

Ref. No: AMNS/ Sagasahi/725 Dated 30.11.2022

The Director (S), Integrated Regional Office (IRO), Ministry of Environment, Forest & Climate Change, A-31, Chandrasekharpur, Bhubaneswar

Sub: Half-yearly Environmental Clearance Compliance Report of Ghoraburhani - Sagasahi Iron Ore Mining Project of ArcelorMittal Nippon Steel India Limited for production of 7,162,538 TPA iron ore (ROM), 18750 TPA Topsoil and 2,868,896 TPA 08/SB/IB (Total excavation: 1,00,50,184 TPA) along with Crushing & Screening Plant and Beneficiation Plant with capacity of 6.7 Million TPA (1250 TPH) Capacity over ML area of 139.165 Ha the period April 2022 to Sept. 2022.

Ref: MoEF&CC Environment Clearance letter No. J-11015/192/2016-IA.II (M) dated 28.05.2020.

Dear Sir,

This is in reference to the above subject, we would like to be inform you that, the mines has started its operation from 9th September 2021.In this regard we are submitting the six monthly Environmental Clearance compliance report in soft copy by email - roez.bsr-mef@nic.in and the same will be uploaded in our company website i.e. www.amns.in with comprehensive data analysis reports (supporting photographs and monitoring reports) for the period **April 2022 to Sept. 2022** in respect of Ghoraburhani - Sagasahi Iron Ore Mining Project of ArcelorMittal Nippon Steel India Limited.

This is for your kind information, please.

Thanking you,

Yours truly,

For and on behalf of ArcelorMittal Nippon Steel India Limited

Authorized Signatory

Ramakrishna Chinnamsetty

Head of Mining & Business Development.

Encl.: As above

Copy to:

- 1. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum Office Complex, East Arjun Nagar, Delhi 110032
- 2. The Chairman, State Pollution Control Board, Orissa, A/118, Nilakantha Nagar, Unit VIII, Bhubaneswar 751012, Email paribesh1@ospcboard.org
- 3. The Regional Director, Central Ground Water Board, Government of India, South Eastern Region, Bhubaneswar 751030, Email: rdser-cgwb@nic.in

Page 1 of 1









SL. NO	SPECIFIC CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
1	This EC for production of 7,162,538 TPA iron ore (ROM), 18750 TPA Top soil and 2,868,896 TPA OB/SB/IB (Total excavation: 1, 00,50,184 TPA) along with Crushing & Screening Plant and Beneficiation Plant with capacity of 6.7Million TPA (1250TPH) Capacity in the mine lease area of 139.165 ha shall be operational after submission of an undertaking through affidavit to MoEF &CC within 15 days of receipt of the EC letter, for compliance of all the conditions prescribed herein.	The Project Proponent has submitted an undertaking through affidavit to MoEF & CC for compliance of all the conditions stipulated in the environment clearance letter. Copy enclosed as Annexure-I
2	Till the construction of beneficiation plant in the mine lease area, the transportation of ore from mine to Dabuna Beneficiation plant by road is allowed only for 3 years. No more road transportation is allowed after 3 years without permission of the Ministry. From 4 th year onwards, the ore should be transported only through proposed slurry pipeline or as per the guidelines of CSIR-NEER's recommendation. PP. shall inform Ministry for any deviation in the proposed mode of transport of minerals in case the timeline is not complied with.	The initial work has been started. The Slurry pipe line survey Is under progress. Hence the project will inform Ministry for any deviation in the proposed mode of transport of minerals in case the timeline is not complied with.
3	Accessing the forest land for activities shall be applicable after getting Stage-II FC approval. No mining activity shall be carried out without obtaining Stage-II of Forest Clearance for the forest land involved in the project.	The project has obtained Stage –II of Forest Clearance vides letter No 8-55/2018/FC dt. 15.12.2020 over 120.838 Ha of forest land involved in the project towards mining activity. Copy enclosed as Annexure -II.
4.	Installation of crusher and screening plant with proposed capacity only will be allowed. No further installation of crusher and screening plants are allowed without permission of the Ministry.	The Project Proponent is abiding by the said condition and installation of dry fog system for dust suppression purpose. No further installation of crusher and screening plants shall be done without permission of the Ministry.
5	PP shall construct the tailing pond as committed and make regular maintenance for the same.	Project proponent will construct the tailing pond as committed during the 4th year of mining operation and construction of beneficiation plant as proposed. The applicable regular maintenance for the same will be followed as per the prescribed guidelines of consent to operate.

SL. NO	SPECIFIC CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
6	PP shall make the rain water harvesting system as committed before the EAC.	Project proponent has planned for construction of the rain water harvesting system as committed before the EAC. One rain water harvesting recharge pit constructed. In due course of time the measures shall be under taken in the forms of roof top rain water harvesting in base camp & office for roof top rain water harvestings purpose well as in the form of settling ponds and check dam/check weirs at strategic points of operational core areas as applicable.
7.	PP shall construct garland drains with protective bunds around excavated area, to avoid entrance of surface run off into pit and mixing with ground water. Furthermore, PP shall make garland drains/storm water drains along with siltation/settling tanks at regular interval around the active mine pits through proper plan which follow the natural slope of surface run off and/or to avoid its mixing with groundwater.	There is no such ground water accumulation in the mine operational area. It will be complied in due course of mine development if applicable. However, the mines have developed 500 MTR garland drains at the appropriate locations. Photo enclosed as Photo # 1
8	PP shall make check dams to prevent sedimentation/siltation of natural water courses.	The project has constructed check dams & check weirs in different locations to prevent the sedimentation or siltation of natural water course. The PP. has planned to construct number of check dams in south pit area as per approved mining plan. Photo enclosed as Photo # 2
9	PP shall make progressive green belt and plantation like bench plantation and also make plantation mineral storage, top soil stack, road, magazine and other places as committed.	Project Proponent has planted 10970 no's as saplings in native species. During FY 2022-23 1700 no's sapling have been planted in safety zone areas and 185 no's in outside ML area towards the development of progressive green belt. Photo of planation is enclosed as Photo # 3(A) , (B), (C) & (D)
10	PP shall comply all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes.	Project proponent is compiling all the action plans made for public concerns followed by its regular maintenance along with the record of progressive activity outcomes.

SL. NO	SPECIFIC CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
11	The EC is subject to outcome of W .P.(C) No. 9247/2018 before Hon'ble High Court of Odisha.	,

B. Recommendation of CSIR-NEERI Report on "Carrying Capacity Study for Environmentally Sustainable Iron and Manganese ore Mining Activity in Keonjhar, Sundargarh and Mayurbhanj districts of Odisha State: The committee has also deliberate the various specific recommendations of carrying capacity study report conducted by CSIR-NEERI w.r.t. mining proposal of iron ore and/or manganese in the state of Odisha. There are recommendation which needs to be implemented by the State Govt. of the carrying capacity study report, the Committee has also recommended the following specific conditions viz.

SL. No.	SPECIFIC CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
1)	Project Proponent and Department of Steel & Mines, Govt. of Odisha shall ensure the implementation of recommendations of carrying capacity study report conducted by CSIR-NEERI w.r.t. mining proposal of Iron Ore and/or manganese in the State of Odisha.	Project Proponent is implementing the recommendations of carrying capacity study report conducted by CSIR- NEERI.
2)	Department of Steel & Mines, Govt. of Odisha should prepare 5 years regional plan for annual iron ore requirement from the state, which in turn shall be met from different mines/zones (e.g. Jada, Koira.) in the state. Accordingly, sustainable annual production (SAP) for each zone/mine may be followed adopting necessary environmental protection measures.	Department of Steel & Mines,Govt. of Odisha will do the needful .
3)	Project Proponent shall construct the cement concrete road from mine entrance and exit to the main road with proper drainage system and green belt development along the roads and also construction of road with minimum 300 m inside the mine. This should be done within one year for existing mines and new mine should have since beginning. The Department of Steel &Mines,	A cement concrete road is running through the Mining Lease which has divided Mining into Pit 1 and Pit This road will be connected to both Pit 1 and Pit 2 through a 9 m wide cement concrete Road, which will serve as two way movement of vehicle. The construction of the same is under process. The approx. length of this connecting pucca road will be 300 m inside the mines. Besides drainage channel will be made on either side of concrete road and green belt plantation will be developed and maintained.

	Govt. of Odisha should ensure the compliance and should not issue the Mining Permits, if mine lease holder has not constructed proper cement concrete road as suggested. This Environmental Clearance for the expansion project shall be operated only after the compliance of the above mentioned specific condition.	
4)	The Committee observed that as per there commendations of NEERI report the PP needs to do regular vacuum cleaning of all mineral carrying roads aiming at "zero dust re-suspension" within 3 months. This Environmental Clearance for the expansion projects shall be operated only after the compliance of the above mentioned specific condition.	Vacuum cleaners is planned for cleaning of all mineral carrying roads inside ML area including road passing centrally through the mining Lease and also for the proposed cement concrete road with estimated budget has been earmarked for procurement of 2 nos. Vacuum cleaners for the mine as well as their Opex for first 5 years.
5)	Project Proponent shall monitor the environmental quality parameters as per EC and CTE/CTO conditions, and implementation of suggested measures for control of road dust and air pollution. Odisha State Pollution Control Board has to ensure the compliance of CTE / CTO. Regional office of the MoEF & CC, Bhubaneswar shall monitor the compliance of the EC conditions. Regional office of the Indian Bureau of Mines (IBM) shall monitor the compliance of mining plan and progressive mine closure plan. Any violation by mine lease holder may invite actions per the provisions of applicable Acts.	The environmental quality parameters are being carried out as per the EC and CTE/CTO conditions. The project has taken measures for control of road dust and air pollution by engaging number of water tankers for sprinkling purposes and compliances of EC and mine plan conditions. Photo enclosed as Photo # 4(A)&(B)
6)	Project Proponent shall ensure the compliance of Suggested Ore Transport Mode (SOTM) with association of the State Government of Odisha. All existing mines should ensure adoption of SOTM within next 5 years. New mines or mines seeking expansion should incorporate provision of SOTM in the beginning it self, and should	Project proponent shall follow the suggested Ore Transport Mode (SOTM) in association with Government of Odisha within the stipulated time frame.

have system in place within next 5 years.	
The State Govt. of Odisha shall ensure dust free roads in mining areas wherever the road transportation of mineral is involved. The road shoulders shall be paved with fence besides compliance with IRC guidelines. All the roads should have proper drainage system and apart from paving of entire carriage width the remaining right of way should have native plantation (dust capturing species). Further regular maintenance should also be ensured by the Govt. of Odisha. Progress on development of dust free roads, implementation of SOTM, increased use of existing rail network ,development of additional railway network/conveyor belt/ pipe lines etcshall be submitted periodically to Regional office of the MoEF &CC.	Department of Steel & Mines, Govt. of Odisha will do the needful. In addition, the project is carrying out regular water sprinkling on ore transporting road. Pot holes are repaired on regular basis. Photo enclosed as Photo # 5
Project Proponent shall develop the parking plazas for trucks with proper basic amenities/ facilities inside the mine. This should be done within one year for existing mines and new mines should have since beginning. This Environmental Clearance for the expansion project shall be operated only after the compliance of the above mentioned specific condition. Department of Steel & Mines shall ensure the construction of NH 215 as minimum 4 lane road with proper drainage system and plantation and subsequent regular maintenance of the road as per IRC guidelines. Construction of other mineral carrying roads with proper width and drainage system along with road side plantation to be carried out. This shall be completed	A Parking Plaza with basic amenities has been planned adjacent to mine access road & will be constructed soon. Department of Steel & Mines, Govt. of Odisha will do the needful.
within 2 Years. Regular vacuum cleaning of all mineral carrying roads aiming at	Vacuum cleaners is planned for cleaning of all mineral carrying roads inside ML area including

_		ro -Roida, Dist Suildergaill
	"Zero Dust Re-suspension" shall be	road passing centrally through the mining Lease
	adopted by PWD/NHAI/ Mine Lease	and also for the proposed cement concrete road
10)	Holders within a time Period of 3	& an estimated budget has been ear marked for
10)	months for existing roads. This	procurement of 2 no's Vacuum cleaners for the
		•
	Environmental Clearance for the	mine as well as their Opex for first 5 years.
	expansion project shall be operated	
	only after the compliance of the	
	above mentioned specific condition.	
	In case the total requirement of iron	Department of Steel & Mines, Govt. of Odisha will
	ore exceeds the suggested limit for	do the needful.
	that year, permission for annual	do tilo fiocalai.
44)	production by an individual mine	
11)	may be decided depending on	
	approved EC capacity (for total	
	actual dispatch)and actual	
	production rate of individual mine	
	during last year or any other criteria	
	set by the State Govt., i.e. Dept. of	
	Steel & Mines. Department of Steel	
	and Mines in consultation with	
	Indian Bureau of Mines-RO should	
	prepare in advance mine-wise	
	annual production scenario so that	
	demand for iron ore can be	
	anticipated, and actual	
	production/dispatch does not	
	·	
	exceed the suggested annual	
	production.	
	R&D studies towards utilization of	A Preliminary bench scale study has already been
	low-grade iron ore should be	done through IMMT using the available Core
	conducted through	Samples. Based on that, the Iron ore
	research/academic institutes like	beneficiation plant is proposed which will come
	IMMT, Bhubaneswar, NML,	into operation from 4 th year onwards.
	Jamshedpur, and concerned	·
	metallurgical departments in IITs,	
	NITs etc., targeting full utilization of	
12)		
12)	low-grade iron ore(Fe content up to	
	45% by 2020 and up to 40% by	
	2025). In fact, lifecycle assessment	
	of whole process including	
	environmental considerations	
	should be done for techno-	
	economic and environment viability.	
	R&D studies on utilization of mine	
	waste water having high	
	concentration of Fe content for	
	different commercial applications in	
		l l
	industries such as cosmetics,	
	industries such as cosmetics,	

	At Ghorabamani	PO –Koida, Dist.: Sundergarh
	Responsibility: IBM, Dept. of Steel &	
	Mines, Individual Mine Lease	
	Holders.	
	The mining activity in Joda-Koira	Department of Steel & Mines,Govt. of Odisha will
	sector is expected to continue for	do the needful.
	another 100 years, therefore, it will	
	be desirable to develop proper rail	
	network in the region. Rail transport	
	shall not only be pollution free	
	mode but also will be much	
13)	economical option for iron ore	
10)	transport. The rail network and/or	
	•	
	conveyor belt system up to public	
	railway siding needs to be created.	
	The total length of the conveyor belt	
	system/ rail network to be	
	developed from mines to nearest	
	railway sidings by 11 mines in Jada	
	region is estimated to be about 64	
	km. Similarly, in Koira region, total	
	length of rail network/ conveyor	
	system for 8 mines (under SOTM 1	
	&2) is estimated to be around 95	
	km. Further, it is suggested to	
	develop a rail network connecting	
	Banspani (Joda region) and Roxy	
	railway sidings in Koira region.	
	Responsibility: Dept. of Steel	
	&Mines, Govt. of Odisha and	
	Concerned Mines along with Indian	
	Railways. Time Period: Maximum 7	
	years (by 2025). The Department	
	of Steel &Mines, Govt. of Odisha	
	should follow-up with the	
	concerned Departments and	
	railways so that proposed proper	
	rail network is in place by 2025.	
	State Govt. of Odisha shall make all	Department of Steel & Mines, Govt. of Odisha will
	efforts to ensure exhausting all the	do the needful.
	iron &manganese ore resources in	
	the existing working mines and from	
14)	disturbed mining leases/zones in	
	Joda and Koira region. The criteria	
	suggested shall be applicable while	
	suggesting appropriate lease area	
	and sustainable mining rate.	
	Responsibility: Dept. of Steel &	
	Mines, Govt. of Odisha.	
	Mining Operations/Process	i) Appropriate Mining Process and machineries
	Related: Project Proponent shall	have been deployed adhering to approved mining
	-	

STATUS OF ENVIRONMENTAL CLEARANCE CONDITIONS Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd.,

At- Ghoraburhani, PO -Koida, Dist.: Sundergarh

implement the following mitigation measures: (i) Appropriate mining process and machinery (viz. right capacity, fuel efficient) should be selected to carry out various mining operations that generate minimal dust/air pollution, noise, wastewater and solid waste. e.g. drills should be operated with extractors ore quipped with water injection svstem. (ii)After commencement minina operation. a study should be conducted to assess and quantify emission load generation (in terms of air pollution, noise, waste water and solid waste)from each of the mining activity (including transportation) on annual basis. Efforts should be made to further eliminate/ minimize generation of air pollution/dust. noise. wastewater. solid generation waste successive years through use of better technology. This shall be ensured by the respective mine holders. (iii)Various lease machineries/equipment selected (viz. dumpers, excavators, crushers, screen plants etc.) and transport means should have optimum fuel/power consumption, and their fuel/power consumption should be recorded on monthly basis. Further, inspection and maintenance of all equipment/ machineries/ the should vehicles be transport followed as per manufacturer's instructions/ recommended time schedule and record should be maintained by the respective mine lease holders. (iv) Digital processing of the entire lease area using remote sensing technique should be carried out regularly once in 3 years for monitoring land use pattern and mining activity taken place. Further, the extent of pit area excavated should also be demarcated based remote on

plan. The drilling machine deployed is equipped with water injector system to minimize the generation of dust from source itself. Photo enclosed as **Photo #6(A)&(B)**

- ii) The Project Proponent plan to deploy a NABET Accredited organization to conduct a study to assess and quantify emission load generation (in terms of air pollution, noise, waste water and solid waste) from each of the mining activity (including transportation) on annual basis and accordingly efforts will be made to further eliminate/ minimize generation of air pollution/dust, noise, wastewater, solid waste generation in successive years through use of better technology.
- iii) Fuel / power consumption, inspection and maintenance schedules of all machineries are being recorded on monthly basis.
- iv) Digital processing of the entire lease area using remote sensing technique (satellite Imagery) will be done once in 3 years for monitoring the land use pattern and the mining activity and also the area excavated in Pits will be demarcated based on the remote sensing analysis and the same will carried out by ORSAC or any agency of national repute for which expenses will be born by us.

15)

Project

sensing analysis. This should be done by ORSAC (Odisha Space Applications Centre, Bhubaneswar) or an agency of national repute or if done by private agency, the report shall be vetted / authenticated by ORSAC, Bhubaneswar. Expenses towards the same shall be borne by the respective mine lease holders. Responsibility: Individual Mine Lease Holders.

following mitigation measures: (i) Fugitive dust emissions from all the should be controlled sources regularly on daily basis. Water arrangement spraving haul roads, loading and un loading and at other transfer points should be provided and properly maintained. Further, it will be desirable to use water fogging system to minimize water consumption. It should be ensured that the ambient air quality parameters conform to the norms prescribed by the CPCB in this regard. (ii)The core zone of mining activity should be monitored on daily basis. Minimum four ambient quality monitoring stations should be established in the core zone for SPM, PM 10, PM 2.5, SO 2, Nox and CO monitoring. Location of quality monitoring 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(based

Study). The number of monitoring locations maybe more for larger

capacity mines and working in

larger area. Out of four stations, one

should be online monitoring station in the mines having more than 3

MTPA EC Capacity.(iii)Monitoring in

Emission Load Assessment

Air Environment Related:

Proponent shall implement

16)

- i) Regular water sprinkling is being carried out by engaging water tankers on haul roads and in critical areas porn to air pollution and having high levels of particulate matters such as crushing & screening plants, loading and unloading and transfer points for dust suppression.
- ii) Ambient air monitoring system is installed inside Mining Lease area for monitoring PM10, PM2.5, Sox and Nox in the core zone on daily basis as per the stipulation. 3 numbers of ambient quality monitoring stations have been established in the core zone for SPM, PM10, PM2.5,SO2, Nox and CO monitoring .The monitoring report reveals that the parameters are well within the norm as per NAAQs notification made by CPCB.
- iii) the monitoring of AAQ is being carried out on regular basis in the buffer zone of the ML area through M/s ITC Pvt. Ltd labs a NABET accredited agency.
- (iv) We are regularly monitoring the emission of the vehicles including HEMMs to ascertain emission limits. Further regular maintenance of vehicles used in mining operations and in transportation of mineral is being carried out.
- (v) The vehicles will be covered with tarpaulin and will not be overloaded during transportation of minerals. Photo enclosed as **Photo-#7**

Air quality monitoring at one location along the transport route within the mine (periodically, near truck entry and exit gate) is being carried out within the mine (periodically, near truck entry and exit gate).

