

# 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/ 167

Date: 23.05.2022

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

Sub: Six Monthly Compliance of the Conditions Stipulated in Environmental Clearance of Ajitaburu Iron ore 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 31st March-2022 to the conditions stipulated in the Environmental Clearance granted by MoEF vide No:J-11015/505/2007-IA. II(M), Dated: 31st March- 2011 in respect of Ajitaburu Iron ore mining project of Manoharpur Ore Mines of M/s SAIL for production of 2.80MTPA of Iron ore.

It may please be noted that mine is not in operation since 1995 for want of Stage - II Forestry Clearance.

Thanking you.

Yours faithfully, For, Steel Authority of India Ltd.

(Kamal Bhasker)

Chief General Manager (Mining) MOM, 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, Central Pollution Control Board, 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

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हर किसी की जिन्दगी से जुड़ा हुआ है सेल

There's a little bit of SAIL in everybody's life

# Status of Compliance to Conditions Stipulated in Environmental Clearance granted

by

#### **MoEFCC**

Vide Order No:J-11015/505/2007-IA.II(M),

Dated: 31st March, 2011 for 2.80 MTPA

Of

**Ajitaburu 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-11015/505/2007-IA.II(M), Dated: 31<sup>st</sup> March, 2011 of Ajitaburu Iron Ore Mining project for production of 2.80 MTPA (ROM) of iron ore.

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

## A. Specific Condition

Sl. No.	Conditions	Compliance Status as on March' 2022
i	The project proponent shall obtain Consent to Establish and Consent to Operate from the	To obtain Consent to Establish (NOC), application was submitted to JSPCB, Ranchi
	Jharkhand State Pollution Control Board and	and copy to Regional Office, Jamshedpur
	effectively implement all the conditions	on 30.01.2010, vide Ref. No.
	stipulated therein.	MOM/C/PC/4/139.
ii	Environmental clearance is subject to final order	Noted.
	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.	Nick Applicable
iii	Environmental clearance is subject to obtaining	Not Applicable.
	clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be	
	applicable to the project.	
iv	Environmental clearance is subject to obtaining	Stage-1 Forest Clearance was obtained vide
	clearance under Forest (Conservation) Act, 1980	letter Ref: F.No.8-70/2009-FC, dated:
	for diversion of forestland. Mine working shall be	07.03.2011 for mine working over 153.036
	restricted to the area for which forestry clearance	ha.Stage-01 conditions compliances
	has been obtained.	submitted & grant of Final Clearance is
		awaited.
V	Prior environmental Clearance from the Standing	Not Applicable.
	Committee of the National Board for wildlife shall	
	be obtained due to location of the mine within	
	the core zone of Singhbhum Elephant Reserve,	
	before starting any activity relating to the project at site. All the conditions stipulated by the	
	standing committee shall be effectively	
	implemented in the project. It shall be noted that	
	wildlife clearance shall be granted to the project	
	and that your proposal for wildlife clearance shall	
	be considered by the competent authority ties on	
	its merits and decision taken. The investment	
	made in the project, if any based on	
	environmental clearance granted to the project,	
	in anticipation of the clearance from wildlife	
	clearance shall be entirely at the cost and risk of	
	the project proponent and Ministry of	
	Environment and Forests shall not be responsible	
	in this regard in any manner.	

Period: October' 2021 to March' 2022



SI. No.	Conditions	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 hydrogeological 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 462m 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 below the groundwater table, we will obtain 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
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.	will be carried out.  No working during 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 separately 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. There shall be two external over burden dumps. The stabilized dump in area of 2 ha shall not be used for dumping in future. The new dump created in an area of 12 ha shall have maximum projected height of 34 m having two terraces and the overall slope of the dump shall be maintained to 28. The OB dump should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. Monitoring and management of rehabilitated areas shall continue	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 the Ministry of Environment & Forests and Climate Change and its Regional Office located at Ranchi.



SI. No.	Conditions	Compliance Status as on March' 2022
	until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office located at Bhubaneswar on six monthly basis.	
X	Catch drains and siltation ponds of appropriate size shall be constructed around the mine working soil, mineral and OB dump(s) to prevent run off of water and flow of sediments directly into the Hamsadagaar Nallah, the koina River, the seasonal nallahs and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after the monsoon and maintained properly. Garland drains, setting tanks and check dams of appropriate size, gradient and length shall be constructed around the mine pit, soil, mineral and over burden dumps to prevent run off of water and flow of sediments directly into the Hamsadagaar Nalla, the Koina River, the seasonal nallahs and other water bodies and sump capacity should be designed 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.	No working during October-2021 to March-2022.  After starting operations, Repair of old Retaining wall, Garland drain, siltation pond and construction of new Retaining wall, Garland drain, siltation pond at required places will be carried out.
xi	Dimension of the retaining wall at the toe of the over burden dumps and the OB benches within the mine to check run-off and siltation shall be based on the rain fall data.	No working during October-2021 to March-2022. Dimension of the retaining wall and check dams will be designed based on the rainfall data.
xii	Plantation shall be raised in an area of 92.986 ha including a 7.5 m wide green belt in the safety zone around the mining lease, over burden dumps, mine benches, 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	No working during October-2021 to March-2022.  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.



