

Ref No.: AMNS/11/24

Date: 29.05.2024

To

The Addl. Principal Chief Conservator of Forests (C),
Ministry of Environment, Forest and Climate Change, Govt. of India,
Eastern Regional Office, A/3, Chandrasekharpur, Bhubaneswar — 751023.

Sub.:Submission of Half yearly EC compliance report for the period from October 2023 to March 2024 by M/s. ArcelorMittal Nippon Steel India Limited located At- Udayabata, Post- Paradip, Tehsil Kujang, District-Jagatsinghpur, Odisha

Dear Sir,

We are submitting herewith the half yearly EC compliance for the period from October 2023 to March 2024 to the conditions stipulated in the following Environmental Clearances:

- Environment Clearance for 6 MTPA Integrated Steel Plant of M/s Essar Steel India Ltd. vide letter no. J-11011/129/2007-IA II(I) dated 29.05.2008 at Paradeep, Odisha and subsequently change made in the company name in Environment Clearance titled "1 x 6 MTPA Iron ore Pellet Plant (Unit-1) located at Paradeep, Dist-Jagatsingpur, Odisha" from Essar Steel Orissa Limited to M/s ArcelorMittal Nippon Steel India Ltd. Odisha dated 24th June 2021.
- 2. Environment Clearance for completion of balance work of 6 MTPA Pellet Plant (Unit-2) of 12 MTPA Pellet Plant by M/s. ArcelorMittal Nippon Steel India Limited located at Udayabata, Post- Paradip, Tehsil- Kujang, District-Jagatsinghpur, Odisha" vide F. No. J-11011/129/2007-IA-II(I) dated 13<sup>th</sup> August, 2021.
- Bijaychandrapur, Paradeep in Jagatsinghpur district by M/s Essar Power Orissa Ltd. vide Ref. No. SEIAA/219/ENV dated 16.04.2011 subsequent name change from M/s Essar power (Orissa) Ltd. to M/s. ArcelorMittal Nippon Steel India Ltd. vide File No. SIA/OR/THE/289000/2022 dated 06<sup>th</sup> February 2023.

This is for your kind perusal please.

Thanking you

For ArcelorMittal Nippon Steel India Pta ON

Suresha G

Executive Director, Odisha Assets

Encl.: As above

Copy to: The Regional Director, Central Pollution Control Board, Kolkata, West Bengal

PARADEE

The Member Secretary, State Environment Impact Assessment Authority, Bhubaneswar, Odisha

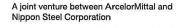
The Member Secretary, Odisha State Pollution Control Board, Bhubaneswar, Odisha

The Regional officer, Odisha State Pollution Control Board, Paradeep, Odisha

#### ArcelorMittal Nippon Steel India Limited

CIN U27100GJ1976FLC013787

Pellet Plant, Udayabata, Paradeep - 754 142 Dist.: Jagatsinghpur Odisha, India Regd. Off: 27km, Surat-Hazira Road, Hazira, Surat Gujarat 394270 India T +91 67 2222 7076 E contact@amns.in W www.amns.in







# Half yearly EC Compliance Report (October' 2023 to March' 2024)

## EC Title:

"New Title of EC: "1 x 6 MTPA Iron ore Pellet Plant (Unit-01) located at Paradeep, Dist-Jagatsinghpur, Odisha of ArcelorMittal Nippon Steel India Ltd".

## Clearance Letter/Proposal No & Date:

 $\label{eq:J-11011/129/2007-IA} \ \mbox{II(I), DATED 29.05.2008 and name change dated 24.06.2021 (Proposal No-IA/OR/IND/206293/2021 dated 16.6.2021)}$ 

