SIX MONTHLY EC COMPLIANCE REPORT: Apr to Sept, 2023



SURJAGARH IRON ORE MINES LLOYDS METALS & ENERGY LTD.



LLOYDS METALS & ENERGY LTD. SURJAGARH IRON ORE MINES SURJAGARH, ETAPALI, GADCHIROLI, MAHAARASHTRA

NAME OF THE PROJECT: SURJAGARH IRON ORE MINES LLOYDS METALS & ENERGY LTD.

CLEARANCE LETTER NO. & DATE:

- 1. EC Identification no. EC23A001MH116618
- 2. MoEF&CC File no. J-11015/348/2005.IA(M) dt. 24/02/2023

MINES PRODUCTION CAPACITY: 10.0 MTPA (ROM)

PERIOD OF COMPLIANCE REPORT: Apr to Sept, 2023 Compliance Status of conditions imposed in the granted Environment Clearance of Surjagarh Iron Ore Mines of Lloyds Metals & Energy Ltd. for mining of iron ore with production capacity of iron ore : 10.0 MTPA (ROM), waste: 1.769 MTPA (Total Excavation: 11.769 MTPA) along with Crushing & Screening Plant in the mine lease area of 348.09 Ha located near village Surjagarh, Tehsil Etapali, Dist. Gadchiroli, Maharashtra.

SI. No.	Special Conditions		Compliance Status
i.	This Environmental Cleara	ance will be valid	We will abide by the condition and submit the
	upto 9 years as the life of	of the mine is 9	revised proposal of the resources for further
	years.		extension of mines life based on the approved
			mining plan.
ii.	EAC recommended for an	n amount of Rs.	The project is carrying out the implementation
	26.64/- Cr towards Reme	•	of Remediation plan, Natural Resource an
	Natural and Commu	•	Community Resource Augmentation plan i
	Augmentation plan to be	•	phased manner as per timeline. In line to th
	span of three years.		same, we have already spent an amount of Rs
		tural resource	24.77 Crores during the reporting period (t
	Augmentation plan ar	,	Sept, 2023).
	Resource Augmentation	•	
		are mentioned	
	below;		
	SI. Description	Estimated Cost (Rs. Crores)	
	1. Remediation Plan	6.53	
	2. Natural Resource	1.53	
	Augmentation Plan		
	3. Community Resource Augmentation Plan	15.58	
iii.	Total budgetary provision	with respect to	Bank guarantee of Rs. 26.64 Crores toward
	Remediation plan and	•	Remediation Plan and natural & Communit
	Community Resource Au		Resource Augmentation plan submitted at Th
	is Rs. 26.64/- Cr. The	•	Regional Officer, MPCB, Regional Office, 1
	Proponent shall be requi		Floor, Udyog Bhavan, Chandrapur - 44240
	bank guarantee of an		vide BG no. 0713623BG0000066 date
	26.64/- Cr towards Reme		31.01.2023.
		nity Resource	Annexure – 1.
	Augmentation plan with th	•	
	the grant of EC.		
iv.	Remediation plan shall be	e completed in 3	We are abiding by the said condition and th
	years whereas bank gua	rantee shall be	project is implementing the remediation pla
	for 5 years. The bank gu	uarantee will be	and Natural and Community Resourc
	released after successful	implementation	Augmentation Plan in phased manner as pe
	of the remediation plan a	and Natural and	the recommendation of EAC, MoEF&CC.
	Community Resource Aug	mentation Plan,	

Surjagarh Iron Ore Mines of Lloyds Metals & Energy Ltd. Iron ore production capacity - 10 MTPA