Sl. No.	Conditions	Compliance Status as on March' 2022		
	mine lease area in a phased manner and shall be completed within first five years.			
xiii	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.	2022.  Water sprinkling will be done on haul road loading and unloading point and all transfer points during operation period.		n haul roads,
xiv	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.	top, a	ne mine pits are located a all the surface runoff from the have been diverted to where it seeps in to the gro	the mining mine pits,
xv	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-pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with	locate select Ground wells interv The Mons	ork of 6 nos. of existing ed around the mines ted for ground water level nd water table levels at are being monitored vals i.e. 4 times in a year. Range of water levels soon (November-2021) er (January-2022) is as followed.	have been monitoring. the selected at regular during Post and during
	the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forest and its Regional Office Bhubaneswar,	ID	Location	Water level below the Ground Surfa (in meters)
	the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater	G1	Adjacent to community centre at Angua	6.3- 6.35
	table is getting depleted due to the mining	G2	Opposite to community centre at Anqua	6.25-6.30
	activity; necessary corrective measures shall be carried out.	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



SI. No.	Conditions	Compliance	Status	s as on Mar	ch' 2022
		In addition to at Chiria (150 Village 200 f monitored at a year.	feet) eet pro	and anothe ovided and	r at Dhobil are being
		Ground water (November-20 (January-2022 photograph is	021) !) an	and durir d and	ng Winter piezometer
xvi	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 de 2022.  Regular monit the perennial is being do maintained.	toring o	of flow rate .e. Hamsada	of water at agaar Nalla,
xvii	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 Regional Director, Central Ground Water Board, the SPCB and the CPCB.	Water quality and downstre being done or are being senting sen	am of n quar submitt Forest fice, I Author I and f upsti	Hamsadaga terly basis ing to N & Climate Ranchi, th ity, the Sta the Centra	aar Nalla is and results dinistry of Change, it's le Central te Pollution al Pollution downstream
		is as follows-	1	Г	
		Parameter	Unit	† •	Down-stream
		pH Temperature	°C	7.4-7.95 21.1-28.4	7.24-7.8 21.3-28.2
		Turbidity	NTU	3-3.3	2.75-2.8
		Conductivity	μS/c	110.2-	91.4-144.5
		DO	m Mg/l	165.2 7.3-7.65	7.45-7.6
		TDS		54.8-79.4	47.2-66.8
		Water quality – 2.			



SI. No.	Conditions	Compliance Status as on March' 2022
xviii	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 Department, GOJ and agreement has been made with Water Ways Division, Chaibasa on 03.08.2017, for drawl of water from Hamsadagara Nalla to the tune of 0.62 MCM per annum for Manoharpur Ore Mines, Chiria.
xix	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.
XX	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.  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.
xxi	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral from mine face to the beneficiation plant. The vehicles shall be covered with a tarpaulin and shall not be overloaded.	No working during October-2021 to March-2022.  Will be followed during operation.
xxii	No blasting shall be carried out after the Sunset; Blasting operation shall be carried out only during the daytime. Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.	No working during October-2021 to March-2022. Will be followed during operation

Period: October' 2021 to March' 2022



SI. No.	Conditions	Compliance Status as on March' 2022		
xxiii	Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land use pattern and report submitted to the Ministry of Environment and Forests and its Regional Office located at Bhubaneswar.	Department of Mining Engine Institute of Technology (India Mines) Dhanbad as on 31.03.20 use pattern of the lease area is a	of Ajitaburu veloped by ering Indian n School of 121 and Land as follows,	
		LU/LC classes	Area (ha)	
		Mine lease Boundary	323.887	
		Dense forest	253.568	
		Open forest	33.329	
		Built-up area Mining	5.618	
		Built-up area non mining	8.972	
		Waste Land	22.402	
xxiv	Drills shall either be operated with dust extractors or equipped with water injection system.	No working during October-202 2022. Will be followed during operation		
xxv	Mineral handling area shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.	No working during October-202 2022. Will be followed during operation		
xxvi	Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and wastewater generated during the mining operation.	Septic Tanks with soaking pits provided for the various accor Septic Tank & Soaking Pits are b regularly and maintained.  However, Vehicle washing facil grease traps was provided at Choffice for vehicles.	mmodations. eing cleaned lity with Oil	
xxvii	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 exami periodical medical examinatio carried out and records maintain	n is being	