Period: October' 2023 to March' 2024

#### A. SPECIFIC CONDITIONS:

SL. NO.	CONDITIONS	COMPLIANCE STATUS
i)	Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted.	Action plan already submitted through 1st compliance report and RSPM level is well within the permissible limit, and which is monitored on every month. Monitoring
		report submitted to SPCB on monthly basis and Regional office of Ministry on half yearly basis.
ii)	On-line stack monitoring facilities for all the stacks and sufficient air pollution control devices provided viz. ESP, bag filters, scrubbers, cyclones etc. to control emissions from all the sources	On-line stack monitoring facility of Forbs marshal make, On-line SO2 analyzer (Environment SA make) already installed in chimney. The real time data are being
	including captive power plant shall be provided to keep emission levels below 100 mg/Nm3 and	transmitted to SPCB and CPCB through M/s Glens. Pollution control equipments like
1901	report submitted to the Ministry 's Regional Office at Bhubaneswar, CPCB and OPCB.	high efficiency ESP (F L Smidth make), Bag filter (F L Smidth, Dustvan, Batliboi make) and wet scrubbers (Bold Rich make) are in
		operation to maintain the emissions within the norms. Monitoring report submitted to
		SPCB on monthly basis and Regional office, MoEF on half yearly basis. Stack emission varies from 24.6 mg/Nm3 to 37.9 mg/Nm3 and it is well within the limit of 100 mg/Nm3.
iii)	Gaseous emission levels including secondary fugitive emissions from blast furnace, sinter plant and power plant shall be controlled within the	Not Applicable.
	latest permissible units issued by the ministry and regularly monitored. Guidelines / code of practices issued by the CPCB shall be followed and	
	report submitted to the Ministry's Regional Office at Bhubaneswar, CPCB and OPCB.	WIPPON SA

In-plant control measures for checking fugitive emissions from all the vulnerable sources like Sinter Plant, BF, BOF Shop and Steel melting shop etc. shall be provided. Further specific measures like water sprinkling and dry fogging shall be carried out at the stock piles of raw material, stacker reclaimer, conveyor transfer points and vibrating screens etc. Fume extraction system in steel refining units shall also be provided. Centralized de-dusting system ie, collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed and height conforming to the standards of induction furnaces in the industry shall be provided. Fugitive emissions shall be controlled, regularly monitored and records maintained.

Sinter plant, BF, BOF and steel melting shop not yet established.

Water sprinkling is provided in stockpile area, stacker/ reclaimer areas and conveyor transfer points and vibrating screens etc. A Fog Canon of capacity 25lpm with a throw of 30m and a working pressure of 18 bar is in operation. In addition to that DFDS installed in different product conveyor points to control fugitive emission. Regularly it is monitored through NABL accredited laboratory.

- v) Electrostatic Precipitator (ESP) shall be provided to Pellet Plant, Blast Furnace(BF), Sinter Plant and Power Plant and particulate emissions shall not exceed 100mg/Nm3. Gas Cleaning Plant shall be provided to BF. Bag filters shall be provided to Pellet Plant, BF, SMS, Lime and Dolomite Plant. Gas recovery holder and secondary air exhaust with bag house shall be provided to SMS. Dust suppression system shall be provided to raw material storage and handling area, Sinter Plant. Emissions from transfer points in material handling plant shall be controlled by dust extraction system.
- High efficiency ESPs for Pellet Plant has been designed with an additional field and PM concentration of less than 50mg/Nm3 is being achieved.
- High capacity bag filters have been installed in Additive Grinding Building, Bin & Mix Building. Bold Rich make high capacity wet scrubber type Dust Extraction System have already been installed at Hearth Layer Separation Building, Indurating discharge end and indurating feed end and in operating very efficiently.
- BF and SMS are not yet established.
- High efficiency water sprinklers have been installed in the iron ore fines stock yard. Bentonite, coke breeze and Lime stock yards are covered.

vi) Total requirement of water from Taldanda Canal shall not exceed 2582 m3/hr. The waste water from Blast Furnace and steel melting shop shall be treated in effluent treatment plant(ETP). The acidic and alkaline waste water from Demineralization Plant shall be treated in neutralization pit, scale pit, settling tank, filters and oil skimmers shall be provided to continuous casting shop. All the treated waste water shall conform to the norms prescribed by OPCB /CPCB and Ministry under E(P) Act. The domestic waste water after treatment in STP shall be used for green belt.

Total drawl of makeup water from Taladanda canal is 54 cum/hr and 378 cum/hr from slurry water for the operation of 6 MTPA Pellet Plant.

- BF and SMS are not yet established.
- Domestic waste water is sent to soak pit through septic tank. A 15 KLD STP has already been installed and in operation to treat waste water of both the Canteens. Treated water from STP is being used in gardening purpose.

