

# स्टील अथॉरिटी ऑफ इण्डिया लिमिटेड STEEL AUTHORITY OF INDIA LIMITED <sub>मेल SAIL</sub> बोकारो इस्पात संयंत्र

**BOKARO STEEL PLANT** 

एम.ओ.एम., चिड़िया MOM, CHIRIA

Ref. No. MOM/PC/6/ 17

Date: 23.05.2022

To,

Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change Integrated Regional Office (ECZ) 2<sup>nd</sup> Floor, Headquarter –Jharkhand State Housing Board, Harmu Chowk. Ranchi - 834 002

Sub: Six Monthly Compliance of the Conditions Stipulated in Environmental Clearance of Sukri-Luturburu Mining project for the period October-2021 to March-2022 of M/s SAIL.

Sir,

We are hereby submitting status of compliance for the above period up to 31<sup>St</sup> March-2022 to the conditions stipulated in the Environmental Clearance granted by MoEF vide No:J-11015/247/2009-IA.II(M), Dated: 10<sup>th</sup> June, 2013 in respect of Sukri-Luturburu Mining project of Manoharpur Ore Mines of M/s SAIL for production of 0.75MTPA of Iron ore.

It may please be noted that mine is not in operation since 22.03.2009 for want of Stage II Forestry Clearance.

Thanking you.

Yours faithfully, For, Steel Authority of India Ltd.

Chief General Manager (Mining) Manoharpur Ore Mines, Chiria Bokaro Steel Plant (BSL), SAIL

#### Copy to:

- 1. Director, IA, MoEF&CC, GOI, Indira Paryavaran Bhavan, Aliganj, JorBagh Road, New Delhi 110 003.
- 2. Member Secretary, JSPCB, HEC, Dhurwa, Ranchi 834 004.
- 3. In-charge, Eastern Zone, CPCB, Southern Conclave, Block 502,5th & 6th Floors, 1582 Rajdanga Main Road, Kolkata - 700 107 (W. B.)

Chiria Office: MOM Chiria, Po.-Ps: Chiria, W. Singhbhum, Jharkhand-833106, E-MAIL: momchiria@gmail.com, momperschiria@gamil.com

Head Office: Addm. Building, Bokaro Steel Plant, Bokaro City, Jharkhand - 827001

Regd. Office: Ispat Bhawan, Lodhi Road, New Delhi-110003, Phone: +91-11-2436-7481 (14 Lines), Fax: 24367015

# Status of Compliance to Conditions Stipulated in Environmental Clearance granted

by

#### **MoEFCC**

Vide Order No: J-11015/247/2009-IA. II(M),

Dated: 10th June, 2013 for 0.75 MTPA

Of **Sukri Luturburu Iron Ore Mining Project** 

(Period: October' 2021 to March' 2022)



#### STEEL AUTHORITY OF INDIA LIMITED

BOKARO STEEL PLANT (BSL) MANOHARPUR ORE MINES P.O. – CHIRIA, PIN: 833106

DIST. : SINGHBHUM (WEST)

JHARKHAND STATE



Environment Clearance letter No: J-11015/247/2009-IA. II(M), Dated: 10<sup>th</sup> June, 2013 of Sukri Luturburu Iron Ore Mining project for production of 0.75 MTPA (ROM) of Iron ore.

