

- Inta

Mines Manager
Deojhar Iron Ore Mines Mines Manager
Deojhar Iron Mines

Encl.

As aboMs. Tarini Minerals (P) Ltd.

Copy to:

Fiber Emphasis

- The Director (S), Regional Office (EZ), Ministry of Environment, Forest & Climate Change, A-31, Chandrasekharpur, Bhubaneswar.
 E mail:roez.bsr-mef@nic.in
- 2. The Zonal Officer, Central Pollution Control Board, Eastern Zonal Office, Kolkata, E mail:zokolkatta.cpcb@nic.in
- The Chairman, State Pollution Control Board, Orissa, A/118, Nilakantha Nagar, Unit – VIII, Bhubaneswar – 751012, E mail: paribesh1@ospcboard.org
- The Regional Director, Central Ground Water Board, Government of India, South Eastern Region, Bhubaneswar – 751030.
 E mail: rdser-cgwb@nic.in

Six Monthly E.C Compliance report

Period: April-2021 to September-2021

Environment Clearance Letter No.:

SEIAA/26/9, dated. 27.11.2009 and 3427/SEIAA, dated 30.05.2015.









Deojhar Iron Ore Mines M/s. Tarini Minerals Pvt. Ltd.

www.diom-tm.com

A. SPECIFIC CONDITIONS

SL. No.	SPECIFIC CONDITION	COMPLIANCE
1	The applicant (Project Proponent) will take necessary measures for prevention, control and mitigation of Air Pollution, water pollution, noise pollution and land pollution including solid waste management as mentioned by him in Form-I, Final EIA Reports And Environment Management Plan (EMP) in compliance with prescribed statutory norms and standards.	The project proponent has taken up adequatepreventive measures for prevention and control of different environmental parameters; a. Air pollution Measures: Regular water sprinkling by engaging mobile water tankers, truck wheel wash system, dry fog system in mineral handling plants & plantation, b. Water pollution Measures: Provided settling pond, check dam with cumulative length of 541 mtrs. with garland drains during the monsoon season, preventive and scheduled maintenance of the HEMM are being carried out at regular intervals to avoid/ mitigate any noise induced pollution, de-silting of the surface run off management structures is carried c. Dump Management: At present there is 1 No. of OB dump which is active with retaining wall at its toe. d. Environmental Monitoring: Apart from that regular environmental monitoring of different parameters are being carried out as per the MOEF&CC & SPCB guidelines for Air, Water, Noise etc. The photo of the same is enclosed as photo-1,2,3,4&5.
2	The applicant will take necessary steps for socio economic development after a detailed Primary Socio-economic Survey of the people of Core area on need based assessment for providing employment, education, health, drinking water and sanitation, road and	The project has carried a need based assessment by engaging a consultant i.e. JANASADHANA. Based on the findings different projects have undertaken in consultation with "JANASADHANA" for the socio-economic development of the local people belongs to adjoining villages. A

3	communication facilities etc. A report is to be submitted by the proponent to SEIAA regularly on 1st June and 1st December of each calendar year. The applicant will comply with the points concerns and issues raised by the people duringpublic hearing on 4th February, 2009 in accordance with	detailed implementation status report of the same is given in Annexure # 1 . We have full-filled the commitment regarding the demands raised during the public hearing and compliance are made as per the commitments i.e. Infrastructure
	the commitments made by him thereon.	the commitments i.e. Infrastructure development, Health, Sanitation, Education, etc. All the raised points are addressed and complied. The details have been attached here in Table - 2 .
4	The applicant will take statutory clearance/approval/permissions from the concerned authorities in respect of his project as and when required.	Necessary statutory clearances/approval/permissions from the concerned authorities have been obtained such as: Consent to Operate from SPCB, Ground Water Permission from CGWA, Hazardous waste authorization, approved mining plan from IBM, Forest clearance from MoEF, etc. Forest Clearance from MoEF (copy attached as Annexure – 1), Consent to Operate from SPCB, Orissa vide letter No.: 2603/IND-I-CON-1373 date 14.03.2019 (copy attached as Annexure – 2), Approved Mining Scheme from IBM for the period 2019-20 to 2023-24 vide letter No.MS/FM/39-ORI/BHU/2018-19/2501 dated. 25.01.2019 (copy attached as Annexure – 3).
5	For post environmental clearance monitoring, the applicant will submit half yearly compliance report in respect of the stipulated terms and conditions of this Environmental Clearance to the State Environmental Impact Assessment Authority (SEIAA), Orissa on 1st June and 1stDecember of each calendar year.	Half yearly compliance is being submitted as per the EC conditions on time to time basis. The half yearly compliance status reports arementioned in Table no.03 .

6	The core zone should be monitored intensively with no. of stations as prescribed by CPCB, Delhi and unit of pollutant level should be expressed as NAAQ of CPCB, Delhi. The detail methodology adopted for analysis of samples shall be cleared indicated.	well as done or project method parameter attached	buffer zone is per the Na is also dology for	of AAQ in the core as of the ML area being AAQ's notification. The adopting specified analysis of the AAQ nmarized AAQ report is ure-04.
		1 2 3	SO ₂ NO ₂ SPM(PM ₁₀)	Ultraviolet Fluorescence Chemiluminescence Gravimetric
		4 5	SPM(PM _{2.5})	Gravimetric CO monitor
7	The proponent shall submit ground toothing baseline data on flora and fauna and CSR activities already carried out within three months to the SEIAA, Orissa. No two pits shall be simultaneously	has be Chief Whas est include Lakhs was 28.06.20 zone i.e. and more and more and more also est of nalla The contact and more also est of nalla and more and more also est of nalla and more and more also est of nalla and more and	inated cost is cost for both which is already in favor in the cost for proponent in the cost is for proponent in the expension of the expension of the cost is for proposed substance ablished guides.	nas appointed 4 nos. of action of wild animals aditure of Rs. 3.8 of from that, the project structed check dam & estrict the mixing of es in nearby streams & ard wall along the sides same is attached as
Ö	worked. After exhausting the first mine pit and before starting mining operations in the next pit, reclamation and plantation		s still active. T ing to the	The project is operating above mentioned bllowing as per the

9	works in the exhausted pit shall be completed so as to ensure that reclamation, forest cover and vegetation should be visible during the first year of mining operations in the next pit. This process will follow till the last pit is exhausted. Adequate rehabilitation of mined pit shall be completed before any new ore body is worked. Adequate buffer zone shall be maintained between two consecutive mineral bearing deposits.	approved mining scheme/plan including PMCP as approved by IBM. There is only one mines pit and the project has maintained the safety zone of 7.5 m width around the ML boundary. In this regard, the project has covered the dumps with application of mixed grass seeds along the slopes to stabilize and also to reduce wash off in case of rains during monsoon. The project has done cumulatively44, 680 numbers of saplings in and around the ML area tillSept-2021 out of which600 Nos. have has been planted during April 21-Sept-21 and distribution of 500 nos. of saplings with different varieties of native species in the safety zonephoto of the same is attached as photo – 4 & 7. Plantation details have been given in table
10	Zero waste mining concept shall be	-4 . Due to the incorporation of better &
	implemented either by putting up	efficient machineries and latest
	pelletisation plant or disposal of low	technologies, we ensure that zero wastes
	grade ores/fines to prospective buyers.	will be coming out due to the mining
		activity. Steps have been initiated to work
7 7	The fellowing shall be to the	out in this context.
11	The following shall be implemented viz.	The project has taken the following steps
	(a) dump run off should be diverted into settling ponds until it is clear (b)	a. Run off generated from Dump
	adequate rain water harvesting and	areas are being diverted to settling pits with proper checks before
	ground water recharging facilities should	disposal to natural water bodies.
	be developed in the core zone, (c)	b. We have implemented the roof top
	attempt should be made to achieve zero	rain water harvesting structures and
		settling pits cum harvesting

	water balance.	structures in the mines areas
	Taloi balailoo.	towards recharge of the ground
		water.
		c. Steps have been taken to achieve
		zero water balance like
		implementation of STP (Ultra
		Filtration Unit) for treatment of
		domestic effluent and reuse of the
		treated water for mines dust
		suppression and nearby gardening
		purpose.
12	Maintenance of roads through which	The project has black topped the
	transportation of ores are undertaken	transportation approach roads and
	shall be carried by the project regularly	regular maintenance of the main
	at its own cost.	approach road along with the mines haul
		roads are being carried out by engaging
		the grader periodically, the roads are
		without ruts & potholes. The project is also
		ensuring the tarpluin covers over the
		loaded trucks so as to prevent the spillage
		of the materials. The Project authority are
		regularly monitoring the emission of the
		vehicle to ascertain whether the vehicle
		meet the pollution norms.
		The photo of the same is attached as
		photo # 13.
13	Fugitive dust generation shall be	There is regular monitoring of the Fugitive
	controlled. Fugitive dust emission shall be	dust emission. The project has taken
	regularly monitored at locations of	adequate measures like dry fog system in
	nearest human habitation (including	screen plants, water sprinkling in mines
	schools and other public amentias	haulage roads etc. towards dust
	located nearest to sources of dust	suppression purposes. The project has
	generation as applicable) and records	established the monitoring of fugitive dust
	shall be submitted to the SEIAA, Orissa.	in the mining lease area, viz. Mines
		Face/Haulage Road, Crusher/Screen
		Plant, Loading/Unloading point. The
		analysis report of the same is attached as Annexure – 6.
14	Transportation of ore shall be done by	
14	Transportation of ore shall be done by covering the trucks with tarpaulin or	The steps are being followed by proper care towards public roads to ensure that
	other suitable mechanism so that no	the trucks should not be overloaded
	The suitable mechanism so mai no	THE HUCKS SHOULD HOT DE OVEHOUGED

	spillage of ore /dust takes place.	during transportation: besides these trucks
		are being covered with tarpaulins while
		transportation of the iron ore. Time to time
		awareness program is being carried out for
		the operators/drivers etc. towards the
		same. Photo of the same is attached
		asphoto # 13.
15	Rain water harvesting shall be	In the entire area, where ever possibility of
10	undertaken to recharge the ground	wash off, flow of sediments etc. is
	water source.	anticipated retaining wall, garland drain,
	water source.	
		check weirshave been provided apart
		from that the roof top rain water
		harvesting structure got implemented
		towards augmentation of ground water in
		the camp area. Photo of the same has
		been attached as Photo - .
16	Monitoring of ground and surface water	Regular monitoring of the ground water
	quality shall be regularly conducted and	quality on quarterly basis, as per the
	records should be maintained and data	monitoring locations there are 4 nos. of
	shall be submitted regularly to SEIAA,	locations and monitoring of the surface
	Orissa.	water quality is also being carried out in 5
		nos. locations. The records are also
		maintained for this purpose & it's being
		monitored 4 times in a year i.e. pre-
		monsoon, monsoon, post monsoon and
		winter.
		The monitoring of ground and surface
		water quality records being submitted to
		SEIAA, Orissa on half yearly basis and
		Regional Office of MoEF&CC,
		Bhubaneswar. The summarized analysis
		report of the same is attached as
		Annexure - 7 & 8.
17	The proponent shall ensure that no silt	The project has provided necessary
	originating due to mining activity is	precautionary measures like siltation
	transported in the surface water course.	pit,retaining walls and garland drains at
	Measures for prevention and control of	the toe of the dumps and places wherever
	soil erosion and management of silt shall	required. Apart from that we have
	be undertaken. Protection of dumps	provided guard wall as nalla protection
	against erosion shall be carried out with	measures, a length of 380 mtr. and check
	geo-textile matting or other suitable	weirs at the strategic locations with yearly

material, and	thick plantations of native	maintenance.
trees and shru	ibs shall be carried out at	Stabilization of the dumps being done
the dump s	lopes. Dumps shall be	withthe application of mixed grass seeds
protected by r	etaining walls.	towards vegetation and dump slope
		stabilization. The photos regarding the
		same have been attached as Photo -
18 Trenches ga	rland drains shall be	To arrest silt from mines run off, a number
constructed at	foot of dumps to arrest silt	of catch drains and settling cum
from being of	carried to water bodies.	percolation pits have been constructed
Adequate nur	nber of check dams shall	with garland drains around the mines
be construct	ed across seasonal or	dump areas. Nallah protection guard walls
perennial nalle	ah (if any) flowing through	have also been constructed across the
the ML area	be arrested. De-silting at	length of the nallah. Time to time de-silting
regular interva	ls shall be carried out.	is followed before each monsoon.
19 Provisions sha l	I be made for the housing	The is no such housing being made for the
	within the site with all	labours within the lease area however the
	rastructure and facilities	project has commonly created a
1	or cooking, mobile toilets,	temporary housing facility for the work
	fe drinking water, medical	force by facilitating fuel for cooking, septic
	crèche etc. the housing	tank followed by soak pit for domestic
	the form of temporary	effluents (STP-Ultra Filtration Unit), drinking
	be removed after the	water, medical health care etc.
completion of		warer, mealear mealin eare ere.
20 Occupational	•	Initial Medical Examination & Periodical
	the workers including	Medical Examination of the workers
	of work related health	engaged in the project is being
hazards, trai	•	undertaken periodically for permanent
	IIV, and health effects on	and outsider employees along with the
	espirable mineral dust etc.	pre-medical examination of persons
	d out. The proponent shall	employed, who are engaged in the
	time qualified doctor who	process of mining & are likely exposed to
	n occupational health.	dust to observe any contractions due to
	itoring for exposure to	exposure to dust. This is being carried as
	neral dust on the workers	per in compliance to Mines Act 1952 &
	onducted and records	rules 1956 and amendments there to. The
	cluding health records of	various tests include PFT, X-Ray, and lung
	Awareness program for	spirometry etc.
	npact of mining on their	During the reporting period 05 Nos. of IME
<u>-</u>	ecautionary measures like	and 03 Nos. of PME (client and contractor)
use of persono	al equipment's etc. shall be	has been carried out.

21	carried out periodically. Review of impact of various health measures undertaken (at interval of five years or less) shall be conducted followed by follow up action wherever required. Occupational Health center shall be established near the mine itself. Shelter belt i.e. (wind break of 15m width and consisting of at least around the lease facing the human habitation, school/agricultural fields etc.) if any in the vicinity in the safety zone/backfilled and reclaimed areas, around voids and roads shall be raised. Green belt development and selection of plant species shall be as per SPCB guidelines. Density of trees has to be around 2500 plants per hectare, herbs and shrubs shall also form a part of afforestation program besides tree plantation. Help and guidance of local DFO may be sought in the matter. Details of year wise afforestation program including rehabilitation of mined out area shall be submitted to the SEIAA, Orissa within six	There are no such human habitation/schools etc. within the ML area. However, the project has covered all the sub-grade dumps with plantation with native species and application ofmixed grass seeds along the slopes to stabilize and also to reduce wash off in case of rains during monsoon. A safety zone of 7.5 m width around the ML boundary is being maintained. The project has cumulatively done 44,680 numbers of saplings in and around the ML area till date with different varieties of native species in the safety zone, & peripheral area of ML.
22	This environmental clearance is subjected to forest clearance under the Forest (Conservation) Act, 1980.	The forest clearance has been obtained over an area of 34.365 ha vide MoEF letter no: F No.8- 216/1992-FC dated 31st March 1993. As per the present circular dated 01.04.2015 from MoEF, Govt. of India the forest clearance over 34.365 Ha will be extended up to the coterminous of the
23	The mining operation shall be restricted to above ground water table and it should not intersect the groundwater table.	extended lease period. The Project proponent working at a depth of 590aMSL which is far above the ground water level and ground water level exist 540 aMSL. The ultimate depth of the bottom of the approval Mining Scheme is at 548m RL. Therefore, intersection of

		ground water table during the whole life of
		the ML area shall not be obstructed.
		However, the Project has carried out a
		detailed study on hydrology and hydro-
		geological aspect of the area through an
		expert agency and base line data
		developed for future reference.
24	The top soil shall temporarily be stored at	There is no generation of the top soil during
24		
	earmarked site(s) only and it should not	mining operations. In case of top soil
	be kept unutilized for long (not more	generation generated in future, it should
	than 3 years). The topsoil shall be used	be stored in an earmarked area and
	for land reclamation and plantation.	necessary precaution may be taken to
		preserve its nutrient values.
25	The over burden (OB) generated during	At present there is 1 OB dump which is
	the mining operation shall be temporarily	active, phase wise plantation and
	stacked at earmarked dump site(s) only	stabilization will be done.
	and it should not be kept active for a	
	long period of time and its phase-wise	
	stabilization shall be carried out. Proper	
	terracing of OB dump shall be carried	
	out so that the overall slope shall not	
	exceed 28° Back filling shall be done as	
	per approved mining plan; back filling to	
	start from 3rd year onwards of the mining	
	operations and the entire quantity of	
	waste shall be backfilled and liquidated	
	within five years. There shall be no	
	external OB dumps after the 6th year of	
	the mining operations. The backfilled	
	area shall be afforested. Backfilling has	
	to be done in a manner that it is restored	
	to the normal ground level. Monitoring	
	and management ofrehabilitated areas	
	should continue till the vegetation is	
	established and becomes self-	
	generating compliance status to be	
	reported to the appropriate authorities.	
26	The funds earmarked for the environment	The funds earmarked for environmental
	protection measures shall be judiciously	protection are being utilized for the same.
	utilized. Under no circumstances this	The year wise environmental expenses are
	funds shall be diverted for other	shown in table No. 05 .
L		

	purposes. Year wise expenditure for	
	these funds should be reported to the	
	SEIAA, Orissa.	
27	The above mentioned stipulated	We are abiding by the said conditions.
	conditions shall be complied in time	
	bound manner. Failure to comply with	
	any of the conditions mentioned above	
	may result in withdrawal of this	
	environmental clearance and attract	
	action under the provisions of	
	Environmental Protection (EP) Act, 1986.	
	Additional Environmental Clearance	
SI.	condition of mining projects vide. OM of	
No.	MoEF&CC, F.No. 22-34/2018-IA.III dated:	Compliance Status
	16.01.2020 in respect of Deojhar Iron Ore	
	Mines, M/s Tarini Minerals Pvt. Ltd.	
	The mining lease holders shall, after	We will abide by the condition.
	ceasing mining operations, undertake	At present the mining operation is going
	re-grassing the mining area and any	on and the mineral is not exhausted at all
	other area which may have been	& it's also duly approved by the IBM in
	disturbed due to their mining activities	Mining Plan. Therefore, after ceasing of the
01	and restore the land to a condition which	mining operation or exhaust of minerals,
	is fit for growth of fodder, flora, fauna etc.	we will undertake re-grassing of the
		disturbed land due mining activities and
		restore the land to a condition which is fit
		for growth of fodder, flora, fauna etc. as
		duly approved in Mining Plan by IBM.