	and after the recommendation by regional office of the Ministry, Expert Appraisal Committee and approval of the Regulatory Authority.	
V.	The Project Proponent shall be required to remit the amount of Rs 5.48 Cr as per penalty provisions of SOP dated 07.07.2021 into the fund maintained by the concerned State Pollution Control Board. EC shall be issued on submission of proof regarding the same.	The project has paid the amount of Rs. 5,48,00,000/- in the shape of DD in favour of the Regional Officer, Maharashtra Pollution Control Board, Chandrapur bearing DD no. 262195 dt. 31.01.2023, accordingly EC is granted to the project proponent. Enclosed as Annexure – 2.
vi.	The Environmental Clearance will not be operational till such time the Project Proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2 August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.	Project is in complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2 August 2017.
vii.	State Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of judgment of Hon'ble Supreme Court dated the 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.	There is no such demand from the State Govt. w.r.t. this project since there is no such violation exists as per the judgment of Hon'ble Supreme Court dated the 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
viii.	The Project Proponent should install the continuous ambient air quality monitoring stations (CAAQMS) as per the scientific study and in consultation with CPCB/SPCB. The real time data so generated should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB	The project has already installed 3 no. CAAQM Station as per the scientific study & in consultation with MPCB, Maharashtra and real time data is being displayed digitally at the entry/ exist gate of the mines lease area for public domain and linked with MPCB Server. Photos of same enclosed as Photo 1 .
ix.	The Project Proponent needs to monitor the air quality, noise level and ground vibration during drilling and blasting at the edge of the mine, near the village, crusher and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Integrated Regional Office	The project is carrying out the air, water, noise level, blasting activity specified locations as per MOEF&CC and MPCB guidelines. The data so collected is being submitted to the IRO, MoEF&CC on regular intervals.

X.	The Project Proponent shall effectively utilize the low grade Iron ore.	The low-grade ore is effectively utilized having proper blending with high grade ores and exported / marketed accordingly
xi.	The Project Proponent has submitted the "Site Specific Wildlife Management Plan" to State Forest Department vide letter dated 23.12.2022. The instant EC shall be functional upon the proof of submission of funds for updated/ approved above said plan and its initiation/ commencement by Forest Department to IRO/ Ministry. Till the time "Site Specific Wildlife Management Plan" is approved, funds are deposited with State Govt. and plan is initiated/commenced, the project proponent shall restrict its production upto 3.0 MTPA.	The project has submitted the Site-Specific Wildlife Conservation Plan and the same got approved by the PCCF (Wildlife), Nagpur dt. 15.02.2023. Enclosed as Annexure – 3A . Based on the demand by the Forest Dept., we have paid the amount of Rs. 683.50 lakhs in favour of Deputy Conservator of Forest, Bhamragarh Forest Division, Allapali vide payment UTR no. KKBKR22023022407932990 dt. 24.02.2023. Enclosed as Annexure – 3B .
xii.	The Project Proponent should follow-up the status of implementation on Wildlife Management and Safety Plan from the Forest Officials and the same shall be submitted to the Ministry's Integrated Regional Office in the six monthly compliance report.	The Site Specific Wildlife Management Plan got approved by the PCCF (Wildlife), Nagpur dt. 15.02.2023 and payment of Rs. 683.50 lakhs is paid by the PP in favour of Deputy Conservator of Forest, Bhamragarh Forest Division, Allapali vide payment UTR no. KKBKR22023022407932990 dt. 24.02.2023. We have intimated the local DCF Office, Allapali for furnishing the implementation status of same, but there is no such response by the authority and the copy letters submitted before authority is attached. Annexure-4.
xiii.	The Project Proponent needs to install the cameras all around the mine lease area to identify and to ensure the movement of animals.	The project has installed cameras at the strategic locations all around the mines lease area to identify and to ensure the movement of animals. Details of same enclosed as Annexure-5 .
xiv.	The Project Proponent needs to establish the parks like butterfly park, biodiversity park etc., in the already identified land as committed by the Project Proponent before the EAC.	The project has surveyed and completed the biological assessment for the butterfly and biodiversity park in the Etapali vicinity in association with State Forest Dept. We have also done preliminary survey by engaging the Wildlife Experts, report attached as Annexure-6. Apart from that, we have also submitted Rs. 1.00 Crores to State Forest Dept. for implementation of same. We are also in continuous touch with State Forest Dept. for the development work, once its approved the work will be started.