#### Half yearly compliance report for the period: October-2021 to March-2022

#### A. Specific Condition

Sl. No.	Condition	Compliance Status as on March-2022
i	The project proponent shall obtain Consent to Establish and Consent to Operate from the Jharkhand State Pollution Control Board and effectively implement all the conditions	Consent to Establishment was obtained from Jharkhand State Pollution Control Board for a capacity of 0.75 MPTA, vide letter Ref. no: PC/NOC/JSR/333/09-G-1810 dated: 2.05.2014
ii	stipulated therein.  Environmental clearance is subject to final	1819,dated: 2.05.2014.  Noted.
"	order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004, as may be applicable to this project.	Noted.
iii	Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to the project.	Not Applicable
iv	Environmental clearance has been accorded to the broken up granted of 33.40 ha forest land for which for which forestry clearance has been granted. No mining activity will be allowed in forest area for which the Forest Clearance is not available.	Stage-1 Forest Clearance was obtained vide letter Ref: F.No.8-70/2009-FC, dated: 09.03.2011. Stage-01 conditions compliances submitted & Final Clearance is awaited.
V	The project proponent will seek and obtain approval under the FC Act, 1980 for diversion of the entire forest land located within the mining lease within a period of two years from 01.02.2013 i.e. the date of issue of guidelines by FC vide there letter F.NO.11-362/2012-FC, failing which the mining lease area will be reduced to the non forest area plus the forest area for which the project proponent has been able to obtain the FC at the end of this time period. In the case of reduction in mine lease area, the project proponent will need to get a revised mining Plan approved from the competent authority for reduced area and enter into a new mining lease as per reduced lease area. The EC will be constructed to be available for the mining lease area as per the revised mining lease deed.	Not Applicable



Sl. No.	Condition	Compliance Status as on March-2022	
vi	The Mining operations shall be restricted to above the groundwater table and it should not intersect the groundwater table. In case of working below the groundwater table, prior approval of the Ministry of Environment and Forests and the Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out.	Water table level at our mining lease area is about 400 m AMSL and ultimate depth of our proposed workings will be above 645 m AMSL. Hence there is no possibility for intersecting of Mine workings with the ground water table.  Due to any reason it is required to work	
vii	The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations. The first order streams and the seasonal nallahs originating from the mining lease area shall be protected.	No working October-2021 to March-2022.  Proper Precautions will be taken to avoid obstructions to Natural water resources by providing drains and bounds etc. at required places during operations period.	
viii	The top soil, if any shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation.	No working during October-2021 to March-2022.  After starting operations, the top soil will be temporarily stored at earmarked site. The stored top soil will be used in plantation works.	
ix	The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time and their phase-wise stabilization shall be carried out. The maximum height of the dump shall be 30m in three terraces of 10 m each so that the overall slope should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textile shall be undertaken for stabilization of the dump. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustained. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office located at Bhubaneswar on six monthly basis.	No working during October-2021 to March-2022.  After starting operations the over burden (OB) generated during the mining operations will be stored at earmarked site. Phase-wise stabilization will be carried out.  Six monthly Compliance Status is being submitted to Ministry of Environment & Forests and Climate Change and its Regional Office located at Ranchi.	



Sl. No.	Condition	Compliance Status as on March-2022
Х	Catch drains and siltation ponds of	No working during October-2021 to March-
	appropriate size shall be constructed around	2022.
	the mine working soil, mineral and OB	After starting operations, Repair of old
	dump(s) to prevent run off of water and flow	Retaining wall, Garland drain, siltation pond
	of sediments directly into the Hamsadagaar	and construction of new Retaining wall at
	Nallah, the Koina River, the seasonal nallahs	required places will be carried out.
	and other water bodies. The water so	required places will be carried out.
	collected should be utilized for watering the	
	mine area, roads, green belt development etc.	
	The drains shall be regularly de-silted	
	particularly after the monsoon and maintained	
	properly.	
xi	Garland drains, setting tanks and check dams	No working during October-2021 to March-
	of appropriate size, gradient and length shall	2022.
	be constructed around the mine pit, soil,	After starting operations, repair of old
	mineral and over burden dumps to prevent	Garland drains, siltation tanks, check Dams
	run off of water and flow of sediments directly	and construction of new Retaining wall
	into the Hamsadagaar Nalla, the Koina	Garland drains, setting tanks and check
	River, the seasonal nallahs and other water	dams at required places will be carried out.
	bodies and sump capacity should be designed	dams at required places will be carried out.
	keeping 50% safety margin over and above	
	peak sudden rainfall (based on 50 years data)	
	and maximum discharge in the area adjoining	
	the mine site. Sump capacity should also	
	provide adequate retention period to allow	
	proper settling of silt material. Sedimentation	
	pits shall be constructed at the corners of the	
	garland drains and de-silted at regular	
	intervals.	
xii	Dimension of the retaining wall at the toe of	No working during October-2021 to March-
	the over burden dumps and the OB benches	2022.
	within the mine to check run-off and siltation	Dimension of the retaining wall and check
	shall be based on the rain fall data.	dams will be designed based on the rainfall
		data.
xiii	The void left unfilled in an area of 5ha shall be	No working during October-2021 to March-
	converted into water body. The higher	2022.
	benches of excavated void/mining pit shall be	
	terraced and plantation done to stabilize the	After exploitation of the ore or During Mine
	slopes. The slope of higher benches shall be	closure the following activities steps will be
	made gentler for easy accessibility by local	taken for the use of public,
	people to use the water body. Peripheral	1. The slope of higher benches shall be
	fencing shall be carried out all along the	made gentler and void area 5 ha will be
	excavated area.	converted into water body.