Photo enclosed as **Photo # 8**Monitoring report enclosed **as Annexure –III & IV**

STATUS OF ENVIRONMENTAL CLEARANCE CONDITIONS Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd.,

At- Ghoraburhani, PO -Koida, Dist.: Sundergarh

buffer zone should be carried out SPCB or through NABET accredited agency. In addition, air quality parameters (SPM, PM10. PM2.5, SO2, NO and CO)shall be regularly monitored at locations of nearest human habitation including schools and other public amenities located nearest to source of the dust generation applicable.(iv)Emissions vehicles as well as heavy machinery should be kept under control and regularly monitored. Measures should be taken for regular maintenance of vehicles used in mining operations and transportation of mineral.(v)The vehicles shall be covered with a tarpaulin and should not be overloaded. Further, possibility of closed container trucks should be explored for direct to destination movement of iron ore. Air quality monitoring at one location should also be carried out along the transport route within the mine (periodically, near truck entry and exit gate), Responsibility: Individual Mine Lease Holders and SPCB.

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At- Ghoraburhani, PO –Koida, Dist.: Sundergarh

- 17) Noise and Vibration Related: Project Proponent shall implement following mitigation measures :(i)Blasting operation should be carried out only during day time. Controlled blasting such as Nonel should be practiced. The mitigation measures for control of ground vibrations and to arrest fly rocks boulders and should implemented.(ii)Appropriate 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. (iii) Noise levels should be monitored regularly (on weekly basis) near the maior sources of noise generation within core zone. Further, date, time distance of measurement should also be indicated with the noise levels in the report. The data should be used to map the noise generation from different activities and efforts should be made to maintain the noise levels with the acceptable limits of CPCB (CPCB, (iv) Similarly, vibration various sensitive locations should be monitored at least once in any month, and mapped for significant changes due to successive mining operations. Responsibility: Individual Mine Lease Holders.
- **ii**) Blasting operation is being carried out only during day time only Controlled blasting by using NONEL-Technology is in practice under strict supervision to minimize generation of dust and fly rocks & the study is conducted by NIRM, Bangalore, based on the recommendation, the blasting is being carried. Measurement & Monitoring of vibration level is being done as per the NIRM, suggestion.
 - ii) Appropriate measures taken to control the noise level by providing aquatic enclosures to DG sets, Enclosures to Cone and Jaw Crusher & development of Green belt around the Mine Safety Zone etc.
 - iii) Noise level is being monitored by Noise Level Meter, the result reveals that the parameter is well within the prescribed norms.

Noise monitoring report enclosed as **Annexure #V**

- 18) Water/Wastewater Related: Project Proponent shall implement the following mitigation measures: (i) In general, the mining operations should be restricted to above ground water table and it should not intersect groundwater table. However, if enough resources are estimated below the ground water table, the same may be explored
- Water/Wastewater Related: Project Proponent shall implement the following mitigation measures: (i) In general, the mining operations should be restricted to above i)Based on the exploratory evidences and hydrological study conducted the lowest working level is 520 mRL whereas the ground water table starts at 503 mRL. Therefore, mining operation will not intersect the ground water table.
 - ii) No perennial nalla / stream passes through the Mining Lease area.
 - iii) Regular monthly monitoring of ground water level and its quality is being carried out within the mine lease area. The Project has installed a

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At- Ghoraburhani, PO –Koida, Dist.: Sundergarh

after conducting detailed geological by GSI studies and hydrogeological studies by CGWA or NIH or institute of national repute, and ensuring that no damage to the land stability/ water aquifer system shall happen. The details/ outcome of study may be reflected such /incorporated in the EIA/EMP report of the mine appropriately. (ii)Natural watercourse and/or water resources should not be obstructed due to any mining operations. Regular monitoring of the flow rate of the springs and perennial nalla should be carried out and records should maintained. Further, monitoring of water quality of nalla and river passing thorough the mine (upstream lease area downstream locations) should be carried out on monthly basis. (iii) Regular monitoring of groundwater level and its quality should be carried out with in the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring should be carried out on monthly basis. (iv) In order to optimize water requirement, suitable conservation measures to augment ground water resources in the area should be undertaken in consultation with Central Ground Water Board(CGWA).(v)Suitable rainwater harvesting measures on long-term basis should be planned implemented in consultation with CGWA, to recharge the ground water source. Further, CGWA can prepare a comprehensive plan for the whole region. (vi) Appropriate mitigation measures (viz. ETP, STP, garland drains, retaining walls, collection of run off etc.) Should be taken to prevent pollution of nearby river/other water bodies. Water quality monitoring study should be

piezometer with telemetry system in observation well. Monitoring Report of GW quality enclosed as **Annexure-VII**

- iv) Rain water harvesting measures is planned for implementation.
- v) The project has planned to implement roof top rain water harvesting structures in camp and office premises.
- vi)The project has planned to implement ETP with oil & grease trap pit with re-circulation system for reuse in the workshop areas.
- Apart from these project has commissioned 80 KI capacity STP within camp premises with re-use facility and to prevent pollution of nearby river/other water bodies. Photo of the same is enclosed as **Photo #9(A)**
- vii) Provisions are made for collection & treatment of Industrial Waste water (Work shop & Waste water from the mine).
- Viii) The project implements ETP with oil & grease Separation Pit with recirculation system for reuse. Photo of the same is enclosed as **Photo #9(B)** STP discharge water quality report enclosed as **Annexure-VI**
- ix) In the entire lease area wherever possibilities of soil erosion, flow of sediments etc. is anticipated the project will provide retaining wall, garland drain & check weir/check dams. Desiltation shall be carried out on regular basis. Photo of the same is enclosed as **Photo #10(A)** (B) &(C)
- x) 25000 M² Geo textile matting provided over the dump slops to minimize erosion from the site. 750 mtr retaining wall followed by garland drain provided at the toe of Waste Dump. Photo enclosed as **Photo # 11 &12**
- xi) The project has constructed retaining wall and garland drains around the toe of the OB dumps and the wash off being channelized to the nearby settling pits as per the approved mining plan.
- xii) The waste water stored in Mine pit if any shall be utilized for the sprinkling on haul roads and green belt development. Photo enclosed as **Photo #13**
- xiii) There is no waste water discharged from the mine. We are planning to optimize water

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At- Ghoraburhani, PO –Koida, Dist.: Sundergarh

conducted by **State** Pollution | Control Board to ensure quality of surface and ground water sources on regular basis. The study can be conducted through NABL/ NABET approved water testing laboratory. However, the report should be SPCB. (vii)Industrial vetted bv wastewater (workshop wastewater from the mine) should be properly collected, treated in ETP so as to conform to the discharge standards applicable.(viii)Oil and grease trap should be installed discharge before workshop of effluents. Further, sewage treatment plant should be installed for the employees/colony, wherever applicable.(ix)Mine lease holder should ensure that no silt originating due to mining activity is transported in the surface water course or any other water body. **Appropriate** measures for prevention and control of soil erosion and management of silt should be undertaken. Quantity of silt/soil generated should be measured on regular basis for its better utilization.(x)Erosion dumps site should be protected by providing geo-textile matting or other suitable material, and thick plantation of native trees and shrubs should be carried out at the dump slopes. Further dumps should be protected retaining by walls.(xi)Trenches/garland should be constructed at the foot of dumps to arrest silt from being carried to water bodies. Adequate number of check dams should be constructed across seasonal/perennial nallas (if any)flowing through the mine lease area sand silt be arrested. silting at regular intervals should be carried out and quantity should be recorded for its better utilization, after proper soil quality analysis.

consumption by adopting suitable technique in consultation with competent authorities.

(xii)Theater so collected in the reservoir within the mine should be utilized for the sprinkling on hauls roads; green belt development etc. (xiii) There should be zero waste water discharge from the Based on actual water withdrawal consumption/ utilization and different activities. water balance diagram should be prepared on monthly basis, and efforts should be made to optimize consumption of water per ton of ore production in successive years. Responsibility: Individual Mine Lease Holders. SPCB and CGWB.

- i) There is no top soil generated in reporting period .The generated top soils has been utilized for the purpose of green belt development.
- ii) Its being followed.
- iii) OB/ Sub- grade Ore is being stacked in earmarked Dump yard as per the approved Mining Plan. Appropriate measures like garland drain retaining wall is constructed to take care of any erosion and for its stabilization. Photo enclosed as Photo #11 & Photo #12 (A) &(B)
- v) Catch Drains and settling tanks constructed at the dump site.
- v) Back filling of the area will be done as per the approved mining Plan.
- vi) There will be minimum generation of Hazardous Wastes except in field machinery maintenance workshops, which will be separately handled with all precautionary measures as per guideline provided under "Hazardous waste Management Rule 2016".

Photo of the same is enclosed as **Photo #14** (A),(B)&(C)

- 19) Land/Soil/Over burden Related:
 Project Proponent shall implement
 the following mitigation measures:
 (i) The top soil should temporarily
 - (i) The top soil should temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long (not more than 3 years or as per provisions mentioned in the plan/scheme). The top soil should be used for land reclamation plantation appropriately. and should (ii)Fodder plots developed in the non-mineralized area in lieu of use of grazing land, if any.(iii) Over burden/ low grade ore should be stacked at earmarked dump site(s)only and should not be kept active for long period. The dump height should be decided on case to case basis, depending on of mine and quantity of waste material generated .However. slope stability study should be conducted for larger heights as per IBM approved mine plan and DGMS guidelines. The OB dump should be scientifically vegetated with suitable native species to prevent erosion and surface runoff. In critical areas. geotextiles of should undertaken for stabilization of the dump. Monitoring and management

rehabilitated

until

continue

areas

the

should

vegetation

becomes self-sustaining. Proper records should be maintained regarding species, their growth, area coverage etc. (iv) Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from mine operation, soil, OB and mineral dumps. The water so collected can be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly de-silted, particularly after monsoon and should be maintained properly. Appropriate documents should be maintained. Garland drain of appropriate size, gradient and length should be constructed for mine pit, soil. OB and mineral dumps and sump capacity should be designed with appropriate safety margin based on long term rainfall data. Sump capacity should be provided for adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and de-silted at intervals.(v)Backfilling regular should be done as per approved mining plan/scheme. There should be no OB dumps outside the mine lease area. The backfilled area should be afforested, aiming to restore the normal ground level. Monitoring and management of rehabilitated areas should continue till the vegetation is established and becomes self-generating. Hazardous waste such as, waste oil, lubricants, resin, and coaltar etc. should be disposed of as per of Hazardous Waste provisions Management Rules, 2016, as amended from time time. to Responsibility: Individual Mine Lease Holders.

Ecology/Biodiversity (Flora-Fauna) i) Site specific wildlife conservation plan got approved by PCCF Wildlife and chief wildlife Warden, Bhubaneswar with an estimated cost of

20) Related: Project Proponent shall implement the following mitigation

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At- Ghoraburhani, PO –Koida, Dist.: Sundergarh

measures: (i)All precautionary measures should be taken during mining operation for conservation and protection of endangered fauna namely elephant, sloth bear etc. spotted in the study area. Action plan for conservation of flora and fauna should be prepared implemented in consultation with State Forest and Wildlife Department within the mine lease whereas outside the mine lease area, the same should be State maintained by Forest Department.(ii)Afforestation is to be done by using local and mixed species saplings within and outside the mining lease area. The reclamation and afforestation is to be done in such a manner like exploring the growth of fruit bearing trees which will attract the fauna and thus maintaining biodiversity of the area. As afforestation done so far is very less, forest department needs to identify adequate land and do afforestation by involving local people in a time bound manner. (iii) Green belt development carried out by mines should be monitored regularly in every season and parameters like area under vegetation/plantation, type plantation. type of tree species /grass species/scrubs etc., distance between the plants and survival rate should be recorded. (iv) Green belt is an important sink of air pollutants including noise. Development of green cover in mining area will not only help reducing air and noise pollution but also will improve the ecological conditions and prevent soil erosion to a greater extent. Further, selection of tree species for green belt should constitute removal/dust capturing plants since efficient plants can act as biological filters removing

Rs1257Lakh of which Rs. 348.770 lakh has been earmarked for implementation of plan within the mine lease area and Rs. 908.240 Lakhs has been earmarked for implementation of plan within the buffer zone (ZOI).No such specie has been reported in the core zone as per Wild life Management study conducted over the area.

- ii. A detailed Site Specific Wild life Conservation Plan has been prepared for Flora and Fauna .Copy enclosed as **Annexure-IX**
- iii. Afforestation is to be done by using local and mixed species saplings within and outside the mining lease area.
- iv. Green belt has been proposed & carried all along the safety zone around the Mining Lease, along the central village road.
- v. Green belt over 1.8113 Ha will be developed with the 10970 No's native species. For the FY 2022-23 plantation of 1885 no's done over 0.673.ha. Photo of the same enclosed as **Photo #3 (A) & (B)** Details of plantation given in **Table No-1**

vi. Financial outlay for Compensatory afforestation as approved in De-reservation Proposal is Rs 2.31 Cr

Further, proposed budget for Wild life management plan is Rs 12.57 Cr. Out of this an amount of Rs 100 Lakhs has been allocated for conservation of Schedule - I Species.

significant amounts of particulate pollution. Thus, the identified native trees in the mine area may be Tree encouraged for plantation. species having small leaf area, dens hair on leaf surface (rough surface), deep channels on leaves should be included for plantation. (v) Vetiver plantation on inactive dumps may be encouraged as the grass species has high strength of anchoring besides medicinal value.(vi)Details of compensatory afforestation done should be recorded and documented by respective forest divisions, and State **Forest** Department should present minewise annual status, along with expenditure details. Responsibility: Individual Mine Lease Holders and State Forest & Wildlife Department.

21)

i) A Village Development Committee will be formed to solve the local problems and will act as a platform for regular consultation. This committee will also plan, review and monitor the development initiatives.

Socio-Economic Related: Project Proponent shall implement the following mitigation measures: (i) Public interaction should be done on regular basis and social welfare activities should be done to meet the requirements the local of communities. Further, basic infrastructure amenities and facilities like education, medical, roads, safe drinking water. sanitation, employment, skill development, training institute etc. should be developed to alleviate the quality of life of the people of the region.(ii)Land outees and land losers/affected people, any, should be compensated and rehabilitated as per the national/state policy on Rehabilitation. Resettlement and socio-economic (iii)The development in the region should be focused and aligned with the quidelines/initiatives of Govt. of India/ NITI Aayog around prosperity, equality, justice, cleanlines s,transparency,employment,respect to women, hope etc. This can be

A comprehensive social welfare activity has been chalked out based on Socio Economic Need Assessment study of the project affected villages as detailed in EIA Report.

- ii) The State Government has appointed recognized consultant for undertaking Social Impact Assessment as per Odisha Right to Fair Compensation and Transparency in Land Acquisition and Rehabilitation and Resettlement Rules 2015. The consultant has completed and submitted the study report.
- iii) in line with the guidelines given in the above rules, project proponent has worked out compensation package of Rs 354.05 Lakhs as per ORRP 2006/ ORFCTLARR2016 provisions. There is no displacement in the project. There are 8 plots of 4 land owners having 26 extended families will be affected.

Employment -- Although none of the families are eligible for employment as per the Act, but company propose one person from each land losing family has been given job based on their skill and qualification for which provision for Skill

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At- Ghoraburhani, PO –Koida, Dist.: Sundergarh

achieved by providing adequate and Development training of training are made. A budget of Rs. 31.20 lakhs (@ Rs. 5000/- per facilities for education, medical and developing skills in the month for a trainee for 2 years course) has been the region. provisioned. of District administration in association with mine lease holders should plan However, Project proponent will abide by the for "Samagra Vikas" of these blocks compensation package as worked out and well as other blocks of the district. finalized by District Authority. While planning for different The programs are carried out aligned with in the region, Government initiatives schemes the and prioritized with activities should be prioritized as PMKKKY with DMFT, Sundargarh. per Pradhan Mantri Khanij Kshetra Kalyan Yojna (PMKKKY), notified by Ministry of Mines, Govt. of India, vide no. 16/7/2017-M. letter VI(Part). dated September 16, 2015. Responsibility: District Administration and Individual Mine Lease Holders. 22) Road Transport Related: Project i) Project proponent will follow the suggested ore transport mode (SOTM). Proponent shall implement the following mitigation measures :(i)All ii) Cement concrete road of 9 m width inside the the mine lease holders should lease area to both Pit 1 and Pit 2 which is follow the suggested ore transport planned to serve as two way movement of (SOTM), based on its EC vehicle. capacity within next 5 years. (ii)The iii) Transportation of ore durina road mine lease holders should ensure transportation will be done by covering the trucks construction of cement road of with tarpaulin. Photo of the same enclosed as appropriate width from and to the Photo #7 entry and exit gate of the mine. AAQ monitoring including PM10 Further, maintenance of all the monitored regularly near the exit & entry gate on roads should be carried out as per regular basis. Photo of the same enclosed as the requirement to ensure dust free Photo #8 road transport. (iii) Transportation of ore should be done by covering the trucks with tarpaulin or other suitable mechanism so that no spillage of ore/dust takes place. Further, air quality in terms of dust. PM 10 should be monitored near the roads towards entry & exit gate on regular basis, and be maintained within the acceptable limits. Responsibility: Individual Mine Lease Holders and Dept. Of Steel Mines. 23) Occupational Health Related: i) Personal Protective Equipment's (PPE) is being

implement

measures:

provided to the workers & staffs along with

adequate training on regular basis to educate and

Project Proponent shall

the following mitigation

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At- Ghoraburhani, PO –Koida, Dist.: Sundergarh

(i) 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 periodically. (ii) Occupational health surveillance program for all the employees/workers (including casual workers) should be undertaken periodically (on annual basis)to observe any changes due to exposure to dust, and corrective measures should be taken immediately .if needed. (iii) Occupational health and safety measures related awareness programs including identification of work related health hazard, training on malaria eradication, HIV and health effects on exposure mineral dust etc., should be carried out for all the workers on regular basis. A fulltime qualified doctor should been gaged for the purpose. Periodic monitoring (on 6 monthly basis) for exposure to reparable minerals dust on the workers should be conducted, and record should be maintained including health record of all the workers. Review of impact of various health measures undertaken (at an interval of 3 years or less) should be conducted followed by follow-up of actions, wherever required. Occupational health Centre should be established near mine site itself. Responsibility: Individual Mine Holders Lease and **District** Administration (District Medical Officer).

make them conscious.

- ii) Occupational health surveillance is being carried out on annual basis. The occupational health surveillance shows that there no occurrence of any kind of occupational health disease.
- iii) 48 Employee undergone IME and PME medical examinations. A dispensary with full time qualified doctor has been engaged for the purpose and maintaining the health records of the worker.