XV.	The Project Proponent needs to implement the recommendations of the Slope stability study carried out by CSIR- Central Institute of Mining and Fuel Research, Dhanbad. The implementation status of the same shall be submitted to the Ministry's Integrated Regional Office (IRO) along with the six-monthly compliance report.	The project is implementing the recommendations of Slope Stability Study carried by CSIR-CIMFR, Dhanbad and the implementation status of same is being submitted to IRO, MOEF&CC on six monthly basis.
xvi.	The Project Proponent shall adhere to the recommendations of the Ground vibration study carried out by CSIR- Central Institute of Mining and Fuel Research, Dhanbad. The implementation status of the same shall be submitted to the Ministry's Integrated Regional Office (IRO) along with the six-monthly compliance report.	The project is implementing the recommendations of Ground vibration study carried by CSIR-CIMFR, Dhanbad and the implementation status of same is being submitted to IRO, MOEF&CC on six monthly basis. The blasting result of same found to be well within the norms, the reports of same attached as Annexure-7 .
xvii.	The Project Proponent needs to install the permanent water sprinklers along the haul road and the approach road. 10 nos. of fog canon/mist sprayer of at least 40 m throw shall be installed at various locations in the mine lease area. Effective dust suppression system shall be adopted at the transportation site and in the other parts of the mining lease to arrest the fugitive dust emission.	The project has installed 3100 M length of fixed sprinkling system all along the mines haul and approach roads. Photo enclosed. 10 Number of fogging type mist cannons are placed at various locations for effective dust suppression purposes within the mines lease area at transportation side and other areas. Photo enclosed as Photo #2 .
xviii.	The air pollution control equipment's like bag filters, vacuum suction hoods, dry	The project has installed bag filter systems in Crusher Plant and cold fog dust suppression system and hoods in screen plants. The project has also established necessary measures to avoid generation of fugitive dusts emissions by engaging mobile water sprinkling tankers and mist cannons. Photo enclosed as Photo #3 .
xix.	Vacuum cleaner for cleaning of dust from permanent haul road within the lease area and workshop for vehicle washing facility shall be provided.	The project has already engaged 1 no. road sweep cum vacuum clean machine for dust control measures on the mineral transportation roads. mist cannons. Photo enclosed as Photo #4. The project has also established a vehicle washing facility in the workshop for treatment of effluent water.

		Photo enclosed as Photo #5 .
XX.	The Project Proponent needs to install the proposed rooftop rainwater harvesting structure and additional rainwater harvesting structures within 6 months from the date of issue of this EC.	The project has implemented roof top rain water harvesting structures for Camp premises, workshop areas and Hospital buildings with proper recharge structures towards ground water recharge purposes. Photo enclosed as Photo #6 .
xxi.	The budget of Rs. 58.71 Crores to address the concerns raised by the public including in the public hearing to be completed within 3 years from the date of start of mining operations. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes.	The project is implementing the public hearing concerns in phased manner and the same will be completed within 3 years. However, during the reporting period the project has initiated the works like overhead drinking water facility, skill development center, Garment unit, Hospital, electricity to villages, employment etc. A detailed progress report is enclosed as Annexure-8
xxii.	The Project Proponent should adopt the proper mitigation measures as proposed under EMP with budgetary provision of Rs. 4.425 Crores. The adoption of mitigation measures and monitoring of the same as proposed in the EMP shall be done under the supervision of the qualified environmental personnel. The implementation status of the same shall be submitted to the Ministry's Integrated Regional Office.	The project is implementing different environmental safeguard measures w.r.t Air, Water, Soil, Noise and Waste management. The monitoring of the same is also carried as per EMP. The implementation status of same is also submitted to IRO, MoEF&CC on regular basis. Item wise mitigation measures with costs incurred for the same is enclosed as Annexure-9A. The project has also established Environment Cell with qualified personnel to look after the compliance management of the project. The org. structure is enclosed as Annexure-9B.
xxiii.	The Project Proponent should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup at site which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories/consultants. Any non- compliance or infringement should be reported to the concerned authority.	Presently, the project is carrying the environmental monitoring by engaging NABL and MoEF&CC accredited laboratories for monitoring of different Air, Water, Soil, Noise parameters etc. The project is also under process to establish the in-house environment laboratory for monitoring and measurement of same. The project has already set up an environment management cell having environment engineers, chemists, staffs etc. for monitoring of the environmental parameters.
xxiv.	The Project Proponent needs to complete the entire peripheral plantation under green belt, safety barrier plantation and	The project is carrying the plantation as per approved mining plan and gap filling plantation in safety zone areas, during reporting of FY