TABLES

<u>Table No.1 –CSR Expenses(April-21 to Sept-21)</u>

	CSR Expenditure		
	Deojhar Iron Ore Mines, N	/s Tarini Minerals Pvt. Ltd.	
Sl. No.	Expenditure for the year 2021-22 (April-21 to Sept-21)		
1	Education	1.6	
2	Health	2.1	
3	Drinking Water Facility	0.3	
4	Social welfare (Peripheral Activities)	0.4	
5	Electricity	0.2	
6	Water Sprinkling (Inter connecting village road etc.)	3.6	
	TOTAL 8.3		

Table No. 02: Compliance to the points raised in Public Hearing

SI. No.	Public Hearing consents by the Project Proponent	Compliance Status
1	The Project Proponent assured with consultation with Govt. department and as per their advice they will adopt all the measures to keep the sound pollution under control especially during blasting.	Due to availability of soft material there is no blasting is being carried and the excavation work is carried out by engaging excavators only. Anyhow noise is being monitored and the results are well within the prescribed norms, copy is enclosed in Annexure -1 .
2	To construct Check dam for Mahadev NasaNalla and for this the project proponent invited the village committee to come with a proposal for the same.	We ensure that natural watercourse of Mahadev Nalla will not be obstructed due to our mining operations. Necessary precautionary measures were well taken in consultation with Govt. bodies to avoid any sort of interference like providing guard wall &

		check weir at bank of Mahadev Nallah.
3	Suitable dump management system to minimize the pollution and all wastes are being dumped inside the lease area.	Sub grade is being stacked in an identified area inside ML Area by maintaining proper terracing & slope. It has also developed with garland drain and retaining wall along with native sapling plantation for stabilization of critical areas of dump.
4	Company has formed an Environment cell and they are monitoring this on regular basis to keep this under control.	A separate environmental management cell is in operation under the control of Mines Manager, which is looking after all environmental activities including Environmental Monitoring.
5	The Project proponent will give priority in employing skilled local people such as drivers, drillers, operators, etc. according to their qualification.	Local peoples are being given priority in employing skilled local people such as drivers, drillers, operators, etc. according to their qualification.
6	The Project proponent assured that they will re-open all the schools in Murgabeda Village those are not running at present and will appoint 4 teachers in those Schools on permanent basis.	The School is running effectively with engagement of teaching facilities with appointment of teachers. Study materials like books, slates, pencils etc. are being provided. Mid-day meal is provided at free of cost for class IX & X at Deojhar High School. Bus facility is being provided for Deojhar high school and for Sarswati Sisu Mandir, Bileipada.
7	The project proponent is already supplying drinking water to Murgabeda villages through water	2 no. of bore wells with drinking water facilities are provided for the villagers of the Muragbeda, about a population of around 1000 no's.

	tanker and will continue this facility.	
8	The Project proponent is ready to construct inter village connecting roads in Murgabeda village and they invited proposal from the village committee for the same.	Inter connecting village roads are made up of black top in length of 1.8 Km to suppress the dust. The photo of the same is enclosed as photo 5.
9	The project proponent has already opened a dispensary here for locals for availing medical facility free of cost where a doctor is available. One Ambulance is always available there at service.	Medical facilities like dispensary and ambulances are being provided. Medical health camp is being organized at regular intervals for the local villagers with free of cost medicines. The photo of the same is enclosed as photo 6.
10	Regarding electrification of villages, we have requested the concerned Village committee along with Sarpancha to come forward with the latest status and the proposal so that they can support and assist the village committee for electrification.	It is being carried out with the village committee members by providing materials for Street Light Connections to nearby villages.
11	The Project Proponent assured that they are following all the Govt. rules regarding employment and statutory payments.	It is being followed.
12	The project proponent requested the Murgabeda Temple committee to come with a proposal so that they can consider for its renovation.	Temple renovation work is completed with the proposals of Temple Committee members. The bathing area has been developed with anti-slippery tiles and guard bars and a cloth changing room have provided. Two male and three female labours have deployed for proper up- keep of the temple.

Table 3 – Six Monthly Compliance Submission details

\$I.No	Compliance Time Period	Date of Submission
1	October 20 to March 21	18.05.2021
2	April 20 to September20	24.11.2020
3	October 2020 to March 2020	20.05.2020
4	April 2019 to September 2019	18.11.2019
5	October 2018 to March 2019	25.04.2019
6	April 2018 to September 2018	20.11.2018
7	October 2017 to March 2018	30.05.2018
8	April 2017 to September 2017	25.11.2017
9	October 2016 to March 2017	25.05.2017
10	April 2016 to September 2016	19.11.2016
11	October 2015 to March 2016	25.05.2016
12	April 2015 to September 2015	16.11.2015

Table 4- Plantation Details

	Deojhar Iron Ore Mines of M/s Tarini Minerals (P) Ltd.									
SI.No	Year	No. of Sapling	Location	Name of Saplings						
01	2015 - 2016	Nil								
02	2016 - 2017	1300	Dump, Safety zone (Gap filling)	Neem, Karanja, Krushnachuda,						
03	2017 - 2018	8020	Dump, Safety zone (Gap filling) & outside	Radhachude, Sal, Chatian, Sisoo,						
04	2018-2019	800	Safety zone (Gap filling) & outside	Mango, Saguan etc.						
05	2019-2020	1300	Safety zone (Gap filling) & outside	GIC.						
06	2020-2021	1510	Safety zone (Gap filling) & bench plantation							
07	2021-22	600	Safety zone (Gap filling) & Dump gap filling							

Table 5-Details of Environmental Expenses

Environm	Environmental Expenditure of Deojhar Iron Ore Mining Project of M/s. Tarini Minerals Pvt. Ltd, District, Keonjhar,						
		Cost, Rs. In Lakhs					
	2021-22						
SI. No.	Activity	(April-21 to September-21)					
1	Dry-fog system installed & maintenance	0.2					
2	Water tankers two no's for water sprinkling	3.5					
3	Rain water harvesting structures	0.1					
4	Site specific sewage treatment plant with maintenance	0.2					
5	Service Centre cum ETP & its maintenance	0.1					
6	Tyre wash system	6					
7	Plantation	1.9					
	Total amount incurred	12					

ANNEXURES

Annexure - 1: Forest Clearance Copy

F. No. 1-216/1992-FC

The Principal Secretary (Forests). Government of Orisse, Bhubaneshwar

aliversion of 36.42 ha of Reserved forest land (Thakurani RF) in Koonjhar district for mining of iron ore by Sri Niranjan Pemaik (now Mb Tarini Minerals (P) L46.) Making the forest clearance co-terminus with Mining Lease period regarding.

I am directed to refer to your letter No. 10F (Cons)-20/07/1287 dand 17.07.2907 on the above cited subject, wherein the Ministry of Environment & Forests has been requested to make the forest clearance to-termipus with the revised Mining Lease period in respect of the above said proposal, under Section 2 of the Forest (Conservation) Act, 1980. The State Government of Orissa has also influenced that the said Mining Lease has been transferred by the Sairs Overenment from Sri Niresjan Patnalk to M/s Tarini Minerals P. Ltd. with prior approval of the Ministry of Mines. Convenient of India.

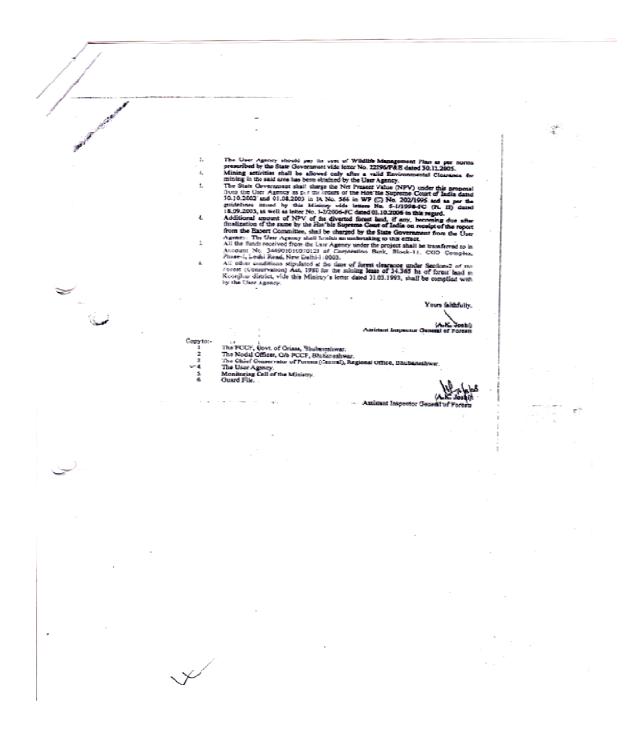
Ministry of Environment and Forests had accorded approval under Section 2 of the Forest (Conservation) Act, 1980 for diversion of 34.365 hs of forest lar i in Keonjhar district, Orisza, for mining leave in favour of Shri Nistajan Pattistk for a period of ten years, subject to certain conditions, vide letter dated 31.03.1993

The request of the State Government of Orissa has been examined in the Ministry of Environment and Forests. After considering the above request of the State Government of Orissa and careful examination of all the aspects in detail, the Central Government hereby grants approval to extend the period of diversion of forest lind, earlier granted by the Ministry of Environment & Forest under the said Act, to make the forest clearer or on-terminus with the period of Mining Lease granted by the State Government of Orissa is, upo 14.09.2014. However, it has been observed that more permanation of the Ministry of Environment & Forests has not been observed that short permanation of the Ministry of Environment & Forests has not been observed that there is no service and the service of the forest forest Niranjan Patmak to May Tariet Ministry P. Left, and, therefore, this has been availed as a violation of the Forest (Conservation) Act, 1980 and, it has been decided that the User Agency their bediship to pay Penal Compensatory Afforestation over an equal amount of non-forest land.

Accordingly the above approval by the Ministry of Environment & Poreste shall be subject

The mon-forcet lend to the case of 30.49 he identified for the purpose of Compensatory Afforeservice shall be randered and mutane in feword of the State-Forest Depart followed by its socialization as Reserved Forest. Prosected Forest.

From Compensatory Afforestation shall be raised and maintained over an equal amount of non-forest lend at the project cost. For this purpose, the User Agency shall identify / make available suitable non-forest lend in consultation with the State Government. The non-forest land so sécraffed and made available shall be transferred and mutand in the name of the State Forest Department and shall be declared as Reserved Forest / Protected Forest.



Annexure- 2: Consent to Operate Copy from OSPCB



CONSENT ORDER
DEOJHAR IRON ORE MINES OF M/S, TARINI MINERALS PVT. LTD...

Page 1 of 13

BY REGD. POST WITH AD

STATE POLLUTION CONTROL BOARD, ODISHA

A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012
Phone-2561909, Fax: 2562822, 2560955 E-mail: paribesh1@ospcboard.org, Website: www.ospcboard.org

CONSENT ORDER

No. 2603

/ IND - I-CON- 1373

Dt. 14.03.2019

CONSENT ORDER NO. 444

Sub: Consent for discharge of sewage and trade effluent under section 25/26 of Water (PCP) Act, 1974 and for existing / new operation of the plant under section 21 of Air (PCP) Act, 1981.

Ref: Your Online Application No. 2402344 Dated 06.01.2019 & online reply dated 31.01.2019

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

Name of the Industry: DEOJHAR IRON ORE MINES OF M/S. TARINI MINERALS PVT. LTD.,

Name of the Occupier & Designation: SRI PINAKI MONDAL, MINES MANAGER

Address: AT/PO: GUALI, DIST: KEONJHAR.

This consent order is valid for the period up to 31.03.2024 from the date of issue of this order.

This consent order supersedes the earlier consent order issued vide letter No. 4610 dated 27.03.2017.

Details of Products Manufactured

SI. No	Product	Quantity
01.	Iron Ore	1.5 MTPA

Details of Mineral Handling Plants /Units

01	Operation of stationary crushing plant of capacity 1x400 TPH	
02.	Operation of mobile screening plants of capacity 3X 200 TPH	

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

Annexure - 3: Approved Mining Scheme Copy from IBM



भारत सरकार GOVERNMENT OF INDIA खान मंत्रालय MINISTRY OF MINES भारतीय खान ब्यूरो INDIAN BUREAU OF MINES क्षेत्रीय खान नियंत्रक के कार्यालय OFFICE OF THE REGIONAL CONTROLLER OF MINES



By. Regd. Parcel / E-M Phone: 0674-23524 Tele Fax: 0674-23524

ro.bhubaneshwar@ibm.gov Plot No.149, Pokhari BHUBANESWAR-7510

No. MS/FM/39-ORI/BHU/2018-19

Date: 25.01.2019

To

Shri D. R. Patnaik, Managing Director, M/s Tarini Minerals Pvt. Ltd, X-5, Civil Township, Rourkela, Pin-769004, Odisha.

Sub:Approval of Review of Mining Plan of Deojhar Iron Ore Mines over an area of 34.365 ha in Keonjhar district of Odisha of M/s Tarini Minerals Private Limited submitted under rule-17 (2) of MCR, 2016.

Ref: -i) Your letter no. nil dated 19.12.2018.

- ii) This office letter of even no. dated 19.12.2018.
- iii) This office letter of even no. dated 19.12.2018 addressed to the Director of Mines, Govt. of Odisha, copy endorsed to you.
- iv) This office letter of even no. dated 03.01.2019.
- v) Your letter no. nil dated 16.01.2019 received on 18.01.2019.

Sir,

In exercise of the power delegated to me vide Gazette Notification No. S.O. 1857 (E) dated 18.05.2016, I hereby Approve the Review of Mining Plan including Progressive Mine Closure Plan of Deojhar Iron Ore Mines over an area of 34.365 ha of M/s Tarini Minerals Private Limited in Keonjhar district of Odisha State submitted under Rule 17 (2) of Mineral Concession Rules, 2016. This approval is subject to the following conditions:

- The Review of Mining Plan is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
- П. The proposals shown on the plates and/or given in the document is based on the lease map /sketch submitted by the applicant/ lessee and is applicable from the date of approval.
- It is clarified that the approval of aforesaid Review of Mining Plan does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Act, 1957, or the Mineral Concession Rules, 2016 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under, Mines Act, 1952 and Rule & Regulations made there under.
- Indian Bureau of Mines has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the leasehold shown on the ground with reference to lease map & other plans furnished by the applicant / lessee.