C. Standard conditions

I. Statutory compliances

SL.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
No.		
1)	This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.	We will abide by the said condition.
2)	The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No.114 of 2014 in matter of Common Cause versus Union of India & Others before commencing the mining operations.	We are abiding by the said condition.
3)	The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through the irrespective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition(Civil) No. 114 of 2014 in matter of Common Cause versus Union of India	Not applicable as its auctioned mines and executed in 2021.
4)	This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF & CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.	Not applicable to the project.
5)	This Environmental Clearance shall	The project has obtained Forest clearance vide
 	become operational only after receiving	letter No.10F (CONS)-26/2018/17489/F-E under
	formal Forest Clearance (FC) under the	the provision of Forest Conservation Act, 1980.
	provision of Forest Conservation Act,	
	1980, if applicable to the Project.	
6)	Project Proponent (PP) shall obtain	Project Proponent (PP) has obtained Consent to
	Consent to Operate after grant of EC	establish & consent to operate for extraction of
	and effectively implement all the	7.16 Million TPA iron ore (ROM) production

		C -Rolla, Dist Sundergani
	conditions stipulated therein .The	from the OSPCB, Bhubaneswar, Odisha which
	mining activity shall not commence	also includes installation of 1x1350 TPH
	prior to obtaining Consent to	stationary crushing & Screening plant and 2 x
	Establish/Consent to Operate from the	500 TPH mobile crushing & Screening Plants,
	concerned State Pollution Control	vide Consent Order No. 2955 and vide Letter
	Board/Committee	No. 5144/IND-I-CON-6154 dated
		30.03.2022All the conditions stipulated in the
		consent to establish & Consent to operate are
		being implemented.
		0 1
	The DD shall adhes to the contains of	Copy enclosed as Annexure X
7)	The PP shall adhere to the provision of	The project proponent will adhere to the
	the Mines Act, 1952, Mines and Mineral	provision of the Mines Act, 1952, Mines and
	(Development & Regulation), Act, 2015	Mineral (Development Regulation), Act 2015
	and rules & regulations made there	and rules & regulations made there under
	under. PP shall adhere to various	
	circulars issued by Directorate General	
	Mines Safety (DGMS)and Indian Bureau	
	of Mines from time to time.	
8)	The Project Proponent shall obtain	The project proponent has confined its operation
)	consents from all the concerned land	within the surface right granted area only.
	owners, before start of mining	within the surface right granted area only.
	,	
	operations, as per the provisions of	
	MMDR Act, 1957 and rules made there	
	under in respect of lands which are not	
	owned by it.	
9)	The Project Proponent shall follow the	Not applicable, if any it will be followed as per
	mitigation measures provided in	the guidelines.
	MoEF&CC's Office Memorandum No .Z-	-
	11013/57/2014-IA.II(M),dated 29th	
	October, 2014, titled "Impact of mining	
	activities on Habitations-Issues related	
	to the mining Projects where in	
	Habitations and villages are the part of	
	mine lease areas or Habitations and	
	villages are surrounded by the mine	
46)	lease area".	TI D I (D
10)	The Project Proponent shall obtain	The Project Proponent has obtained NOC for
	necessary prior permission of the	withdrawal of 95 Cum/day quantity of ground
	competent authorities for drawl of	water from CGWA for the project vide letter No.
	requisite quantity of surface water and	CGWA/NOC/MIN/ ORIG/2022/14796 dated
	from CGWA for withdrawal of ground	14.03.2022. Enclosed as Annexure-XI
	water for the project.	
		It has been complied with intimating the letters
11)	A copy of EC letter will be marked to	it has been complied with intimating the letters i
11)		·
11)	concerned Panchayat /local NGO etc. if	to local Gram Panchayat, Municipality, DDM
11)	concerned Panchayat /local NGO etc. if any , from whom suggestion/	to local Gram Panchayat, Municipality, DDM Office, Zilla Paris had, Divisional Forest Officer
11)	concerned Panchayat /local NGO etc. if any , from whom suggestion/ representation has been received while	to local Gram Panchayat, Municipality, DDM
,	concerned Panchayat /local NGO etc. if any , from whom suggestion/ representation has been received while processing the proposal.	to local Gram Panchayat, Municipality, DDM Office, Zilla Paris had, Divisional Forest Officer etc
11)	concerned Panchayat /local NGO etc. if any , from whom suggestion/ representation has been received while processing the proposal. State Pollution Control	to local Gram Panchayat, Municipality, DDM Office, Zilla Paris had, Divisional Forest Officer
,	concerned Panchayat /local NGO etc. if any , from whom suggestion/ representation has been received while processing the proposal.	to local Gram Panchayat, Municipality, DDM Office, Zilla Paris had, Divisional Forest Officer etc

		- Kolua, Dist Sulluergam
	Regional office, District Industries	
	Centre and Collector's office/	
	Tehsildar's Office for 30 days.	
13)	The Project Authorities should widely	Project proponent has advertised in the two
	advertise about the grant of this EC	local newspapers, i.e. The Prameya Daily
	letter by printing the same in at least	(vernacular language) and The Sunday Express
	two local newspapers, one of which	 English New Paper within stipulated time
	shall be in vernacular language of the	period. A copy of the same got submitted to the
	concerned area. The advertisement	Regional Office of this Ministry located at
	shall be done within 7 days of the issue	Bhubaneswar vide letter
	of the clearance letter mentioning that	Copy enclosed as Annexure XII
	the instant project has been accorded	
	EC and copy of the EC letter is	
	available with the State Pollution	
	Control Board/Committee and web site	
	of the Ministry of Environment, Forest	
	and Climate Change	
	(www.cparivesh.nic.in).A copy of the	
	advertisement may be forwarded to	
	the concerned MoEF &CC Regional	
	Office for compliance and record.	
14)	The Project Proponent shall inform the	We will abide by the said condition.
'	MoEF & CC for any change in	
	ownership of the mining lease .In case	
	there is any change in ownership or	
	mining lease is transferred than mining	
	operation shall only be carried out after	
	transfer of EC as per provisions of the	
	pare 11 of EIA Notification 2006 as	
	amended from time to time.	

II. Air quality monitoring and preservation

SL.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
No.		
15)	The Project Proponent shall install	Presently the monitoring of AAQ is being carried
	a minimum of 3 (three) online	out in the core (03 stations) as well as buffer
	Ambient Air Quality Monitoring	zone(04 stations) of the ML area on regular basis.
	Stations with 1 (one) in upwind	The monitoring report reveals that the parameters
	and 2(two) in down wind direction	like PM10. PM2.5, CO, SO2 and Nox are within the
	based on long term climatological	norm as per NAAQs notification made by the
	data about wind direction such that	CPCB.
	an angle of 120° is made between	
	the monitoring locations to monitor	The Project Proponent has installed two online
	critical parameters, relevant for	Ambient Air Quality Monitoring Stations with 1
	mining operations, of air pollution	(one) in upwind and 1(two)in down wind direction
	viz.PM10,PM2.5,NO2,CO and SO2	based on long term climatological data about wind
	etc. As per the methodology	direction such that an angle of 120° is made

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At- Ghoraburhani, PO –Koida, Dist.: Sundergarh

mentioned in NAAQS Notification No.B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery 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 displayed within 03 months in front of the main Gate of the mine site.

between the monitoring locations to monitor critical parameters with RT- DAS connectivity to SPCB Server, another CAAQM Stations is procured and will be established in down wind direction

Photo enclosed as Photo #15

Effective safeguard measures for 16) prevention of dust generation and suppression subsequent (like regular water sprinkling, metaled road construction etc.)shall carried out in areas prone to air pollution where in high levels of PM10 and PM2.5 are evident such haul road. loading unloading and point transfer points. The Fugitive dust emissions from all sources shall be regularly controlled installation by required equipment's/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall been sure that air pollution level conform to the standards prescribed by the MoEF & CC & Central Pollution **Control Board.**

Regular water sprinkling is being carried out by engaging 02 nos. of mobile water tankers (01 nos. 16 KL, 01 no. 08 KL) at haul road, loading and unloading point and transfer points & around the crusher and screening plants and other strategic dust generating areas including the mines haul and mineral dispatch roads.

Apart from that auto fixed water sprinkling arrangement shall be provided for mineral dispatch roads.

Further, provision of dry fogging for mobile for crusher and screen plants are under progress.

Photo enclosed as Photo # 4 & 5

III. Water quality monitoring and preservation

SL.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
No.		
17)	In case, immediate mining scheme	As per the hydrological study conducted the
	envisages intersection of ground	lowest working level is 520 mRL whereas the
	water table, then Environmental	ground water table starts at 503 mRL.
	Clearance shall become	Therefore, mining operation will not intersect the
	operational only after receiving	ground water table.
	formal clearance from CGWA. In	The Project Proponent has obtained NOC for
	case, mining operation involves	withdrawal of 95 Cum/day quantity of ground
	intersection of ground water table	water from CGWA for the project vide letter No.

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At- Ghoraburhani, PO –Koida, Dist.: Sundergarh

at a later stage, then PP shall ensure that prior approval from CGWA and MoEF & CC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydrogeological study of the area.

CGWA/NOC/MIN/ORIG/2022/14796 dated 14.03.2022 as well as the Environment clearance for the project vide letter No. F. No. J-11015/192/2016-IA.II(M) dated 28th May 2020 .Copy of the NOC from CGWA enclosed as **Annexure -XI**

18) Regular monitoring of the flow rate of the springs and perennial nalla is flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village. should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Ground water Department/State Pollution Control Board.

No perennial nalla is flowing through the mine lease. Hence, monitoring of the surface water quality is being carried out at 04 locations namely Suna Nadi (Upstream), Suna nadi (Downstream), Karo Nalla and Teherei Nalla. The records are also maintained for this purpose. The surface water quality as well as flow rate is being monitored 4 times in a year i.e. premonsoon, monsoon, post monsoon and winter. Monitoring of the ground water quality at 06 locations namely Inside Mining lease area, Sagasahi village, kalmang village, Oraghat village, Gandhalpada village and shankapura village. The records are also maintained for this purpose. The ground water quality is being monitored 4 times in a year i.e. pre-monsoon, monsoon, post monsoon and winter. The Reports of GW Quality are enclosed as Annexure -VII

However, the project is supplying the drinking water to the project nearby villages.

19) Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new Piezo-meter installations during the mining operation in consultation with Ground Water Central Authority/State Ground Water Department. The Report changes in Ground water level and quality shall be submitted on sixmonthly basis to the Regional Office of the Ministry, CGWA and State Ground water Department,

We are conducting ground water quality and level on regular basis by M/s ITC Pvt. Ltd. which is a NABL accredited one. The monitoring report is being submitted on six-monthly basis to the concerned authorities. Project Proponent has installed Piezometer & Water Flow Meter with Telemetry system Photo of the same enclosed as **Photo # 16 (A)&(B)**

	State Pollution Control Board.	ani, PO -Roida, Dist Sundergam
20)	The Project Proponent shall	We are conducting surface water quality
,	undertake regular monitoring of	monitoring on regular basis by M/s ITC Pvt. Ltd.
	natural water course/ water	Further, no perennial nalla / stream passes
	resources/springs and perennial	through the Mining Lease area.
	nallas existing/ flowing in and	an oagri are riming zoace area.
	around the mine lease and maintain	
	its records. The project proponent	
	shall undertake regular monitoring	
	of water quality upstream and	
	downstream of water bodies	
	passing within and nearby/adjacent	
	to the mine lease and maintain its	
	records. Sufficient number of	
	gullies shall be provided at	
	appropriate places within the lease	
	for management of water. PP shall	
	carry out regular monitoring w.r.t.	
	pH and included the same in	
	monitoring plan. The parameters to	
	be monitored shall include their	
	water quality vis- a-vis suitability	
	for usage as per CPCB criteria and	
	flow rate. It shall be sure 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, Forest and Climate	
	Change and its Regional Office,	
	Central Ground Water Authority	
	and Regional Director, Central	
	Ground Water Board, State	
	Pollution Control Board and Central	
	Pollution Control Board. Clearly	
	showing the trend analysis on six-	
	monthly basis.	
21)	Quality of polluted water generated	As such no polluted water shall be generated
	from mining operations which	from mine activities.
	include Chemical Oxygen Demand	However, the Project proponent has engaged

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At-Ghoraburhani, PO –Koida, Dist.: Sundergarh

(COD) mines run-off; acid mine drainage and metal contamination in run off shall be monitored Total along with Suspended Solids(TDS), Dissolved Oxygen(DO),pH and Total Suspended Solids (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-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard. Project **Proponent** shall plan.

NABL accredited and MoEF certified agency named M/s ITC Pvt. Ltd. for the analysis of water quality as applicable and parameters as stated in the conditions.

The monitored data is being 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.

22) develop and implement rain water harvesting measures on long term basis to augment ground water resources in the area consultation with Central Ground Water Board/ State Ground water Department. A report on amount of water recharged needs be to Regional Office submitted MoEFCC annually.

In this regard project proponent has engaged and prepared a detail study report in consultation with Regional Director, CGWB, and Bhubaneswar to provide Check weirs, check dams, de-silting cum percolation ponds/pits at the strategic locations of the mines lease area. However, suitable rain water harvesting measures like settling pits, check weir, check dams along with roof top rain Water harvesting Structures for the mines; camp and office area will be implemented in due course of mining pit development.

23) Industrial waste water (work shop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned Pollution Control (SPCB).The work shop effluent shall be treated after its initial passage through Oil and grease trap.

There will be no industrial waste water discharge from the mine. ETP (Oil and grease separation unit) has implemented for proper collection and treatment of work shop effluents. The discharge water quality shall be conducted through NABL accredited and MoEF certified agency named M/s ITC Pvt. Ltd. through M/s Qualitek labs Pvt. Ltd, Bhubaneswar, Odisha. Photo of the same attached as **Photo #9(A)**

24) The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional I Office of the MoEF&CC and State Pollution Control Board/Committee.

Water balance chart has been prepared by the Project proponent and actions will carried out for reducing the consumption.

IV. Noise and vibration monitoring and prevention

SL. No.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
25)	The peak particle velocity at 500 m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.	The peak particle velocity at 500 m distance or within the nearest habitation is being monitored periodically as per applicable DGMS guidelines.
26)	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. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the flood lights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day/night hours.	The noise level is kept within prescribed limit during night as revealed from the monitored data. The illumination is directed away from the nearby village sites so that it will not affect the biological clock of the villagers.
27)	The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working industry areas shall be provided with protective respiratory devices along with 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/laborers are working without personal protective equipment.	Workers engaged in Operations are provided with earplugs/muffs, besides this acoustic enclosure for all machine operating cabins are provided. It is being monitored by Noise Level Meter; the results reveals very well within norms. Apart from that adequate training on safety and Health aspects is being carried out on daily basis among all the employees.

V. Mining plan

SL.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
No.		
No. 28)	The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal where in year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, overburden, inter burden and topsoil etc No change in basic mining proposal like mining technology, total excavation, mineral & waste	All mining activities are carried out in accordance with approved mining plan complying the EC conditions.
	production, lease area and scope of working (viz. method of mining, overburden & dump management, OB. & dump mining, mineral transportation mode, ultimate depth of mining etc.)shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form to Short Term Permit (STP), Query license or any other name.	
29)	The Project Proponent shall get the	We are in the initial stage of mining operation.
	Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change for record and verification.	A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority.
30)	The land-use of the mine lease area	The land use of the ML area at various stages
	at various stages of mining scheme	of mining scheme as well as at the end of life

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At- Ghoraburhani, PO –Koida, Dist.: Sundergarh

as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-avis 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 selfsustaining. The compliance status shall be submitted half-yearly to the MoEF & CC and its concerned Regional Office.

will be governed as per the approved mining plan. The excavation vis-à-vis back filling in the mine lease area are and corresponding afforestation in the reclaimed area will be carried out in line with approved mine Plan. The compliance status will be submitted to the concerned Authorities within stipulated time frame.

VI. Land reclamation

SL. No.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
31)	The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines /circulars issued by D.G.M.S w.r.t .safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.	The only OB/waste dumps is being properly terraced at the earmarked place by maintaining the adequate slope & height as per the approved Mining Plan as per the guidelines /circulars issued by D.G.M.S w.r.t. safety in mining operations and geo textile matting applied on dump slops to stabilization purpose. Presently no top soil generated during the reporting period and generated top soils has been utilized for plantation purpose.
32)	The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. Safety in mining	The only OB/waste dumps is being properly terraced at the earmarked place by maintaining the adequate slope & height as per the approved Mining Plan as per the guidelines /circulars issued by D.G.M.S w.r.t .safety in mining operations and will be scientifically vegetated along the slope to stabilize the same.

	operations shall be strictly adhered to maintain the stability of waste dumps.	
33)	The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.	Project Proponent will reclaim the waste dump sites scientifically as per the approved mining plan by the application of native grass seeds, seedlings and geotextiles, etc. along with the provision of garland drain, retaining wall followed by settling pits.
34)	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 local climatic parameters and help in adaptation of plant species to the micro climate. 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 there by ensuring proper filling/leveling of dump mass.In critical areas, use of geo textiles/geo-membranes, clay liners/Betonies etc. shall be undertaken for stabilization of the dump.	Presently, one active OB/waste dump is being properly terraced by maintaining the adequate slope & height. 25000 M ² Geo Textile has been laid down on OB a Dump Slops for stabilization of dump. Further, the dumps will be scientifically vegetated with application of native local species along the slope to stabilize. Photo of the same enclosed as Photo # 12 (A) & (B)
35)	The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC.	Presently mining is at initial stage and OB/waste dumping is under progress. As per the approved mining plan the dump height shall be maintained. So no slope stability study is required at this moment.
36)	Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/River/Pond 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	Project proponent has planned to construct a Check dam in south pit area on natural depression area 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. However, in north pit active dump area one settling tanks constructed to prevent run off of water and flow of sediments and has been desilted in post monsoon period. Photo of the same enclosed as photo #18

	At Officiabatil	ani, PO -Noida, Dist.: Sundergarn
	monsoon season, and maintained	
	properly.	
37)	Check dams of appropriate 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 years data) and maximum discharge in	Project proponent has constructed Check dam in strategic areas and on the seasonal nalla to prevent storm run-off and sediment flow into adjoining water bodies and planned to construct in south pit as per mining plan. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall. However, one settling pond has constructed followed by Garland drain near active dump area and another settling cum percolation pond has constructed settlement of
	the mine and its adjoining area which shall also help in providing adequate retention time period there by allowing proper settling of sediments/silt material. The sedimentation pits/sumps shall be constructed at the corners of the garland drains.	sediments.
38)	The topsoil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. Safety in mining operations shall be strictly adhered to maintain the stability of dumps. The top soil shall be used for land reclamation and plantation purpose.	Top soil n stacked has already been utilized for green belt development purpose and during reporting period no top soil generated. Hence the physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS during storing at earmarked site. Adequate precautionary measures shall be taken to preserve the nutrient contents.

VII. Transportation

SL. No.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
39)	No Transportation of the	We will abide by the said condition.
	minerals shall be allowed in	-
	case of roads passing	
	through villages/ habitations.	
	In such cases, PP shall	
	construct a 'by pass' 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	

STATUS OF ENVIRONMENTAL CLEARANCE CONDITIONS Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd.,

At- Ghoraburhani, PO -Koida, Dist.: Sundergarh

and dust along with chances accidents of could mitigated. All costs resulting widening from and strengthening of existing public road network shall be borne by the PP 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 effectively controlled water sprinkling will also be done regularly. Vehicular emissions shall be kept under regularly control and monitored. **Project should Pollution** obtain Under Control (PUC) certificate for the vehicles from all authorized pollution testing centers.

40)

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 dust generation like crushing zone, material transfer points, material yards etc. should invariably provided with dust arrangements. suppression pollution control The air equipment's like bag filters, vacuum suction hoods, dry

Regular water sprinkling is being carried out by engaging 04 nos. of mobile water tankers (02 nos. 16 KL, 02 nos. 08 KL) at haul road, loading and unloading point and transfer points & around the crusher and screening plants and other strategic dust generating areas including the mines haul and mineral dispatch roads. Apart from that auto fixed water sprinkling arrangement of 1.20 KM length shall be provided for mineral dispatch roads. Further, dry fogging along with hoods over conveyor and material transfer points is provided for crusher and screen plants. Photo enclosed as **Photo # 4 & 5**

fogging 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.	