	gap plantation within three years from the start of mining operations. The project Proponent should plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting. Plantation shall be undertaken in consultation with the State Forest Department. The Project Proponent shall make the actual count on the saplings planted and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving the target survival rate shall be submitted to the Ministry's Integrated Regional Office.	2023-24, the project has planted 750 no. of saplings in safety zone areas. It also ensured healthy saplings of native species are planted. The project has also developed a captive Nursery within the ML area having capacity of 5000 nos. The project is also monitoring the survival of the plants and records are maintained. The project is also ensuring the survival of more than 95% with proper care like watering, manuring, weeding etc. The plantation status of the same is being submitted to IRO, MOEF&CC on regular basis. Annexure-10
xxv.	The Project Proponent needs to submit the action taken report on plantation, damage recovery, Natural Resource Augmentation Plan (NRAP), Community Resource Augmentation Plan (CRAP) annually to the Ministry's Integrated Regional Office which should be monitorable and verifiable. The period of addressing these issues is restricted to a period of 3 years.	The Project is abiding by the said condition and will submit the action taken report on plantation, damage recovery, Natural Resource Augmentation Plan (NRAP), Community Resource Augmentation Plan (CRAP) annually to the Ministry's Integrated Regional Office, Nagpur.
xxvi.	As committed by the Project Proponent, multi-specialty hospital shall be established.	The project has already constructed 30 bedded multi-specialty Hospital at Hedri village and the hospital has been commenced for public use. Photo attached as Photo #7.
xxvii.	The Project Proponent shall provide the solar pumps to the local farmers.	The project has already provided solar pumps to local farmers for their agricultural uses along with other agricultural equipment's.
xviii.	The Project Proponent shall explore the possibility of using electric/CNG/Solar based equipment's and machineries to reduce the diesel consumption	The project has already made the trail run of electric loader vehicle & dumpers in mining operations and based on the performance ordered for 30 numbers vehicle for use in mines. Apart from that, the roof top based solar power system work is under process for camp and office premises. Photos attached as Photo #8.
xxix.	Approval/ permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable. State Pollution	The project has already obtained the GW NOC from CGWA for drawing of the ground water quantity of 70 KLD vide CGWA approval no. CGWA/NOC/ MIN/ ORIG/ 2022/ 14843 dt.

	Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.	21.03.2022. Copy enclosed as Annexure-11.
XXX.	The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly.	The project is organizing employment-based apprenticeship / internship training programs every year with provision of stipend for the unemployed youths and programs for enhancing the skills of the local people for Plumbing, LMV Operator, HEMM Operator, Fitter, Electrician etc. However, the project has established a Skill Development Center with Industrial Security Academy, where local youths are trained and skilled to become Industrial Security guards and employed. Apart from that, local girls are also trained for operating LMV & HMV vehicles through simulation training and in-house driving skills, presently the lady drivers are operating LMV vehicles in mines. Details of same enclosed as Annexure-12.
xxxi.	The Project Proponent needs to obtain the permission for withdrawal of Surface water from the Department of Water Resources, Government of Maharashtra before start of mining operations of this instant EC.	The project has already obtained the surface water permission for withdrawal of the surface water Bande River from Dept. of Water Resources for 1200 KLD quantity of surface water. Permission copy attached as Annexure – 13 .
xxxii.	The Project Proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations, at the time of operation of mine and post mining operations. Regular surveillance shall be carried through regular occupational health check-up every year for mine workers. PP shall also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity.	The Project is periodically monitoring and maintaining the health records of the mine workers digitally. Regular surveillance is also carried through regular occupational health check-up as per DGMS guidelines. We have also organized number of Mega Medical camp for the benefit of the local people and also the monitoring the health impacts due to mining activity. The details of occupational health check up is enclosed as Annexure 14A and Health Camp as Annexure 14B .
xxiii.	The mining lease holder shall, after ceasing mining operations, under take re- grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to condition which is fit for growth of fodder, flora and fauna etc. The implementation report of the above said	We will abide by the said condition and undertake the re-grassing of the mined out areas as per approved mining plan.

	condition shall be submitted to the Ministry's Integrated Regional Office	
xxiv.	The Project proponent shall take necessary other clearances/permissions under various Acts and Rules if any, from the respective authorities / department.	We are abiding by the said condition and the project has obtained the all the clearances from the respective authorities.

B. Standard Conditions

I. Statutory Compliance

SI. No.	Condition	Action plan / Compliance Status
1.	This environmental clearance (EC) is subject to orders / judgement of Hon'ble Supreme Court of India, Hon'ble NGT and any other court of Law, Common Cause conditions as may be applicable.	We are abiding the said condition.
2.	The Environmental Clearance will not be operational till such time the Project Proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2 August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.	
3.	State Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of judgment of Hon'ble Supreme Court dated the 2ndAugust 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.	We are abiding the said condition.
4.	The PP shall follow the mitigation measures provided in MoEF&CC's OM no. Z-11013/57/2014-IA.II 9M) dt. 29.10.2014, titled "impact of mining activities on habitations – issues related to the mining projects wherein habitation & villages are the part of the mine lease areas or habitation and villages are surrounded by the mine lease area"	We are abiding by the said condition.