Contd. Page-2

<u>Annexure - 4 - Summarized AAQ Report</u>

Deojhai	Iron Ore M	ines of M/s	s Tarini Min	erals Pvt. Ltd	l.		
Summerized Mo	nthly Averd	age Ambie	ent Air Qua	lity Monitorin	ng Report	ŀ	
		Am	nbient Air G	Quality Parar	neters in	µgm/m³	
Sampling Location	Month	Range	P.M-10	P.M2.5	SO ₂	NOx	СО
	Apr-21	Avg.	76.00	25.25	10.48	12.33	0.38
	May-21	Avg.	70.25	23.50	9.40	11.76	0.45
Mine Site Office (AAQ-1)	Jun-21	Avg.	70.63	25.75	9.94	11.46	0.54
Wille Sile Office (AAQ-1)	Jul-21	Avg.	63.50	28.00	9.70	11.53	0.49
	Aug-21	Avg.	70.11	33.67	8.09	8.86	0.37
	Sep-21	Avg.	75.88	26.63	10.55	11.63	0.50
	Apr-21	Avg.	74.88	24.88	10.34	11.89	0.59
	May-21	Avg.	74.50	26.00	9.39	10.59	0.55
Exit Gate (AAQ-2)	Jun-21	Avg.	68.38	25.38	10.05	11.54	0.53
LAII Odie (AAQ-2)	Jul-21	Avg.	60.88	24.25	9.79	10.90	0.46
	Aug-21	Avg.	78.22	39.00	8.28	9.12	0.30
	Sep-21	Avg.	77.13	25.63	10.80	12.08	0.53
	Apr-21	Avg.	75.13	25.75	9.51	10.70	0.48
	May-21	Avg.	68.50	20.25	10.69	12.29	0.42
Murgabeda Village (AAQ-3)	Jun-21	Avg.	65.25	23.50	10.10	11.55	0.49
wurgubedd village (AAQ-3)	Jul-21	Avg.	43.75	22.88	10.35	12.33	0.37
	Aug-21	Avg.	59.33	26.00	7.39	8.26	0.14
	Sep-21	Avg.	64.75	17.25	10.43	11.83	0.53
	Apr-21	Avg.	65.00	20.50	9.61	11.25	0.44
	May-21	Avg.	69.13	19.75	10.79	12.44	0.57
Bileipada Village(AAQ-4)	Jun-21	Avg.	65.13	23.63	11.13	12.60	0.59
Bileipada Village(AAQ-4)	Jul-21	Avg.	50.50	21.38	9.73	12.05	0.53
	Aug-21	Avg.	60.11	20.67	7.29	8.48	0.16
	Sep-21	Avg.	61.50	16.63	11.40	12.93	0.58
	Jul-21	Avg.	53.25	21.13	9.93	11.95	0.51
Deojhar Village (AAQ-5)	Aug-21	Avg.	62.33	21.22	8.20	9.03	0.19
	Sep-21 Jul-21	Avg.	64.50 52.38	19.75 19.88	10.63 10.01	11.90 12.11	0.48
Mahadev Nasa (AAQ-6)		Avg.			7.30	8.50	
widhadev wasa (AAQ-0)	Aug-21	Avg.	61.78 60.50	24.44 14.75	10.84	12.25	0.38
	Sep-21	Avg.	00.50	14./5	10.84	12.25	0.48

Note: Analysis & report provided by B.S Envi Tech Pvt. Ltd., Secundrabad, Telangana an MOEFCC & NABL accredited lab.

Annexure – 5: Wild Life Conservation Plan Copy

WARDEN,ORISSA5™ FLOOR, B.D.A. APARTMENT, PRAKRUTI BHAWAN, NILAKANTHA NAGAR, BHUBANESWAR-751012. Memo No 1238 Dt. 15.2.2.010 1WL-C-FC- 524/09 To The Chief Conservator of Forests (Nodel), O/o the Principal CCF, Orissa, Bhubaneswar Approval of Site Specific Wildlife Conservation Plan for Deojhar Iron Ore Mines in village Deojhar in Keonjhar district Sir. 1 am directed to inform you that the Site Specific Wildlife Conservation Plan for Deojhar Iron Ore Mines in village Deojhar in Keonjhar district of M/s Tarini Minerals Pvt. Ltd. has been approved by PCCF(WL) & Chief Wildlife Warden. Orissa with financial forecast of Rs.54.00 lakhs for the following activities For activities to be implemented by User agency in Project Area --- Rs 13 00 lakhs For activities to be implemented by DFO, Keonjhar Division in the Project Impact Area - Rs 41 00 takhs User agency will execute activities for Rs.13 lakhs in the lease hold area under the guidance of DFO, Keonjhar Division & Rs.41.00 lakhs may be deposited with DFO Keonjhar division under CAMPA for activities to be executed by DFO in the zone of influence. Conservator of Forests (WL) Memo No. 1239 dt. 15-2-2010 Copy forwarded to the DFO, Keonjhar Division for information & necessary action with reference to Memo No. 2562 dt. 8.709 of CF., Rourakela Circle. Conservator of Forests (WL) Memo No. 1240 Dt. 15.2.2010 Copy forwarded to CF, Rourkela Circle for information & necessary action with reference to his office Memo No. 2561 dt.8.7.09 Conservator of Forests (WL) Memo No. 1241 dt. 15.2.2010 L Copy forwarded to the M/s Tarini Minerals Pvt. Ltd, Bonikela, Joda, Keonjhar for information & necessary action with reference to his letter dated 22.9 09 2-2 One Mo. alfrave of Forests (WL) Conservato Ø~

<u>Annexure - 6 : Fugitive Dust Monitoring Report</u>

Deojhar Iron Ore Mines of M/s Tarini Minerals Pvt. Ltd.				
Monthly Average Fugitive Dust	Monitoring Report			
Sampling Location	Month	Moi Parar	ive Dust nitoring neters in m/m³	
	Apr-21	Avg.	585.63	
	May-21	Avg.	563.75	
Mines Face/ Haulage road	Jun-21	Avg.	660.50	
or ace, manage load	Jul-21	Avg.	453.75	
	Aug-21	Avg.	514.50	
	Sep-21	Avg.	470.38	
	Apr-21	Avg.	708.13	
	May-21	Avg.	563.38	
Screening Plant	Jun-21	Avg.	673.00	
Screening Fidin	Jul-21	Avg.	482.13	
	Aug-21	Avg.	547.13	
	Sep-21	Avg.	471.13	
	Apr-21	Avg.	662.63	
	May-21	Avg.	592.13	
Loading & Unloading point	Jun-21	Avg.	664.25	
Lodding & Uniodding Politi	Jul-21	Avg.	426.25	
	Aug-21	Avg.	525.75	
	Sep-21	Avg.	465.75	

Note: Analysis & report provided by B.S Envi Tech Pvt. Ltd., Secundrabad, Telangana an MOEFCC & NABL accredited lab.

<u>Annexure - 7: Ground Water Monitoring Report</u>

		Deoj	har Iron Ore	Mines		
		M/s Ta	rini Minerals	Pvt. Ltd.		
		Ground	Water Quali	ty Report		
			Apr-21			
	Location		Murgabeda Village	Daldir Village	Deojhar Village	Bileipada Village
SI. No.	Test Parameter	Units		Resu	lt	1
1	Odour		Agreeable	Agreeable	Agreeable	Agreeable
2	Colour	Hazen	<5	<5	<5	<5
3	pН		6.75	6.72	6.75	6.8
4	Turbidity	NTU	<1	<1	<1	<1
5	Total Hardness as CaCO ₃	mg/l	49	113	145	188
6	Iron as Fe	mg/l	0.1	0.05	0.12	0.1
7	Chlorides as Cl	mg/l	36	56	310	56
8	Total Dissolved solids @105 °C	mg/l	128	315	328	312
9	Calcium as Ca	mg/l	15.0	32	45	49
10	Magnesium as Mg	mg/l	3.1	8.1	8	16
11	Sulphate as SO ₄	mg/l	18	45	21	32
12	Nitrate as NO ₃	mg/l	10	20	16	21
13	Flouride as F	mg/l	0.22	0.63	0.47	0.6
14	Total Alkalinity as CaCO ₃	mg/l	28	142	163	129
15	Boron as B	mg/l	< 0.10	< 0.10	< 0.10	<0.10
16	Aluminium as Al	mg/l	< 0.02	< 0.02	< 0.02	< 0.02
17	Copper as Cu	mg/l	< 0.02	< 0.02	< 0.02	< 0.02
18	Manganese as Mn	mg/l	<0.02	<0.02	<0.02	< 0.02
19	Selinium as Se	mg/l	< 0.01	< 0.01	< 0.01	< 0.01
20	Zinc as Zn	mg/l	<0.02	<0.02	<0.02	< 0.02
21	Cadmium as Cd	mg/l	< 0.003	< 0.003	< 0.003	< 0.003
22	Lead as Pb	mg/l	< 0.01	< 0.01	< 0.01	< 0.01
23	Mercury as Hg	mg/l	< 0.001	< 0.001	< 0.001	< 0.001
24	Total Arsenic as As	mg/l	< 0.01	< 0.01	< 0.01	< 0.01
25	Total Chromimum as Cr	mg/l	< 0.02	< 0.02	< 0.02	< 0.02
	= . lo !:f	CELL / 400 l	A I	A I-		

Note – The above tests are carried by B.S Envi. Tech P. Ltd Laboratory & its accredited by NABL and MoEF&CC.

Absent

CFU/ 100 ml

26

Total Coliforms

Reporting Period: April-2021 to September-2021

Absent

Absent

Absent

		Dec	ojhar Iron Ore	e Mines		
		M/s T	arini Mineral	s Pvt. Ltd.		
		Groun	d Water Qua	lity Report		
			Jul-21			
	Location		Murgabeda Village	Daldir Village	Deojhar Village	Bileipada Village
Sl. No.	Test Parameter	Units		Resu	lt	
1	Odour		Agreeable	Agreeable	Agreeable	Agreeable
2	Colour	Hazen	<5	<5	<5	<5
3	рН		6.64	6.74	6.75	6.8
4	Turbidity	NTU	<1	<1	<1	<1
5	Total Hardness as CaCO ₃	mg/l	60	96	84	136
6	Iron as Fe	mg/l	0.08	0.08	0.11	0.12
7	Chlorides as Cl	mg/l	35	44	36	52
8	Total Dissolved solids @105 °C	mg/l	132	310	268	304
9	Calcium as Ca	mg/l	16.0	32	24	40
10	Magnesium as Mg	mg/l	4.9	3.9	5.8	8.7
11	Sulphate as SO ₄	mg/l	17	41	31	38
12	Nitrate as NO ₃	mg/l	14	20	16	32
13	Flouride as F	mg/l	0.23	0.47	0.47	0.47
14	Total Alkalinity as CaCO ₃	mg/l	24	118	108	94
15	Boron as B	mg/l	< 0.10	< 0.10	< 0.10	<0.10
16	Aluminium as Al	mg/l	< 0.02	< 0.02	< 0.02	< 0.02
17	Copper as Cu	mg/l	< 0.02	< 0.02	< 0.02	< 0.02
18	Manganese as Mn	mg/l	<0.02	<0.02	<0.02	< 0.02
19	Selinium as Se	mg/l	< 0.01	< 0.01	< 0.01	< 0.01
20	Zinc as Zn	mg/l	<0.02	<0.02	<0.02	< 0.02
21	Cadmium as Cd	mg/l	< 0.003	< 0.003	< 0.003	< 0.003
22	Lead as Pb	mg/l	< 0.01	< 0.01	< 0.01	< 0.01
23	Mercury as Hg	mg/l	< 0.001	< 0.001	< 0.001	< 0.001
24	Total Arsenic as As	mg/l	< 0.01	< 0.01	< 0.01	< 0.01
25	Total Chromimum as Cr	mg/l	< 0.02	< 0.02	< 0.02	< 0.02
26	Total Coliforms	CFU/ 100 ml	Absent	Absent	Absent	Absent

Note – The above tests are carried by B.S Envi. Tech P. Ltd Laboratory & its accredited by NABL and MoEF&CC.

<u>Annexure - 8 : Surface Water Monitoring Report</u>

	Deojhar Iron Ore Mines								
		M/s Ta	rini Mine	erals Pvt.	Ltd.				
		Surface	Water C	Quality Re	port				
		, , , , , , , , , , , , , , , , , , ,	Apr-		<u> </u>				
	Location		SunaNad i U/S	SunaNadi D/S	MahadevNalla h U/S	MahadevNalla h D/S	Baitarani River		
SI. No.	Test Parameter	Units			Result	1			
1	рН		6.65	6.85	6.75	6.85	6.82		
2	Oil & Grease	mg/l	< 1	< 1	<1	< 1	<1		
3	Total Suspended Solids	mg/l	70	85	75	98	56		
4	Total Dissolved Solids @ 105°C	mg/l	112	165	140	174	180		
5	BOD for 3 days at 27°C	mg/l	12	20	14	32	16		
6	COD	mg/l	65	98	56	115	74		
7	Chloride as Cl	mg/l	12.3	23	18	26	23		
8	Phosphate as P	mg/l	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
9	Sulphide as S ²⁻	mg/l	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
10	Sulphates as SO ₄	mg/l	7	10.8	12	20	9		
11	Total Volatile Suspended Solids (MLVSS)	mg/l	24	36	26	45	22		
12	Colour	Hazen units	4	12	6	10	15		
13	Odour		Agreeabl e	Agreeable	Agreeable	Agreeable	Agreeabl e		
14	Iron as Fe	mg/l	0.1	0.28	0.22	0.2	0.25		
15	Flouride as F ⁻	mg/l	0.2	0.32	0.26	0.1	0.26		
16	Boron as B	mg/l	<0.10	<0.10	< 0.10	< 0.10	< 0.10		
17	Percent Sodium		42.6	42.6	41.5	45	42.5		
18	Residual Sodium Carbonate	mg/l	25	26	18	20	21		
19	Copper as Cu	mg/l	<0.02	<0.02	< 0.02	< 0.02	< 0.02		
20	Manganese as Mn	mg/l	<0.02	<0.02	< 0.02	< 0.02	< 0.02		
21	Selenium as Se	mg/l	<0.01	< 0.01	< 0.01	< 0.01	< 0.01		
22	Zinc as Zn	mg/l	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02		
23	Cadmimum as Cd	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003		
24	Lead as Pb	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
25	Mercury as Hg	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
26	Nickel as Ni	mg/l	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02		
27	Total Arsenic as As	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
28	Total Chromimum as Cr	mg/l	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02		

	Total Coliforms	CFU/100						l
29	Total Collornis	ml	75	95	135	145	65	l

		De	eojhar Iron	Ore Mines			
		M/s	Tarini Min	erals Pvt. Lt	d.		
		Surfa	ce Water (Quality Repo	ort		
			Jul-2	21			
	Location		SunaNadi U/S	SunaNadi D/S	MahadevNalla h U/S	MahadevNalla h D/S	Baitarani River
SI. No.	Test Parameter	Units			Result		l
1	pH		6.67	6.75	6.73	6.64	6.69
2	Oil & Grease	mg/l	< 1	< 1	<1	<1	<1
3	Total Suspended Solids	mg/l	64	96	44	78	84
4	Total Dissolved Solids @ 105°C	mg/l	142	164	152	186	194
5	BOD for 3 days at 27°C	mg/l	10	17	11	10	22
6	COD	mg/l	40	78	48	60	96
7	Chloride as Cl	mg/l	8.8	14.2	10.8	9.4	14.2
8	Phosphate as P	mg/l	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
9	Sulphide as S ²⁻	mg/l	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
10	Sulphates as SO ₄	mg/l	7.5	8.6	6.5	8.7	12
11	Total Volatile Suspended Solids (MLVSS)	mg/l	22	30	14	24	38
12	Colour	Hazen units	5	10	10	5	10
13	Odour		Agreeabl e	Agreeable	Agreeable	Agreeable	Agreeabl e
14	Iron as Fe	mg/l	0.24	0.27	0.15	0.24	0.25
15	Flouride as F	mg/l	0.26	0.21	0.19	0.29	0.31
16	Boron as B	mg/l	<0.10	<0.10	< 0.10	< 0.10	< 0.10
17	Percent Sodium		41.3	44.1	41.5	41.3	43.6
18	Residual Sodium Carbonate	mg/l	37	27	42	58	48
19	Copper as Cu	mg/l	<0.02	<0.02	< 0.02	< 0.02	< 0.02
20	Manganese as Mn	mg/l	<0.02	<0.02	< 0.02	< 0.02	< 0.02
21	Selenium as Se	mg/l	<0.01	< 0.01	< 0.01	< 0.01	< 0.01
22	Zinc as Zn	mg/l	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
23	Cadmimum as Cd	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
24	Lead as Pb	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
25	Mercury as Hg	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
26	Nickel as Ni	mg/l	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02