VIII. Green Belt

SL. No.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
	STANDARD CONDITIONS	
41)	The Project Proponent shall	The green belt has been developed with native
	develop green belt in 7.5 m	species of 10972 along the safety zone and other
	wide safety zone all along the	area. In this regard the project has planted 1700
	mine lease boundary as per	nos. of new plantation within the ML Area
	the guidelines of CPCB in	boundary (safety zones) as well as 185 No's
	order to arrest pollution	outside the ML area (Camp /surrounding &
	emanating from mining	premises) during the reporting period -2022-23
	operations within the lease.	as per the guidelines of concerned agencies.
	The whole Green belts shall	Details of Plantation enclosed as Table-1
	be developed within first 5	
	years starting from wind ward	
	side of the active mining area.	
	The development of green	
	belt shall be governed as per	
	the EC granted by the Ministry	
	irrespective of the stipulation	
	made in approved mine plan.	
42)	The Project Proponent shall	The mine operation is in initial stage. Project
	carry out plantation/	proponent will carry out plantation/ afforestation in
	afforestation in backfilled and	backfilled and reclaimed area of mining lease,
	reclaimed area of mining	around water body, along the road sides, in
	lease, around water body,	community areas etc. by planting the selected
	along the road sides, in	native species useful to the local people adhering
	community areas etc. by	the CPCB guidelines in this respect and in
	planting the native species in	consultation with concerned govt. agencies as
	consultation with the State	stated.
	Forest	
	Department/Agriculture	
	Department/Rural	
	development	
	department/Tribal Welfare	
	Department/Gram Panchayat	
	such that only those species	
	Todon that only those species	

	Forest and Wildlife	Regional office of the Ministry.
•	consultation with the State	conservation Plan shall be submitted to the
45)	And implemented in	Implementation status (annual) on wildlife
	Warden of the State Govt.	
	approved by Chief Wildlife	
	fauna. The Plan shall be	
	for conservation of flora and	
	delineating action to be taken	
	prepared for the same clearly	
	Conservation Plan shall be	
	operation. A Wildlife	
	I species during mining	enclosed as Annexure- IX
	flora and fauna and Schedule-	area. The Site specific wildlife conservation plan
	and protection of endangered	Schedule – I species found in the buffer zone
	measures for conservation	warden, Bhubaneswar. As per the plan no
	under take all precautionary	approved by PCCF Wild life and chief Wildlife
44)	The Project Proponent shall	Site specific Wildlife conservation Plan got
	trees should be promoted.	
	felling and plantation of such	
	guarded/protected against	
	scrupulously	
	the scorching sun, should be	
	provide mid-day shelter from	
	grazing ground, which	
	The sparse trees on such	
	acquisition of grazing land.	
	Supreme Court with regard to	
	the directions of the Hon'ble	
	should essentially implement	
	regard, Project Proponent	
	State Government. In this	
	done in consultation with the	
	of such grazing land shall be	
	mine lease. The development	
	which are coming within the	
	compensate those areas	
	feed by developing grazing land with a view to	
	arrangements for livestock	
	make necessary alternative	
43)	The Project Proponent shall	We will abide by the said condition.
13)		We will shide by the said condition
	protection and care of trees.	
	provisions hall be made for	
	Hectare. Adequate budgetary	
	around 2500 saplings per	
	density of the trees should be	
	shall also be adhered. The	
	to the local people. The CPCB guidelines in this respect	
	be selected which are of use	
	he coloofed which are of	, and the second se

STATUS OF ENVIRONMENTAL CLEARANCE CONDITIONS Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd.,

At- Ghoraburhani, PO -Koida, Dist.: Sundergarh

Department. A copy of Wildlife
Conservation Plan and its
implementation status
(annual) shall be submitted to
the Regional Office of the
Ministry.

IX. Public hearing and human health issues

SL.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
No.		
46)	The Project Proponent shall	Initial Medical Examination & Periodical Medical
	appoint an Occupational Health	Examination of the workers engaged in the
	Specialist for Regular as well as	project is being undertaken under the authorized
	Periodical medical examination of	doctors periodically for employees who are
	the workers engaged in the mining	engaged in the process of mining & are likely
	activities, as per the DGMS	exposed to dust to observe any contractions due
	guidelines. The records shall be	to exposure to dust. This is being carried as per in
	maintained properly. PP shall also	compliance to Mines Act 1952 & rules 1956 and
	carry out Occupational health	amendments there to.
	check-ups in respect of workers	During the period of April to September 2022 48
	which are having ailments like BP,	nos of employee undergone for IME
	diabetes, habitual smoking, etc.	examinations.
	The check-up shall be under taken	
	once in six months and necessary	
	remedial/preventive measures be	
	taken. A status report on the same	
	may be sent to MoEF & CC	
	Regional Office and DGMS on half-	
	yearly basis.	
47)	The Project Proponent must	The Project Proponent has taken measures for
.,,	demonstrate commitment to work	Health Risk Assessment (HRA) for identification
	towards 'Zero Harm' from their	of workplace hazards and assesses their potential
	mining activities and carry out	risks to health and determines appropriate control
	Health Risk Assessment (HRA) for	measures to protect the health and wellbeing of
	identification work place hazards	workers and nearby community. The company
	and assess their potential risks to	Will also maintain accurate and systematic
	health and determine appropriate	records of the HRA and all the tests being carried
	control measures to protect the	out.
	health and wellbeing of workers	
	and nearby community. The	
	proponent shall maintain accurate	
	and systematic records of the Harte	
	HRA for neighborhood has to focus	
	on Public Health Problems like	
	Malaria, Tuberculosis, HIV, Anemia,	
	and Diarrhoea in children under	
	five, respiratory infections due to	
	= =	
	bio mass cooking. The proponent	
	shall also create awareness and	

educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carry out base line HRA for all the category of workers and there after every five years.

48) The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust X-Ray chest; For Noise Audio metric; for Lead Exposure Blood Lead, For **Ophthalmologic** Welders Full Assessment; for Manganese Miners a complete Neurological Assessment by а Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium-Fortnightly inspection of hands and forearms responsible person. Except rout inetestsal tests would be carried out in a Lab accredited by NASH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of **Physical** examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. lt would obligatory for the State Mines **Departments** to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one).X-

The Project Proponent is committed to work towards 'Zero Harm' from their mining activities and will carry out Health Risk Assessment (HRA) for

Identification workplace hazards and assesses their potential risks to health and determines appropriate control measures to protect the health and wellbeing of workers and nearby community. The company

will also maintain accurate and systematic records of the HRA and all the tests being carried out.

Ray must meet ILO criteria (17x14 inches and of good quality). 49) The Proponent shall maintained a This will be done and records will be maintained. record of performance indicators for workers which includes(a)there should not be as significant decline in their Body Mass Index and it should stay between 18.5-24.9, (b)the Final Chest X-Ray compared with the base line X-Ray should not show any capacities,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1). Forced Vital Capacity (FVC), and the ratio)unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f)they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEF&CC's annually along with details of their life's and compensation paid to workers having above indications. 50) The Project Proponent shall ensure Workers engaged in different mining Operations that Personnel working in dusty are provided with protective respiratory devices i.e. Nose Mask, Ear Plugs, Ear Muffs etc.. areas should wear protective they Regular sprinkling is being carried in and around respiratory devices and should also be provided with work place areas. Apart from that adequate adequate training and information training on safety and Health aspects is being on safety and health aspects. imparted on daily basis among all the employees. Project Proponent has constructed temporary 51) Proiect Proponent shall make provision for worker camps outside (rented land) the mine the housing for workers/labors or shall construct lease area with necessary basic infrastructure/ labor camps facilities like toilets, STP, safe drinking water, medical healthcare, etc. The housing is made within/outside(company owned purely of temporary structures which can be land)with necessary basic infrastructure/ facilities like fuel for removed after the completion of the project. The cooking, mobile toilets, mobile STP, domestic waste waters are being treated with safe drinking water, medical STP of 80 KL capacity in order to avoid

healthcare, creche for kids etc. The contamination of underground water. housing may be provided in the Photo # 9(A). form of temporary structures which removed after completion of the project related infrastructure. The domestic waste waters hould be treated with STP in order to avoid contamination of underground water. The activities proposed in Action 52) The project proponent is committed towards the plan prepared for addressing the implementation of activities proposed in Action issues raised during the Public plan prepared for addressing the issues raised Hearing shall be completed as per during the Public Hearing and shall be completed as per the budgetary provisions mentioned in the budgetary provisions mentioned in the Action Plan and Action Plan and within the stipulated time frame. within the stipulated time frame. The Status Report on implementation of Action The Status Plan shall be submitted to the concerned Report Regional Office of the Ministry along with District implementation of Action Plan shall be submitted to the concerned Administration Regional Office of the Ministry along with District Administration

X. Corporate Environment Responsibility (CER)

SL. No.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
53)	The activities and budget	
,	earmarked for Corporate	implemented in a time bound manner and
	Environmental Responsibility	Annual report of implementation of the same will
	(CER) as per Ministry's O.M No	be submitted to Regional Office MoEF&CC.
	22-65/2017-A. II (M) dated	
	01.05.2018 or as proposed by	
	EAC should be kept in a	
	separate bank account. The	
	activities proposed for CER	
	shall be implemented in a time	
	bound manner and annual	
	report of implementation of the	
	same along with documentary	
	proof viz. Photographs,	
	purchase documents, latitude	
	& longitude of infrastructure	
	developed & road constructed needs to be submitted to	
	Regional Office MoEF &CC	
	annually along with audited	
	statement.	
54)	Project Proponent shall keep	The Project proponent shall not divert the fund
- '/	the funds earmarked for	earmarked for environmental protection. The fund
	environmental protection	earmarked for environmental protection measures
	measures in a separate	•

account and refrain from	Year wise expenditure of such funds will be
diverting the same for other	reported to the MoEF CC and its concerned
purposes. The Year wise	Regional Office on regular basis.
expenditure of such funds	Details of expenses enclosed as Annexure XIV .
should be reported to the	
MoEF & CC and its concerned	
Regional Office.	

XI. Miscellaneous

0	OTANDADD CONDITIONS	0747110 40 011 0 477 / 4 071011 741/711
SL. No.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
55)	The Project Proponent shall	Digital processing of the entire lease area using
	prepare digital map(land use &	remote
	land cover)of the entire lease	sensing technique will be done regularly in 5 years for
	area once in five years purpose	monitoring the land use pattern and the same will
	of monitoring land use pattern	carried out by ORSAC or any agency of national
	and submit a report to	repute for which expenses will be born by the project
	concerned Regional Office of	proponent.
	the MoEF&CC.	
56)	The Project Authorities should	We will abide by the said condition.
-	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.	
57)	The Project Proponent shall	We are submitting our first six monthly compliance
	submit six monthly compliance	reports on the status of the implementation of the
	reports on the status of the	stipulated environmental safeguards to the MOEF &
	implementation of the	CC & its concerned Regional Office, Central Pollution
	stipulated environmental	Control Board and State Pollution Control Board.
	safeguards to the MOEF CC &	
	its concerned Regional Office,	
	Central Pollution Control Board	
	and State Pollution Control	
	Board.	
58)	A separate 'Environmental	We have established an Environmental Cell headed
,	Management Cell' with	by the Head-Technical to look after the
	suitable qualified manpower	implementation of the various pollution control
	should be set-up under the	measures and other Environment Management
	control of a Senior Executive.	System requirements who is reporting to the Head of
	The Senior Executive shall	the Organization.
	directly report to Head of the	Ŭ
	Organization. Adequate	
	number of qualified	
	Environmental Scientists and	
L	and	

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd.,
At- Ghoraburhani, PO –Koida, Dist.: Sundergarh

	1	
	Mining Engineers shall be	
	appointed and submit a report	
	to RO ,MoEF& CC.	
59)	The concerned Regional Office	
	of the MoEF& CC shall	the MoEF & CC officer(s)by furnishing the requisite
	randomly monitor compliance	data information/monitoring reports while monitoring
	of the stipulated conditions.	the compliance of the stipulated conditions by the
	The project authorities should	concerned regional Officials.
	extend full cooperation to the	
	MoEF& CC officer(s)by	
	furnishing the requisite data	
	information/monitoring reports.	
60)	In pursuant to Ministry's	The project proponent shall abide by the condition.
,	O.MNo22-34/2018-IA.III dated	
	16.01.2020 to comply with the	
	direction made by Hon'ble	
	Supreme Court on	
	8.01.2020inW.P. (Civil)No	
	114/2014 in the matter Common	
	Cause vs Union of India, 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 other	
	mining activities and restore	
	the land to a condition which is	
	fit for growth of fodder, flora,	
	fauna etc.	
-	1	

D. Standard EC conditions for Mineral Beneficiation Plants:

I. Statutory compliance:

SL. No.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
1)	The project proponent shall obtain forest	The project has obtained Forest
	clearance under the provisions of Forest	clearance vide letter No. 10 F
	(Conservation) Act, 1986, in case of the	(CONS)-26/2018/17489/F-E for the
	diversion of forest land for non-forest	forest land involved in the project
	purpose involved in the project.	towards the accessing the forest land
		for applicable activities as approved.
2)	The project proponent shall obtain	Not applicable to the project.
	clearance from the National Board for	
	Wildlife, if applicable.	
3)	The project proponent shall prepare Site-	Site specific wildlife conservation plan
	Specific Conservation Plan & Wildlife	got approved by PCCF Wildlife and
	Management Plan and approved by the	chief wildlife Warden, Bhubaneswar
	Chief Wildlife Warden. The	with an estimated cost of Rs. 1257
	recommendations of the approved Site-	Lakh of which Rs. 348.770 lakh has
	Specific Conservation Plan /Wildlife	been earmarked for implementation of

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At-Ghoraburhani, PO –Koida, Dist.: Sundergarh

	Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the sixmonthly compliance report. (in case of the presence of schedule-I species in the study area).	plan within the mine lease area and Rs. 908.240 Lakhs has been earmarked for implementation of plan within the buffer zone (ZOI). No such specie has been reported in the core zone as per Wild life Management study conducted over the area. Rs.100.00 lakhs will be specifically spent towards the Conservation of Schedule-I species.
4)	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/Committee.	Project Proponent (PP) has obtained Consent to establish & consent to operate for extraction of 7.16 Million TPA iron ore (ROM) production from the OSPCB, Bhubaneswar, Odisha which also includes installation of 1x1350 TPH stationary crushing & Screening plant and 2x500 TPH mobile crushing & Screening Plants, vide Consent Order No. 2955 and vide Letter No. 5144/IND-I-CON-6154 dated 30.03.2022. However at the time of installation of Iron Ore BF plant, consent to operate will be obtained for the same.
5)	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water from the competent authority concerned in case of drawl of surface water required for the project.	The Project Proponent has obtained NOC for withdrawal of 95 Cu.m/day quantity of ground water from CGWA for the project vide letter No. CGWA/NOC/MIN/ORIG/2022/14796 dated 14.03.2022 as well as the Environment clearance for the project vide letter No. F. No. J-11015/192/2016-IA.II(M) dated 28th May 2020.
6)	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.	The project is in initial stage. The workshop and its allied infrastructures are also in ground state. The project has applied for authorization under the Hazardous and other Waste Management Rules, 2016 shall be made to obtain the same.

II. Air quality monitoring and preservation

SL. No.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
7)	The project proponent shall install	Out of three Continuous Ambient Air Quality
	24x7 continuous emission	monitoring Stations (CAAQMS), one no. of
	monitoring system at process	CAAQMS with data transfer facility to SPCB

	stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. Monitor fugitive emissions in the plant premises.	server has been established in core zone. The locations of these stations are decided in consultation with the Regional Officer State Pollution Control Board, based on metrological data, topographical features and environmentally and ecologically sensitive targets. Till installation of all CAAQMS, manual ambient air quality monitoring is being carried out.
8)	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection)Act, 1986.	The Project proponent has engaged NABL accredited and MoEF certified agency named M/s ITC lab pvt. Ltd. Through M/s Qualitek labs Pvt. Ltd, Bhubaneswar, Odisha for the monitor fugitive emissions in the plant premises on regular basis as stated.
9)	The project proponent shall install system to carry out Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM-10 and PM, in reference to PM emission, and SO, and NOx in reference to SO, and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at angle of 120' each), covering up wind and downwind directions.	Out of three Continuous Ambient Air Quality monitoring Stations(CAAQMS), two nos. of CAAQMS with RT-DAS data transfer facility to SPCB server has been established in core zone. The locations of these stations are decided in consultation with the Regional Officer State Pollution Control Board, based on metrological data, topographical features and environmentally and ecologically sensitive targets. Till installation of all CAAQMS, manual ambient air quality monitoring is being carried out.
10)	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF &CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.	Not applicable for the project.
11)	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all	Regular water sprinkling is being carried out engaging water sprinkling tankers for the fugitive dust suppression on haul roads. Appropriate air pollution control system (APC) is provided in the

	vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	form of dry fog system for crusher & screen plants. Permanent fixed sprinkler for the permanent hauling road and truck tyre washing system for the dispatch vehicles, etc. as applicable to all the dust generating points to
		comply prescribed stack emission and fugitive emission standards.
12)	The project proponent use leak	As per the standard practice the vehicles which
	proof trucks/dumpers carrying ore and other raw materials and cover	will carry the loaded materials shall be fully covered with tarpaulins to prevent the spillage of
	them with tarpaulin.	mineral on transportation road.
13)	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.	Not applicable for the project.
14)	Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.	Not applicable as it is an open cast mining activities.

III. Water quality monitoring and preservation

SL.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
No.	OTANDARD CONDITIONS	OTATOO AO ON DATE / AO HON TAILEN
15)	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	There is no scope of huge quantity of effluents generation from the mines for which the installation of the same shall be required. Instead, project proponent will construct ETP (oil & grease trap pit) for the treatment of effluents generated from workshop; etc. The water quality shall be analyzed through NABL accredited laboratories to conform the prescribed standard before discharge to outside.
16)	The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon)at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.	The ground water quality is being monitored by the project proponent through the recognized under Environment (Protection) Act, 1986 and NABL accredited Laboratory/agency M/s ITC Pvt. Ltd. through M/s Qualitek laboratory Pvt. Ltd., Bhubaneswar as prescribed in the condition.
17)	The project proponent shall submit monthly summary report	Not applicable for the project

		ani, PO –Koida, Dist.: Sundergarn
18)	of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report. The project proponent shall provide the slime disposal facility with impervious lining and collection wells for seepage.	The project proponent will construct the slime disposal ponds with impervious lining and collection wells for seepage. The water collected from the slime pond shall be treated and recycled
	The water collected from the slime pond shall be treated and recycled.	as per the approved EIA/EMP plan.
19)	Adhere to' Zero Liquid Discharge'	The project will ensure to adopt the Zero waste Mining Concept as per the approved mining plan.
20)	Sewage Treatment Plant shall be provided for treatment of domestic waste water to meet the prescribed standards.	Sewage Treatment Plant of 80 KL capacity has already been provided for treatment of domestic waste water at the camp area to meet the prescribed standards. The water quality is being monitored by the project proponent through the recognized under Environment (Protection) Act, 1986 and NABL accredited Laboratory/agency M/s ITC Pvt. Ltd. through M/s Qualitek laboratory Pvt. Ltd., Bhubaneswar.
21)	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.	Garland drains, retaining wall will be constructed at the bottom of the OB dump followed by the settling pits (collection pits) provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
22)	The project proponent shall practice rain water harvesting to maximum possible extent.	Project proponent will implement roof top rain water harvesting measures at the office and camp area as per the approved mining plan.
23)	The project proponent shall make efforts to minimize water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.	As ours is a mining operation, still the project proponent will make efforts to minimize water consumption in all walks of the operation.

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At-Ghoraburhani, PO –Koida, Dist.: Sundergarh

IV. Noise monitoring and preservation

SL. No.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
24)	carried as per the prescribed guidelines and report in this regard shall be submitted to	Noise level is being monitored by Noise Level Meter as per the prescribed guidelines. The monitoring result shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report on regular basis.
25)	The ambient noise levels should conform to the standards prescribed under E (P) A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A)during night time.	monitoring report reveals that the result is well

V. Energy Conservation measures

SL. No.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
25)		provided for solar light system for office area and
26)	Provide LED lights in their offices and residential areas.	LED lights are being utilized in project office and camp area for illumination.