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Prior permission for the drawl of 2582 m3/hr of	
water from Taldanda Canal from the concerned department shall be obtained.	Permission for drawing water from Taladanda Canal @ 3550m3/hr has already been obtained vide Letter No.12432/WR/Irr-II-WRC-22/07 dated 18.04.07 from the Water Resource Dept. of Govt. of Odisha.
disposal site/secured land fill (SLF) shall be carried out regularly and report submitted and report submitted to the Ministry's Regional Office at Bhubaneswar, CPCB, OPCB.	Test well shall be dug around the waste disposal site during construction and operation of Integrated Steel Plant.  Presently not applicable. It will be done when Integrated Steel Plant becomes operational.  Ground water monitoring is carried from the tube well on monthly basis and report submitted to OSPCB on monthly basis and Ministry's Regional office on half yearly basis.
ESP fines from the Pellet Plant shall be recycled and reused in the Pellet Plant. Sludge from BF Plant, slag and dust from steel making shop shall be used in the Sinter Plant. All the Blast Furnace (BF) slag shall be granulated and provided to cement manufacturers. Splashes ,skull and scale from the BF Plant shall be used in Steel Making Shop .Scrap from the slab caster shall be used in steel making.SMS slag shall be used in the Sinter Plant. All other solid wastes shall be properly disposed off in environment friendly manner. Used oil shall be sold to recyclers.	ESP fines of the Pellet Plant are collected in wet slurry form and reused in Pellet Plant itself. Used Oil/Waste Oil is always sold to an authorized re- processor only.  SMS, BF are not yet established.
A time bound action plan shall be submitted to the Ministry and its Regional Office at Bhubaneswar to reduce solid wastes, its proper utilization and disposal.	The only solid waste in the form of iron ore fines generated in the Pellet Plant is being recycled in Plant. Action plan for reduction of other solid wastes shall be submitted after establishment of integrated Steel Plant.
As proposed, green belt shall be developed in 485 acres out of total 1925.42 acres and efforts shall be made to develop green belt further to cover 33% area within and around the plant premises as per the CPCB guidelines in consultation with DFO.	This condition is for total areas of ISP but ISP facilities have been dropped down in existing EC. Currently total Pellet Plant area is 54.69 Ha i.e 135.14 Ac. Plantation programme has been taken under green belt development plan and total plantation covered area is 24.2 Ha i.e 44.24% of total plant area of 54.69 Ha with total 59200 numbers of saplings. In F.Y 2023-24, 5000 nos of saplings have been planted in 2.25 Ha in addition to earlier reported 54200 saplings. Local species such as Neem, Radha Chuda, Chattiyana, Kadamba, Karanja, Spathodia, Patoli, Badam, Champa, Mango, Jamun, Mahagoni, Sishoo have been
	Ground water monitoring around the solid waste disposal site/secured land fill (SLF) shall be carried out regularly and report submitted and report submitted to the Ministry's Regional Office at Bhubaneswar, CPCB, OPCB.  ESP fines from the Pellet Plant shall be recycled and reused in the Pellet Plant. Sludge from BF Plant, slag and dust from steel making shop shall be used in the Sinter Plant. All the Blast Furnace (BF) slag shall be granulated and provided to cement manufacturers. Splashes ,skull and scale from the BF Plant shall be used in Steel Making Shop .Scrap from the slab caster shall be used in steel making.SMS slag shall be used in the Sinter Plant. All other solid wastes shall be properly disposed off in environment friendly manner. Used oil shall be sold to recyclers.  A time bound action plan shall be submitted to the Ministry and its Regional Office at Bhubaneswar to reduce solid wastes, its proper utilization and disposal.  As proposed, green belt shall be developed in 485 acres out of total 1925.42 acres and efforts shall be made to develop green belt further to cover 33% area within and around the plant premises as

xii)	All the recommendations made in Charter on Corporate Responsibility for Environmental Protection (CREP) for Steel Plant shall be implemented	It shall be implemented when the Steel Plant comes into operation.
xiii)	No coke oven plant shall be installed without taking prior environmental clearance from the Ministry	Agreed. No coke oven plant established yet.
xiv)	Prior environmental clearance shall be taken for Beneficiation Plant and all the stipulated environmental conditions shall be implemented satisfactorily.	MoEF has granted EC on 04.05.09 vide LetterNo.11015/876/2007-IA.II(M) to beneficiation plant.
xv)	Prior permission from the State Forest Department regarding impact of proposed project on Mangrove Swamp and recommendations suggested shall be implemented.	AMNS has deposited Rs. 357.781 Lakhs in State Forest Department for the purpose of implementation of various activities within the project impact area in Mangrove Forest Division (WL), Rajnagar. Site specific conservation plan and its implementation status have been received from Divisional Forest Officer, Mangrove Forest Division (WL) Rajnagar vide letter No. 2951/1F-Acct-45/2024 dated 18 <sup>th</sup> May 2024.
xvi)	No construction activity on the Forest Land shall be initiated without taking prior forest clearance from the concerned Central/State Govt.	No construction activity has been undertaken on forest land.
xvii)	Rehabilitation and Resettlement Plan shall be implemented as per the revised R&R Policy and in collaboration with the State Government in a time bound manner and report submitted to the Ministry ,its Regional Office at Bhubaneswar and OPCB.	There is no displacement as on date in Pellet Plant.