SI. No.	Conditions	Compliance Status as on March' 2022
xxviii	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	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.
	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.	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 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



SI. No.	Conditions	Compliance Status as on March' 2022
		by the guidelines and contribute fund for implementation of IWLMP on prorate basis.
xxix	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 project proponent out of the project cost.	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.
	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.
xxx	No transportation of ore outside the mine lease area shall be carried out after the sunset.	No working during October-2021 to March-2022.
xxxi	The critical parameters such as RSPM (Particulate matter with size less than 10 µm i.e. PM10) and NOx in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest 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 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.	Will be followed during operation.  No working during October-2021 to March-2022.
xxxii	A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of	Not Applicable at present.  Final Mine closure plan along with the fund
	final mine closure for approval.	details will be submitted to the ministry 5 years 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.
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.	No working during October-2021 to March-2022.
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.
٧	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 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 discharge of workshop effluents.	No working during October-2021 to March-2022.  Will be followed.



SI. No.	Condition	Compliance S	Status as on March' 2022
viii	Personnel working in dusty areas should wear protective respiratory devices and they should	No working March-2022.	during October-2021 to
	also be provided with adequate training and information on safety and health aspects.	Will be followe	ed.
	Occupational health surveillance program of the		
	workers should be undertaken periodically to		
	observe any contractions due to exposure to dust		
ix	and take corrective measures, if needed.  A separate environmental management cell with	A full-fledged	Environment Management
	suitable qualified personnel should be set-up	_	s been established to look
	under the control of a Senior Executive who will		nent aspects headed by an
	report directly to the Head of the Organization.	-	ngineer with more than 10 ience in the field of
		' '	in the rank of AGM who
		directly report	s Head of Mines.
х	The funds earmarked for environmental	There will b	e separate budget for
	protection measures should be kept in separate		& Lease department. The
	account and should not be diverted for other purpose. Year wise expenditure should be	_	get will be exclusively used nt & Lease expenses only.
	reported to the Ministry of Environment and		
	Forests and its Regional Office located at		penditure from 2013 on protection measures is as
	Bhubaneswar.	furnished belo	-
		Year	Approximate
			Expenditure
		2013-14	42.00 Lakhs
		2014-15	25.70 Lakhs 44.60 Lakhs
		2015-10	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
xi	The project authorities should inform to The Regional Office located at Bhubaneswar	Will be followe	ed.
	regarding date of financial closures and final		
	approval of the project by the concerned		
	authorities and the date of start of land		
	development work.		



SI. No.	Condition	Compliance Status as on March' 2022
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 Report.	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 Central Pollution Control Board and State Pollution Control Board.	Six monthly compliance reports on the status of implementation of environmental safeguards are being submitted to Ministry of Environment & Forests and Climate Change and its Regional Office located at 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.	
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	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.



SI. No.	Condition	Compliance Status as on March' 2022
	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.	
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 Onen Molle	Water level below the Ground Surface (in meters)				
ID	Location of Open Wells	During Post Monsoon (November-2021)	During Winter (January-2022)			
G1	Adjacent to community	6.30	6.35			
	centre at Anqua	6.05	6.00			
G2	Opposite to community centre at Angua	6.25	6.30			
G3	Near Anqua Model Steel	2.00	2.40			
	Village Gate					
G4	Siva Mandir	3.50	3.60			
G5	Near CNI Church	7.45	7.50			
G6	Near Bishra Chowk	1.60	1.70			

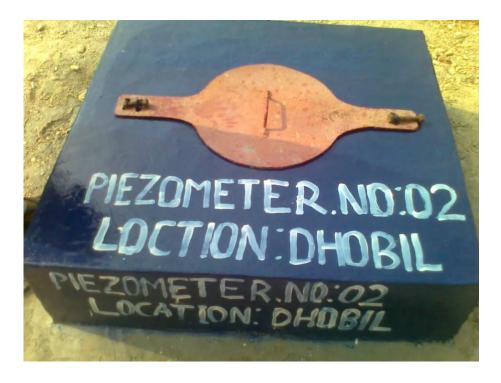
	Location of	Water level below the Ground Surface (in meters)				
Sl. No.	Piezometer	During Post Monsoon (November-2021)	During Winter (January-2022)			
1	Chiria Village	4.00	4.30			
2	Dhobil Village	3.35	3.50			



#### 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