VI. Waste management

SL. No.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
27)	hazardous waste shall be disposed of as per the Hazardous & Other waste	workshops, which are separately handled and stored at different yards with all precautionary measures as per guideline provided under
28)	Kitchen waste shall be composted or converted to bio gas for further use. (to be decided on case to case basis depending on type and size of plant)	, ,

VII. Green belt and EMP

SL. No.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
29)	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The green belt shall inter alia cover the entire periphery of the plant.	Green belt has been developed as per the approved mining plan with plantation of native tree species in accordance with CPCB guidelines.
30)	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the Programme for reduction of the same including carbon sequestration including plantation.	be conducted for proper and Standardized methodology to evaluate the emissions of GHG to

VIII. Public hearing and human health issues

SL. No.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
31)	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Identification and Risk Assessment) structure will be created by the company. A detail Hazard Identification and Risk Assessment study will be
32)	The project proponent shall carry out heat stress analysis for the work men who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	Not Applicable.
33)	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after	temporary camps outside (rented land) ML area with necessary basic infrastructure/ facilities like toilets, STP, safe drinking water, medical

	the completion of the project.	
34)	Occupational health surveillance	Project proponent is conducting Periodic medical
,	of the workers shall be done on a regular basis and records	examination, occupational health check ups and maintaining the records as per Factories Act & Odisha Factories Rule.

IX. Corporate Environment Responsibility

0	OTANDADD CONDITIONS	OTATIO ACCOURAGE (ACTION TAICE)
SL. No.	STANDARD CONDITIONS	STATUS AS ON DATE / ACTION TAKEN
35)	The project proponent shall	The project proponent will abide by the
	comply with the provisions	condition and comply accordingly.
	contained in this Ministry's OM	
	vide F.No.22-65/2017-IA.III dated	
	15 May 2018, as applicable,	
	regarding Corporate Environment	
	Responsibility.	
36)	The company shall have a well	To demonstrate its commitment to Environment
	laid down environmental policy	protection, company is having Environmental
	duly approve by the Board of	, , , , , , , , , , , , , , , , , , , ,
	Directors. The environmental	Continual Improvement in Environmental
	policy should prescribe for	Performance of the Mining activity.
	standard operating procedures to	
	have proper checks and balances	
	and to bring into focus any	
	infringements /deviation/ violation	
	of the environmental/ forest/ wild	
	life norms/ conditions. The	
	company shall have defined	
	system of reporting	
	infringements/ deviation/violation	
	of the environmental/forest/wild	
	life norms/conditions and for	
	shareholders/stake holders. The	
	copy of the board resolution in	
	this regard shall be submitted to	
	the MoEF & CC as a part of six-	
	monthly report.	
37)	A separate Environmental Cell	We have established an Environmental Cell
	both at the project and company	headed by the Head-Technical to look after the
	head quarter level, with qualified	implementation of the various pollution control
	personnel shall be set up under	measures and other Environment Management
	the control of senior Executive,	System requirements who is reporting to the

STATUS OF ENVIRONMENTAL CLEARANCE CONDITIONS Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd.,

.o.aoa.a	Cagacam non ore mine or more accommutation posi-
	At- Ghoraburhani, PO –Koida, Dist.: Sundergarh

		I, FO -Rolda, Dist Sundergam
	who will directly report to the	Head of the Organization.
	head of the organization.	
38)	Action plan for implementing EMP	Action plan for implementing EMP and
	and environmental conditions	environmental conditions along with
	along with responsibility matrix of	responsibility matrix of the company has
	the company shall be prepared	already been in order. The fund earmarked for
	and shall be duly approved by	environmental protection measures in a
		•
	competent authority. The year	separate account is being utilized for the said
	wise funds earmarked for	purpose only
	environmental protection	
	measures shall be kept in	
	separate account and not to be	
	diverted for any other purpose.	
	Year wise progress of	
	implementation of action plan	
	shall be reported to the Ministry/	
	Regional Office along with the Six	
	Monthly Compliance Report.	
39)	Self-environmental audit shall be	Project proponent will conduct the
,	conducted annually. Every three	environmental audit system as prescribed by
	years third party environmental	implementing the ISO standards at operation
	audit shall be carried out.	level.
40)	All the recommendations made in	Noted. All the recommendations made in the
40)		
		, , , , , , , , , , , , , , , , , , , ,
	Responsibility for Environment	,
	Protection (CREP) for the Mineral	Beneficiation plants will be implemented.
	Beneficiation plants shall be	
	implemented.	

X. Miscellaneous

The project proponent shall make	Project proponent has advertised in the two local
public the environmental clearance	newspapers, i.e. Prameya Daily (vernacular
granted for their project along with	language) and The Sunday – English Newspaper
the environmental conditions and	within stipulated time period. A copy of the same
safeguards at their cost by	got submitted to the Regional Office of this
, ,	Ministry located at Bhubaneswar.
, .	•
or State of which one shall be in the	
vernacular language within seven	
	complied.
clearance shall be submitted by the	·
project proponents to the Heads of	
• • • • •	
Municipal Bodies in addition to the	
	granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and

	relevant offices of the Government	
	who in turn has to display the same	
42)	for 30 days from the date of receipt.	We are submitting our six monthly compliance
43)	The project proponent shall upload the status of compliance of the stipulated environment clearance	We are submitting our six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards measures
	conditions, including results of	and same will be uploaded on the website of the
	monitored data on their web site	ministry of Environment, Forest and Climate
	and update the same on half-yearly basis.	Change at environment clearance portal half yearly basis.
44)	The project proponent shall monitor	The project proponent will display the information
,	the criteria pollutants level namely;	at a convenient location for disclosure to the
	PM10, SO, Nox (ambient levels as	public and put on the web site of the company.
	well as stack emissions) or critical	parameter and their end of and company.
	sectoral parameters, indicated for	
	the projects and display the same at	
	a convenient location for disclosure	
	to the public and put on the web	
1=:	site of the company.	
45)	The project proponent shall submit	Mining operation is in initial stage and We are
	six-monthly reports on the status of the compliance of the stipulated	submitting our first six monthly compliance reports on the status of the implementation of the
	environmental conditions on the	stipulated environmental safeguards to the MOEF
	website of the ministry of	& CC & its concerned Regional Office, Central
	Environment, Forest and Climate	Pollution Control Board and State Pollution
	Change at environment clearance	Control Board. Subsequently the status shall be
	portal.	uploaded on the website of the ministry of
		Environment, Forest and Climate Change at
46)	The preject proposet shall submit	environment clearance portal.
46)	The project proponent shall submit the environmental statement for	The environment statement for the reporting year 2021-22 shall be submitted to SPCB, Odisha and
	each financial year in Form-V to the	copy of the same shall also updated in the
	concerned State Pollution Control	company's website followed by the submission of
	Board as prescribed under the	the same to the Office of the Ministry of
	Environment (Protection) Rules,	Environment and Forests & Climate Change,
	1986, as amended subsequently	Bhubaneswar.
	and put on the website of the	
1=:	company.	
47)	The project proponent shall inform	The project proponent will inform the Regional
	the Regional Office as well as the Ministry, the date of financial	Office as well as the Ministry, the date of financial closure and final approval of the project by the
	closure and final approval of the	concerned authorities, commencing the land
1	l Clubule allu Illiai auviluvai vi ille	
		development work and start of production operation by the project.
	project by the concerned	development work and start of production
	project by the concerned authorities, commencing the land development work and start of production operation by the project.	development work and start of production operation by the project.
48)	project by the concerned authorities, commencing the land development work and start of production operation by the project. The project authorities must strictly	development work and start of production operation by the project. Noted. The Project proponent will adhere by the
48)	project by the concerned authorities, commencing the land development work and start of production operation by the project. The project authorities must strictly adhere to the stipulations made by	development work and start of production operation by the project. Noted. The Project proponent will adhere by the condition stipulated by SPCB and the State
48)	project by the concerned authorities, commencing the land development work and start of production operation by the project. The project authorities must strictly	development work and start of production operation by the project. Noted. The Project proponent will adhere by the

40)		ani, PO -kolda, Dist.: Sundergarn
49)	The project proponent shall abide	The Project proponent is committed in
	by all the commitments and	implementing the commitment made during
	recommendations made in the	Public Hearing and also that during their
	EIA/EMP report, commitment made	presentation to the Expert Appraisal Committee
	during Public Hearing and also that	and will abide by the condition.
	during their presentation to the	•
	Expert Appraisal Committee.	
50)	No further expansion or	Noted. The Project proponent will abide by the
00)	modifications in the plant shall be	condition.
	carried out without prior approval of	Condition.
	•	
	Forests and Climate Change	
5.4	(MoEF&CC).	N. d. T. D. d. d. d. d. d.
51)	Concealing factual data or	, , ,
	submission of false/fabricated	condition.
	data may result in revocation of	
	this environmental clearance and	
	attract action under the provisions	
	of Environment (Protection)Act,	
	1986.	
52)	The Ministry may revoke or	Noted. The Project proponent will abide by the
,	suspend the clearance, if	condition.
	implementation of any of the above	oonalion.
	conditions is not satisfactory.	
F2)		Noted The Drainet propoport will chide by the
53)	The Ministry reserves the right to	Noted. The Project proponent will abide by the
	stipulate additional conditions if	condition.
	found necessary. The Company in a	
	time bound manner shall implement	
	these conditions.	
54)	The Regional Office of this Ministry	' ' '
	shall monitor compliance of the	cooperation to the MoEF & CC officer(s)by
	stipulated conditions. The project	furnishing the requisite data
	authorities should extend full	information/monitoring reports while monitoring
	cooperation to the officer(s) of the	the compliance of the stipulated conditions by the
	Regional Office by furnishing the	concerned regional Officials.
	requisite	Ŭ
	data/information/monitoring	
	reports.	
55)	The above conditions shall been	Noted. The Project proponent will abide by the
	forced, inter-alia under the	condition.
	provisions of the Water (Prevention	CONCINUIT.
	& Control of Pollution) Act, 1974,	
	the Air (Prevention & Control of	
	Pollution)Act, 1981, the	
	Environment (Protection) Act, 1986,	
	Hazardous and Other Wastes	
	(Management and Trans-boundary	
	Movement) Rules, 2016 and the	
	Public Liability Insurance Act, 1991	
	along with their amendments and	
<u> </u>	along with those unfoliamonts and	

	Rules and any other orders passed by the Hon'ble Supreme Court of India/High Courts and any other Court of Law relating to the subject matter.	
56)	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted. The Project proponent will abide by the condition.
57	Awareness among employees & villagers on Ban of Single Use Plastic-(SUP) as per Office Memorandum from MoEF & CC vide Ref No: F.No IA-22/8/2021-IA-III[150512]	The project has carried out no of Awareness Programme on adverse impact on environment due to single use plastic use among employees & villagers. Photo of the same enclosed as Photo #19

PHOTOGRAPHS



Photo-1 Garland Drain at the toe of OB Dump



Photo# 2 Construction of Check Dam near 175 TPH Crusher



Photo # 3(A) ,(B),(C) &(D) Plantation and Transplantation Work at Safety Zone





Photo # 4 (A) & B) Mobile Water Tankers engaged on mines approach road



Photo # 5 Mobile Water Tankers engaged & on Ore Carrying Transporting Road





Photo # 6 Drilling Machines equipped with Wet Drilling & Dust Extractor System



Photo #7 Ore Carrying Vehicle covered with tarpaulin before exit of mine gate





Photo# 8 (A) & (B) Establishment of AAQ Station



Photo # 9(A) Sewage Treatment Plant (80 KL) at base camp



Photo # 9(B) Effluent Treatment Plant at Work Shop



Photo 10(A) Settling cum Percolation Pond



Photo # 10(B) Construction Series of Check Weirs at different locations



Photo # 10(C) Check Weir provided at sensitive locations



Photo # 11 Retaining Wall along with garland Drain around the S G Dump





Photo # 12 (A) & (B) Geo textile mat laying on waste dump & fines dump Slop



Photo # 13 Pit Sump for collection runoff water





Photo #14(A) Used oil stored in closed container under ventilated shed



Photo # 14 (B) Scarp Battery Storage Yard



Photo # 14 (C) Used Filters Storage with Secondary Containment



Photo #19 Establishment of Continuous Ambient Air Quality Monitoring Station







Photo #16(A) (B) &(C) Installation of Piezo Meter & Water Flow Meter with Telemetry System







Photo#16 (A),(B)&(C) Dry fog systems provided at all Screen & Crusher Units



Photo #19 Awareness among employees & Villagers on BAN of SUP.

ANNEXURE- I

AMMERURE # 1

Government of Gujarat



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Certificate of Stamp Duty

Certificate No.

IN-GJ96013511570121S

Certificate Issued Date

10-Jun-2020 07:53 PM

Account Reference

IMPACC (SV)/ gj13184204/ NANPURA1/ GJ-SU

Unique Doc. Reference

SUBIN-GJGJ1318420431326278731600S

Purchased by

RIDDHISH DOSHI

Description of Document

Article 4 Affidavit

Description

Not Applicable

Consideration Price (Rs.)

(Zero)

First Party

: ARCELORMITTAL NIPPON STEEL INDIA LIMITED

Second Party

Not Applicable

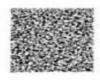
Stamp Duty Paid By

: ARCELORMITTAL NIPPON STEEL INDIA LIMITED

Stamp Duty Amount(Rs.)

100

(One Hundred only)





LB 0000241854

Statutory Alert

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Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At-Ghoraburhani, PO –Koida, Dist.: Sundergarh

Affidavit

 Pankaj S Chourasia, aged about 44 years, son of Late Shri S. N. Chourasia, resident of Flat 1, Plot 131, Sector 12, Vashi, Navi Mumbai 400 703, do hereby state as follows:

- I Pankaj S Chourasia as Company Secretary of ArcelorMittal Nippon Steel India Limited (formerly Essar Steel India Limited) submitting this affidavit with reference to the Environmental clearance granted vide F. No. J-11015/192/2016-IA.II (M) dated 28th May 2020 for Ghoraburhani – Sagasahi Iron ore Block of M/s ArcelorMittal Nippon Steel India Limited (Formerly Essar Steel India Limited) with an approved quantity of Iron ore 7,162,538 TPA iron ore (ROM), 18750 TPA Topsoil and 2,868,896 TPA OB/SB/IB (Total Excavation: 1,00,50,184 TPA) along with Crushing & Screening Plant and Beneficiation Plant with capacity of 6.7 Million TPA (1250 TPH) capacity in the mine lease area of 139.165 hai, located at village – Ghoraburhani, Sagasahi and Kalmang, Tehsil Koira, District Sundargarh, Odisha.
- That I undertake, M/s ArcelorMittal Nippon Steel India Limited (Formerly Essar Steel India Limited) shall comply with all the conditions prescribed in the Environmental Clearance vide F. No. J-11015/192/2016-IA-II (M) dated 28th May 2020 issued by Ministry of Environment, Forest & Climate Change, New Delhi.

 That I swear this affidavit to produce before the Authority of Ministry of Environment, Forest and Climate Change, New Delhi.

> Signature of Deponent Name: Pankaj S Chourasia Company Secretary

ArcelorMittal Nippon Steel India Limited

VERIFICATION

Verified that the contents of this affidavit are true to my knowledge and no part of the affidavit is false and nothing has been concealed or missed therein.

Verified at on this 11th day of June, 2020

Signature of Deponent

DAGE 2 MED

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At- Ghoraburhani, PO –Koida, Dist.: Sundergarh

ANNEXURE-II

File No.8-55/2018FC

ANNEXURG # 2

Government of India
Ministry of Environment, Forest and Climate Change
(FC Division)

Indira Paryavaran Bhawan, Jor bagh Aliganj Road, New Delhi – 110003. Dated: 15th December, 2020

To,

Addl. Chief Secretary (Forests), Government of Odisha, Bhubaneswar.

Subject :Proposal for diversion of 120.838 ha of forest land for iron ore mining under Section 2 (ii) and for according permission under Section 2 (iii) of the Forest (Conservation) Act, 1980 for entire forest land 126.401 ha including safety zone area of 5.563 ha in favour of M/s Essar Steel India Ltd within their allotted Ghoraburhani-Sagasahi Iron Ore Block of 139.165 ha located in village Sagasahi, Kalmang, Ghoraburhani and Mendhamaruni PRF-I in Koira Tehsil and Koira Range under Bonai Forest Division of Sundargarh District, Odisha.

Sir.

I am directed to refer to the State Government's letter No. 10F(Cons)-26/2018-17489/ F&E dated 08.08.2018 on above mentioned subject seeking prior approval of the Central Government under Section-2 of the Forest (Conservation) Act, 1980 and to say that the proposal was examined by the Forest Advisory Committee (FAC) constituted by the Central Government under Section-3 of the said Act. After careful consideration of the proposal and recommendation by the FAC, and approval of competent authority in the Ministry, Inprinciple/Stage-I approval was accorded for diversion of 120.838 ha of forest land for iron ore mining under Section 2 (ii) and for according permission under Section 2 (iii) of the Forest (Conservation) Act, 1980 for entire forest land 126.401 ha including safety zone area of 5.563 ha in favour of M/s Essar Steel India Ltd within their allotted Ghoraburhani-Sagasahi Iron Ore Block of 139.165 ha located in village Sagasahi, Kalmang, Ghoraburhani and Mendhamaruni PRF-l in Koira Tehsil and Koira Range under Bonai Forest Division of Sundargarh District, Odisha vide this Ministry's letter of even number dated 06.03.2019 subject to fulfillment of certain conditions. The State Government has furnished compliance report in respect of the conditions stipulated in the approval and has requested the Central Government to grant final approval.

- 2. In this connection, I am directed to say that on the basis of the compliance report furnished by the State Government vide their letter no. 18092 9F (MG)-1/2018 dated 15.10.2020, approval of the Central Government is hereby accorded under Section-2 of the Forest (Conservation) Act, 1980 for subject diversion for opencast mining of limestone in favour of M/s Essar Steel India Ltd, subject to following conditions:
- A: Conditions which need to be complied prior to handing over of forest land to user agency by the State Govt.:
 - i. The State Govt, shall ensure that the admissible identified non-forest land for raising

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At-Ghoraburhani, PO –Koida, Dist.: Sundergarh

File No.8-55/2018FC

- compensatory afforestation shall be notified as RF/ PF;
- ii. The State Govt, shall ensure the complete compliance on FRA, 2006; It should also be ensured that the FRA certificate issued by District collector is complete with letter number, date, name, signature and official seal, as required in the certificate.
- iii. The State Govt, shall ensure that the boundary of the diverted forest land, mining lease and safety zone, as applicable, shall be demarcated on ground at the project cost, by erecting four feet high reinforced cement concrete pillars, each inscribed with its serial number, distance from pillar to pillar and GPS co-ordinates;
- iv. The User Agency shall obtain the Environment Clearance as per the provisions of the Environmental (Protection) Act, 1986;
- v. State government may ensure that the KML files of diverted forest land and corresponding CA areas as approved by Government of India with requisite details are uploaded on e green watch portal.

B: Conditions which need to be complied after handing over of forest land to the user agency by the State Govt.:

- i. Legal status of the diverted forest land shall remain unchanged;
- ii. The State Govt. shall ensure that the State Forest Department will raise the Compensatory Afforestation in identified equal non-forest land in village Podadihi under Bansapal Tahasil of Keonjhar Forest Division in Keonjhar District in extent to the forest land being diverted within three years of Stage –II Clearance and maintained thereafter as per approved plan and At least 1000 plants per hectare shall be planted as per approved plan/scheme. The approved Soil and Moisture Conservation (SMC) activities on the CA land shall be carried out by the State Forest Department;
- iii. The State Govt. ensure that 5.563 ha of proposed safety zone shall be maintained as tree cover and should be enriched with indigenous species at the cost of the user agency under supervision of State Forest Department.
- iv. The State Govt. ensure that following activities shall be implemented by the user agency at the project cost under supervision of State Forest Department: a) Mitigative measures to minimize soil erosion and choking of stream shall be implemented within a period of three years with effect from the issue of Stage-II clearance in accordance with the approved Plan in consultation with the State Forest Department;
 - (b) Planting of adequate drought hardy plant species and sowing of seeds, in the appropriate area within the mining lease to arrest soil erosion in accordance with the approved scheme;
 - (c) Construction of check dam, retention /toe walls along the contour to arrest sliding down of the excavated material along the contour in accordance with the approved scheme:
 - (d) Stabilize the overburden dumps by appropriate grading / benching, in accordance with the approved scheme, so as to ensure that angles of repose at any given place is less than 280, and
 - (e) No damage shall be caused to the top-soil and the user agency will follow the top-soil management plan.
- v. The user agency shall pay the additional amount of NPV, if so determined, as per the final decision of the Hon'ble Supreme Court of India;
- vi. The State Govt. ensure that the user agency will implement the approved plan /scheme for fencing, protection and regeneration of the safety zone area at their cost under supervision of State Forest Department;

File No.8-55/2018FC

the all Acts, Rules, Regulations, Guidelines, Hon'ble Court Order (s) and NGT Order (s) pertaining to this project, if any, for the time being in force, as applicable to the

> Yours faithfully, (Sandeep Sharma) Asstt. Inspector General of Forests

Copy to:

- 1. Principal Chief Conservator of Forests, Government of Odisha, Bhubaneshwar.
- Nodal Officer(FCA), Government of Odisha, Bhubaneshwar.
 Dy. Director General (Central), Integrated Regional Office, Bhubaneshwar.
- 4. Monitoring Cell of FC Divisions, MoEF&CC, New Delhi.
- 5. Guard file.