27	Total Arsenic as As	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
28	Total Chromimum as Cr	mg/l	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
29	Total Coliforms	CFU/10 0 ml	80	90	80	80	90

Total Coliforms O ml 80 90 80 90 Deojhar Iron Ore Mines M/s Tarini Minerals Pvt. Ltd. Surface Water Quality Report Sep-21

	Location		SunaNadi U/S	SunaNadi D/S	MahadevNalla h U/S	MahadevNalla h D/S	Baitarani River
SI. No.	Test Parameter	Units			Result	1	
1	рН	•••	6.7	6.82	6.7	6.65	6.65
2	Oil & Grease	mg/l	< 1	< 1	<1	< 1	<1
3	Total Suspended Solids	mg/l	55	90	45	70	90
4	Total Dissolved Solids @ 105°C	mg/l	165	156	160	175	215
5	BOD for 3 days at 27°C	mg/l	10	19	7	15	22
6	COD	mg/l	52	81	42	82	125
7	Chloride as Cl	mg/l	7.1	13.5	8.3	10.1	18.6
8	Phosphate as P	mg/l	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
9	Sulphide as S ²⁻	mg/l	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
10	Sulphates as SO ₄	mg/l	8.2	9.6	7	9.6	15
11	Total Volatile Suspended Solids (MLVSS)	mg/l	18	28	15	25	40
12	Colour	Hazen units	6	12	12	4	15
13	Odour		Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
14	Iron as Fe	mg/l	0.2	0.25	0.12	0.29	0.26
15	Flouride as F	mg/l	0.25	0.34	0.26	0.42	0.38
16	Boron as B	mg/l	<0.10	<0.10	< 0.10	< 0.10	< 0.10
17	Percent Sodium	••••	41.3	41	41.9	41.5	41.2
18	Residual Sodium Carbonate	mg/l	38	49	36	49	46
19	Copper as Cu	mg/l	<0.02	<0.02	< 0.02	< 0.02	< 0.02
20	Manganese as Mn	mg/l	<0.02	<0.02	< 0.02	< 0.02	< 0.02
21	Selenium as Se	mg/l	<0.01	< 0.01	< 0.01	< 0.01	< 0.01
22	Zinc as Zn	mg/l	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
23	Cadmimum as Cd	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
24	Lead as Pb	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
25	Mercury as Hg	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

26	Nickel as Ni	mg/l	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
27	Total Arsenic as As	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
28	Total Chromimum as Cr	mg/l	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
29	Total Coliforms	CFU/100 ml	75	105	80	95	125

Note – The above tests are carried by B.S Envi. Tech P. Ltd Laboratory & its accredited by NABL and MoEF&CC.

Annexure – 9: List of IME Carried out &Sample IME/PME test report

Category of	IM	IE	PI	ΛE
Employees	Contractor	Owner	Contractor	Owner
Workers	5	0	3	0
Staff	0	0		0
Executive / Managers	0	0	0	1
TOTAL	5	0	3	1

[See Rule 29 F (2) and 29 L] Report of Medical Examination Under Rule 29 B (To be issued in Englicate)**
CEMPICATE No.
Certified that Sn/Smf employed as In
The findings if the examination authority are given in the attached sheet, it is considered this
SinShrimati
(a)* is medically fit for any employment in mines
(b)* is suffering from and is reedically unfit for
(i) Any employment in mine, or
(ii) any employment below ground, or
(iii) any employment or work
(c)" is suffering from
cuted/controlled and should be again examined within a period of month
He/She* will appear for re-examined with the result of test of and the opinion
apecialist from He/She' m
Signature of the Examining Authority Thriveni Earthmovers (P) 1
Place: HI-TECH DIAGNOSTIC CENTRE JODA Date: 20191901
Delete whatever not applicable Original - To be kept with Examining Authority. Pink Copy - To be handed over to Person Concerned. Yellow Copy - To be sent to the concerned Manager of the Mine.

PHOTOGRAPHS





Photo-1: Mobile Water Tanker for dust suppression

Photo-2: Truck Tire wash system





Photo-3: Environment monitoring & sampling



Photo-5: Retaining wall at toe of dumps







Photo-6: Safety zone plantation and dump plantation



Reporting Period: April-2021 to September-2021





Photo-8: STP for treatment of Domestic Waste Water (Ultra Filtration Unit) & its utilization in green belt development





Photo-9: Black topped road adjoining to the ML



Reporting Period: April-2021 to September-2021

ENVIRONMENT MONITORING REPORTS

Reporting Period: April-2021 to September-2021

DEOJHAR MINES

AAQ REPORT

SEPTEMBER-2021



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

REPORT NO:	DIOM/TM /	ENV/2021/AAQ	/2021-09	Issued to:
Reporting Date	30.09.2021	Analysis Starting on	29.09.2021	Deojhar Iron Ore Mines,
Sample Received on	29.09.2021	Analysis Completed on	30.09.2021	10 C 4 C 4 C 4 C 4 C 4 C 4 C 4 C 4 C 4 C
Sample Descr	iption: Ambi	ent Air Quality		M/s Tarini Minerals Pvt. Ltd.
Location	: Mines	Office		rvi. Liu.
Month				
Sample Collec	cted by: B.S.	Envi-Tech (P) Ltd	.,,	

s.no	DATE	PM ₁₀ [μg/m ³]	PM _{2.5} [μg/m ³]	SO ₂ [μg/m ³]	NO ₂ [μg/m ³]	CO [mg/m ³]
	Protocol	IS:5182 Part 23	BSET SOP AA-02	IS:5182 Part 2	IS:5182 Part 6	BSET SOP AA-09
1	03/09/2021	81	27	10.6	11.5	0.67
2	07/09/2021	72	23	9.8	10.5	0.34
3	10/09/2021	68	21	12.1	13.7	0.46
4	14/09/2021	71	28	10.5	11.4	0.52
5	17/09/2021	80	26	11.3	12.4	0.29
6	21/09/2021	81	32	10.1	11.5	0.41
7	24/09/2021	79	28	9.7	10.6	0.57
8	28/09/2021	75	28	10.3	11.4	0.72
	Q Standards ourly standard)	100 [μg/m³]	60 [μg/m³]	80 [μg/m³]	80 [μg/m³]	02 [mg/m ³] (8 hourly)

Legend:PM₁₀-Particulate Matter(Size Less than 10μm)

PM_{2.5}-Particulate Matter(Size Less than 2.5µm)

SO₂-Sulphur Dioxide

NO2- NitrogenDioxide

Authorized Signatory

*Complaints Register is available at Laboratory.

Telangana, India

Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063

Email : lab@bsenvitech.com, info@bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

REPORT NO:	DIOM/TM /	ENV/2021/AAQ	/2021-09	Issued to:
Reporting Date	30.09.2021	Analysis Starting on	29.09.2021	Deojhar Iron Ore Mines,
Sample Received on	29.09.2021	Analysis Completed on	30.09.2021	
Sample Descr	iption: Ambi	ent Air Quality		M/s Tarini Minerals
Location	: Exit G	ate		Pvt. Ltd.
Month				
Sample Collec	cted by: B.S.	Envi-Tech (P) Ltd	٠,	8

S.NO	DATE PM ₁₀ [μg/m ³]	PM _{2.5} [μg/m ³]	SO ₂ [μg/m ³]	NO ₂ [μg/m ³]	CO [mg/m ³]	
	Protocol	IS:5182 Part 23	BSET SOP AA-02	IS:5182 Part 2	IS:5182 Part 6	BSET SOP AA-09
1	03/09/2021	83	32	10.7	12.1	0.43
2	07/09/2021	81	30	11.1	12.5	0.51
3	10/09/2021	76	28	10.7	12.1	0.35
4	14/09/2021	74	18	11.2	12.5	0.48
5	17/09/2021	65	18	10.6	11.8	0.59
6	21/09/2021	83	28	10.7	11.9	0.68
7	24/09/2021	75	23	11.0	12.2	0.57
8	28/09/2021	80	28	10.4	11.5	0.62
	Q Standards urly standard)	100 [μg/m³]	60 [μg/m³]	80 [μg/m³]	80 [μg/m³]	02 [mg/m ³] (8 hourly)

Legend: PM₁₀-Particulate Matter (Size Less than 10μm)

PM_{2.5}-Particulate Matter (Size Less than 2.5µm)

SO₂-Sulphur Dioxide NO₂- Nitrogen Dioxide

Authorized Signatory

*Complaints Register is available at Laboratory.

Email : lab@bsenvitech.com, info@bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

REPORT NO:	DIOM/TM /	ENV/2021/AAQ	/2021-09	Issued to:
Reporting Date	30.09.2021	Analysis Starting on	29.09.2021	Deojhar Iron Ore Mines,
Sample Received on	29.09.2021	Analysis Completed on	30.09.2021	,
Sample Descr	iption: Ambi	ent Air Quality		M/s Tarini Minerals Pvt. Ltd.
Location	: Murga	abeda Village		rvi. Liu.
Month				
Sample Collec	cted by: B.S.	Envi-Tech (P) Ltd	,	×

S.NO	DATE PM ₁₀ [μg/m ³]	PM _{2.5} [μg/m ³]	SO ₂ [μg/m ³]	NO ₂ [μg/m³]	CO [mg/m ³]	
	Protocol	IS:5182 Part 23	BSET SOP AA-02	IS:5182 Part 2	IS:5182 Part 6	BSET SOP AA-09
1	03/09/2021	67	18	11.0	12.6	0.41
2	07/09/2021	69	17	9.2	10.7	0.78
3	10/09/2021	62	14	10.4	12.0	0.34
4	14/09/2021	57	11	9.9	11.1	0.47
5	17/09/2021	63	15	10.3	11.5	0.61
6	21/09/2021	74	24	10.9	12.2	0.44
7	24/09/2021	65	15	11.2	12.8	0.51
8	28/09/2021	61	24	10.5	11.7	0.64
	Q Standards urly standard)	100 [μg/m³]	60 [μg/m³]	80 [μg/m³]	80 [μg/m³]	02 [mg/m ³] (8 hourly)

Legend: PM₁₀-Particulate Matter (Size Less than 10µm)

PM_{2.5}-Particulate Matter (Size Less than 2.5µm)

SO₂-Sulphur Dioxide

NO₂- Nitrogen Dioxide

ized Signatory

*Complaints Register is available at Laboratory.

Telangana, India

Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063

: lab@bsenvitech.com, info@bsenvitech.com Email



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

REPORT NO:	DIOM/TM /	ENV/2021/AAQ	/2021-09	Issued to:
Reporting Date	30.09.2021	Analysis Starting on	29.09.2021	Deojhar Iron Ore Mines,
Sample Received on	29.09.2021	Analysis Completed on	30.09.2021	- M/s Tarini Minerals
Sample Descr	iption: Ambie	ent Air Quality		Pvt. Ltd.
Location	: Bileipa	ada Village		I vi. Liu.
Month				
Sample Collec	cted by: B.S.	Envi-Tech (P) Ltd	••	

S.NO	DATE		PM ₁₀ [μg/m ³]		SO ₂ [μg/m³]	NO ₂ [μg/m ³]	CO [mg/m³]
	Protocol	IS:5182 Part 23	BSET SOP AA-02	IS:5182 Part 2	IS:5182 Part 6	BSET SOP AA-09	
1	03/09/2021	60	11	12.0	13.7	0.48	
2	07/09/2021	61	17	11.1	11.7	0.66	
3	10/09/2021	57	10	10.3	12.4	0.71	
4	14/09/2021	59	11	11.3	12.5	0.52	
5	17/09/2021	64	20	10.9	12.1	0.71	
6	21/09/2021	72	30	11.4	13.1	0.52	
7	24/09/2021	60	13	12.0	13.9	0.49	
8	28/09/2021	59	21	12.2	14.0	0.54	
	Q Standards urly standard)	100 [μg/m³]	60 [μg/m³]	80 [μg/m³]	80 [μg/m³]	02 [mg/m ³] (8 hourly)	

Legend: PM₁₀-Particulate Matter (Size Less than 10μm)

PM_{2.5}-Particulate Matter (Size Less than 2.5μm)

SO₂-Sulphur Dioxide NO₂- Nitrogen Dioxide

authorized Signatory

*Complaints Register is available at Laboratory.

Telangana, India

Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063

Email : lab@bsenvitech.com, info@bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

REPORT NO:	DIOM! TM /	ENV/2021/AAQ	/2021-09	Issued to:
Reporting Date	30.09.2021	Analysis Starting on	29.09.2021	Deojhar Iron Ore Mines,
Sample Received on	29.09.2021	Analysis Completed on	30.09.2021	M/s Tarini Mineral
Sample Descr	iption: Ambi	ent Air Quality		Pvt. Ltd.
Location	: Deojh	ar Village		I vii Liu
Month				
Sample Collec				

S.NO	DATE		PM ₁₀ [μg/m ³]	PM _{2.5} [μg/m ³]	SO ₂ [μg/m ³]	NO ₂ [μg/m ³]	CO [mg/m ³]
	Protocol	IS:5182 Part 23	BSET SOP AA-02	IS:5182 Part 2	IS:5182 Part 6	BSET SOP AA-09	
1	03/09/2021	69	18	10.8	12.3	0.66	
2	07/09/2021	59	10	10.5	11.5	0.50	
3	10/09/2021	62	18	9.9	10.7	0.39	
4	14/09/2021	63	22	10.2	11.5	0.42	
5	17/09/2021	70	28	10.9	12.1	0.46	
6	21/09/2021	65	23	11.0	12.6	0.38	
7	24/09/2021	69	24	10.6	12.1	0.47	
8	28/09/2021	59	15	11.1	12.4	0.52	
	Q Standards urly standard)	100 [μg/m³]	60 [μg/m³]	80 [μg/m³]	80 [μg/m³]	02 [mg/m ³] (8 hourly)	

Legend: PM₁₀-Particulate Matter (Size Less than 10µm)

PM_{2.5}-Particulate Matter (Size Less than 2.5µm)

SO₂-Sulphur Dioxide NO₂- Nitrogen Dioxide

Authorized Signatory

*Complaints Register is available at Laboratory.

Email : lab@bsenvitech.com, info@bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

REPORT NO:	DIOM! TM /	ENV/2021/AAQ	/2021-09	Issued to:
Reporting Date	30.09.2021	Analysis Starting on	29.09.2021	Deojhar Iron Ore Mines,
Sample Received on	29.09.2021	Analysis Completed on	30.09.2021	- M/s Tarini Minerals
Sample Descr	iption: Ambi	ent Air Quality		Pvt. Ltd.
Location	I vi. Liu.			
Month				
Sample Collec	cted by: B.S.	Envi-Tech (P) Ltd	•,	

S.NO	NEW WINDOW W	DATE PM_{10} $PM_{2.5}$ $[\mu g/m^3]$ $[\mu g/m^3]$		Section of the Control	SO ₂ [μg/m³]	NO ₂ [μg/m ³]	CO [mg/m ³]
	Protocol	IS:5182 Part 23	BSET SOP AA-02	IS:5182 Part 2	IS:5182 Part 6	BSET SOP AA-09	
1	03/09/2021	58	11	11.5	12.9	0.46	
2	07/09/2021	62	14	10.8	11.9	0.52	
3	10/09/2021	63	17	10.1	12.5	0.32	
4	14/09/2021	55	10	10.7	11.9	0.21	
5	17/09/2021	59	10	11.0	12.3	0.64	
6	21/09/2021	60	21	10.8	12.0	0.58	
7	24/09/2021	64	13	11.3	12.7	0.75	
8	28/09/2021	63	22	10.5	11.8	0.39	
	Q Standards urly standard)	100 [μg/m³]	60 [μg/m³]	80 [μg/m³]	80 [μg/m³]	02 [mg/m ³] (8 hourly)	

Legend: PM₁₀-Particulate Matter (Size Less than 10μm)

 $PM_{2.5}$ -Particulate Matter (Size Less than $2.5\mu m$)

SO₂-Sulphur Dioxide NO₂- Nitrogen Dioxide

Authorized Signatory

*Complaints Register is available at Laboratory.