SI. No.	Condition	Compliance Status as on March-2022
xiv	Plantation shall be raised in an area of 225.755 ha including a 7.5 m wide green belt in the safety zone around the mining lease, over burden dumps, mine benches, around water body, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall	<ol> <li>Plantation will be done to stabilize the slopes.</li> <li>Peripheral fencing will be carried out all along the excavated area.</li> <li>No working October-2021 to March-2022.</li> <li>Greenbelt will be developed all along the mine lease area in a phased manner and shall be completed within first five years after the start of mining operations.</li> </ol>
xv	be completed within first five years.  Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as around loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	No working during October-2021 to March-2022.  Regular water sprinkling will be done on haul roads, loading and unloading point and all transfer points during operation period.
xvi	The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.	As the mine pits are located at the hill top, all the surface runoff from the mining areas have been diverted to mine pits, from where it seeps in to the ground.  Check bunds, Garland drains and siltation pond has been constructed to control surface runoff.
xvii	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and installing new piezometers during the mining operation. The periodic monitoring (at least four times on a year-premonsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority	Network of 6 nos. of existing Dug Wells located around the mines have been selected for ground water level monitoring. Ground water table levels at the selected wells are being monitored at regular intervals i.e. 4 times in a year.  The Range of water levels during Post Monsoon (November-2021) and during Winter (January-2022) is as follows,



SI. No.	Condition	Compliance Status as on March-2022		
	and the data thus collected may be sent regularly to the Ministry of Environment and Forest and its Regional Office Bhubaneswar, the Central Ground Water Authority and the Regional Director, Central Ground Water	ID	Location	Water level below the Ground Surface (in meters)
	Board. If at any stage, it is observed that the	G1	Adjacent to community centre at Angua	6.3- 6.35
	groundwater table is getting depleted due to the mining activity; necessary corrective measures shall be carried out.		Opposite to community centre at Angua	6.25-6.30
		G3	Near Anqua Model Steel Village Gate	2.00-2.40
		G4	Shiva Mandir	3.50-3.60
		G5	Near CNI Church	7.45-7.50
		G6	Near Bishra Chowk	1.60-1.70
		In addition to above Two piezometers one at Chiria (150 feet) and another at Dhobil Village 200 feet provided and are being monitored at regular intervals i.e. 4 times in a year.  Ground water levels during Post Monsoon (November-2021) and during Winter (January-2022) and piezometer photograph is placed in <b>Annexure – 1</b> .		
xviii	Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintained.	No working during October-2021 to March-2022.  Regular monitoring of flow rate of water at the perennial nalla i.e. Hamsadagaar Nalla, is being done and records are being maintained.		
xix	Regular monitoring of water quality upstream and downstream of the Hamsadagaar Nalla shall be carried out and record of monitored date should be maintained and submitted to the Ministry of Environment and Forests, its Regional Office, Bhubaneswar, the Central Groundwater Authority, the State Pollution Control Board and the Central Pollution Control Board.	Water quality monitoring at both upstream and downstream of Hamsadagaar Nalla is being done on quarterly basis and results are being submitting to Ministry of Environment, Forest & Climate Change, it's Regional Office, Ranchi, the Central Groundwater Authority, the State Pollution		