5.	A constrained letter will be marked	Its complied with submission of EC letters to
5.	A copy of clearance letter will be marked to concerned Panchayat/local NGO, if	Its complied with submission of EC letters to local Panchayat /NGOs etc.
	any, from whom suggestion/	Submission copy of same enclosed as
	representation has been received while	
	processing the proposal.	
6.	State Pollution Control Board should	Its being complied by MPCB.
	display a copy of the clearance letter at	
	the Regional office, District Industry	
	Centre and Collector's office/ Tehsildar's	
	Office for 30 days.	
7.	The project authorities should advertise	The project has advertised in two local
	at least in two local newspapers widely	newspapers widely circulated daily i.e. "The
	circulated, one of which shall be in the	Lokmat" (largest circulated Marathi daily) and
	vernacular language of the locality	• • • • •
	concerned, within 7 days of the issue of	
	the clearance letter informing that the project has been accorded environmental	been accorded EC. The details of same is also
	clearance and a copy of the clearance	submitted to IRO, MoEF&CC, Nagpur vide our letter dt. 04.03.2023.
	letter is available with the State Pollution	Copy of same enclosed as Annexure – 16.
	Control Board and also at web site of the	
	Ministry of Environment, Forest and	
	Climate Change at	
	(www.parivesh.nic.in). A copy of the	
	same should be forwarded to the	
	Regional Office for compliance and	
	record.	
8.	The PP shall inform the MoEF&CC for	We are abiding by the said condition.
	any change in ownership of the mining	
	lease. In case there is any change in	
	ownership or mining lease is transferred,	
	the PP needs to apply for transfer of EC	
	as per provisions of the para 11 of EIA	
	Notification, 2006 as amended from time	
	to time.	

ii. Air quality monitoring and preservation

	The Dustant Dusman and shall install a	Manage and the state of the second stress and
9.	The Project Proponent shall install a	We are abiding the said condition and
	minimum of 3 online AAQ station with 1	installed 3 no. of CAAQMS station covering
	in upwind and 2 in downwind direction	all the aspects as specified in upwind &
	based on long term climatological data	downwind directions such that an angle of
	about wind direction such that an angle	120 degree is maintained. The ambient air
	of 120 deg. is made between monitoring	quality is also monitored at prominent places
	locations to monitor critical parameters,	like office, building, canteen etc. as per the
	3 1	site condition to ascertain the exposure
	•	characteristics at specific places. The above
	and SO2 etc. as per the methodology	data is also digitally displayed in front of the

	mentioned in NAAQs notification,	main gate of the mine site.
	,	Photo attached as Photo #1.
	18.11.2009 covering the aspects of	
	transportation and use of heavy	
	machineries in the impact zone. The	
	ambient air quality shall also be	
	monitored at prominent places like office,	
	building, canteen etc. as per the site	
	condition to ascertain the exposure	
	characteristics at specific places. The	
	above data shall be digitally within 3	
	months in front of the main gate of the	
	mine site.	
10.	Effective safeguard measures such as	The project has installed 3100 m length of
10.	regular water sprinkling shall be carried	fixed sprinkling system on the mines haul
	•	
	out in critical areas prone to air pollution	roads, engaged 5 X 20, 7 X 10, 2 X 8 KL
	and having high levels of PM10 and	capacity mobile water tanker sprinklers for
	PM2.5 such as haul road, loading and	dust suppression purposes of the other part
	unloading point and transfer points. The	of the mines lease area.
	fugitive dust emissions from all the	All the crusher and screen plants are
	sources shall be controlled regularly by	equipped with dry fog system and hoods over
	installation of required equipment's /	the conveyor belts. All the monitoring test
	machineries and preventive	results confirms very well within the norms.
	maintenance.	Photo enclosed as Photo # 2 & 3.
	Use of suitable water soluble chemical	
	dust suppressing agents may be	
	explored for better effectiveness of dust	
	control system. It shall be ensured that	
	air pollution level conform to the	
	standards prescribed by the MoEF&CC/	
	CPCB.	
III. Wate	er quality monitoring and preservation	
11.	In case, immediate mining scheme	There is no intersection of the ground water
	envisages intersection of ground water	table as the ultimate mining working is at 460
	table, then EC shall become operational	RL and ground water table exists at 260 RL.
	after receiving formal clearance from	The and ground water table exists at 200 He.
	CGWA. In case mining operation	
	5 1	
	involves intersection of ground water	
	table at a large stage, then PP shall	
	ensure that prior approval from CGWA &	
	MOEF&CC is in place before such	
	mining operations. The permission for	
	intersection of GW table shall be	
	essentially be based on detailed hydro-	
	geological study of the area.	
12.	PP shall regularly monitor and maintain	We are regularly monitoring the ground water
	records wrt Ground water level and	level & quality analysis in and around the
	quality in and around the mine lease by	mines lease area. The water level is being