Email : lab@bsenvitech.com, info@bsenvitech.com Website : www.bsenvitech.com

DEOJHAR MINES

FUGITIVE DUST MONITORING REPORT

SEPTEMBER-2021



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

REPORT NO:	DIOM/TM /	ENV/2021/AAQ	/2021-09	Issued to:
Reporting Date	30.09.2021	Analysis Starting on	29.09.2021	Deojhar Iron Ore Mines,
Sample Received on	29.09.2021	Analysis Completed on	30.09.2021	M/s Tarini Minerals
Sample Descr	ription: Fugit	ive Dust Monitori	ng	Pvt. Ltd.
Location				
Month				
Sample Collection	cted by: B.S.	Envi-Tech (P) Ltd	•••	

s.no	DATE	SPM [μg/m³]	STANDARD AS PER CFO
1	03/09/2021	416	
2	07/09/2021	527	
3	10/09/2021	544	
4	14/09/2021	421	1200
5	17/09/2021	469	[μg/ m ³]
6	21/09/2021	502	
7	24/09/2021	473	
8	28/09/2021	411	

Legend: SPM-Suspended Particulate Matter

*Complaints Register is available at Laboratory.

Telangana, India

Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063

Authorized Signatory

Email : lab@bsenvitech.com, info@bsenvitech.com Website : www.bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

REPORT NO:	DIOM/TM /	ENV/2021/AAQ	/2021-09	Issued to:	
Reporting Date	- 30 09 7071 - 79		29.09.2021	Deojhar Iron Ore Mines,	
Sample Received on	29.09.2021	Analysis Completed on	30.09.2021	M/s Tarini Minerals	
Sample Descr	iption: Fugiti	ve Dust Monitori	ng	Pvt. Ltd.	
Location	I vt. Ltu.				
Month	: Septer				
Sample Collec	cted by: B.S.	Envi-Tech (P) Ltd	.,		

S.NO	DATE	SPM [µg/m³]	STANDARD AS PER CFO
1	03/09/2021	513	
2	07/09/2021	549	
3	10/09/2021	526	
4	14/09/2021	472	1200
5	17/09/2021	418	[μ g/m ³]
6	21/09/2021	443	
7	24/09/2021	406	
8	28/09/2021	442	

Legend: SPM-Suspended Particulate Matter

C'BAO.

Authorized Signatory

St. Ann's Road, Tarnaka, Secunderabad - 500017, Telangana, India Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063

Email : lab@bsenvitech.com, info@bsenvitech.com Website : www.bsenvitech.com CIN No. : U74210TG1999PTC032358



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

REPORT NO:	DIOM/TM/	ENV/2021/AAQ	/2021-09	Issued to:
Reporting Date	30.09.2021	Analysis Starting on	29.09.2021	Deojhar Iron Ore Mines,
Sample Received on	29.09.2021	Analysis Completed on	30.09.2021	M/s Tarini Minerals
Sample Descr	iption: Fugiti	ve Dust Monitori	ng	Pvt. Ltd.
Location	1,112101			
Month	: Septer			
Sample Collec	cted by: B.S.	Envi-Tech (P) Ltd	• •	

s.no	DATE	SPM [µg/m³]	STANDARD AS PER CFO
1	03/09/2021	564	
2	07/09/2021	439	
3	10/09/2021	472	
4	14/09/2021	518	1200
5	17/09/2021	447	[µ g / m ³]
6	21/09/2021	413	
7	24/09/2021	406	
8	28/09/2021	467	

Legend: SPM-Suspended Particulate Matter

Authorized Signatory

Secunderabad - 500017, Telangana, India

: +91 40 49783062 / 27016806 Fax : +91 40 49783063 Phone Email : lab@bsenvitech.com, info@bsenvitech.com

DEOJHAR MINES

ETP WATER REPORT

SEPTEMBER-2021



Packing

B.S. ENVI - TECH PVT. LTD.

Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Lab Code No

Issue Date Your Ref

Name & Address of the Customer:

Deojhar Iron Ore Mines,

M/s Tarini Minerals Pvt. Ltd.

Sample Description: Waste Water Sample

Quantity : 1 No. x 2.0 Ltrs Sample

1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

Test Required : As given below

: Plastic Bottles& Pre-Sterilized Bottle

Sample tested as received Sampling Details

Date of Sampling: 07.09.2021 Location of Sampling: ETP Water inside ML Area Sampling Method/Procedure: IS 3025 Part 1 General Environment conditions: Ok

Test Report No.: BSET/2021/WW-03938

Date of Receipt : 09.09.2021

Date of completion of testing

Sample condition at receipt

Date of commencement of testing

Date of Registration

: 210656209

: 18.09.2021

: Letter Dated 09.09.2021

Page No: 1 of 1

09.09.2021

09.09.2021

18.09.2021

Found ok

TEST RESULTS

S. No	Test Parameters	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
1	рН		IS:3025- Part-11	6.65	5.5 – 9.0
2	Total Suspended Solids	mg/l	IS:3025- Part-17	90	100
3	Total Dissolved Solids@105°C	mg/l	IS:3025 - Part-16	850	2100
4	Oil & Grease	mg/l	IS:3025- Part-39	7	10
5	COD	mg/l	IS:3025 - Part-58	145	250
6	BOD for 3days at 27°C,	mg/l	IS:3025 - Part-44	15	30
7	Chloride as Cl,	mg/l	IS:3025 -Part-32	70	1000
8	Iron as Fe	mg/l	3111 B of APHA 23 rd Edition 2017	0.46	3
9	Manganese as Mn	mg/l	3111 B of APHA 23 rd Edition 2017	0.35	2.0

Interpretation of results: Nil, Deviation from test method: Nil

uthorized Signatory (G/Chandra Mouli) Environmental Scientist

End of the Report

*Complaints Register is available at Laboratory.

St. Ann's Road, Tarnaka, Secunderabad - 500017,

Telangana, India

: +91 40 49783062 / 27016806 Fax : +91 40 49783063 Phone

Email : lab@bsenvitech.com, info@bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer: Test Report No.: BSET/2021/WW-03947 Deojhar Iron Ore Mines, Lab Code No : 210655309 M/s Tarini Minerals Pvt. Ltd. **Issue Date** : 28.09.2021 Your Ref : Letter Dated 20.09.2021 Date of Receipt : 20.09.2021 Sample Description: Waste Water Sample : 1 No. x 2.0 Ltrs Sample Quantity 20.09.2021 **Date of Registration** 1 No. x 500 ml Sample(Metals) 20.09.2021 Date of commencement of testing 1 No x 250 ml Sample (Microbiology) Date of completion of testing 28.09.2021 **Packing** : Plastic Bottles& Pre-Sterilized Bottle Found ok Sample condition at receipt Test Required : As given below

Sampling Details

Date of Sampling: 17.09.2021 Location of Sampling: ETP Water inside ML Area Sampling Method/Procedure: IS 3025 Part 1

General Environment conditions: Ok

Sample tested as received

Page No: 1 of 1

TEST RESULTS

S. No	Test Parameters	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
1	рН		IS:3025- Part-11	6.75	5.5 – 9.0
2	Total Suspended Solids	mg/l	IS:3025- Part-17	120	100
3	Total Dissolved Solids@105°C	mg/l	IS:3025 - Part-16	910	2100
4	Oil & Grease	mg/l	IS:3025- Part-39	12	10
5	COD	mg/l	IS:3025 - Part-58	175	250
6	BOD for 3days at 27°C,	mg/l	IS:3025 - Part-44	21	30
7	Chloride as Cl,	mg/l	IS:3025 -Part-32	80	1000
8	Iron as Fe	mg/l	3111 B of APHA 23 rd Edition 2017	0.42	3
9	Manganese as Mn	mg/l	3111 B of APHA 23 rd Edition 2017	0.36	2.0

Interpretation of results: Nil, Deviation from test method: Nil

uthorized Signatory (Chandra Mouli) **Environmental Scientist**

End of the Report

*Complaints Register is available at Laboratory.

Telangana, India

: +91 40 49783062 / 27016806 Fax : +91 40 49783063 Phone

: lab@bsenvitech.com, info@bsenvitech.com Website: www.bsenvitech.com

DEOJHAR MINES

STP WATER REPORT

SEPTEMBER-2021



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer: Test Report No.: BSET/2021/WW-03939 Lab Code No : 210656109 Deojhar Iron Ore Mines, M/s Tarini Minerals Pvt. Ltd. Issue Date : 18.09.2021 Your Ref : Letter Dated 09.09.2021 Date of Receipt: 09.09.2021 Sample Description: Waste Water Sample Quantity : 1 No. x 2.0 Ltrs Sample 09.09.2021 **Date of Registration** 1 No. x 500 ml Sample(Metals) 09.09.2021 Date of commencement of testing 1 No x 250 ml Sample (Microbiology) Date of completion of testing 18.09.2021 Packing : Plastic Bottles& Pre-Sterilized Bottle Found ok Sample condition at receipt Test Required : As given below Sample tested as received

Sampling Details

Date of Sampling: 07.09.2021 Location of Sampling: STP Water At Camp Sampling Method/Procedure: IS 3025 Part 1

General Environment conditions: Ok

Page No: 1 of 1

TEST RESULTS

S. No	Test Parameters	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
1	рН		IS:3025- Part-11	6.78	5.5 – 9.0
2	Oil & Grease	mg/l	IS:3025- Part-39	5	10
3	Total Suspended Solids	mg/l	IS:3025- Part-17	95	100
4	Total Dissolved Solids@105°C	mg/l	IS:3025 - Part-16	812	2100
5	COD	mg/l	IS:3025 - Part-58	80	250
6	BOD for 3days at 27°C,	mg/l	IS:3025 - Part-44	14	30
7	Iron as Fe	mg/l	3111 B of APHA 23 rd Edition 2017	0.72	3
8	Fecal Coliform	MPN/100ml	APHA 23 rd Edition	250	230

Interpretation of results: Nil, Deviation from test method: Nil

Authorized Signatory (G.Chandra Mouli) Environmental Scientist

*** End of the Report ***

*Complaints Register is available at Laboratory.

Secunderabad - 500017, Telangana, India Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063 Email : lab@bsenvitech.com, info@bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer: Test Report No.: BSET/2021/WW-03948 Deojhar Iron Ore Mines, Lab Code No : 210655209 M/s Tarini Minerals Pvt. Ltd. **Issue Date** : 28.09.2021 Your Ref : Letter Dated 20.09.2021 Date of Receipt : 20.09.2021 Sample Description: Waste Water Sample : 1 No. x 2.0 Ltrs Sample Quantity 20.09.2021 **Date of Registration** 1 No. x 500 ml Sample(Metals) 20.09.2021 Date of commencement of testing 1 No x 250 ml Sample (Microbiology) Date of completion of testing 28.09.2021 **Packing** : Plastic Bottles& Pre-Sterilized Bottle Found ok Sample condition at receipt

Sampling Details

Date of Sampling: 17.09.2021 S.
Location of Sampling: STP Water At Camp

Test Required : As given below

Sampling Method/Procedure: IS 3025 Part 1 General Environment conditions: Ok

Sample tested as received

Page No: 1 of 1

TEST RESULTS

S. No	Test Parameters	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
1	рН		1S:3025- Part-11	6.76	5.5 – 9.0
2	Oil & Grease	mg/l	IS:3025- Part-39	9	10
3	Total Suspended Solids	mg/l	IS:3025- Part-17	85	100
4	Total Dissolved Solids@105°C	mg/l	IS:3025 - Part-16	815	2100
5	COD	mg/l	IS:3025 - Part-58	108	250
6	BOD for 3days at 27°C,	mg/l	IS:3025 - Part-44	26	30
7	Iron as Fe	mg/l	3111 B of APHA 23 rd Edition 2017	0.87	3
8	Fecal Coliform	MPN/100ml	APHA 23 rd Edition	325	230

Interpretation of results: Nil, Deviation from test method: Nil

Authorized Signatory (G.Chandra Mouli) Environmental Scientist

*** End of the Report ***

*Complaints Register is available at Laboratory.

4th Floor, 'AMITY VILLE', 12-13-1270/71/73, St. Ann's Road, Tarnaka,

Secunderabad - 500017, Telangana, India Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063

Email : lab@bsenvitech.com, info@bsenvitech.com

DEOJHAR MINES

SURFACE WATER QUALITY REPORT

SEPTEMBER-2021



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines, M/s Tarini Minerals Pvt. Ltd. Test Report No.: BSET/2021/WS-03940

Lab Code No : 210656009

Issue Date : 18.09.2021

Your Ref : Letter Dated 09.09.2021

Sample Description: Surface Water Sample Date of Receipt : 09.09.2021

Quantity : 1 No. x 2.0 Ltrs Sample

1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

: Plastic Bottles& Pre-Sterilized Bottle Packing

Test Required : As given below

09.09.2021 Date of Registration 09.09.2021 Date of commencement of testing 18.09.2021 Date of completion of testing Found ok Sample condition at receipt

Sample tested as received

Date of Sampling: 07.09.2021

Location of Sampling: Suna nadi river Upstream

Sampling Details

Sampling Method/Procedure: IS 3025 Part 1 General Environment conditions: Ok

Page No: 1 of 2

TEST RESULTS

S. No	Test Parameters	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
1.	pH	244	IS:3025- Part-11	6.70	5.5 – 9.0
2.	Oil & Grease	mg/l	IS:3025- Part-39	<1	10
3.	Total Suspended Solids	mg/l	IS:3025- Part-17	55	100
4.	Total Dissolved Solids @ 105°C, mg/l	mg/l	IS:3025 - Part-16	165	2100
5.	BOD for 3days at 27°C,	mg/l	IS:3025 - Part-44	10	30
6.	COD	mg/l	IS:3025 - Part-58	52	250
7.	Chloride as Cl,	mg/l	IS:3025 -Part-32	7.1	1000
8,	Phosphate as P	mg/l	4500 P, E APHA 23 rd Edition 2017	< 0.10	5.0
9.	Sulphide as S ² -	mg/l	4500 S ²⁻ , D APHA 23 rd Edition 2017	< 0.10	2.0
10.	Sulphates as SO ₄	mg/l	4500-SO ₄ E, Turbidity Method, 23 rd Edition 2017	8.2	1000
11.	Total Volatile Suspended Solids (MLVSS)	mg/l	1S:3025- Part-18	18	
12.	Colour	Hazen Units	IS:3025 -Part-4	6	Not to have Colour and Unpleasant
13.	Odour		IS:3025 -Part-5	Agreeable	Odour
14,	Iron as Fe	mg/l	3111 B of APHA 23 rd Edition 2017	0.20	3
15.	Fluoride as F	mg/l	4500-F D, APHA 23 rd Edition 2017	EC/7.25	2.0

Interpretation of results: Nil, Deviation from test method: Nil

Authorized Signatory (G.Chandra Mouli) Environmental Scientist

*Complaints Register is available at Laboratory.

Secunderabad - 500017, Telangana, India

Website: www.bsenvitech.com

CIN No.: U74210TG1999PTC032358

Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063 : lab@bsenvitech.com, info@bsenvitech.com Email



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Sample Description: Surface Water Sample

Deojhar Iron Ore Mines,

M/s Tarini Minerals Pvt. Ltd.