		Compliance Status as on March-2022			
		The Range of upstream and downstream			
		Parameters during October-21 to March-2			to March-22
		is as follows-			<del>,</del>
		Parameter	Unit	Up-stream	Down-stream
		рН	-	7.4-7.95	7.24-7.8
		emperature	°C	21.1-28.4	21.3-28.2
		Turbidity	NTU	3-3.3	2.75-2.8
		onductivity	μS/cm	110.2- 165.2	91.4-144.5
		DO	Mg/l	7.3-7.65	7.45-7.6
		TDS	Mg/l	54.8-79.4	47.2-66.8
		Water qual	ity data	is attached	in <b>Annexure</b>
XX	The Project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and ground water) required for the project.	Permission obtained from Water Resource			rkhand and with Water .08.2017, for gara Nalla to annum for
xxi	Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground Water Board.	As the mine pits are located at the hill top, all the surface runoff from the mining areas have been diverted to mine pits, from where it seeps in to the ground. Check bunds, Garland drains and siltation pond has been constructed to control surface runoff.			
xxii	Appropriate mitigative measures shall be taken to prevent pollution of the Koina River in consultation with the State Pollution Control Board.	No working during October-2021 to March-2022.  As the mine pits are located at the hill top, all the surface runoff from the mining areas have been diverted to mine pits, from where it seeps in to the ground.			
	Vehicular emissions shall be kept under	As per the instruction of Jharkhand State Pollution Control Board during site visits Retaining wall, check dams, garland drains have been constructed to prevent pollution of water bodies.  CAT Plan has been approved Jharkhand State Forest Dept. on 01.2.2022. The CAT structures suggested by IIT KGP shall be implemented in consultation with the SPCB / Sate Forest Dept.  No working during October-2021 to March-			



Sl. No.	Condition	Compliance Status as on March-2022		
	control and regularly monitored. Measures	2022.		
	shall be taken for maintenance of vehicles used in mining operations and in	Will be followed during operation.		
	transportation of mineral from mine face to			
	the beneficiation plant. The vehicles shall be			
	covered with a tarpaulin and shall not be			
	overloaded.			
xxiv	No blasting shall be carried out after the	No working during October-	-2021 to March-	
	Sunset; Blasting operation shall be carried out	2022.		
	only during the daytime. Controlled blasting	Will be followed during oper	ration.	
	shall be practiced. The mitigative measures for	viii se ionowed daring oper	acion.	
	control of ground vibrations and to arrest fly			
	rocks and boulders should be implemented.			
XXV	Digital processing of the entire lease area using	The entire mine lease is	in Ankua RF of	
	remote sensing technique should be done	Saranda Reserve Forest.		
	regularly once in three years for monitoring	Land use and land cover	map of Sukri –	
	land use pattern and report submitted to the	Luturburu lease area have	been developed	
	Ministry of Environment and Forests and its	by Department of Mining Engineering		
	Regional Office located at Bhubaneswar.	Indian Institute of Technology (Indian		
		School of Mines) Dhanbad as on 31.03.2021		
		and Land use pattern of the lease area is as		
		follows,		
		LU/LC classes	Area (ha)	
		Mine lease Boundary 609.504		
		Dense forest	501.713	
		Open forest	77.971	
		Built-up area Mining	9.619	
		Built-up area non mining	-	
		Waste Land	20.105	
xxvi	Drills shall either be operated with dust	No working during October	-2021 to March-	
	extractors or equipped with water injection	2022.		
	system.	Will be followed during oper		
xxvii	Mineral handling area shall be provided with	No working during October	-2021 to March-	
	adequate number of high efficiency dust	2022.		
	extraction system. Loading and unloading	Will be followed during oper	ration.	
	areas including all the transfer points should			
	also have efficient dust control arrangements.			
	These should be properly maintained and			
xxviii	operated.  Sewage treatment plant shall be installed for	Sentic Tanks with coaking	nite have been	
XXVIII	the colony. ETP shall also be provided for the	Septic Tanks with soaking pits have been provided for the various accommodations.		
	workshop and wastewater generated during	Septic Tank & Soaking Pits are being cleaned		
	the mining operation.	regularly and maintained.	ic being cleaned	
	Tare mining operation.	regularly and maintained.		