ANNEXURE- III AAQ Monitoring Reports

		Pariod	April-22 to S	ent-22					
Period: April-22 to Sept-22 Results in micro.gm/CUM									
Sampling locations	Month	Range	PM10	PM2.5	SO ₂	NOx	CO		
A1		195				110%			
A1	Apr-22	Avg.	82	18	15	18	BLQ(LOQ:1.0		
	May-22	Avg.	81	19	15	18	BLQ(LOQ:1.0		
Mines Office	Jun-22	Avg.	84	18	15	18	BLQ(LOQ:1.0		
	Jul-22	Avg.	81	20	16	20	BLQ(LOQ:1.0		
	Aug-22	Avg.	81	19	15	20	BLQ(LOQ:1.0		
	Sep-22	Avg.	81	19	15	19	BLQ(LOQ:1.0		
A2	Oep-22	Avy.	01	19	15	1 19	BLQ LOQ: 1.0		
	Apr-22	Avg.	82	18	15	18	BLQ(LOQ:1.0		
	May-22	Avg.	80	19	15	18	BLQ(LOQ:1.0		
Date of Date of	Jun-22	Avg.	80	22	15	19	BLQ(LOQ:1.0		
Entry & Exit Gate	Jul-22	Avg.	82	20	15	19	BLQ(LOQ:1.0		
	Aug-22	Avg.	80	20	15	19	BLQ(LOQ:1.0		
	Sep-22	Avg.	80	19	16	19	BLQ(LOQ:1.0		
A3						1 10	DEG EGG. 1.c		
	Apr-22	Avg.	82	19	15	17	BLQ(LOQ:1.0		
	May-22	Avg.	81	19	15	18	BLQ(LOQ:1.0		
Near CAAQMS -2(Jun-22	Avg.	80	19	16	19	BLQ(LOQ:1.0		
North Pit)	Jul-22	Avg.	81	19	15	19	BLQ(LOQ:1.0		
	Aug-22	Avg.	79	250	15	19	BLQ(LOQ:1.0		
	Sep-22	Avg.	81	20	15	19	BLQ(LOQ:1.0		
A4							224(234:1:0		
	Apr-22	Avg.	82	20	15	16	BLQ(LOQ:1.0		
	May-22	Avg.	81	20	15	18	BLQ(LOQ:1.0		
illage Ghoraburhani	Jun-22	Avg.	81	21	15	18	BLQ(LOQ:1.0		
mage Ghoraburnam	Jul-22	Avg.	80	18	15	19	BLQ(LOQ:1.0		
	Aug-22	Avg.	82	20	16	18	BLQ(LOQ:1.0		
	Sep-22	Avg.	78	19	15	20	BLQ(LOQ:1.0		
A5									
	Apr-22	Avg.	79	19	16	17	BLQ(LOQ:1.0		
	May-22	Avg.	78	18	16	19	BLQ(LOQ:1.0		
Village Sagasahi	Jun-22	Avg.	81	20	15	18	BLQ(LOQ:1.0		
muge Dagasam	Jul-22	Avg.	79	18	15	18	BLQ(LOQ:1.0		
	Aug-22	Avg.	75	19	16	20	BLQ(LOQ:1.0		
	Sep-22	Avg.	78	20	16	18	BLQ(LOQ:1.0		
A6									
	Apr-22	Avg.	83	19	14	17	BLQ(LOQ:1.0		
	May-22	Avg.	75	19	15	18	BLQ(LOQ:1,0		
Village Kolmong	Jun-22	Avg.	78	18	15	19	BLQ(LOQ:1.0		
	Jul-22	Avg.	80	18	16	19	BLQ(LOQ:1.0		
	Aug-22	Avg.	75	18	16	19	BLQ(LOQ:1.0		
1.7	Sep-22	Avg.	79	20	16	19	BLQ(LOQ:1.0		
A7									
	Apr-22	Avg.	77	18	15	17	BLQ(LOQ:1.0		
	May-22	Avg.	75	18	15	18	BLQ(LOQ:1.0		
Village Barpada	Jun-22	Avg.	76	18	14	18	BLQ(LOQ:1.0		
	Jul-22	Avg.	77	19	15	19	BLQ(LOQ:1.0		
	Aug-22	Avg.	77	19	14	20	BLQ(LOQ:1.0		
	Sep-22	Avg.	79	18	15	18	BLQ(LOQ:1.0		

ANNEXURE-IV Fugitive Dust Monitoring Report

			India Limite	d					
			rom April-22						
Stations	Monthly Average Results, micro.gm/CUM								
	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Norms		
Crusher Plant	537	576	595	555	583	527			
Ore Storage & Loading	561	550	581	567	548	558			
Haul Road	526	573	550	548	527	518	1200		
Screening Area	546	556	536	525	578	582			
Mines Face	561	537	534	555	522	531			
Dumping Area	552	590	562	562	516	577			

ANNEXURE-V Ambient and Work Zone Monitoring Report

Sı Ghoraburhani Sag			Level Re ine of M/s		India Lim	ited			
PLACE OF	Average Leq Results of Noise Level in dB (A) From April to September-22								
MINITORING(Core & Buffer Zone)	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22			
Ghoraburuhani	59.45	57.3	59.15	64.85	59.9	65.5			
Sagasahi	60.2	58.65	59.15	61.1	64.6	62.63			
Kolmong	60.85	58.25	59.9	61.2	56.8	57.53			
Ganghalpada	61	57.5	59.4	58.65	56	60.77			
Oroghat	61.25	57.2	59.15	57.7	57.7	59.89			
Barpada	60.25	56.55	58.9	60.45	56.5	59.51			
Screening Plant Area	71.5	71.2	69.45	74.1	67.9	68.88			
Crusher Plant Area	70.3	70	62.75	71.55	66.2	71.21			
workshop	65.5	67.55	66.3	72	69.1	70.45			
Loading point	71.85	67.85	65.85	67.25	67.15	68.45			
Mines Pit	69.49	69	67.95	71.7	66.1	67.32			
NORMS	(6.00 AM - 9.00 PM) - Leq 75 dB(A) (9.00PM- 6.00 AM) - Leq 70 dB(A)								

ANNEXURE-VI STP Discharge Quality Report

	S ⁻ Ghoraburhani Saga	TP Discha sahi Iron				India	Limited	1	
	Pe	eriod: Fro	m Apr-2	2 to Se	p-22				
Sl. No	Parameters	Unit	RESULTS						
			Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Norms
1	рН		6.5	6.74	6.78	6.56	6.78	6.55	5.5-9.0
2	Total Suspended Solids (TSS)	mg/l	55	74	67	54	62	74	100mg/l
3	COD	mg/l	100	123	110	118	102	110	
4	BOD	mg/l	18	23	26	24	21	24	30 mg/l
5	Faecal ColiformMPN/100 ml	mg/l	350	430	350	920	430	540	1000ml

ANNEXURE-VII Ground Water Quality Report

		GHORAB	Summarised Gr JRHANI SAGASAHI IRON	UND WATER QUALITY F ound Water Quality M ORE MINES, M/s. ARC the Period of August-	onitoring Report : ELORMITTAL NIPPON ST	EEL INDIA LTD.		
SL.NO	Analysis	Unit	GW1	GW2	GW3	GW4	GW5	GW6
a	Colour (apparent)	u. Hazen	1.Orga	noleptic & Physical Pa	rameter	T	T	
b	Odour Odour	u. Hazen		122		5	301	19
c			Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
	pH Value		6.92	6.81	6.94	6.97	5.83	5,93
d	Turbidity(NTU))	•••	<0.5	25.1	<0.5	0.6	51.4	2.17
c	Total dissolved solids	mg/l	66	39	66	49	44	38
a	Aluminium as Al	mg/l	BLQ(LOQ:0.02)	ning Undesirable Substa BLQ(LOQ:0.02)	BLQ(LOQ:0.02)	BLQ(LOQ:0.02)	BLQ(LOQ:0.02)	BLQ(LOQ:0.0
b	Ammonia (as total	mg/l	BLQ(LOQ:0.1)					
c	ammonia-N) Anionic detergent (as			BLQ(LOQ:0.1)	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)	BLQ(LOQ:0.1
ď	MBAS)	mg/l	BLQ(LOQ:0.5)	BLQ(LOQ:0.5)	BLQ(LOQ:0.5)	BLQ(LOQ:0.5)	BLQ(LOQ:0.5)	BLQ(LOQ:0.5
	Barium (as Ba)	mg/l	BLQ(LOQ:0.3)	BLQ(LOQ:0.3)	BLQ(LOQ:0.3)	BLQ(LOQ:0.3)	BLQ(LOQ:0.3)	BLQ(LOQ:0.3
e	Boron(as B)	mg/l	BLQ(LOQ:0.5)	BLQ(LOQ:0.5)	BLQ(LOQ:0.5)	BLQ(LOQ:0.5)	BLQ(LOQ:0.5)	BLQ(LOQ:0.5
ſ	calcium (as ca)	mg/l	10.3	6.6	11.8	7.4	5.2	6.6
g	Chloramines(as Cl2)	mg/l	BLQ(LOQ:0.3)	BLQ(LOQ:0.3)	BLQ(LOQ:0.03)	BLQ(LOQ:0.03)	BLQ(LOQ:0.3)	BLQ(LOQ:0.3
h	Chloride as (Cl)	mg/l	9.8	9.8	10.8	12.7	13.7	15.7
i	Copper (as Cu)	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.015)	BLQ(LOQ:0.2
j	Fluoride (as F)	mg/l	BLQ(LOQ:0.1)	BLQ(LOQ:0.001)	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)	BLQ(LOQ:0.1
k	Phenolic compounds	mg/l	BLQ(LOQ:0.001)	BLQ(LOQ:0.001)	BLQ(LOQ:0.001)	BLQ(LOQ:0.001)	BLQ(LOQ:0.001)	BLQ(LOQ:0.00
1	Free residual Chlorine mg/l Not Applica		Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl
m Iron (as Fe)		mg/l	BLQ(LOQ:0.08)	0.17	BLQ(LOQ:0.08)	BLQ(LOQ:0.08)	BLQ(LOQ:0.08)	0.67
n	Magnesium (as Mg)	mg/l	4,9	1.8	2.7	2.6 1.7		2.7
0	Manganese (as Mn)	mg/l	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)	BLQ(LOQ:0.1
р	Mineral Oil	mg/l	BLQ(LOQ:1.0)	BLQ(LOQ:1.0)	BLQ(LOQ:1.0)	BLQ(LOQ:1.0)	BLQ(LOQ:1.0)	BLQ(LOQ:1.0
q	Nitrate as NO3	mg/l	BLO(LOO:1.0)	BLQ(LOQ:1.0)	BLQ(LOQ:1.0)	BLQ(LOQ:1.0)	BLQ(LOQ:1.0)	1.5
r	Selenium (as Se)	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.00:
s	Silver (as Ag)	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	
t	Sulphate (as SO4)	mg/l	BLQ(LOQ:1.0)	BLQ(LOQ:1.0)				BLQ(LOQ:0.00
u	Sulphid (as H2s)	mg/l	BLQ(LOQ:0.05)		BLQ(LOQ:1.0) BLQ(LOQ:1.0)		8.2	BLQ(LOQ:1.0
v	Total Alkalinity(as		48.5	BLQ(LOQ:0.05)	BLQ(LOQ:0.05)	BLQ(LOQ:0.05)	BLQ(LOQ:0.05)	BLQ(LOQ:0.05
w	(CaCO3) Total Hardness(as	mg/l		25.3	44.3	33.8	21.1	29.5
	CaCO3)	mg/l	46	23.9	40.5	29.4	20.2	27.6
X	Zinc (as Zn)		BLQ(LOQ:0,002)	0.382	BLQ(LOQ:0.002)	0.004	0.078	0.062
	T T			eter concerning Toxic su	bstances			日本 建三
a	Cadmium (as Cd)	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002
b	Cyanide(as CN)	mg/l	BLQ(LOQ:0.01)	BLQ(LOQ:0.01)	BLQ(LOQ:0.01)	BLQ(LOQ:0.01)	BLQ(LOQ:0.01)	BLQ(LOQ:0.01
c	Lead (as pb)	mg/l	BLQ(LOQ:0,002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0,002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.00)
d	Mercury(as Hg)	mg/l	BLQ(LOQ:0:001)	BLQ(LOQ:0.001)	1.39	BLQ(LOQ:0.001)	BLQ(LOQ:0.001)	BLQ(LOQ:0.00)
e	Molibdenum(as Mo)	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002
ſ	Nickel(as Ni)	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ;0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0,002)	BLQ(LOQ:0.002
g	Total Arsenic (as As)	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	0.006	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002
h	Total Chromium(as Cr)	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002
7	E Coli			1.Microbial tests				
1	Total Coliform Count	per 100ml	Absent	Absent	Absent	Absent	Absent	Absent

GW - 1	Near Mine lease Area (Bore Well)	DATE
GW - 2	Sagasahi (Bore Well)	DAIL
GW - 3	Kolmang (Bore Well)	
GW - 4	Oraghat (Bore Well)	19.08.2022
GW - 5	Gandhalpada(Bore Well)	10.00.2022
GW - 6	Shankhapura(Boewell)	

ANNEXURE-VIII Surface Water Quality Report

		SUF	RFACE WATER QUA	LITY REPORT							
	<u>S1</u>	ummarised S	urface Water Qua	lity Monitoring Rep	oort:						
	GHORABURHANI SA	GASAHI IRO	N ORE MINES, M/s.	ARCELORMITTAL N	IPPON ST	EEL INDIA	LTD.				
		Fe	or the Period of Au	gust-2022							
Sl.No	o PARAMETER	UNIT	SW-1	SW-2	S	W-3	SW-4				
a	Colour (apparent)	u. Hazen	125	284		103	18				
b	Odour	-	Agreeable	Agreeable	Agr	eeable	Agreeabl	e			
c	pH Value		6.88	6,69	6	.79	6.7				
d	Turbidity(NTU))		55.2	74.8	4	6.3	21.7	VE			
e	Total dissolved solids	mg/l	44	41		70	34	N.			
.Parai	meter Concerning Undesirable S	ubstances in e	xcess amount								
	Aluminium as Al	mg/l	BLQ(LOQ:0.02)	BLQ(LOQ:0.02)	BLQ(L	OQ:0.02)	BLQ(LOQ:0	0.02			
b	Ammonia (as total ammonia-N)	mg/l	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)		OQ:0.1)	BLQ(LOQ:	-			
c	Anionic detergent (as MBAS)	mg/l	BLQ(LOQ:0.5)	BLQ(LOQ:0.05)	BLQ(L	OQ:0.05)	BLQ(LOQ:0	-			
d	Barium (as Ba)	mg/l	BLQ(LOQ:0.3)	BLQ(LOQ:0.3)	BLQ(I	OQ:0.3)	BLQ(LOQ:	_			
e	Boron(as B)	mg/l	BLQ(LOQ:0.5)	BLQ(LOQ:0.5)		.OQ:0.5)	BLQ(LOQ:	_			
f	calcium (as ca)	mg/l	5.9	5.8		9.5	4.6				
g	Chloramines(as Cl2)	mg/l	BLQ(LOQ:0.03)	BLQ(LOQ:0.03)	BLQ(L	OQ:0.03)	BLQ(LOQ:0	0.03			
h	Chloride as (Cl)	mg/l	13.5	12.6	1	4.5	1.4				
i Copper (as Cu) mg/l BLQ(LOQ:0.002) BLQ(LOQ:0.002) BI							BLQ(LOQ:0.	.002			
j	Fluoride (as F)	mg/l	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)		BLQ(LOQ:0.1				
k	Phenolic compounds	mg/l	BLQ(LOQ:0.001)	BLQ(LOQ:0.001)	BLQ(LO	OQ:0.001)	BLQ(LOQ:0.00				
1	Free residual Chlorine	mg/l	Not Applicable	Not Applicable	Not A	pplicable	Not Applica				
m	Iron (as Fe)	mg/l	0.1 0.1		BLQ(L	OQ:0.08)	BLQ(LOQ:	_			
n	Magnesium (as Mg)	mg/l	2.7	2.7		5.4	3				
0	Manganese (as Mn)	mg/l	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)	BLQ(I	OQ:0.1)	BLQ(LOQ:	0.1)			
р	Mineral Oil	mg/l	BLQ(LOQ:1.0)	BLQ(LOQ:1.0)	BLQ(I	OQ:1.0)	BLQ(LOQ:0.0				
q	Nitrate as NO3	mg/l	BLQ(LOQ:1.0)	BLQ(LOQ:1.0)	BLQ(I	OQ:1.0) BLQ(LOQ:					
r	Selenium (as Se)	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LC	OQ:0.002)	BLQ(LOQ:0.	_			
S	Silver (as Ag)	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LC	OQ:0.002)	BLQ(LOQ:0.	-			
t	Sulphate (as SO4)	mg/l	3.7	7.7		5.3	3.8				
u	Sulphid (as H2s)	mg/l	BLQ(LOQ:0.05)	BLQ(LOQ:0.05)	BLQ(L	OQ:0.05)	BLQ(LOQ:0	.05			
v	Total Alkalinity(as (CaCO3)	mg/l	31.5	31.5	42		15.3				
w	Total Hardness(as CaCO3)	mg/l	25.8	25.7		46 18					
x	Zinc (as Zn)		0.002	0.002	0.	007	0.003				
Paran	neter concerning Toxic substance	S									
а	Cadmium (as Cd)	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LC	Q:0.002)	BLQ(LOQ:0.	002			
b	Cyanide(as CN)	mg/l	BLQ(LOQ:0.01)	BLQ(LOQ:0.01)	BLQ(Le	OQ:0.01)	BLQ(LOQ:0				
	Lead (as pb)	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LC	Q:0.002)	BLQ(LOQ:0.	002			
d	Mercury(as Hg)	mg/l	BLQ(LOQ:0.001)	BLQ(LOQ:0.001)	BLQ(LC	Q:0.001)	BLQ(LOQ:0.	_			
e	Molibdenum(as Mo)	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LC	Q:0.002)	BLQ(LOQ:0.	002			
f	Nickel(as Ni)	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LC	Q:0.002)	BLQ(LOQ:0.	002			
	Total Arsenic (as As)	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LC	Q:0.002)	BLQ(LOQ:0.	002			
	Total Chromium(as Cr)	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LC	Q:0.002)	BLQ(LOQ:0.	002			
	bial tests										
-	E.Coli	per 100ml	Present	Present		Present					
	Total Coliform Count	per 100ml	Present	Present	Present		Absent				
LQ- B	elow Limit of Quantification, LO		antification								
		SW - 1		River (Up Stream)			DATE				
		SW - 2	Suna Ri	ver (Down Stream)							
		SW - 3 Karo nalla 17.08.2022									

ANNEXURE-IX Site Specific Wild Life Conservation Plan



OFFICE OF THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS (WILDLIFE) & CHIEF WILDLIFE WARDEN, ODISHA

Department of Forest and Environment, Government of Odisha

No. / / / IWL-FC-Mri-SSP-196/2018 Dated, Bhubaneswar the / August, 2019

To

M/s Essar Steel India Limited, At/PO - Dabuna, Via - Joda, Dist. - Keonjhar, Odisha, PIN - 758034

Sub:

Approval of Site Specific Wildlife Conservation Plan for Ghoraburhani-Segasahi Iron Ore Block of M/s Essar Steel India Ltd. over an area of 139.165 ha in Koira Tahsil of Sundargarh district

SIr,

It is to inform that you have to implement a Site Specific Wildlife Conservation Plan for Ghoraburhani-Segasahi Iron Ore Block in Koira Tahsil of Sundargarh district in compliance to the Standard ToR No.18 issued by MoEF&CC, Government of India in their letter No.3-11015/192/2016-IA.II(M) dt 16.01.2017 for preparation of EIA/EMP report.