# GENERAL CONDITIONS(S):

SL.	CONDITIONS	COMPLIANCE STATUS
NO.	2	. •
i)	The Project Authorities must strictly adhere to the	Note. It is being adhered strictly.
	stipulations made by the Orissa Pollution Control	
	Board (OPCB) and the State Government	
ii)	No further expansion or modifications in the plant	Prior approval will be taken for expansion/
	should be carried out without prior approval of	Modification.
	the Ministry of Environment and Forests	
iii)	The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 13th May,1993 and standards specified from time to time. The State Board may specify more stringent standards for the relevant parameters keeping in view the	On-line stack monitoring facilities have already been installed in the RCC stack to monitor concentration of Particulate Matter and SO2 in stack emission.  Additionally, manual monitoring is also being undertaken and monthly reports are submitted to SPCB as per CPCB guidelines.
	nature of the industry and its size and location. At	

	marking the entire level of 0 and 1	,
5A	no time ,the emission level shall go beyond the prescribed standards. On-line continuous monitoring system shall be installed in stacks to monitor SPM and interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	AAO ia baing manitanal at 04 laasti an
iv)	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of SPM, SO2 and NOx are anticipated in consultation with OPCB. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the OPCB/CPCB once in six months.	AAQ is being monitored at 04 locations as per the CPCB guidelines and in consultation with the Regional Office, SPCB. Additionally, 03 On-line Continuous Ambient Air Quality Monitoring Stations have also been installed and commissioned with transmission of real time data to SPCB and CPCB server. Another 02 numbers of CAAQMS installation work is in completion stage. Monthly Average PM10 value varies from 69.3 μg/m3 to 86.1 μg/m3, PM2.5 varies from 29.5 μg/m3 to 38.4 μg/m3, SO2 value varies from 12.4 μg/m3 to 25.3 μg/m3 and NOx value varies from 22.3 μg/m3 to 34.9 μg/m3.
v)	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422(E) dated 19th May ,1993 and 31st December,1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	The surplus process water after being treated in WTP and Thickener gets recycled/used in Captive Power Plant, Green Belt development, firefighting and dust suppression.
vi)	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules,1989 viz.,75 dBA(Day time) and 70 dBA(Night time)	Noise levels are monitored periodically. However, as a proactive measure, ear protectors are being provided to those workers working in the Main water Pump House, Filtration Building at 6 mts, Filtration Building Ground Floor, Indurations Building Feed end area, IDB Burner Floor (North side), IDB Pellet discharge end, Balling Disc area, IDB Ground Floor, Discharge end Scrubber, Soft water & Cold water pump House and at ESP Area.  Ambient noise levels are well within the prescribed standards. It varies from 61.2 dBA to 74.5 dBA in day time and 51.3 dBA to 64.5 dBA in night time.
vii)	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	In order to increase the holding capacity of rain water, an existing Pond has already been renovated extensively. Surface run off treatment plant of 160m3/hr is installed for treatment and reuse of surface run off water. Feasibility study was carried out by one NABL and NABET approved agency for possibility water harvesting in the area as water table and it is found at very high level in the locality unsuitable for recharging.