Issue Date

Test Report No.: BSET/2021/WS-03940 : 210656009

Lab Code No

: 18.09.2021

Your Ref

: Letter Dated 09.09.2021

Date of Registration

Date of Receipt : 09.09.2021

Quantity

: 1 No. x 2.0 Ltrs Sample

1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

Packing

: Plastic Bottles& Pre-Sterilized Bottle

Test Required : As given below

Sample condition at receipt Sample tested as received

Date of Sampling: 07.09.2021

Location of Sampling: Suna nadi river Upstream

Sampling Details Sampling Method/Procedure: IS 3025 Part 1

General Environment conditions: Ok

Date of commencement of testing

Date of completion of testing

Page No: 2 of 2

09.09.2021

09.09.2021

18.09.2021

Found ok

TEST RESULTS

S. No.	Test Parameter	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
16.	Boron as B	mg/l	4500 B, B APHA 23 rd Edition 2017	< 0.10	2.0
17.	Percent Sodium		BSET/SOP/W &WW-26	41.3	-
18.	Residual Sodium Carbonate	mg/l	BSET/SOP/W &WW-25	38	10*
19.	Copper as Cu	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	3.0
20.	Manganese as Mn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	2.0
21,	Selenium as Se	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.05
22.	Zinc as Zn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	5.0
23.	Cadmium as Cd	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.003	2.0
24.	Lead as Pb	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.01	0.1
25.	Mercury as Hg	mg/l	3112 B of APHA 23 rd Edition 2017	< 0.001	0.01
26.	Nickel as Ni	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	3.0
27.	Total Arsenic as As	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.2
28.	Total Chromium as Cr	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	2.0
29.	Total Coliforms	CFU/100ml	APHA 23 rd Edition 2017	TETH S	

Interpretation of results: Nil, Deviation from test method: Nil

(G.Chandra Mouli) Environmental Scientist

*** End of the Report***

*Complaints Register is available at Laboratory.

4th Floor, 'AMITY VILLE', 12-13-1270/71/73,

St. Ann's Road, Tarnaka, Secunderabad - 500017,

Telangana, India

: +91 40 49783062 / 27016806 Fax : +91 40 49783063 Phone : lab@bsenvitech.com, info@bsenvitech.com

Website: www.bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Lab Code No

Issue Date

Your Ref

Name & Address of the Customer:

Deojhar Iron Ore Mines,

M/s Tarini Minerals Pvt. Ltd.

Sample Description: Surface Water Sample

: 1 No. x 2.0 Ltrs Sample Quantity

1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology) : Plastic Bottles& Pre-Sterilized Bottle **Packing**

Test Required : As given below

Sampling Details

Sampling Method/Procedure: IS 3025 Part 1

Test Report No.: BSET/2021/WS-03941

: 210655909

: 18.09.2021

: Letter Dated 09.09.2021

General Environment conditions: Ok

Date of Receipt : 09.09.2021

Date of completion of testing

Sample condition at receipt

Sample tested as received

Date of commencement of testing

Date of Registration

Page No: 1 of 2

09.09.2021

09.09.2021

18.09.2021

Found ok

Date of Sampling: 07.09.2021 Location of Sampling: Suna nadi river Downstream

TEST RESULTS

S. No	Test Parameters	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
1	pH		IS:3025- Part-11	6.82	5.5 – 9.0
2.	Oil & Grease	mg/l	IS:3025- Part-39	< 1	10
3.	Total Suspended Solids	mg/l	IS:3025- Part-17	90	100
4.	Total Dissolved Solids @ 105°C, mg/l	mg/l	IS:3025 - Part-16	156	2100
5.	BOD for 3days at 27°C,	mg/l	IS:3025 - Part-44	19	30
6.	COD	mg/l	IS:3025 - Part-58	81	250
7.	Chloride as Cl,	mg/l	IS:3025 -Part-32	13.5	1000
8.	Phosphate as P	mg/l	4500 P, E APHA 23 rd Edition 2017	< 0.10	5.0
9.	Sulphide as S ²⁻	mg/l	4500 S ²⁻ , D APHA 23 rd Edition 2017	< 0.10	2.0
10.	Sulphates as SO ₄	mg/l	4500-SO ₄ E, Turbidity Method, 23 rd Edition 2017	9.6	1000
11.	Total Volatile Suspended Solids (MLVSS)	mg/l	IS:3025- Part-18	28	
12.	Colour	Hazen Units	IS:3025 -Part-4	12	Not to have Colour and Unpleasant
13.	Odour		IS:3025 -Part-5	Agreeable	Odour
14.	Iron as Fe	mg/l	3111 B of APHA 23 rd Edition 2017	0.25	3
15.	Fluoride as F	mg/l	4500-F D, APHA 23 rd Edition 2017	0.34 ECH	2.0

Interpretation of results: Nil, Deviation from test method: Nil

Authorized Signatory (G/Chandra Mouli) **Environmental Scientist**

*Complaints Register is available at Laboratory.

4th Floor, 'AMITY VILLE', 12-13-1270/71/73,

St. Ann's Road, Tarnaka, Secunderabad - 500017.

Telangana, India

Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063

Email : lab@bsenvitech.com, info@bsenvitech.com

Website: www.bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines,

M/s Tarini Minerals Pvt. Ltd.

Test Report No.: BSET/2021/WS-03941

Lab Code No : 210655909

Issue Date : 18.09.2021

Your Ref : Letter Dated 09.09.2021

Date of Receipt : 09.09.2021

Sample Description: Surface Water Sample

Quantity : 1 No. x 2.0 Ltrs Sample

l No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

Packing : Plastic Bottles& Pre-Sterilized Bottle

Location of Sampling: Suna nadi river Downstream

Test Required : As given below

Date of Sampling: 07.09.2021

 Date of Registration
 09.09.2021

 Date of commencement of testing
 09.09.2021

 Date of completion of testing
 18.09.2021

 Sample condition at receipt
 Found ok

Sample tested as received

Sampling Details

Sampling Method/Procedure: IS 3025 Part 1

General Environment conditions: Ok

Page No: 2 of 2

TEST RESULTS

S. No.	Test Parameter	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
16.	Boron as B	mg/l	4500 B, B APHA 23 rd Edition 2017	< 0.10	2.0
17.	Percent Sodium	2	BSET/SOP/W &WW-26	41.0	-
18.	Residual Sodium Carbonate	mg/l	BSET/SOP/W &WW-25	49	
19.	Copper as Cu	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	3.0
20.	Manganese as Mn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	2.0
21.	Selenium as Se	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.05
22.	Zinc as Zn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	5.0
23,	Cadmium as Cd	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.003	2.0
24.	Lead as Pb	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.01	0.1
25.	Mercury as Hg	mg/l	3112 B of APHA 23 rd Edition 2017	< 0.001	0.01
26.	Nickel as Ni	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	3.0
27.	Total Arsenic as As	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.2
28.	Total Chromium as Cr	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	2.0
29.	Total Coliforms	CFU/100ml	APHA 23 rd Edition 2017	105	-

Interpretation of results: Nil, Deviation from test method: Nil

... End of the Report...

Authorized Signatory G.Chandra Mouli) Environmental Scientist

*Complaints Register is available at Laboratory.

4th Floor, 'AMITY VILLE', 12-13-1270/71/73,

St. Ann's Road, Tarnaka, Secunderabad - 500017,

Telangana, India

Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063

Email: lab@bsenvitech.com, info@bsenvitech.com

Website: www.bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines, M/s Tarini Minerals Pvt. Ltd. Test Report No.: BSET/2021/WS-03942

Lab Code No : 210655809

Issue Date : 18.09.2021

Your Ref : Letter Dated 09.09.2021

Date of Receipt : 09.09.2021

Sample Description: Surface Water Sample

Quantity : 1 No. x 2.0 Ltrs Sample

: 1 No. x 2.0 Ltrs Sample 1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

Packing : Plastic Bottles& Pre-Sterilized Bottle

Test Required : As given below

Location of Sampling: Baitarani River

Date of Sampling: 07.09.2021

 Date of Registration
 09.09.2021

 Date of commencement of testing
 09.09.2021

 Date of completion of testing
 18.09.2021

 Sample condition at receipt
 Found ok

Sample tested as received

Sampling Details

Sampling Method/Procedure: IS 3025 Part 1

General Environment conditions: Ok

Page No: 1 of 2

TEST RESULTS

S. No	Test Parameters	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
1.	pH	-	IS:3025- Part-11	6.70	5.5 – 9.0
2.	Oil & Grease	mg/l	IS:3025- Part-39	< 1	10
3.	Total Suspended Solids	mg/l	IS:3025- Part-17	45	100
4.	Total Dissolved Solids @ 105°C, mg/I	mg/l	IS:3025 - Part-16	160	2100
5.	BOD for 3days at 27°C,	mg/l	IS:3025 - Part-44	7	30
6.	COD	mg/l	IS:3025 - Part-58	42	250
7.	Chloride as Cl,	mg/l	IS:3025 -Part-32	8.3	1000
8.	Phosphate as P	mg/l	4500 P, E APHA 23 rd Edition 2017	< 0.10	5.0
9.	Sulphide as S ² -	mg/l	4500 S ²⁻ , D APHA 23 rd Edition 2017	< 0.10	2.0
10.	Sulphates as SO ₄	mg/l	4500-SO ₄ E, Turbidity Method, 23 rd Edition 2017	7.0	1000
11.	Total Volatile Suspended Solids (MLVSS)	mg/l	IS:3025- Part-18	15	4
12.	Colour	Hazen Units	IS:3025 -Part-4	12	Not to have Colour and Unpleasant
13.	Odour		IS:3025 -Part-5	Agreeable	Odour
14.	Iron as Fe	mg/l	3111 B of APHA 23 rd Edition 2017	0.12	3
15.	Fluoride as F	mg/l	4500-F D, APHA 23 rd Edition 2017	EC/-0.26	2,0

Interpretation of results: Nil, Deviation from test method: Nil

Authorized Signatory t G.Chandra Mouli) Environmental Scientist

*Complaints Register is available at Laboratory.

4th Floor, 'AMITY VILLE', 12-13-1270/71/73,

St. Ann's Road, Tarnaka, Secunderabad - 500017,

Telangana, India

interior and a control of the contro

Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063

Email : lab@bsenvitech.com, info@bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines,

M/s Tarini Minerals Pvt. Ltd.

Sample Description: Surface Water Sample

Quantity : 1 No. x 2.0 Ltrs Sample

1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

Packing : Plastic Bottles& Pre-Sterilized Bottle

Date of Sampling: 07.09.2021

Location of Sampling: Baitarani River

Test Required : As given below

Test Report No.: BSET/2021/WS-03942

Lab Code No : 210655809

: 18.09.2021 **Issue Date**

Your Ref : Letter Dated 09.09.2021

Date of Receipt : 09.09.2021

09.09.2021 **Date of Registration**

09.09.2021 Date of commencement of testing

18.09.2021 Date of completion of testing Found ok Sample condition at receipt

Sample tested as received

Sampling Details

Sampling Method/Procedure: IS 3025 Part 1

General Environment conditions: Ok

Page No: 2 of 2

TEST RESULTS

S. No.	Test Parameter	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
16,	Boron as B	mg/l	4500 B, B APHA 23 rd Edition 2017	< 0.10	2.0
17.	Percent Sodium	18	BSET/SOP/W &WW-26	41.9	₹ <u>₽</u>
18.	Residual Sodium Carbonate	mg/l	BSET/SOP/W &WW-25	36	
19.	Copper as Cu	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	3.0
20.	Manganese as Mn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	2.0
21.	Selenium as Se	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.05
22.	Zinc as Zn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	5.0
23.	Cadmium as Cd	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.003	2.0
24.	Lead as Pb	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.01	0.1
25.	Mercury as Hg	mg/l	3112 B of APHA 23 rd Edition 2017	< 0.001	0.01
26.	Nickel as Ni	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	3.0
27.	Total Arsenic as As	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.2
28.	Total Chromium as Cr	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	2.0
29.	Total Coliforms	CFU/100ml	APHA 23 rd Edition 2017	80	91 11 E

Interpretation of results: Nil, Deviation from test method: Nil

... End of the Report...

4th Floor, 'AMITY VILLE', 12-13-1270/71/73,

St. Ann's Road, Tarnaka, Secunderabad - 500017,

Telangana, India

: +91 40 49783062 / 27016806 Fax : +91 40 49783063 Phone : lab@bsenvitech.com, info@bsenvitech.com

Authorized Signatory (G.Chandra Mouli) Environmental Scientist

Website: www.bsenvitech.com

CIN No.: U74210TG1999PTC032358

*Complaints Register is available at Laboratory.



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines,

M/s Tarini Minerals Pvt. Ltd.

Test Report No.: BSET/2021/WS-03943

Lab Code No : 210655709

Issue Date : 18.09.2021

Your Ref : Letter Dated 09.09.2021

Date of Receipt : 09.09.2021

Sample Description: Surface Water Sample Quantity : 1 No. x 2.0 Ltrs Sample

Location of Sampling: Mahadev Nala Upstream

1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

Packing

Date of Sampling: 07.09.2021

: Plastic Bottles& Pre-Sterilized Bottle

Test Required : As given below

09.09.2021 **Date of Registration** Date of commencement of testing 09.09.2021 18.09.2021 Date of completion of testing Found ok Sample condition at receipt

Sample tested as received

Sampling Details

Sampling Method/Procedure: IS 3025 Part 1

General Environment conditions: Ok

Page No: 1 of 2

TEST RESULTS

S. No	Test Parameters	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
1.	рН		IS:3025- Part-11	6.65	5.5 – 9.0
2.	Oil & Grease	mg/l	IS:3025- Part-39	< 1	10
3.	Total Suspended Solids	mg/l	IS:3025- Part-17	70	100
4.	Total Dissolved Solids @ 105°C, mg/l	mg/l	IS:3025 - Part-16	175	2100
5.	BOD for 3days at 27°C,	mg/l	IS:3025 - Part-44	15	30
6.	COD	mg/l	IS:3025 - Part-58	82	250
7.	Chloride as Cl,	mg/l	IS:3025 -Part-32	10.1	1000
8.	Phosphate as P	mg/l	4500 P, E APHA 23 rd Edition 2017	< 0.10	5.0
9.	Sulphide as S ²⁻	mg/l	4500 S ²⁻ , D APHA 23 rd Edition 2017	< 0.10	2.0
10.	Sulphates as SO ₄	mg/l	4500-SO ₄ E, Turbidity Method, 23 rd Edition 2017	9.6	1000
11.	Total Volatile Suspended Solids (MLVSS)	mg/l	IS:3025- Part-18	25	÷
12.	Colour	Hazen Units	IS:3025 -Part-4	4	Not to have Colour and Unpleasant
13.	Odour	***	IS:3025 -Part-5	Agreeable	Odour
14.	Iron as Fe	mg/l	3111 B of APHA 23 rd Edition 2017	0.29	3
15.	Fluoride as F	mg/l	4500-F D, APHA 23 rd Edition 2017	TE0.42 0	2.0

Interpretation of results: Nil, Deviation from test method: Nil

Authorized Signatory (G.Chandra Mouli) C'B Environmental Scientist

*Complaints Register is available at Laboratory.

4th Floor, 'AMITY VILLE', 12-13-1270/71/73,

St. Ann's Road, Tarnaka, Secunderabad - 500017, Telangana, India

Phone

: +91 40 49783062 / 27016806 Fax : +91 40 49783063 : lab@bsenvitech.com, info@bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines, M/s Tarini Minerals Pvt. Ltd. Test Report No.: BSET/2021/WS-03943

: 210655709 Lab Code No

Issue Date : 18.09.2021

Your Ref : Letter Dated 09.09.2021

Date of Receipt : 09.09.2021

Sample Description: Surface Water Sample Quantity : 1 No. x 2.0 Ltrs Sample

1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

Packing

Location of Sampling: Mahadev Nala Upstream

: Plastic Bottles& Pre-Sterilized Bottle

Test Required : As given below

Date of Sampling: 07.09.2021

Date of Registration 09.09.2021 Date of commencement of testing 09.09.2021 18.09.2021 Date of completion of testing Sample condition at receipt Found ok

Sample tested as received

Sampling Details

Sampling Method/Procedure: IS 3025 Part 1

General Environment conditions: Ok

Page No: 2 of 2

TEST RESULTS

S. No.	Test Parameter	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
16.	Boron as B	mg/l	4500 B, B APHA 23 rd Edition 2017	< 0.10	2.0
17.	Percent Sodium	(e	BSET/SOP/W &WW-26	41.5	
18.	Residual Sodium Carbonate	mg/l	BSET/SOP/W &WW-25	49	15th
19.	Copper as Cu	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	3.0
20.	Manganese as Mn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	2.0
21.	Selenium as Se	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.05
22.	Zinc as Zn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	5.0
23.	Cadmium as Cd	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.003	2.0
24.	Lead as Pb	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.01	0.1
25.	Mercury as Hg	mg/l	3112 B of APHA 23 rd Edition 2017	< 0.001	0.01
26.	Nickel as Ni	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	3.0
27.	Total Arsenic as As	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.2
28.	Total Chromium as Cr	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	2.0
29.	Total Coliforms	CFU/100ml	APHA 23 rd Edition 2017	95	Λ

Interpretation of results: Nil, Deviation from test method: Nil

*** End of the Report***

Authorized Signatory (G.Chandra Mouli) Environmental Scientist

*Complaints Register is available at Laboratory.