 The Site Specific Wildlife Conservation Plan in respect of the above project has been approved by the undersigned with financial forecast of ₹1367.261 lakh (Rupees thirteen crore sixty-seven lakh twenty-six thousand one hundred) only for the following activities.

	Grand Total:	₹1367.261 lakh
b,	For activities to be implemented in project impact area in Bonal Division	₹811.131 lakh
a.	For activities to be implemented by the user agency in project area	₹556.130 lakh

- 3. Various activities in the forest area to be diverted will be executed by the Project proponent under the guidance of the concerned DFO. A sum of ₹811.131 lakh only may be transferred through online portal of CAMPA account of the State for the purpose for implementation of various activities within the project impact area by the Forest Department as envisaged in the plan.
- You may please note the following conditions for future compliance.
 - This Plan may be revisited after 5 years and the User Agency will give undertaking to contribute towards the revised cost of the conservation plan till the project period, if any.
 - If there would be need for Site Specific Wildlife Conservation Plan after expiry of the
 present plan period, the user agency will have to submit another such plan at least
 one year before the expiry of the present Conservation Plan and deposit the outlay
 amount upon its approval. In case of delay, it will be dealt as per law for violations of
 Forest Conservation Act, 1980 and Environment (Protection) Act, 1986.
 - The project proponent has to give an undertaking to bear the differential cost in case of enhancement of wage rate at the time of implementation of this plan.

Yours faithfully

Encl: 2 copies of approved site specific WL Conservation Plan

> Principal Chief Conservator of Forests (WL) & Chief Wildlife Warden, Odisha

P.T.O.

PRAKRUTI BHAWAN, PLOT NO.1459, SAHEED NAGAR, BHUBANESWAR- 751007 Phone: 0674-2602250, Website: www.wildlife.odisha.gov.in, Email: odishawildlife@gmail.com

emo No. 6758 /date

Copy forwarded for information and necessary action to -

 Special Secretary to Govt. of Odisha, F&E Department, Bhubaneswar with reference to that Department memo No.17491/F&E dt 08.08.2018

-2-

- Principal Chief Conservator of Forests, Odisha with reference to this office memo No.6131 dt 23.07.2019
- Regional Chief Conservator of Forests, Rourkela Circle with reference to his memo No.1809 dt 28.07.2019
- Divisional Forest Officer, Bonai Division alongwith copy of the approved site specific wildlife conservation plan with reference to this office memo No.6129 dt 23.07.2019

Principal Chief Conservator of Forests (WL) & Chief Wildlife Warden, Odisha

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At-Ghoraburhani, PO –Koida, Dist.: Sundergarh

ANNEXURE-X CONSENT ORDER



CONSENT ORDER

Page 1 of 13

GHORABHURANI-SAGASAHI IRON ORE BLOCK OF M/S. ARCELOR MITTAL NIPPON STEEL INDIA LTD.



STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST, ENVIRONMENT & CLIMATE CHANGE, GOVERNMENT OF ODISHA]
A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012
Phone-2561909, Fax: 2562822, 2560955 E-mail: paribesh1@ospcboard.org, Website: www.ospcboard.org

CONSENT ORDER

No. 5/44 1

IND-I-CON-6154

Dt. 30.03.20221

BY REGD. POST WITH AD

CONSENT ORDER NO. 2955

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

Ref: Your Online Application No. 3150473 Dated 19-10-2020 and online reply dated 28.03.2022.

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

Name of the Industry: GHORABHURANI-SAGASAHI IRON ORE BLOCK OF M/S. ARCELOR

MITTAL NIPPON STEEL INDIA LTD.

Name of the Occupier & Designation: SRI RAMAKRISHNA CHINNAMSETTY,

AUTHORISED SIGNATORY

Address: AT: GHORABHURANI, PO: KOIRA, DIST: SUNDARGARH

This consent order is valid for the period from 01.04.2022 to 31.03.2024.

Details of Products Manufactured:

SI. No	Product	Quantity			
01.	Iron Ore[ROM]	7.16 MTPA			

Details of Mineral Handling Plants /Units:

01	Stationary crushing and screening plant of capacity 1X1350 TPH	
02.	Mobile crushing and screening plant of capacity 2X500 TPH	

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

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At- Ghoraburhani, PO –Koida, Dist.: Sundergarh



Page 2 of 13

CONSENT ORDER GHORABHURANI-SAGASAHI IRON ORE BLOCK OF M/S. ARCELOR MITTAL NIPPON STEEL INDIA LTD.

Discharge permitted through the following outlet subject to the standard

Outlet No.	Description of		Quantity	Pre-scribed Standard						
	outlet	discharge	of discharge	pН	TSS (mg/l)	BOD (mg/l)	Fecal Coliform (MPN/ 100ml)	Oil & Grease (mg/l)		
01	Septic tank (Domestic effluent)	Soak pit		5.5-9.0	200	100		-		
02	Mine drainage water/ surface runoff/other wastewater except beneficiation	On land / inland surface water body	<u>-</u>	5.5-9.0	(Rainy day)	-	-	10		
	plant				(Non- Rainy day)					

B. **Fugitive Emission Standards**

Particulate Matter	1200 μg/m³						
Note: Fugitive emission: ± 2.0 metres from the sou	shall be monitored in the predominant downwind direction at a distance 25.0 arce of fugitive emission as per following:						
Area	Monitoring Location						
Mine face / Benches	Drilling, excavation and loading applicable for operating benches above water table						
Haul Roads/ Service Roads	Haul roads to ore processing plant, waste dumps and loading areas and service road.						
Crushing plant	Run-off mine unloading at hopper, crushing areas, screens and transfer points.						
Screening plant	Screens, conveying and transportation of ore discharge points.						
Ore storage and loading	Intermediate stock bin / pile areas, ore stock bin / pile areas, wagon / truck loading areas.						
Waste dump	Active waste / reject dumps						

Disposal of solid waste permitted in the following manner C.

SI. No.	Type of Solid waste	Quantity generated (TPD)	Quantity to be reused on site(TPD)	Quantity to be reused off site(TPD)	Quantity disposed off (TPD)	Description of disposal site. As per approved mining plan	
01	Top soil/ over burden	As per approved mining plan	<u></u>		<u>-</u>		

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At- Ghoraburhani, PO -Koida, Dist.: Sundergarh



CONSENT ORDER

Page 3 of 13

GHORABHURANI-SAGASAHI IRON ORE BLOCK OF M/S. ARCELOR MITTAL NIPPON STEEL INDIA LTD.

D. GENERAL CONDITIONS FOR ALL UNITS

- 1. The consent is given by the Board in consideration of the particulars given in the application. Any change or alternation or deviation made in actual practice from the particulars furnished in the application will also be the ground liable for review/variation/revocation of the consent order under section 27 of the Act of Water (Prevention & Control of Pollution) Act, 1981 and to make such variations as deemed fit for the purpose of the Acts.
- The industry would immediately submit revised application for consent to operate to this Board in the event of any change in the
 quantity and quality of raw material / and products / manufacturing process or quantity /quality of the effluent rate of emission / air
 pollution control equipment / system etc.
- The applicant shall not change or alter either the quality or quantity or the rate of discharge or temperature or the route of discharge without the previous written permission of the Board.
- 4. The application shall comply with and carry out the directives/orders issued by the Board in this consent order and at all subsequent times without any negligence on his part. In case of non-compliance of any order/directives issued at any time and/or violation of the terms and conditions of this consent order, the applicant shall be liable for legal action as per the provisions of the Law/Act.
- The applicant shall make an application for grant of fresh consent at least 90 days before the date of expiry of this consent order.
- The issuance of this consent does not convey any property right in either real or personal property or any exclusive privileges nor
 does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State laws or
 regulation.
- This consent does not authorize or approve the construction of any physical structure or facilities or the undertaking of any work in any natural water course.
- The applicant shall display this consent granted to him in a prominent place for perusal of the public and inspecting officers of this Board.
- 9. An inspection book shall be opened and made available to Board's Officers during the visit to the factory.
- 10. The applicant shall furnish to the visiting officer of the Board any information regarding the construction, installation or operation of the plant or of effluent treatment system / air pollution control system / stack monitoring system any other particulars as may be pertinent to preventing and controlling pollution of Water / Air.
- 11. Meters must be affixed at the entrance of the water supply connection so that such meters are easily accessible for inspection and maintenance and for other purposes of the Act provided that the place where it is affixed shall in no case be at a point before which water has been taped by the consumer for utilization for any purposes whatsoever.
- 12. Separate meters with necessary pipe-line for assessing the quantity of water used for each of the purposes mentioned below:
 - a) Industrial cooling, spraying in mine pits or boiler feed,
 - b) Domestic purpose
 -) Process
- 13. The applicant shall display suitable caution board at the lace where the effluent is entering into any water-body or any other place to be indicated by the Board, indicating therein that the area into which the effluents are being discharged is not fit for the domestic use/bathino.
- 14. Storm water shall not be allowed to mix with the trade and/or domestic effluent on the upstream of the terminal manholes where the flow measuring devices will be installed.
- 15. The applicant shall maintain good house-keeping both within the factory and the premises. All pipes, valves, sewers and drains shall be leak-proof. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas.
- 16. The applicant shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems install or used by him to achieve with the term(s) and conditions of the consent.
- 17. Care should be taken to keep the anaerobic lagoons, if any, biologically active and not utilized as mere stagnation ponds. The anaerobic lagoons should be fed with the required nutrients for effective digestion. Lagoons should be constructed with sides and bottom made impervious.
- 18. The utilization of treated effluent on factory's own land, if any, should be completed and there should be no possibility of the effluent gaining access into any drainage channel or other water courses either directly or by overflow.
- The effluent disposal on land, if any, should be done without creating any nuisance to the surroundings or inundation of the lands at any time.
- 20. If at any time the disposal of treated effluent on land becomes incomplete or unsatisfactory or create any problem or becomes a matter of dispute, the industry must adopt alternate satisfactory treatment and disposal measures.
- 21. The sludge from treatment units shall be dried in sludge drying beds and the drained liquid shall be taken to equalization tank.

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At- Ghoraburhani, PO -Koida, Dist.: Sundergarh



CONSENT ORDER

Page 4 of 13

GHORABHURANI-SAGASAHI IRON ORE BLOCK OF M/S. ARCELOR MITTAL NIPPON STEEL INDIA LTD.

- 22 The effluent treatment units and disposal measures shall become operative at the time of commencement of production.
- The applicant shall provide port holes for sampling the emissions and access platform for carrying out stack sampling and provide 23. electrical outlet points and other arrangements for chimneys/stacks and other sources of emissions so as to collect samples of emission by the Board or the applicant at any time in accordance with the provision of the Act or Rules made therein.
- The applicant shall provide all facilities and render required assistance to the Board staff for collection of samples / stack
- The applicant shall not change or alter either the quality or quantity or rate of emission or install, replace or alter the air pollution control equipment or change the raw material or manufacturing process resulting in any change in quality and/or quantity of 25. emissions, without the previous written permission of the Board.
- 26 No control equipments or chimney shall be altered or replaced or as the case may be erected or re-erected except with the previous approval of the Board
- The liquid effluent arising out of the operation of the air pollution control equipment shall be treated in the manner and to ion of standards prescribed by the Board in accordance with the provisions of Water (Prevention and Control of Pollution) Act, 1974 (as 27.
- 28. The stack monitoring system employed by the applicant shall be opened for inspection to this Board at any time.
- 29 There shall not be any fugitive or episodal discharge from the premises.
- In case of such episodal discharge/emissions the industry shall take immediate action to bring down the emission within the limits prescribed by the Board in conditions/stop the operation of the plant. Report of such accidental discharge /emission shall be brought to the notice of the Board within 24 hours of occurrence. 30
- The applicant shall keep the premises of the industrial plant and air pollution control equipments clean and make all hoods, pipes, valves, stacks/chimneys leak proof. The air pollution control equipments, location, inspection chambers, sampling port holes shall 31. be made easily accessible at all times.
- Any upset condition in any of the plant/plants of the factory which is likely to result in increased effluent discharge/emission of air pollutants and / or result in violation of the standards mentioned above shall be reported to the Headquarters and Regional Office of the Board by fax / speed post within 24 hours of its occurence.
- The industry has to ensure that minimum three varieties of trees are planted at the density of not less than 1000 trees per acre. The trees may be planted along boundaries of the industries or industrial premises. This plantation is stipulated over and above the bulk plantation of trees in that area. 33.
- The solid waste such as sweeping, wastage packages, empty containers residues, sludge including that from air pollution control equipments collected within the premises of the industrial plants shall be disposed off scientifically to the satisfaction of the Board, so as no to cause fugitive emission, dust problems through leaching etc., of any kind. 34.
- 35.
- All solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by:

 Land fill in case of inert material, care being taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.

 Controlled incineration, wherever possible in case of combustible organic material.

 - Composting, in case of bio-degradable material.
- 36. Any toxic material shall be detoxicated if possible, otherwise be sealed in steel drums and buried in protected areas after Any toxic material snall be detoxicated if possible, unletwise be sealed iff sleet statistically defined by the detoxication of sealing and burying shall be carried out in the presence of Board's authorized persons only. Letter of authorization shall be obtained for handling and disposal of hazardous wastes.
- If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard, vary all or any of such condition and thereupon the applicant shall be bound to comply 37
- The applicant, his/heirs/legal representatives or assignees shall have no claim whatsoever to the condition or renewal of this 38. consent after the expiry period of this consent.
- 39 The Board reserves the right to review, impose additional conditions or condition, revoke change or alter the terms and conditions of this consent
- Notwithstanding anything contained in this conditional letter of consent, the Board hereby reserves to it the right and power under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 to review any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Act by the Board. 40
- The conditions imposed as above shall continue to be in force until revoked under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 and section 21 A of Air (Prevention & Control of Pollution) Act, 1981. 41.
- In case the consent fee is revised upward during this period, the industry shall pay the differential fees to the Board (for the remaining years) to keep the consent order in force. If they fail to pay the amount within the period stipulated by the Board the consent order will be revoked without prior notice.
- The Board reserves the right to revoke/refuse consent to operate at any time during period for which consent is granted in case any violation is observed and to modify/ stipulate additional conditions as deemed appropriate. 43.

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At- Ghoraburhani, PO -Koida, Dist.: Sundergarh



CONSENT ORDER

GHORABHURANI-SAGASAHI IRON ORE BLOCK OF M/S. ARCELOR MITTAL NIPPON STEEL INDIA LTD.

GENERAL CONDITIONS FOR UNITS WITH INVESTMENT OF MORE THAN Rs 50 CRORES, AND 17 CATEGORIES OF HIGHLY

The applicant shall analyse the emissions every month for the parameters indicated in TABLE .B & C as mentioned in this order and shall furnish the report thereof to the Board by the 10th of the succeeding month.

POLLUTING INDUSTRIES (RED A).

- The applicant shall provide and maintain at his own cost three ambient air quality monitoring stations for monitoring Suspended Particulate Matter, Sulphor Dioxide, Oxides of Nitrogen, Hydro-Carbon, Carbon-Monixide and monitor the same once in a day/week/fortnight/month. The data collected shall be maintained in a register and a monthly extract be furnished to the Board.
- The applicant shall provide and maintain at his own cost a meteorological station to collect the data on wind velocity, direction, temperature, humidity, rainfall, etc. and the daily reading shall be recorded and the extract sent to the Board once in a month.
- The applicant shall forward the following information to the Member Secretary, State Pollution Control Board, Odisha, Bhubaneswar regularly.

 a. Report of analysis of stack monitoring, ambient air quality monitoring meteorological data as required every month.

 Progress on planting of trees quarterly.
- The applicant shall install mechanical composite sampling equipment and continuous flow measuring / recording devices on the effluent drains of trade as well as domestic effluent. A record of daily discharge shall be maintained.

 The following information shall be forwarded to the Member Secretary on or before 10th of every month.
- - Performance / progress of the treatment plant.

 Monthly statement of daily discharge of domestic and/or trade effluent.

Non-compliance with effluent limitations

If for any reason the applicant does not comply with or is unable to comply with any effluent limitations specified in this consent, the applicant shall immediately notify the consent issuing authority by telephone and provide the consent issuing authority with the following information in writing within 5 days of such notification.

- A description of the non-compliance discharge including its impact on the receiving waters.
- ii) Anticipated time of continuance of non-compliance if expected to continue or if such condition has been corrected the duration or period of non-compliance
- iii) Steps taken by the applicant to reduce and eliminate the non-complying discharge and
- Steps to be taken by the applicant too prevent the condition of non-compliance.
- The applicant shall take all reasonable steps to minimize any adverse impact to natural waters resulting from non-compliance with any effluent limitation specified in this consent including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.
- Nothing in this consent shall be construed to relieve the applicant from civil or criminal penalties for non-compliance whether or not such non-compliance is due to factors beyond his control, such as break-down, electric failure, accident or natural disaster.
- The applicant shall at his own cost get the effluent samples collected both before and after treatment and get them analysed at an approval laboratory every month for the parameters indicated in Part-D and shall submit in duplicate the report thereof to the Board. 8.
- The addition of various treatment chemicals should be done only with mechanical dosers and proper equipment for regulation of correct dosages determined daily and for proper uniform feeding. Crude practices such as dumping of chemicals in drains or sumps or trickling of acids or alkalies arbitrarily and utilizing poles for stirring etc. should not be resorted to.
- 10. In the disposal of treated effluent on land for irrigation, the industry shall keep in view of the need for;

Change of point of application of effluent on land

A portion of land kept fallow

- 11. The adoption of these would avoid soil becoming sick or slate, the industry may ensure this in consultation with the Agriculture Department.
- 12. It is the sole responsibility of the industry to ensure that there are no complaints at any time from the royats in the surrounding areas as a result of discharge of sewage or trade effluent if any.
- 13. Proper housekeeping shall be maintained by a dedicated team.
- The industry must constitute a team of responsible and technically qualified personnel who will ensure continuous operation of all pollution control devices round the clock (including night hours) and should be in a position to explain the status of operation of the pollution control measures to the inspecting officers of the Board at any point of time. The name of these persons with their contact telephone numbers shall be intimated to the concerned. Regional Officer and Head Office of the Board and in case of any change in the team it shall be intimated to the Board immediately.

Page 5 of 13

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At- Ghoraburhani, PO –Koida, Dist.: Sundergarh



CONSENT ORDER

Page 6 of 13

GHORABHURANI-SAGASAHI IRON ORE BLOCK OF M/S. ARCELOR MITTAL NIPPON STEEL INDIA LTD.