viii)	Occupational Health Surveillance of the workers	It Is being done every year in concurrence with the requirements of the Factories
	shall be done on a regular basis and records maintained as per the Factories Act.	Act,1948 and Odisha Factories Rules,1950.
ix)	The Project Proponent shall also comply with all	CSR & CER activities are undertaken jointly
'^,	the environmental protection measures and	on a regular basis.
	safeguards recommended in the EIA/EMP Report.	on a regular basis.
	Further the Company must undertake socio-	Survey and Dansey are CCD patinities for the
	economic development activities in the	Summarized Report on CSR activities for the
	surrounding villages like community development	period from October'23 to March'24 is
	programmes, educational programmes, drinking	enclosed as Annexure – I.
	water supply and health care etc.	
x)	As proposed, the project authorities shall earmark	Funds have been earmarked for
	Rs.450 crores and Rs.10 crores for capital cost and	Environment protection in Plant's Opex and
	recurring cost per annum respectively for	revenue budgets. The entire HSE related
	environmental protection measures and use	expenditure required was met from the
	judiciously to implement the conditions stipulated	Operation Budget of CY23 and CAPEX23.
	by the Ministry of Environment and Forests as well	
(61)	as the State Government along with the	,
	implementation schedule for all the conditions	
	stipulated herein. The funds so provided shall not	
	be diverted for any other purpose.	
xi)	The Regional Office of this Ministry at	Submission of compliance reports are being
	Bhubaneswar/CPCB/OPCB will monitor the	done on half yearly basis by 1st December
	stipulated conditions. A six monthly compliance	for the period from April-September and
	report and the monitored data along with	1st June for the period from October-
	statistical interpretation shall be submitted to them regularly.	March to the Regional office of the Ministry.
xii)	The Project Proponent shall inform the public that	Complied.
7,	the project has been accorded Environmental	Simplified.
	Clearance by the Ministry and copies of the	It has been advertised in English News Daily.
	clearance letter are available with the OPCB and	"The New Indian Express" and Oriya News
	may also be seen at Website of the Ministry of	Daily " Oriya Bhaskar" dated 21st & 22nd
	Environment and Forests at http://envfor.nic.in.	June 2008 respectively.
	This shall be advertised within seven days from	Julie 2008 respectively.
	the date of issue of the clearance letter, at least in	
	two local news papers that are widely circulated in the region of which one shall be in the vernacular	w .
	language of the locality concerned and a copy of	
	the same shall be forwarded to the Regional	
	Office.	
xiii)	Project Authorities shall inform the Regional	Financial Closure has been completed in
	Office as well as the Ministry, the date of financial	Sept. 2008 and construction activities
	closure and final approval of the project by the	started in 2008 and production started in
	concerned authorities and the date of	2012.
	commencing of the land development work.	



## EC Title:

"Environmental Clearance for completion of balance work of 6 MTPA Pellet Plant (Unit-2) of 12 MTPA Pellet Plant by M/s. ArcelorMittal Nippon Steel India Limited located at Udayabata, Post- Paradip, Tehsil Kujang, District-Jagatsinghpur, Odisha".

## Clearance Letter/Proposal No & Date:

J-11011/129/2007-IA II(I), Proposal No- IA/OR/IND/204957/2021 dated 17/07/2021

Period: October'2023 to March'2024

## A. Specific Condition:

SI.	Conditions	Compliance Status
No.		,
i.	No construction activity/infringement will take place in flood plain of Mahanadi River located at a distance of 0.20 kms from the boundary of the plant site. Project proponent shall maintain the plant level at least 4.0 meters above MSL and strengthen the existing bund/embankment along the Mahanadi River.	No construction activity/ infringement took place in flood plain of Mahanadi River located at a distance of 0.20 kms from the boundary of the plant site. Plant level is maintained at more than 4.0 meters above MSL and strengthening of the existing bund/embankment along the Mahanadi River is being taken.
ii.	Particulate matter emission from all the stacks shall be less than 30mg/Nm3 By installing bag filters with PTFE membrane. PM emission limit of 30 mg/Nm3 for the operational 6.0 MTPA pellet plant module, shall be achieved by upgrading the existing air pollution control devices by December 2022.	Necessary modification is carried in six nos of ESP connected with induration furnace to take care of the Particulate matter emission from all the stacks of operational 12 MTPA Pellet Plant (PP1 and PP-02 of 6 MTPA each). Six nos of wet scrubbers are attached to feed end, discharge end and HLSV and bag filters are attached to additive grinding units. Stack emission varies from 21.6 mg/Nm3 to 29.8 mg/Nm3 and it is well within the limit of 30 mg/Nm3.
iii.	Water requirement for the project after expansion (852 m3/hr) shall be met from water recovered from iron ore slurry and Taladanda Canal. Ground water abstraction shall not be permitted.	Water requirement is fulfilled from water recovered from iron ore slurry and Taladanda Canal after expansion of the project.
iv.	The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of MoEF&CC.	AMNS has deposited Rs. 357.781 Lakhs in State Forest Department for the purpose of implementation of various activities within the project impact area in Mangrove Forest Division (WL), Rajnagar. Site specific conservation plan and its implementation status have been received from Divisional Forest Officer, Mangrove Forest Division (WL) Rajnagar vide letter No. 2951/1F-Acct-45/2024 dated 18 <sup>th</sup> May 2024.
V.	Fugitive emissions at workplace shall be monitored monthly and report furnished to the concerned Regional Office of MoEF&CC.	Fugitive emissions at workplace is monitored monthly and report is submitted to OSPCB on monthly basis and half yearly furnished to the Regional Office of MoEF&CC.