	establishing a network of existing wells as well as new piezometer installations during the mining operation in consultation with CGWA / SGWD. The report on changes in ground water level and quality shall be submitted on 6- monthly basis to the RO of Ministry, CGWA and SGWD / SPCB.	monitored by establishing 1 no. piezometer. If any changes in GW level and quality we will inform the authority accordingly. Ground water quality report attached as Annexure-17A , level data as Annexure – 17B, Piezometric data as Annexure 17C .
13.	The PP shall undertake regular monitoring of natural water resources / springs and perennial nalalhs existing / flowing in and around the mines lease including U/S and D/S. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and or alteration be made to water bodies during mining operations without justification and prior approval of MoEF&CC. the monitoring of water courses / bodies existing in lease area shall be carried out four times in a year viz. Pre –monsoon (April-May), Monsoon (August), Post monsoon (November) and Winter (January); and the record of monitored data may be sent regularly to Ministry of Environment and Forests and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, SPCB and CPCB clearly showing the trend analysis on six monthly basis.	We are abiding by the said condition and carrying out the monitoring of the water bodies as per the guidelines. There is no obstruction of water bodies within the ML area. The project is also carrying flow rate and quality analysis on regular basis as per specified schedule. The reports of same are also submitted to the authorities on six monthly basis. Surface water quality analysis report enclosed as Annexure-18 .
14.	Quality of polluted water generated from mining operations which include COD in mines run off, acid mine drainage and metal contamination in run off shall be monitored along with TSS. The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board at a suitable location near the main gate of the company. The circular no. J-	The quality test of water generated from mines is being carried on regular basis having number of parameters. The monitored data is being displayed on electronically and displayed at mines entry gate for public domain as well as in the company website i.e. <u>www.lloyds.in</u> Photo enclosed as Photo #9 & website data upload as Annexure # 19 .

	201112/1/2006-IA.II9M) dated	
	27.05.2009 issued by MoEF&CC may	
	also be referred in this regard.	
15.	PP shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground resources in the area in consultation with the Regional Director, Central Ground Water Board / SGWD. A report on amount of water recharged needs to be submitted to RO, MoEF&CC annually.	The project has already implemented rain water harvesting structures in mines premises having number of Check dams and settling cum harvesting ponds at the strategic location of the project area towards augmentation of the ground water resources. Photo enclosed as Photo # 10 .
16.	Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the standards prescribed from time to time. The standards shall be prescribed through CTO issued by the concerned SPCB. The workshop effluent shall be treated after its initial passage through Oil and grease trap.	The project has established oil & grease trap system having oil skimmer for treatment of workshop effluents at the Maintenance Workshop Area. The treated water is being analyzed and test result found to be well within the norms. Photo enclosed as Photo #11 .
17.	The water balance / water audit shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of MoEF&CC and SPCB / Committee.	We will abide by the said condition and the water balance / water audit will be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of MoEF&CC and SPCB / Committee.

IV. Noise and vibration monitoring & prevention

18.	The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.	The project is monitoring the peak particle velocity as per DGMS guidelines periodically for each blasting activity and there is no presence of any village within 1.75 Kms from the lease boundary. The monitoring results found are very well within the norms. Report annexed as Annexure-7 .
19.	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPE's must ensure that the biological clock of the villages is not disturbed; by orienting the	1.75 Kms from lease boundary. No lighting system is facing towards the villages, so there is no disturbance of the biological clock of the villagers. The mine is also carrying the controlled blasting, so there is no impact of dust and noise on the villagers due to blasting.