E. SPECIAL CONDITIONS:

- This consent order is subject to permission from Steel and Mines Department, Government of Odisha for commencement of mining operation.
- 2. Mining operation is subject to availability of all other statutory clearances.
- Drills shall either be operated with dust extractors or equipped with water injection system to minimize dust generation in the work environment.
- 4. Controlled blasting shall be practiced to minimize generation of dust and fly rocks.
- 5. Regular water sprinkling shall be carried out in critical areas prone to air pollution such as around crushing and screening plant. Water sprinkling shall also be carried out on haul roads at frequent interval so that it should always remain in wet condition. Haulage roads shall be devoid of ruts and potholes and shall be maintained properly to avoid generation of dust during movement of vehicles.
- 6. Dust suppression measures preferably dry fog system shall be provided at all appropriate places of mineral handling plants (crusher & screening plant). Loading and unloading areas including all the transfer points shall also have efficient dust suppression arrangements (dry fog system). These shall be properly maintained and operated.
- 7. Fixed auto sprinklers shall be provided on both sides of major haul road and approach road of the mine.
- Mechanized wheel washing facility for the ore transport vehicles shall be provided at the exit points of the mine. The wheel washing facility shall be integrated with complete recirculation system.
- 9. The vehicles carrying ore for transportation from the mine shall be covered with tarpaulin (both bottom & top).
- 10. Regular water sprinkling on mineral transportation roads passing through the habitation area as well as other strategic point on the National Highway shall be done jointly by the mining lessees in consultation with the Regional Officer.
- 11. Four Ambient Air Quality Monitoring Stations shall be established in core zone and buffer zone for monitoring of ambient air quality and location of the stations shall be decided in consultation with the Regional Officer, State Pollution Control Board based on the metrological data, topographical features and environmentally and ecologically sensitive targets.

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At-Ghoraburhani, PO –Koida, Dist.: Sundergarh



Page 7 of 13

CONSENT ORDER GHORABHURANI-SAGASAHI IRON ORE BLOCK OF M/S. ARCELOR MITTAL NIPPON STEEL INDIA LTD.

- 12. The monitoring of ambient air quality shall be carried out twice in a week (24 hourly) at a particular site and the consolidated data shall be submitted to the State Pollution Control Board, once in a year.
- 13. The ambient air quality shall remain within prescribed national ambient air quality standards.
- 14. Three Continuous Ambient Air Quality Monitoring Stations(CAAQMS), with data transfer facility to SPCB server shall be established in core and buffer zone within six months of issue of this order. The locations of these stations shall be decided in consultation with the Regional Officer, State Pollution Control Board, based on metrological data, topographical features and environmentally and ecologically sensitive targets. Till installation of all CAAQMS, manual ambient air quality monitoring shall be carried out at 04 places, as stipulated sl. No. 15 and 16.
- 15. Fugitive Dust Emission Monitoring shall be carried out at the places as stated in Part-B of this order. The monitoring of fugitive dust shall be carried out twice in a week (24 hourly) at a particular site and consolidated data shall be submitted to the State Pollution Control Board, once in a year.
- 16. The top soil generated shall be stored at earmarked site (s) only and stabilized with plantation or shall be used for land reclamation and plantation.
- 17. The over burden generated during the course of mining shall be stacked at earmarked dump site (s) and stabilized with plantation or used for reclamation of excavated land followed by plantation.
- 18. The project proponent shall ensure that no natural watercourse and / or water resources are obstructed due to any mining operations.
- 19. Check dams and check weirs shall be constructed at appropriate places of the mine lease area to prevent direct flow of runoff to nearby water bodies. The surface runoff water from the runoff management system shall be adequately treated to meet the prescribed standards as stated in SI. 2 of Part-A of this order.
- 20. Retention wall shall be constructed at the toe of topsoil dump and OB dump. Garland drain shall be constructed around topsoil dumps, over burden dumps and mineral stack yards terminating at settling pit to prevent direct disposal of runoff to nearby water bodies.

Ghorabhurani -Sagasahi Iron Ore Mine of M/s. ArcelorMittal Nippon Steel India Ltd., At-Ghoraburhani, PO –Koida, Dist.: Sundergarh



CONSENT ORDER GHORABHURANI-SAGASAHI IRON ORE BLOCK OF M/S. ARCELOR MITTAL NIPPON STEEL INDIA LTD.

Page 8 of 13

- 21. Garland drain and sedimentation pit shall be de-silted after monsoon or as and when required. The runoff discharge quality from runoff management system shall meet the standards prescribed as stated in SI. 2 of Part-A of this order.
- 22. Domestic effluents shall be treated in a sewage treatment plant (STP) and or shall be discharged to soak pit via septic tank constructed as BIS specification. The treated wastewater quality of STP shall remain within the following standards and shall be used for plantation:

pH - 6.5 -9.0 TSS - <100 mg/l BOD - 30 mg/l

Fecal Coliform - <1000 MPN/100 ml.

- 23. ETP shall be provided for workshop and wastewater generated during mining operation. The quality of the treated wastewater shall conform to the prescribed standard. (Part-A, SI. No.2).
- 24. Regular monitoring of water quality of upstream and downstream of surface water bodies existed if any within 5 Km shall be carried out once in every month and record shall be maintained and submitted to the State Pollution Control Board once in every year. Monitoring shall be carried out through MoEF & CC accredited laboratory.
- 25. Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells. The monitoring should be done four times a year in pre-monsoon (April/May), monsoon (August), post-monsoon (November) and winter (January) seasons. Data thus collected should be submitted to the Board quarterly.
- 26. The mine shall take necessary action for compliance with the air and water quality standards as stipulated in Part-A and Part-B of this order.
- 27. Adequate measures shall be taken for control of noise levels in the work environment of mine area so that noise levels at the boundary line of mining lease area shall not exceed 75 dB(A) during daytime (6.00 AM to 9.00 PM) and 70 dB(A) during night time (9.00 PM to 6 AM).
- 28. Adequate noise barriers shall be provided surrounding the crushing and screening plants to control noise pollution and avoid impact on wildlife due to operation of crushing and screening plants during night hours.
- 29. Online noise monitoring system shall be installed to monitor noise level during night hours.



Page 9 of 13

CONSENT ORDER GHORABHURANI-SAGASAHI IRON ORE BLOCK OF M/S. ARCELOR MITTAL NIPPON STEEL INDIA LTD.

- 30. Protective barriers shall be provided for the lights to prevent illumination towards the forest area during night hours.
- 31. Ambient air quality monitoring data, noise monitoring data and water / wastewater quality monitoring data shall be electronically displayed at the entry point of the mine or at a suitable location of the mine.
- 32. Plantation of trees shall be undertaken in the colony/ township, over top soil dumps, OB dumps, along the side of haul road and in other areas of the mines not being utilized for mining activities. The mine shall take up avenue plantation and plantation in nearby village areas in consultation with DFO/Horticulture Department. The plantation details shall be submitted to the Board before end of April every year.
- 33. A copy of the annual return (annual return submitted to IBM, Govt. of India/ Directorate of Mines, Govt. of Odisha) shall be submitted to this Board every year.
- 34. The environmental statement report shall be submitted to the Board in prescribed format every year.

MEMBER SECRETARY
STATE POLLUTION CONTROL BOARD, ODISHA

TO,

SRI RAMAKRISHNA CHINNAMSETTY, AUTHORISED SIGNATORY GHORABHURANI-SAGASAHI IRON ORE BLOCK OF M/S. ARCELORMITTAL NIPPON STEEL INDIA LTD 3A, 3RD FLOOR, FORTUNE TOWER, CHANDRASEKHARPUR, BHUBANESWAR-751013

Memo No	o/Dt/
Copy forv	varded to :
i)	Regional Officer, State Pollution Control Board, Rourkela.
ii)	District Collector, Sundargarh
iii)	Director of Mines, Govt. of Odisha, Bhubaneswar
iv)	Director, Environment-cum-Special Secretary, F & E. Deptt., Govt. of Odish Bhubaneswar.
V)	D.F.O., Bonai
vi)	Deputy Director of Mines, Koira
vii)	Addl. Chief Env. Engineer (Hazardous Waste Management Cell)
viii)	Sr. Env. Scientist , Central Lab. SPCB, Bhubaneswar
iv)	Consent Register

CHIEF ENV. ENGINEER (M)
STATE POLLUTION CONTROL BOARD, ODISHA

ANNEXURE-XI NOC FROM CGWA



भारत सरकार एँĕ Éि4 म'Tाĕय एँढ स'साधन, नदी विकास ठर ग'गा स'स्ट विभाग क'ाीय भावम एँढ धेावधकरट Government of India Ministry of Jal Shakti Department of Water Resources, River Development & Ganga Rejuvenation Central Ground Water Authority

(भूजल निकासी हेतु æिाटंनU UंमाĆ čT)

NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Arcelormittal Nippon Steel India Limited Segasahi	, Sagasahi, K	oida, Sundergarh, Odisha					
Segasahi							
3	Koida						
Sundargarh	State:	Odisha					
		Bhadrasahi Chowk, Nh 215, Barbil, Keonjhar,					
Central Ground Water Board South Eastern Region, Bhujal Bhawan, Khandagiri Square, Nh-5, Bhubaneshwar, Khordha, Odisha - 750001							
	Arcelormittal Nippon Steel India Limite Odisha, Joda, Kendujhar, Odisha - 7580 Central Ground Water Board South E	Arcelormittal Nippon Steel India Limited, Ore Club, Odisha, Joda, Kendujhar, Odisha - 758035 Central Ground Water Board South Eastern Region					

1.	NOC No.:	С	GWA/NO	C/MIN/C	RIG/2	022/14	4796								
2.	Application	No.: 2	21-4/3336/OR/MIN/2022					3.		egory: /RE 2020)		Safe			
4.	Project Sta	atus: N	ew Projec	t				5.	NOC	C Type:	Ne	New			
6.	Valid from	n: 1	4/03/2022				-1	7.	Vali	d up to:	13/	03/202	4		
8.	Ground Wa	ater Abstrac	tion Perm	itted:		. <	\supset								
	Fresh	Water		Saline	e Wate	r		Dewatering				Total			
	m³/day	m	³/day	m	³/year		m³/day	m³/year		m ³	m³/day		³/year		
	95.00	34675.00)	0											
9.	Details of o	ground wate	r abstract	ion /Dev	vaterin	g struc	ctures								
			Total Exis	ting No	.:0					Total Proposed No.:3					
		120	DW	DCB	BW	TW	MP	MPu	D١	N DCB	BW	TW	MP	MPu	
	Abstraction	Structure*	0	0	0	0	0	0	0	0	3	0	0	0	
*DV	V- Dug Well; Do	CB-Dug-cum-E	ore Well; B\	N-Bore We	ell; TW-T	ube W	ell; MP-Mi	ine Pit;MP	u-Mine	e Pumps					
10.	Ground Wa	ater Abstrac	tion/Resto	oration C	Charge	s paid	(Rs.): 34675.00								
11.	Number of Piezometers (Observation wells) to be constructed/ monitored & Monitoring						No. of Piezometers			ers Monitoring Mechanism					
	mechanisn	n.								Manual	DWLR**	DWLF	R With	Γelemetry	
	**DWLR - Dig	gital Water Lev	el Recorder					1		0	1	0			

(Compliance Conditions given overleaf)

This is an auto generated document & need not to be signed. 18/11, जामिगर हा7स, मािनस'ह राम्, ि5 नदMी – 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011 Phone: (011) 23383561 Fax: 23382051, 23386743

Website: cgwa-noc.gov.in čािेो बचाये – जीवि बचाये **SAVE WATER - SAVE LIF**

Validity of this NOC shall be subject to compliance of the following conditions:

Mandatory conditions:

- Installation of tamper proof digital water flow meter with telemetry on all the abstraction structure(s) shall be mandatory for all users seeking No Objection Certificate and intimation regarding their
- installation shall be communicated to the CGWA within 30 days of grant of No Objection Certificate
- Proponents shall mandatorily get water flow meter calibrated from an authorized agency once in a year Construction of purpose-built observation wells (piezometers) for ground water level monitoring shall be mandatory as per Section 14 of Guidelines. Water level data shall be made available to CGWA through web portal. Detailed guidelines for construction of piezometers are given in Annexure-II of the guidelines.
- 5) Proponents shall monitor quality of ground water from the abstraction structure(s) once in a year. Water samples from bore wells/ tube wells / dug wells shall be collected during April/May every year and analysed in NABL accredited laboratories for basic parameters (cations and anions), heavy metals, pesticides/ organic compounds etc. Water quality data shall be made available to CGWA through the web portal.
- 6) In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGWB for ground water level monitoring four (4) times a year (January, May, August and November) in core as well as buffer zones of the mine.
- 7) In case of mining project the firm shall submit water quality report of mine discharge/ seepage from Govt. approved/ NABL accredited lab.
- 8) The firm shall report compliance of the NOC conditions online in the website (www.cgwa-noc.gov.in) within one year from the date of issue of this NOC.
- Industries abstracting ground water in excess of 100 m 3 /d shall undertake annual water audit through certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 20% over the next three years through appropriate means.
- 10) Application for renewal can be submitted online from 90 days before the expiry of NOC. Ground water withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of Environment (Protection) Act, 1986
- 11) This NOC is subject to prevailing Central/State Government rules/laws/norms or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation discharge of effluents or any such matter as applicable

General conditions:

- 12) No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).
- The proponent shall seek prior permission from CGWA for any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).
- Proponents shall install roof top rain water harvesting in the premise as per the existing building bye laws in the premis
- The project proponent shall take all necessary measures to prevent contamination of ground water in the premises failing which the firm shall be responsible for any consequences arising 15)
- In case of industries that are likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be 17) stored and put to beneficial use by the firm.
- Wherever feasible, requirement of water for greenbelt (horticulture) shall be met from recycled / treated waste 19
- Wherever the NOC is for abstraction of saline water and the existing wells (s) is /are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any. 20)
- 21
- Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.
- 23) In case of violation of any NOC conditions, the applicant shall be liable to pay the penalties as per Section 16 of Guidelines.
- 24) This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.
- 25) The issue of this NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of the NOC.
- 26) In case of change of ownership, new owner of the industry will have to apply for incorporation of necessary changes in the No Objection Certificate with documentary proof within 60 days of taking over possession of the premises.
- 27) This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/court orders in cases related to ground water or any other related matters.
- 28) Proponents, who have installed/constructed artificial recharge structures in compliance of the NOC granted to them previously and have availed rebate of upto 50% (fifty percent) in the ground water abstraction charges/ground water restoration charges, shall continue to regularly maintain artificial recharge structures.
- Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, pharmaceutical, other hazardous units etc. (as per
- CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution as per Annexure III of the guidelines. In case of new infrastructure projects having ground water abstraction of more than 20 m3/day, the firm/entity shall ensure implementation of dual water supply system in the projects.
- 32) In case of infrastructure projects, paved/parking area must be covered with interlocking/perforated tiles or other suitable measures to ensure groundwater infiltration/harvesting.
- In case of coal and other base metal mining projects, the project proponent shall use the advance dewatering technology (by construction of series of dewatering abstraction structures) to avoid 33)
- 34) contamination of surface water. 35
- The NOC issued is conditional subject to the conditions mentioned in the Public notice dated 27.01.2021 failing which penalty/EC/cancellation of NOC shall be imposed as the case may be.
- 37 This NOC is issued subject to the clearance of Expert Appraisal Committee (EAC) (if applicable).

(Non-compliance of the conditions mentioned above is likely to result in the cancellation of NOC and legal action against the proponent.)

ANNEXURE-XII EC Clearance Publication letter



Ref. No: AMNS/MIN/SAG/01/2019

Dated: 10th June 2020

To

Director
IA Division (Non-Coal Mining)
Ministry of Environment, Forests & Climate Change
Agni Wing , Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi-110003

Ref: Proposal No: IA/OR/MIN/56152/2016

Sub : Compliance to the conditions for Environmental Clearance granted on 28th May/20202 for Ghoraburhani – Sagasahi Iron ore: block of M/s ArcelorMittal Nippon Steel India Limited (Formerly Essar Steel India Limited)

Dear Sir

With reference to the subject cited above, we would like to inform you that in compliance to the condition mentioned in the Environmental Clearance granted on 28th May'2020 for Ghoraburhani — Sagasahi Iron ore block, we are hereby enclosing the copy of the advertisements published in following two local news paper on 31st May'2020:

1. "Prameya" in Odia language

"New Indian Express (Sunday addition)" in English language

This is for your kind information & necessary action please.

Thanking You, Your's Sincerely

Sabyasachi Mohanty

(Authorised Signatory)

ArcelorMittal Nippon Steel India Limited (Formerly Essar Steel India Limited)

Encls: As above

CC to: The Joint Director, Ministry of Environment, Forest & Climate Change, Regional Office, A-3, Chandrasekharpur, Bhubaneswar - 751023

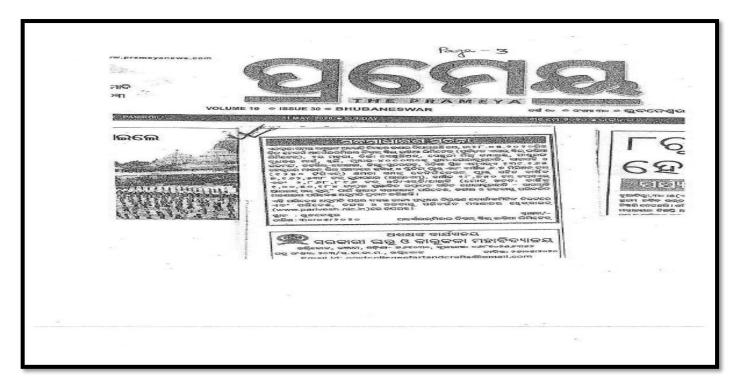
ArcelorMittal Nippon Steel India Limited (Formerly Essar Steel India Limited)

Pellet Plant, Udayabata, Paradeep - 754 142 Dist.: Jagalsinghpur Odisha, India

Regd. Off: 27km, Surat-Hezira Road, Hazira, Surat Gujarat 394270 India CIN U27100GJ1976FLC013787 T +91 67 2222 7076 E contact@amns.in W www.amns.in A joint venture between ArcelorMittal and Nippon Steel Corporation







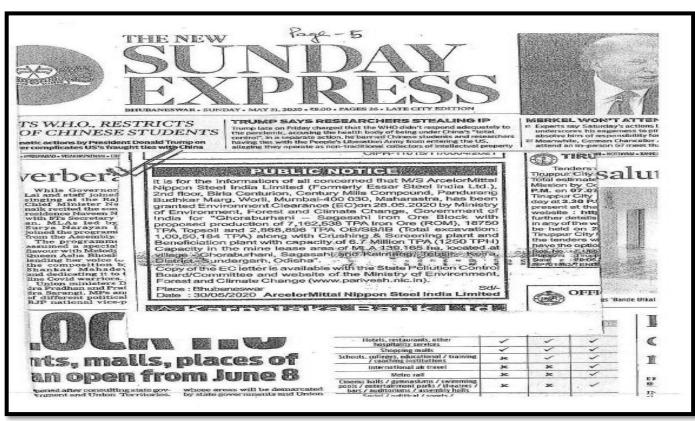


Table No 1 Plantation Details FY 2022-23

GHORABURUHANI SAGASAHI IRON ORE MINE ARCELORMITTAL NIPON STEEL INDIA LIMITED

	PLANTATION ANNUAL STATEMENT FOR THE YEAR :2022-23										
	Within ML									Total	
S1.	No of	Area	Survival	No of	Area	Survival	No of	Area	Survival	No of	Surv
No	Trees	in Ha	rate	Trees	in Ha	rate	Trees	in RKM	rate	Trees	ival
	Planted			Planted			Planted			Planted	rate
1	1700 Nos	0.541	75%	185Nos	0.132	76%	250 Nos	0.25KM	79%	1885N os	76%

ANNEXURE-XIII ENVIRONMENTAL EXPENSES

GHORABURHANI - SAGASAHI IRON ORE MINE ENVIRONMENT CELL EXPENSES

PERIOD: APRIL TO SEPTEMBER -2022

SL.No.	Particulars	Expenditures in Rs.
1	Air Pollution Control Measures	85,14,120
2	Water pollution control Measures	32,11,230
3	Green Belt Development	88,500
4	Environmental Monitoring	24,78,000
5	Occupational Health Safety & Environment etc.	1094700
	GRAND TOTAL	1,53,86,550

P.C. Salve

ENVIRONMENT CELL GSIOM, AMNS INDIA LTD

PROJECT HEAD
GSIOM, AMNS INDIA LTD