Sl. No.	Condition	Compliance Status as on March-2022
		However, Vehicle washing facility with Oil grease traps was provided at Chiria general office for vehicles.
xxix	Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.	Pre-placement medical examination and periodical medical examination is being carried out and records maintained.
xxx	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely elephant, sloth bear, Indian wolf, python etc. spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and wildlife Department. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. All the safeguard measures brought out in the wildlife Conservation Plan so prepared specific to the project site shall be effectively implemented. A copy of action plan shall be submitted to the Ministry of Environment and Forests and its Regional Office, Bhubaneswar.	All precautions are under taken not to disturb the flora and fauna in the mining lease area. Necessary facilities are being extended to local forest department for their inspection and monitoring of forest area.  IWLMP for West Singhbhum District of Jharkhand was prepared by an Expert Committee constituted by the State Govt. vide notification dated 27.08.2011. SAIL was assigned responsibility for institutionalising and funding the study. After submission of report on IWLMP by the Committee, GoJ vide letter dated 19.09.2014 forwarded to MoEFCC, GoI. MoEFCC vide order dated 26.08.2014 constituted a Multi-Disciplinary Expert Committee (MDEC) to examine IWLMP. IWLMP was again refined and revised IWLMP was finally submitted by the Expert Committee to GoJ and MoEFCC, GoI on 10.03.2016.Final IWLMP was appraised in 45th meeting of Standing Committee of National Board for Wildlife on 04.09.2017 wherein the committee appreciated the IWLMP.
		MPSM was approved by MoEFCC on 08.06.2018 wherein it has been stated that the prescription of IWLMP prepared and approved by the State Wildlife Authority, National Board of Wildlife (NBWL) and Project Elephant (PE) of MoEFCC must be followed. IWLMP was presented before GoJ



Sl. No.	Condition	Compliance Status as on March-2022
		on 29.10.2018. Further the compliance of the observations pointed was submitted by SAIL to GoJ on 01.02.2019. Further, GoJ vide letter dated 30.04.2019 raised certain queries, which was replied on 31.05.2019.
		IWLMP is pending with GoJ for approval. Realization of money towards implementation of IWLMP shall be collected from lease holders.
		SAIL has submitted an undertaking to abide by the guidelines and contribute fund for implementation of IWLMP on prorate basis.
xxxi	The entire mining lease area shall be fenced by erecting solar powered electric fencing all round it. The fencing so erected shall be maintained properly and the cost towards erection and maintenance of the solar powered electric fencing shall be borne by the	As the project area falls within the RF, the matter has been discussed with forest officials. State Forest Department officials are of the opinion that Solar fencing may obstruct/ effect the movement of wild life animals.
	project proponent out of the project cost.	Accordingly, the matter is being discussed with DFO, Saranda Division and a request letter has been submitted to DFO, Saranda on 03.05.2018 and 15.01.2022. Based on the opinion of the State Forest Department, action will be taken for compliance of the condition.
xxxii	No transportation of ore outside the mine lease area shall be carried out after the sunset.	No working during October-2021 to March-2022.
		Will be followed during operation.
xxxiii	The critical parameters such as RSPM (Particulate matter with size less than 10 um	No working during October-2021 to March-2022.
	i.e. PM10) and NOx in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest	Will be followed during operation.
	habitation, whichever is loser shall be monitored periodically. Further, quality of discharged water shall also be monitored	
	(TDS, DO, PH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site	



SI. No.	Condition	Compliance Status as on March-2022
	at a suitable location near the main gate of the	
	Company in public domain. The Circular No. J-	
	20012/1/2006-IA (M) dated 27.05.2009 issued	
	by Ministry of Environment and Forests, which	
	is available on the website of the Ministry	
	www.envfor.nic.in shall also be referred in this	
	regard for its compliance.	
xxxiv	A Final Mine Closure Plan along with details of	Not Applicable at present. Final Mine
	Corpus Fund should be submitted to the	closure plan along with the fund details
	Ministry of Environment & Forests 5 years in	will be submitted to the ministry 5 years
	advance of final mine closure for approval.	advance.