	floodlights/masks away from the villagers	
	and keeping the noise levels well within	
	the prescribed limits for day light/night	
	hours.	
20	The PP shall take measures for control of	Workers angeged in Operations are provided
20.		Workers engaged in Operations are provided
	noise levels below 85 dBA in the work	with earplugs/muffs & other safety gadgets,
	environment. The workers engaged in	besides this acoustic enclosure for all
	operations of HEMM, etc. Should be	machine operating cabins are provided. It is
	provided with ear plugs/muffs. All	being monitored by Noise Level Meter; the
	personnel including labourers working in	results reveals very well within norms.
	dusty areas shall be provided with	Noise level report as Annexure-20 & use of
	protective respiratory devices along with	PPEs by workers / employees as Photo #12.
	adequate training, awareness and	
	information on safety and health aspects.	
	•	
	The PP shall be held responsible in case	
	it has been found that workers /	
	personals / labourers are working without	
	personal protective equipment.	
V .	Mining Plan	
21.	The PP shall adhere to approved Mining	The PP is adhering according to approved
	Plan, inter alia including total excavation,	Mining Plan, inter alia including total
	mining technology, lease area, scope of	excavation, mining technology, lease area,
	working.	scope of working as per approved by Indian
	working.	Bureau of Mines (IBM), Gol.
	The level use of the miner lager and at	
22.	The land use of the mines lease area at	The project is working as per the approved
	various stages of mining scheme as well	mining plan. There is no such back filling
	as at the end of life shall be governed as	proposal in the scheme of mines until FY
	per the approved mining plan. The	2026-2027.
	excavations-a-vis backfilling in the mine	
	lease area and corresponding	
	afforestation to be raised in the reclaimed	
	area shall be governed as per approved	
	mining plan. PP shall ensure the	
	monitoring and management of	
	rehabilitated areas until the vegetation	
	-	
	becomes self-sustaining. The compliance	
	status shall be submitted half yearly to	
	the MoEF&CC and its concerned	
1		
	Regional Office.	
VI. Lan		
VI . Lan 23.	Regional Office.	The over burden is stacked at the ear marked
	Regional Office. d reclamation	The over burden is stacked at the ear marked areas within the mines lease area. The top
	Regional Office. d reclamation The over burden, waste and topsoil generated during the mining operations	areas within the mines lease area. The top
	Regional Office. d reclamation The over burden, waste and topsoil generated during the mining operations shall be stacked at ear marked OB dump	areas within the mines lease area. The top soil generated is utilized for plantation
	Regional Office. d reclamation The over burden, waste and topsoil generated during the mining operations shall be stacked at ear marked OB dump sites only and it should not be kept active	areas within the mines lease area. The top soil generated is utilized for plantation purposes. The OB / waste dump / top soil
	Regional Office. d reclamation The over burden, waste and topsoil generated during the mining operations shall be stacked at ear marked OB dump sites only and it should not be kept active for a long period of time. The physical	areas within the mines lease area. The top soil generated is utilized for plantation purposes. The OB / waste dump / top soil dump like height, width and angle of slope
	Regional Office. d reclamation The over burden, waste and topsoil generated during the mining operations shall be stacked at ear marked OB dump sites only and it should not be kept active	areas within the mines lease area. The top soil generated is utilized for plantation purposes. The OB / waste dump / top soil

	slope shall be governed as per the	DGMS. The dump slopes are also covered
	approved mining plan and the guidelines / circulars issued by DGMS. The top soil shall be used for land reclamation and planation.	with Coir mat and grass seed applications. The toe of dump is provided with gabion box type retaining walls followed by garland drains. Photo enclosed as photo #13 .
24.	The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off, the selection of local species regulates climatic parameter and help in adaptation of plant species to the microclimate. The Gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/compactors thereby ensuring proper filling/ leveling of dump mass. In critical area, use of geo textiles/geo-membranes/clay liners/Bentonite etc. shall be undertaken foe stabilization of the dump.	The slope of dumps are properly terraced and stabilized with coir mat and grass seed applications. The dumps are compacted with the help of dozer/compactors thereby ensuring proper filling/ leveling of dump mass. In critical area, geo textiles/ geo- membranes are used for stabilization of the dumps. Photo enclosed as Photo # 14 .
25.	Catch drain, settling tanks and siltation ponds of appropriated size shall be constructed around the mine working, minerals yards and top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/River/Ponds etc) The collected water should be utilized for watering the mine, area, roads, green belt development, Plantation etc, The drains/ sedimentation sumps etc, shall be de-silted regularly, particularly after monsoon season, and maintained properly.	In the entire area, where ever possibility of wash off, flow of sediments etc. is anticipated retaining wall, garland drain and check dam have been. The Retaining wall followed by garland drains, Check dams, Sedimentation pit, silting pit structures got implemented and being de-silted after each monsoon based on the annual average rain fall data. Beside this no's of water check dam cum reservoir has been constructed. Numbers of catch drains and sedimentation pits have been constructed around the mines working area in order to avoid the silt entry into first and second order streams as well as nearby water bodies. Time to time de-silting activity is being followed Photo enclosed as Photo #15.
26.	Check dams of appropriated size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 year data) and	In the entire area, where ever possibility of wash off, flow of sediments etc. is anticipated retaining wall, garland drain and check dam have been. The Retaining wall followed by garland drains, Check dams, Sedimentation pit, silting pit structures got implemented and being de-silted after each monsoon based on the annual average rain fall data. Beside this