Telangana, India

Phone ; +91 40 49783062 / 27016806 Fax : +91 40 49783063

Website ; www.bsenvitech.com CIN No.: U74210TG1999PTC032358

: lab@bsenvitech.com, info@bsenvitech.com



Packing

B.S. ENVI - TECH PVT. LTD.

Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines, M/s Tarini Minerals Pvt. Ltd. Test Report No.: BSET/2021/WS-03944

Lab Code No : 210655609

Issue Date : 18.09.2021

Your Ref : Letter Dated 09.09.2021

Date of Receipt : 09.09.2021

Sample Description: Surface Water Sample

Quantity : 1 No. x 2.0 Ltrs Sample

1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

: Plastic Bottles& Pre-Sterilized Bottle

Test Required : As given below

Location of Sampling: Mahadev Nala Downstream

Date of Sampling: 07.09.2021

Date of Registration

Date of commencement of testing09.09.2021Date of completion of testing18.09.2021

Sample condition at receipt

Sample tested as received

Sampling Details

Sampling Method/Procedure: IS 3025 Part 1 General Environment conditions: Ok

Page No: 1 of 2

09.09.2021

Found ok

TEST RESULTS

S. No	Test Parameters	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
1.	pH		IS:3025- Part-11	6.65	5.5 – 9.0
2.	Oil & Grease	mg/l	IS:3025- Part-39	<1	10
3.	Total Suspended Solids	mg/l	1S:3025- Part-17	90	100
4.	Total Dissolved Solids @ 105°C, mg/l	mg/l	IS:3025 - Part-16	215	2100
5.	BOD for 3days at 27°C,	mg/l	IS:3025 - Part-44	22	30
6.	COD	mg/l	IS:3025 - Part-58	125	250
7.	Chloride as Cl,	mg/l	IS:3025 -Part-32	18.6	1000
8.	Phosphate as P	mg/l	4500 P, E APHA 23 rd Edition 2017	< 0.10	5.0
9.	Sulphide as S ²⁻	mg/l	4500 S ²⁻ , D APHA 23 rd Edition 2017	< 0.10	2.0
10.	Sulphates as SO ₄	mg/l	4500-SO ₄ E, Turbidity Method, 23 rd Edition 2017	15	1000
11.	Total Volatile Suspended Solids (MLVSS)	mg/l	IS:3025- Part-18	40	18
12.	Colour	Hazen Units	IS:3025 -Part-4	15	Not to have Colour and Unpleasant
13.	Odour		IS:3025 -Part-5	Agreeable	Odour
14.	Iron as Fe	mg/l	3111 B of APHA 23 rd Edition 2017	0.26	3
15.	Fluoride as F	mg/l	4500-F D, APHA 23 rd Edition 2017	EC938	2.0

Interpretation of results: Nil, Deviation from test method: Nil

Authorized Signatory (G.Chandra Mouli) Environmental Scientist

*Complaints Register is available at Laboratory.

4th Floor, 'AMITY VILLE', 12-13-1270/71/73,

St. Ann's Road, Tarnaka, Secunderabad - 500017, Telangana, India

Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063 Email : lab@bsenvitech.com, info@bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines,

M/s Tarini Minerals Pvt. Ltd.

Sample Description: Surface Water Sample

Quantity : 1 No. x 2.0 Ltrs Sample

> 1 No. x 500 ml Sample(Metals) 1 No x 250 ml Sample (Microbiology)

Packing : Plastic Bottles& Pre-Sterilized Bottle

Test Required : As given below

Date of Sampling: 07.09.2021 Location of Sampling: Mahadev Nala Downstream Test Report No.: BSET/2021/WS-03944

: 210655609 Lab Code No

Issue Date : 18.09.2021

Your Ref : Letter Dated 09.09.2021

Date of Receipt : 09.09.2021

09.09.2021 **Date of Registration**

09.09.2021 Date of commencement of testing

Date of completion of testing 18.09.2021 Found ok

Sample condition at receipt Sample tested as received

Sampling Details

Sampling Method/Procedure: IS 3025 Part 1

General Environment conditions: Ok

Page No: 2 of 2

TEST RESULTS

S. No.	Test Parameter	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
16.	Boron as B	mg/l	4500 B, B APHA 23 rd Edition 2017	< 0.10	2.0
17.	Percent Sodium	-	BSET/SOP/W &WW-26	41.2	
18.	Residual Sodium Carbonate	mg/l	BSET/SOP/W &WW-25	46	
19.	Copper as Cu	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	3.0
20.	Manganese as Mn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	2.0
21.	Selenium as Se	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.05
22.	Zinc as Zn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	5.0
23.	Cadmium as Cd	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.003	2.0
24.	Lead as Pb	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.01	0.1
25.	Mercury as Hg	mg/l	3112 B of APHA 23 rd Edition 2017	< 0.001	0.01
26.	Nickel as Ni	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	3.0
27.	Total Arsenic as As	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.2
28.	Total Chromium as Cr	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	2.0
29.	Total Coliforms	CFU/100ml	APHA 23 rd Edition 2017	125	1 -

Interpretation of results: Nil, Deviation from test method: Nil

Authorized Signatory G.Chandra Mouli) invironmental Scientist

... End of the Report...

*Complaints Register is available at Laboratory.

4th Floor, 'AMITY VILLE', 12-13-1270/71/73,

St. Ann's Road, Tarnaka, Secunderabad - 500017,

Telangana, India

: +91 40 49783062 / 27016806 Fax : +91 40 49783063 Phone

: lab@bsenvitech.com, info@bsenvitech.com

Website: www.bsenvitech.com

DEOJHAR MINES

SURFACE RUNOFF WATER QUALITY REPORT

SEPTEMBER-2021



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines, M/s Tarini Minerals Pvt. Ltd. Test Report No.: BSET/2021/WS-03945

Lab Code No : 210655509

Issue Date : 18.09.2021

Your Ref : Letter Dated 09.09.2021

Sample Description: Surface Water Sample Date of Receipt : 09.09.2021

Quantity : 1 No. x 2.0 Ltrs Sample

1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

Packing : Plastic Bottles& Pre-Sterilized Bottle

Test Required : As given below

Date of Registration 09.09.2021

Date of commencement of testing 09.09.2021

Date of completion of testing 18.09.2021

Sample condition at receipt Found ok

Sample tested as received

Sampling Details

Date of Sampling: 07.09.2021 Sampling Method/Procedure: IS 3025 Part 1

Location of Sampling: Shutting Pond Near Gate No.02 General Environment conditions: Ok

Page No: 1 of 2

TEST RESULTS

S. No	Test Parameters	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
1.	pH		IS:3025- Part-11	6.74	5.5 – 9.0
2.	Oil & Grease	mg/l	IS:3025- Part-39	<1	10
3.	Total Suspended Solids	mg/l	IS:3025- Part-17	36	100
4.	Total Dissolved Solids @ 105°C, mg/l	mg/l	IS:3025 - Part-16	150	2100
5.	BOD for 3days at 27°C,	mg/l	IS:3025 - Part-44	8	30
6.	COD	mg/l	IS:3025 - Part-58	56	250
7.	Chloride as Cl,	mg/l	IS:3025 -Part-32	11.5	1000
8.	Phosphate as P	mg/l	4500 P, E APHA 23 rd Edition 2017	< 0.10	5.0
9.	Sulphide as S ²⁻	mg/l	4500 S ²⁻ , D APHA 23 rd Edition 2017	< 0.10	2.0
10.	Sulphates as SO ₄	mg/l	4500-SO ₄ E, Turbidity Method, 23 rd Edition 2017	9.4	1000
11.	Total Volatile Suspended Solids (MLVSS)	mg/l	IS:3025- Part-18	18	-
12.	Colour	Hazen Units	IS:3025 -Part-4	5	Not to have Colour and Unpleasant
13.	Odour		IS:3025 -Part-5	Agreeable	Odour
14.	Iron as Fe	mg/l	3111 B of APHA 23 rd Edition 2017	0.10	3
15.	Fluoride as F	mg/l	4500-F D, APHA 23 rd Edition 2017	0.20	2.0

Interpretation of results: Nil, Deviation from test method: Nil

Authorized Signatory (G:Chandra Mouli) Environmental Scientist

*Complaints Register is available at Laboratory.

Telangana, India

and a second sec

Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063

Email: lab@bsenvitech.com, info@bsenvitech.com

Website: www.bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines, M/s Tarini Minerals Pvt. Ltd. Test Report No.: BSET/2021/WS-03945

Lab Code No : 210655509

Issue Date : 18.09.2021

Your Ref : Letter Dated 09.09.2021

Date of Receipt : 09.09.2021

Sample Description: Surface Water Sample

Quantity : 1 No. x 2.0 Ltrs Sample

1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

Packing : Plastic Bottles& Pre-Sterilized Bottle

Test Required : As given below

Date of Registration09.09.2021Date of commencement of testing09.09.2021Date of completion of testing18.09.2021

Sample condition at receipt

Sample tested as received

Sampling Details

Date of Sampling: 07.09.2021 Sampling Method/Procedure: IS 3025 Part 1

Location of Sampling: Shutting Pond Near Gate No.02 General Environment conditions: Ok

Page No: 2 of 2

Found ok

TEST RESULTS

S. No.	Test Parameter	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
16.	Boron as B	mg/l	4500 B, B APHA 23 rd Edition 2017	< 0.10	2.0
17.	Percent Sodium		BSET/SOP/W &WW-26	42.6	102
18.	Residual Sodium Carbonate	mg/l	BSET/SOP/W &WW-25	29	114
19.	Copper as Cu	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	3.0
20.	Manganese as Mn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	2.0
21.	Selenium as Se	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.05
22.	Zinc as Zn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	5.0
23.	Cadmium as Cd	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.003	2.0
24.	Lead as Pb	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.01	0.1
25.	Mercury as Hg	mg/l	3112 B of APHA 23 rd Edition 2017	< 0.001	0.01
26.	Nickel as Ni	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	3.0
27.	Total Arsenic as As	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.2
28.	Total Chromium as Cr	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	2.0
29.	Total Coliforms	CFU/100ml	APHA 23 rd Edition 2017	45	

Interpretation of results: Nil, Deviation from test method: Nil

*** End of the Report***

Authorized Signatory (G.Chandra Mouli) Environmental Scientist

*Complaints Register is available at Laboratory.

Telangana, India

Phone : +91 40 49783

hone : +91 40 49783062 / 27016806 Fax : +91 40 49783063 mail : lab@bsenvitech.com, info@bsenvitech.com

Website: www.bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Sample Description: Surface Water Sample

Location of Sampling: Shutting Pond Near Camp

Deojhar Iron Ore Mines, M/s Tarini Minerals Pvt. Ltd. Test Report No.: BSET/2021/WS-03946

Lab Code No : 210655409

Issue Date : 18.09.2021

Your Ref : Letter Dated 09.09.2021

Date of Receipt : 09.09.2021

Quantity : 1 No. x 2

: 1 No. x 2.0 Ltrs Sample

1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

Packing

: Plastic Bottles& Pre-Sterilized Bottle

Test Required : As given below

Date of Sampling: 07.09.2021

Date of Registration

09.09.2021

Date of completion of testing Sample condition at receipt

Date of commencement of testing

18.09.2021 Found ok

Sample tested as received

Sampling Details

Sampling Method/Procedure: IS 3025 Part 1 General Environment conditions: Ok

Page No: 1 of 2

TEST RESULTS

S. No	Test Parameters	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
l.	рН		IS:3025- Part-11	6.63	5.5 – 9.0
2.	Oil & Grease	mg/l	IS:3025- Part-39	< 1	10
3.	Total Suspended Solids	mg/l	IS:3025- Part-17	38	100
4.	Total Dissolved Solids @ 105°C, mg/l	mg/l	IS:3025 - Part-16	140	2100
5.	BOD for 3days at 27°C,	mg/l	IS:3025 - Part-44	12	30
6.	COD	mg/l	IS:3025 - Part-58	65	250
7.	Chloride as Cl,	mg/l	IS:3025 -Part-32	15.6	1000
8.	Phosphate as P	mg/l	4500 P, E APHA 23 rd Edition 2017	< 0.10	5.0
9.	Sulphide as S ²⁻	mg/l	4500 S ²⁻ , D APHA 23 rd Edition 2017	< 0.10	2.0
10.	Sulphates as SO ₄	mg/l	4500-SO ₄ E, Turbidity Method, 23 rd Edition 2017	13	1000
11,	Total Volatile Suspended Solids (MLVSS)	mg/l	IS:3025- Part-18	16	
12.	Colour	Hazen Units	IS:3025 -Part-4	5	Not to have Colour and Unpleasant
13,	Odour		IS:3025 -Part-5	Agreeable	Odour
14.	Iron as Fe	mg/l	3111 B of APHA 23 rd Edition 2017	0.12	3
15.	Fluoride as F	mg/l	4500-F D, APHA 23 rd Edition 2017	0.19	2.0

Interpretation of results: Nil, Deviation from test method: Nil

Authorized Signatory (G. Chandra Mouli) Environmental Scientist

*Complaints Register is available at Laboratory.

4th Floor, 'AMITY VILLE', 12-13-1270/71/73,

St. Ann's Road, Tarnaka, Secunderabad - 500017,

Telangana, India

Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063

Email : lab@bsenvitech.com, info@bsenvitech.com



Quantity

Packing

B.S. ENVI - TECH PVT. LTD.

Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines, M/s Tarini Minerals Pvt. Ltd. Test Report No.: BSET/2021/WS-03946

Lab Code No : 210655409

Issue Date : 18.09.2021

Your Ref : Letter Dated 09.09.2021

Sample Description: Surface Water Sample Date of Receipt: 09.09.2021

> : 1 No. x 2.0 Ltrs Sample **Date of Registration**

1 No. x 500 ml Sample(Metals) Date of commencement of testing

09.09.2021 1 No x 250 ml Sample (Microbiology) 18.09.2021 Date of completion of testing : Plastic Bottles& Pre-Sterilized Bottle Found ok

Sample condition at receipt Test Required : As given below Sample tested as received

Sampling Details

Sampling Method/Procedure: IS 3025 Part 1 Date of Sampling: 07.09.2021

Location of Sampling: Shutting Pond Near Camp General Environment conditions: Ok

Page No: 2 of 2

09.09.2021

TEST RESULTS

S. No.	Test Parameter	Units	Test Method	Result	General Standards for discharge of Environment pollutants G.S.R 422(E)-1993
16.	Boron as B	mg/l	4500 B, B APHA 23 rd Edition 2017	< 0.10	2.0
17.	Percent Sodium		BSET/SOP/W &WW-26	40.6	•
18.	Residual Sodium Carbonate	mg/l	BSET/SOP/W &WW-25	28	1*
19.	Copper as Cu	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	3.0
20.	Manganese as Mn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	2.0
21.	Selenium as Se	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.05
22.	Zinc as Zn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	5.0
23.	Cadmium as Cd	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.003	2.0
24.	Lead as Pb	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.01	0.1
25.	Mercury as Hg	mg/l	3112 B of APHA 23 rd Edition 2017	< 0.001	0.01
26.	Nickel as Ni	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	3.0
27.	Total Arsenic as As	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.2
28.	Total Chromium as Cr	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	2.0
29.	Total Coliforms	CFU/100ml	APHA 23 rd Edition 2017	65	λ

Interpretation of results: Nil, Deviation from test method: Nil

(G.Chandra Mouli) **Environmental Scientist**

*** End of the Report***

*Complaints Register is available at Laboratory.

4th Floor, 'AMITY VILLE', 12-13-1270/71/73, St. Ann's Road, Tarnaka,

Secunderabad - 500017, Telangana, India

Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063 : lab@bsenvitech.com, info@bsenvitech.com Email

Authorized Signatory

DEOJHAR MINES

DRINKING WATER QUALITY REPORT

JULY-2021



Packing

B.S. ENVI - TECH PVT. LTD.

Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines,

M/s Tarini Minerals Pvt. Ltd.