#### **B.** General Conditions

SI. No.	Condition	Compliance Status as on March - 2022		
i	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.	No working during October-2021 to March-2022. Will be followed during operation.		
ii	No change in the calendar plan including excavation, quantum of mineral iron ore and waste should be made.	No working during October-2021 to March-2022.		
iii	Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10um i.e. PM10) and NOx monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.	Will be followed during operation.		
iv	Data on ambient air quality RSPM (Particulate matter with size less than 10um i.e., PM10 ) & NOx should be regularly submitted to the Ministry of Environment and Forests including its Regional office located at Bhubaneswar and the State Pollution Control Board/Central Pollution Control Board once in six months.	No working during October-2021 to March-2022.		
V	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.	No working during October-2021 to March-2022.		
vi	Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs.	No working during October-2021 to March-2022.		
vii	Industrial waste water (Workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422(E) dated	Will be followed during operation.		



	To the	1	
	19 <sup>th</sup> May, 1993 and 31 <sup>st</sup> December, 1993 or as		
	amended from time to time.		
	Oil and grease trap should be installed before		
CL N	discharge of workshop effluents.	0 11 01 1	
Sl. No.	Condition	•	us as on March - 2022
viii	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	No working du March-2022.	ring October-2021 to
ix	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive who will report directly to the Head of the Organization.	A full-fledged Environment Management Cell (EMC) has been established to look after environment aspects headed by an experienced engineer with more than 10 years' experience in the field of environment in the rank of AGM who directly reports Head of Mines.	
х	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry of Environment and Forests and its Regional Office located at Bhubaneswar.	Environment & Lease department. The allocated budget will be exclusively used for Environment & Lease expenses only.  Year wise expenditure from 2013 of Environmental protection measures is a	
		furnished below:- Year	Approximate Expenditu
		2013-14	42.00 Lakhs
		2014-15	25.70 Lakhs
		2015-16	44.60 Lakhs
		2016-17	53.02 Lakhs
		2017-18	50.84 Lakhs
		2018-19	48.54 Lakhs
		2019-20	53.45Lakhs
		2020-21	53.67 Lakhs
		2021-22	57.82 Lakhs
			1 - :



SI. No.	Condition	Compliance Status as on March -2022
хi	The project authorities should inform to The Regional Office located at Bhubaneswar regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	Will be followed.
xii	The Regional Office of this Ministry located at Bhubaneswar shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite date/information/monitoring reports.	Full co-operation is extended to the officers of the Regional Office, MoEF & CC, Bhubaneswar / Ranchi, by furnishing the requisite data / information / monitoring reports.
xiii	The project proponent shall submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored date (both in hard copies as well as by e-main) to the Ministry of Environment and Forests, its Regional Office Bhubaneswar, The respective Zonal Office of Central Pollution Control Board the State Pollution Control Board. The proponent shall upload the status of compliance of the EC conditions, including results of monitored date on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment & Forests, Bhubaneswar, the respective Zonal Office of CPCB & SPCB.	Six monthly compliance reports on the status of implementation of environmental safeguards are being submitted to MoEF & CC, New Delhi, Regional Office – MoEF & CC, Ranchi, Central Pollution Control Board and State Pollution Control Board.  Copy of the compliance report including environmental quality data is being uploaded to the SAIL web site i.e. www.sail.co.in.
xiv	A copy of the clearance letter shall be sent by the proponent to concerned panchayat, Zila Parisad/Municipal Corporation, Urban Local Body and the Local NGO, if any from whom suggestions/representations, if any were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	The copy of Clearance letter was notified in the public places. The clearance letter has been put on the Company website.
xv	The State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industry Centre and the Collector's office / Tehsildar's office for 30 days.	