VI.	maximum discharge in the mine and its adjoin area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/sit materials. The sedimentation pits/sumps shall be constructed at the corner of the garland drain.	no's of water check dam cum reservoir has been constructed. Numbers of catch drains and sedimentation pits have been constructed around the mines working area in order to avoid the silt entry into first and second order streams as well as nearby water bodies. Time to time de-silting activity is being followed. Photo enclosed as Photo # 13, 14, 15.
27.	No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers. [If	
28.	applicable in case of road transport. The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of	The project has installed 3100 m length of permanent fixed water sprinkling system on the mines haul roads. Engaged 5 X 20, 7 X 10, 2 X 8 KL mobile water tanker sprinklers for dust suppression purposes of the other part of the mines lease area. Installed 10 nos. of mist cannon for dust suppression purposes

	dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipment's like bag filters, vacuum suction hoods, dry logging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.	at the dust prone areas. All the crusher and screen plants are equipped with dry fog system and hoods over the conveyor belts. All the monitoring test results confirms very well within the norms. Photo attached as Photo #2 &3 .
29.	The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.	We are carrying out the gap filling plantation in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. During FY 2023-24, 2500 nos. of plant saplings planted as gap filling in the mines safety zone areas. Photo attached as Photo #17 .
30.	The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.	The project is working as per the approved mining plan. There is no such back filling proposal in the scheme of mines until 2027 as per approved Mining Plan by IBM.
31.	The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land	The total mines lease area is Forest land, there is no occurrence of the any grazing land within the ML area.

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	with a view to compensate those areas which are coming within the mine lease. The development of such grazing land	
	shall be done in consultation with the	
	State Government. In this regard, Project Proponent should essentially implement	
	the directions of the Hon'ble Supreme	
	Court with regard to acquisition of	
	grazing land. The sparse trees on such	
	grazing ground, which provide mid-day	
	shelter from the scorching sun, should be scrupulously guarded/ protected against	
	felling and plantation of such trees	
	should be promoted.	
IX. Pub	lic Hearing and human health issues	
32.	Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, créche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.	We have made the temporary provision for the housing for workers/labors outside the lease area with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche for kids etc. We have also installed 110 KLD STP for treatment of domestic waste water to avoid any contamination of GW. Photo of STP attached as Photo #18 .
Α	Corporate Environment Responsibility (
A 33.	The Project Proponent shall submit the	
33.	The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA. III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.	 A time bound action plan is submitted for the activities committed during public consultation and as discussed by the EAC. We are carrying the committed works in phased manner; Construction of 30 bedded Hospital work is completed, English medium residential school work is under progress For skill development training to locals, we have trained more than 647 locals in different skills like Driving, Plumbing, Fire Fighting, Auto Electrician, Mechanical, Lathe, Tyre Fitter, Wheel Loader etc. Solar based pumps provided to farmers Tribal bhawan work is under progress

		- Village road augmentation work is under progress.			
XI. Misc	XI. Miscellaneous				
34.	The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC	The digital map of the entire lease area will be submitted once in 5 years for monitoring of land use pattern IRO, MoEF&CC, Nagpur.			
35.	The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work				
36.	The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC &its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.	submitting the six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the			
37.	A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.	A separate 'Environmental Management Cell' with suitable qualified manpower set-up under the control of a Senior Executive. The Senior Executive is directly reporting to Head of the Organization. The organization chart of the same attached as Annexure #9B.			
38.	The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.	ready to extend the full support while visit of			
39.	In pursuant to Ministry's 0.M No 22- 34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake re-grassing the mining area and any other area	We are abiding by the said condition.			

	which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.	
40.	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection	We are abiding by the said condition.
41.	Concealing factual data failure to comply with any or submission of false/ fabricated data and of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986	We are abiding by the said condition.