Test Report No.: BSET/2021/WS-02094

Lab Code No : 210840607

Issue Date : 19.07.2021

Your Ref : Letter Dated 09.07.2021

Date of Receipt : 09.07.2021

Quantity : 1 No. x 2.0 Ltrs Sample

Sample Description: Drinking Water Sample

Location of Sampling: At Mines for Portable test

1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

: Plastic Bottles& Pre-Sterilized Bottle

Test Required : As given below

Date of Sampling: 06.07.2021

09.07.2021 Date of Registration 09.07.2021 Date of commencement of testing 19.07.2021 Date of completion of testing

Sample condition at receipt Sample tested as received

Sampling Details

Sampling Method/Procedure: IS 3025 Part 1

General Environment conditions: Ok

Page No: 1 of 2

Found ok

TEST RESULTS

S. No.	Test Parameter	Units	Test Method	Result	Requirement as per IS 10500:2012	
					Acceptable limits	Permissible limits in absence of alternative source
1	Odour		IS:3025 -Part-5	Agreeable	Agreeable	Agreeable
2	Colour	Hazen Units	IS:3025 -Part-4	< 5	5	15
3	pH		IS:3025- Part-11	6.75	6.5-8.5	No Relaxation
4	Turbidity	NTU	IS:3025 -Part-10	<1	1	5
5	Total Hardness as CaCO ₃	mg/l	IS:3025 -Part-21	76	200	600
6	Iron as Fe	mg/l	3111 B of APHA 23 rd Edition 2017	0.08	1.0	No Relaxation
7	Chlorides as Cl	mg/l	IS:3025 -Part-32	45	250	1000
8	Total Dissolved Solids @ 105°C, mg/l	mg/l	IS:3025 - Part-16	198	500	2000
9	Calcium as Ca	mg/l	IS:3025- Part-40	24	75	200
10	Magnesium as Mg	mg/l	IS:3025 -Part-46	3.9	30	100
11	Sulphate as SO ₄	mg/l	4500-SO ₄ E, Turbidity Method, APHA 23 rd Edition 2017	27	200	400
12	Nitrate as NO ₃	mg/l	4500-NO ₃ B Ultraviolet Spectrophotometric Screening Method	12	45	No Relaxation
13	Fluoride as F	mg/l	4500-F D, APHA 23 rd Edition 2017	0.36	1,	1.5
14	Total Alkalinity as CaCO _{3.}	mg/l	IS:3025 -Part-23	48	200	600

Interpretation of results: Nil, Deviation from test method: Nil

Authorized Signatory G.Chandra Mouli) vironmental Scientist

*Complaints Register is available at Laboratory.

4th Floor, 'AMITY VILLE', 12-13-1270/71/73, St. Ann's Road, Tarnaka,

Secunderabad - 500017, Telangana, India

Phone

: +91 40 49783062 / 27016806 Fax : +91 40 49783063

: lab@bsenvitech.com, info@bsenvitech.com Email



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines, M/s Tarini Minerals Pvt. Ltd. Test Report No.: BSET/2021/WS-02094

Lab Code No : 210840607

Issue Date : 19.07.2021

Your Ref : Letter Dated 09.07.2021

Date of Receipt : 09.07.2021

Quantity: 1 No. x 2.0 Ltrs Sample

Sample Description: Drinking Water Sample

1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

Packing : Plastic Bottles& Pre-Sterilized Bottle

Location of Sampling: At Mines for Portable test

Test Required : As given below

Date of Sampling: 06.07.2021

Date of Registration 09.07.2021

Date of commencement of testing 09.07.2021

Date of completion of testing 19.07.2021

Sample condition at receipt
Sample tested as received

Sampling Details

Sampling Method/Procedure: IS 3025 Part 1

General Environment conditions: Ok

Page No: 2 of 2

Found ok

TEST RESULTS

	Test Parameter	Units	Test Method	Result	Requirement as per IS 10500:2012	
S. No.					Acceptable limits	Permissible limits in absence of alternative source
15	Boron as B	mg/l	4500-B B. Curcumin Method, APHA 23 rd Edition 2017	< 0.10	0.5	1
16	Aluminium as Al	mg/l	3500 Al B – Eroochrome Cyanine R method	< 0.02	0.03	0.2
17	Copper as Cu	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	0.05	1.5
18	Manganese as Mn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	0.1	0.3
19	Selenium as Se	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.01	No Relaxation
20	Zinc as Zn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	5	15
21	Cadmium as Cd	mg/l	3111 C of APHA 23 rd Edition 2017	< 0.003	0.003	No Relaxation
22	Lead as Pb	mg/l	3111 C of APHA 23 rd Edition 2017	< 0.01	0.01	No Relaxation
23	Mercury as Hg	mg/l	3112 B of APHA 23 rd Edition 2017	< 0.001	0.001	No Relaxation
24	Total Arsenic as As	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.01	No Relaxation
25	Total Chromium as Cr	mg/l	3111 C of A0PHA 23 rd Edition 2017	< 0.02	0.05	No Relaxation
26	Total Coliforms	CFU/100ml	IS: 1622 – 1981	Absent		100

Interpretation of results: Nil, Deviation from test method: Nil

Authorized Signatory
(G.Chandra Mouli)
Privironmental Scientist

*** End of the Report***

*Complaints Register is available at Laboratory.

St. Ann's Road, Tarnaka, Secunderabad - 500017, Telangana, India HEAVY AND SOUTH TO THE SOUTH THE SOU

Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063 Email : lab@bsenvitech.com, info@bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines, M/s Tarini Minerals Pvt. Ltd. Test Report No.: BSET/2021/WS-02095

Lab Code No : 210840507

Issue Date : 19.07.2021

Your Ref : Letter Dated 09.07.2021

Date of Receipt : 09.07.2021

Quantity : 1 No. x 2.0 Ltrs Sample

Sample Description: Drinking Water Sample

Location of Sampling: At Camp Inlet Water

1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

Packing : Plastic Bottles& Pre-Sterilized Bottle

Test Required : As given below

Date of Sampling: 06.07.2021

Date of Registration 09.07.2021

Date of commencement of testing 09.07.2021

Date of completion of testing 19.07.2021

Sample condition at receipt Found ok

Sample tested as received

Sampling Details

Sampling Method/Procedure: IS 3025 Part 1

General Environment conditions: Ok

Page No: 1 of 2

TEST RESULTS

S. No.	Test Parameter	Units	Test Method	Result	Requirement as per IS 10500:2012	
					Acceptable limits	Permissible limits in absence of alternative source
1	Odour	**	IS:3025 -Part-5	Agreeable	Agreeable	Agreeable
2	Colour	Hazen Units	IS:3025 -Part-4	< 5	5	15
3	pН		IS:3025- Part-11	6.67	6.5-8.5	No Relaxation
4	Turbidity	NTU	IS:3025 -Part-10	< 1	1	5
5	Total Hardness as CaCO ₃	mg/l	IS:3025 -Part-21	62	200	600
6	Iron as Fe	mg/l	3111 B of APHA 23 rd Edition 2017	0.08	1.0	No Relaxation
7	Chlorides as Cl	mg/l	IS:3025 -Part-32	39	250	1000
8	Total Dissolved Solids @ 105°C, mg/l	mg/l	IS:3025 - Part-16	152	500	2000
9	Calcium as Ca	mg/l	1S:3025- Part-40	20	75	200
10	Magnesium as Mg	mg/l	IS:3025 -Part-46	2.9	30	100
11	Sulphate as SO ₄	mg/l	4500-SO ₄ E, Turbidity Method, APHA 23 rd Edition 2017	18	200	400
12	Nitrate as NO ₃	mg/l	4500-NO ₃ B Ultraviolet Spectrophotometric Screening Method	11	45	No Relaxation
13	Fluoride as F	mg/l	4500-F D, APHA 23 rd Edition 2017	0.39	1	1.5
14	Total Alkalinity as CaCO _{3,}	mg/l	IS:3025 -Part-23	36	200	600

Interpretation of results: Nil, Deviation from test method: Nil

Authorized Signatory (G.Chandra Mouli) Environmental Scientist

*Complaints Register is available at Laboratory.

4th Floor, 'AMITY VILLE', 12-13-1270/71/73, St. Ann's Road, Tarnaka,

Secunderabad - 500017, Telangana, India Phone :-

: +91 40 49783062 / 27016806 Fax : +91 40 49783063

Email : lab@bsenvitech.com, Website : www.bsenvitech.com

CIN No.: U74210TG1999PTC032358

: lab@bsenvitech.com, info@bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines, M/s Tarini Minerals Pvt. Ltd. Test Report No.: BSET/2021/WS-02095

Lab Code No : 210840507

Issue Date : 19.07.2021

Date of Receipt : 09.07.2021

Your Ref : Letter Dated 09.07.2021

Sample Description: Drinking Water Sample

Location of Sampling: At Camp Inlet Water

Quantity: 1 No. x 2.0 Ltrs Sample

1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

Packing: Plastic Bottles& Pre-Sterilized Bottle

Test Required: As given below

Date of Sampling: 06.07.2021

Date of Registration

Date of commencement of testing

09.07.2021 09.07.2021

Date of completion of testing Sample condition at receipt 19.07.2021 Found ok

Sample tested as received

Sampling Details

Sampling Method/Procedure: IS 3025 Part 1

General Environment conditions: Ok

Page No: 2 of 2

TEST RESULTS

	Test Parameter	Units	Test Method	Result	Requirement as per IS 10500:2012	
S. No.					Acceptable limits	Permissible limits in absence of alternative source
15	Boron as B	mg/l	4500-B B. Curcumin Method, APHA 23 rd Edition 2017	< 0.10	0.5	1
16	Aluminium as Al	mg/l	3500 Al B – Eroochrome Cyanine R method	< 0.02	0.03	0.2
17	Copper as Cu	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	0.05	1.5
18	Manganese as Mn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	0.1	0.3
19	Selenium as Se	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.01	No Relaxation
20	Zinc as Zn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	5	15
21	Cadmium as Cd	mg/l	3111 C of APHA 23 rd Edition 2017	< 0.003	0.003	No Relaxation
22	Lead as Pb	mg/l	3111 C of APHA 23 rd Edition 2017	< 0.01	0.01	No Relaxation
23	Mercury as Hg	mg/l	3112 B of APHA 23 rd Edition 2017	< 0.001	0.001	No Relaxation
24	Total Arsenic as As	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.01	No Relaxation
25	Total Chromium as Cr	mg/l	3111 C of A0PHA 23 rd Edition 2017	< 0.02	0.05	No Relaxation
26	Total Coliforms	CFU/100ml	IS: 1622 – 1981	Absent	FCH	180

Interpretation of results: Nil, Deviation from test method: Nil

*** End of the Report***

(G.Chandra Mouli) Environmental Scientist

uthorized Signatory

*Complaints Register is available at Laboratory.

Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063

Email : lab@bsenvitech.com, info@bsenvitech.com



Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines, M/s Tarini Minerals Pvt. Ltd. Test Report No.: BSET/2021/WS-02096

Lab Code No : 210840407

Issue Date : 19.07.2021

Your Ref : Letter Dated 09.07.2021

Sample Description: Drinking Water Sample

Quantity: 1 No. x 2.0 Ltrs Sample

1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

Packing : Plastic Bottles& Pre-Sterilized Bottle

Test Required : As given below

Date of Receipt : 09.07.2021

Date of Registration 09.07.2021

Date of commencement of testing 09.07.2021

Date of completion of testing 19.07.2021

Sample condition at receipt Found ok

Sample tested as received

Sampling Details

Date of Sampling: 06.07.2021

Location of Sampling: At Camp Outlet Water (Pantry)

Sampling Method/Procedure: IS 3025 Part 1

General Environment conditions: Ok

Page No: 1 of 2

TEST RESULTS

S.	Test Parameter	Units	Test Method	Result	Requirement as per IS 10500:2012	
S. No.					Acceptable limits	Permissible limits in absence of alternative source
1	Odour	**	IS:3025 -Part-5	Agreeable	Agreeable	Agreeable
2	Colour	Hazen Units	IS:3025 -Part-4	< 5	5	15
3	pH	**	IS:3025- Part-11	6.65	6.5-8.5	No Relaxation
4	Turbidity	NTU	IS:3025 -Part-10	< 1	1	5
5	Total Hardness as CaCO ₃	mg/l	IS:3025 -Part-21	138	200	600
6	Iron as Fe	mg/l	3111 B of APHA 23 rd Edition 2017	0.08	1.0	No Relaxation
7	Chlorides as Cl	mg/l	IS:3025 -Part-32	75	250	1000
8	Total Dissolved Solids @ 105°C, mg/l	mg/l	IS:3025 - Part-16	356	500	2000
9	Calcium as Ca	mg/l	IS:3025- Part-40	44	75	200
10	Magnesium as Mg	mg/l	IS:3025 -Part-46	6.8	30	100
11	Sulphate as SO ₄	mg/l	4500-SO ₄ E, Turbidity Method, APHA 23 rd Edition 2017	52	200	400
12	Nitrate as NO ₃	mg/l	4500-NO ₃ B Ultraviolet Spectrophotometric Screening Method	29	45	No Relaxation
13	Fluoride as F	mg/l	4500-F D, APHA 23 rd Edition 2017	0.45	1	1.5
14	Total Alkalinity as CaCO _{3,}	mg/l	IS:3025 -Part-23	90	200	600

Interpretation of results: Nil, Deviation from test method: Nil

Lavironmental Scientist

*Complaints Register is available at Laboratory.

Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063 Email : lab@bsenvitech.com, info@bsenvitech.com



Quantity

B.S. ENVI - TECH PVT. LTD.

Recognized by MoEF & CC, Gol: Valid upto August, 2022

TEST REPORT

Name & Address of the Customer:

Deojhar Iron Ore Mines, M/s Tarini Minerals Pvt. Ltd. Test Report No.: BSET/2021/WS-02096

Lab Code No : 210840407

Issue Date : 19.07.2021

Your Ref : Letter Dated 09.07.2021

Sample Description: Drinking Water Sample

g Water Sample Date of Receipt : 09.07.2021

: 1 No. x 2.0 Ltrs Sample 1 No. x 500 ml Sample(Metals)

1 No x 250 ml Sample (Microbiology)

Packing : Plastic Bottles& Pre-Sterilized Bottle

Test Required : As given below

Date of Registration 09.07.2021

Date of commencement of testing 09.07.2021

Date of completion of testing 19.07.2021

Sample condition at receipt Found ok

Sample tested as received

Sampling Details

Date of Sampling: 06.07.2021 Sampling Method/Procedure: IS 3025 Part 1

Location of Sampling: At Camp Outlet Water (Pantry) General Environment conditions: Ok

Page No: 2 of 2

TEST RESULTS

	Test Parameter	Units	Test Method	Result	Requirement as per IS 10500:2012	
S. No.					Acceptable limits	Permissible limits in absence of alternative source
15	Boron as B	mg/l	4500-B B. Curcumin Method, APHA 23 rd Edition 2017	< 0.10	0.5	1
16	Aluminium as Al	mg/I	3500 Al B – Eroochrome Cyanine R method	< 0.02	0.03	0.2
17	Copper as Cu	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	0.05	1.5
18	Manganese as Mn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	0.1	0.3
19	Selenium as Se	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.01	No Relaxation
20	Zinc as Zn	mg/l	3111 B of APHA 23 rd Edition 2017	< 0.02	5	15
21	Cadmium as Cd	mg/l	3111 C of APHA 23 rd Edition 2017	< 0.003	0.003	No Relaxation
22	Lead as Pb	mg/l	3111 C of APHA 23 rd Edition 2017	< 0.01	0.01	No Relaxation
23	Mercury as Hg	mg/l	3112 B of APHA 23 rd Edition 2017	< 0.001	0.001	No Relaxation
24	Total Arsenic as As	mg/l	3114 C of APHA 23 rd Edition 2017	< 0.01	0.01	No Relaxation
25	Total Chromium as Cr	mg/l	3111 C of A0PHA 23 rd Edition 2017	< 0.02	0.05	No Relaxation
26	Total Coliforms	CFU/100ml	IS: 1622 – 1981	Absent	14111	

Interpretation of results: Nil, Deviation from test method: Nil

*** End of the Report***

Authorized Signatory
(G. Chandra Mouli)
Environmental Scientist

*Complaints Register is available at Laboratory.

St. Ann's Road, Tarnaka, Secunderabad - 500017, Telangana, India Phone : +91 40 49783062 / 27016806 Fax : +91 40 49783063

Email : lab@bsenvitech.com, info@bsenvitech.com