SI. No.	Condition	Compliance Status as on March -2022
xvi	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Regional office of the Ministry of Environment and Forests, Bhubaneswar by e-mail.	Environmental Statement for the financial year 2021-22 ending 31 <sup>st</sup> March, 2022 has been submitted to the Jharkhand State Pollution Control Board vide reference No: MOM/PC/6/162, dated: 28-04-2022.
xvii	The project authorities should advertise at least in two local newspapers of the District or State in the project is located and widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forests at http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bhubaneswar.	Advertisement was given in two local newspapers Hindustan times (English) and Dainik Jagaran (Local Language Hindi) within 7 days of the issue of the clearance letter.

(Kamal Bhasker)

Chief General Manager (Mines) Manoharpur Ore Mines, Chiria



#### Annexure-1

## **GROUND WATER LEVEL MEASUREMENTS**

### A. Ground Water levels in and around the Mines

Location	Location of Open Wells	Water level below the Ground Surface (in meters)				
ID	Location of Open Wens	During Post Monsoon (November-2021)	During Winter (January-2022)			
G1	Adjacent to community centre at Anqua	6.30	6.35			
G2	Opposite to community centre at Anqua	6.25	6.30			
G3	Near Anqua Model Steel Village Gate	2.00	2.40			
G4	Siva Mandir	3.50	3.60			
G5	Near CNI Church	7.45	7.50			
G6	Near Bishra Chowk	1.60	1.70			

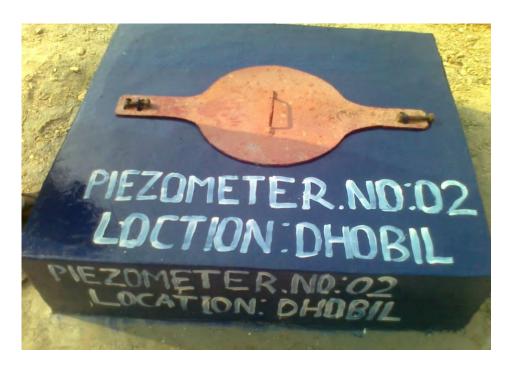
SI. No.	Location of Piezometer	Water level below the Ground Surface (in meters)			
31. IVO.	Location of Flezonieter	During Post Monsoon (November-2021)	During Winter (January-2022)		
1	Chiria Village	4.00	4.30		
2	Dhobil Village	3.35	3.50		



#### Annexure-1



## 1. Piezometer at Chiria Village



2. Piezometer at Dhobil Village



### **Annexure-2**

# WATER QUALITY OF HAMSADAGARA NALLA (Period: October -2021 to March-2022)

	Location - Upstream of Hamsadagara Nalla									
S. No.	Parameter	Unit	Standards as per IS: 2296-1982	Oct	Nov	Dec	Jan	Feb	Mar	
1	рН	-	6.5 - 8.5	7.95	7.73	7.9	7.42	7.31	7.4	
2	Temperature	°C	-	28.4	22.5	21.8	21.1	21.9	24.4	
3	Turbidity	NTU	-	3.3	3.2	3.11	3.1	3.15	3	
4	Conductivity	μS/cm	-	165.2	151.1	145.1	138.9	120.8	110.2	
5	DO	Mg/l	1	7.3	7.38	7.44	7.52	7.41	7.65	
6	TDS	Mg/l	500	79.4	77.2	70.9	65.4	60.5	54.8	

	Location -Downstream of Hamsadagara Nalla									
S. No.	Parameter	Unit	Standards as per IS: 2296-1982	Oct	Nov	Dec	Jan	Feb	Mar	
1	рН	-	6.5 - 8.5	7.8	7.62	7.75	7.3	7.24	7.47	
2	Temperature	°C	-	28.2	22.7	21.7	21.3	21.7	24.2	
3	Turbidity	NTU	-	3	2.95	2.9	2.87	2.8	2.75	
4	Conductivity	μS/cm	-	144.5	132.8	128.7	122.4	95.4	91.4	
5	DO	Mg/l	-	7.45	7.52	7.56	7.6	7.49	7.7	
6	TDS	Mg/l	500	66.8	60.5	57.1	51.3	47.2	45.1	