40% total land shall be covered under green belt Total Pellet Plant area is 54.69 Ha i.e 135.14 includes Ac. Plantation programme has been taken development. This green under green belt development plan and development of 20-meter-wide towards Udayabata Village which is 600 m from the plant total plantation covered area is 24.2 Ha i.e boundary. In addition to the 40% greenbelt 44.24% of total plant area of 54.69 Ha with mentioned above, green cover shall be developed total 59200 numbers of saplings. In F.Y in 16 acres of buffer area created between plant 2023-24, 5000 nos of saplings have been planted in 2.25 Ha in addition to earlier boundary and Mahanadi River as committed by the project proponent. reported 54200 saplings. Local species such as Neem, Radha Chuda, Chattiyana, Kadamba, Karanja, Spathodia, Badam, Champa, Mango, Jamun, Mahagoni, Sishoo have been planted as consultation with DFO. We have switched over to Natural gas by vii. Project proponent shall switch over to Natural Gas fuel from LSHS/LDO by December 2022. installing NG station. Monitoring of the compliance of Environmental Work order is given for NABAT Accredited viii. Clearance conditions shall be carried out by a third third party for monitoring of the compliance party and report shall be submitted to the of Environmental Clearance conditions and Regional Office of the MoEF&CC. report shall be submitted to the Regional Office of the MoEF&CC.

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

I. Statutory compliance:  i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ consent to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts / Rules / Subordinate legislations etc., as may be applicable to the project.  II. Air quality monitoring and preservation  i. The project proponent shall install 24x7 continuous emission monit or stacks to monitor stack emission as well as two Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection)  Noted and strictly followed.  Noted and strictly followed.  Noted and strictly followed.  Noted and strictly followed.  Noted and strictly followed.	
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standards prescribed in Environment (Protection) have already installed in Pellet	
	Plant.
Rules 1986 as amended from time to time. The   Another 02 nos of Continuous Ambie	nt Air
CEMS and CAAQMS shall be connected to SPCB   Quality Monitoring Station (CAAQMS)	have
and CPCB online servers and calibrate these already been procured and instal	ation
systems from time to time according to work is under progress with respe	ct to
equipment supplier specification through labs standards prescribed in Enviror	ment
recognized under Environment (Protection) Act, (Protection) Rules 1986. The CEMS	and
1986 or NABL accredited laboratories. CAAQMS are connected to SPCB and	CPCB
online servers and these systems	are
calibrated from time to time accord	_
equipment supplier specification th	ough

changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.  III. Water quality monitoring and preservation  i. The project proponent shall monitor regularly Ground water quality is monitored every		labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
material conveyor and stacker and reclaimer area for raw material and product storage location.  Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.  Super sucker vacuum cleaner is deployed for shop floor and roofs and vacuum based road sweeping machine is deployed for cleaning of plant roads.  iv. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.  v. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.  vi. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.  vii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.  III. Water quality monitoring and preservation  i. The project proponent shall monitor regularly  Ground water quality is monitored every	shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and	Appropriate Air Pollution Control (APC) system are provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.  1. Electrostatic precipitator of Thermax make has been installed in induration furnace and connected to a concrete chimney.  2. Wet scrubber has been installed in Feed end and discharge end of induration furnace, Hearth layer Separation unit and individually connected to MS chimney.  3. Bag filters have been attached to Ball Mill and Roll Mill of Additive Grinding Mill.  4. Another bag filters are attached to Bentonite Mixing Bin, Limestone storage Bin, Limestone Mixing Bin and Mixer Bin to control fugitive emissions.  3. Dry fog system, fog canon and sprinkler
cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.  iv. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.  v. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.  vi. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.  vii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.  III. Water quality monitoring and preservation  i. The project proponent shall monitor regularly  for shop floor and roofs and vacuum based road sweeping machine is deployed for cleaning of plant roads.  Leakage detection and mechanized bag cleaning facilities are provided for better maintenance of bags.  Recycle and reuse is carried for iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices in the process.  Iron ore received in the form of slurry from our Beneficiation plant for which dust generation is minimized. Covered transportation and conveying of remaining ore, coal and other raw material are provided to prevent spillage and dust generation.  Ventilation system for adequate air changes is designed as per prevailing norms for all tunnels, motor houses, Oil Cellars.  III. Water quality monitoring and preservation  i. The project proponent shall monitor regularly  Ground water quality is monitored events.		material conveyor and stacker and reclaimer area for raw material and product
detection and mechanized bag cleaning facilities for better maintenance of bags.  v. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/agglomeration.  vi. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.  vii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.  III. Water quality monitoring and preservation  i. The project proponent shall monitor regularly  cleaning facilities are provided for better maintenance of bags.  Recycle and reuse is carried for iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process.  Iron ore received in the form of slurry from our Beneficiation plant for which dust generation is minimized. Covered transportation and conveying of remaining ore, coal and other raw material are provided to prevent spillage and dust generation.  Ventilation system for adequate air changes is designed as per prevailing norms for all tunnels, motor houses, Oil Cellars.  III. Water quality monitoring and preservation  Ground water quality is monitored every	cleaners shall be provided to clean plant roads,	for shop floor and roofs and vacuum based road sweeping machine is deployed for
fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.  vi. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.  vii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.  Ill. Water quality monitoring and preservation  i. The project proponent shall monitor regularly  fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning such other fines collected in the pollution control devices and vacuum cleaning devices in the process.  Iron ore received in the form of slurry from our Beneficiation plant for which dust generation is minimized. Covered transportation and conveying of remaining ore, coal and other raw material are provided to prevent spillage and dust generation.  Ventilation system for adequate air changes is designed as per prevailing norms for all tunnels, motor houses, Oil Cellars.  Ground water quality is monitored every	detection and mechanized bag cleaning facilities	cleaning facilities are provided for better
transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.  The project proponent shall monitor regularly  our Beneficiation plant for which dust generation is minimized. Covered transportation and conveying of remaining ore, coal and other raw material are provided to prevent spillage and dust generation.  Ventilation system for adequate air changes is designed as per prevailing norms for all tunnels, motor houses, Oil Cellars.  III. Water quality monitoring and preservation  Ground water quality is monitored every	fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/	fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning
vii. Design the ventilation system for adequate air changes changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.  III. Water quality monitoring and preservation  i. The project proponent shall monitor regularly  Ventilation system for adequate air changes is designed as per prevailing norms for all tunnels, motor houses, Oil Cellars.  Ground water quality is monitored every	transportation and conveying of ore, coal and other raw material to prevent spillage and dust	our Beneficiation plant for which dust generation is minimized. Covered transportation and conveying of remaining ore, coal and other raw material are provided to prevent spillage and dust
i. The project proponent shall monitor regularly Ground water quality is monitored every	changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.	Ventilation system for adequate air changes is designed as per prevailing norms for all
ground water quality at least twice a year (pre-   month through NABL and MoEF recognized)		Ground water quality is monitored every- month through NABL and MoEF recognized.

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	and mark managed at sufficient muschaus of	laboratory CAREV proposal has been
	and post-monsoon) at sufficient numbers of	laboratory. CAPEX proposal has been approved and budget allocated for
	piezometers/sampling wells in the plant and adjacent areas through labs recognized under	approved and budget allocated for Installation of sufficient numbers of
	Environment (Protection) Act, 1986 and NABL	piezometers/wells. Procurement is under
	accredited laboratories.	process.
ii.	Sewage Treatment Plant shall be provided for	Sewage Treatment Plant of capacity 15 KL is
11.	treatment of domestic wastewater to meet the	provided for treatment of domestic waste
	prescribed standards.	water and to meet the prescribed
	prescribed standards.	standards. Monthly monitoring and analysis
		is carried out by NABL Laboratory treated
	-	water quality is well within the prescribed
		standard.
iii.	The project proponent shall provide the ETP for	Not applicable as Rolling mill is not
1111.	effluents of rolling mills to meet the standards	established.
	prescribed in G.S.R 277 (E) 31st March 2012	·
	(applicable to IF/EAF) as amended from time to	
	time.	
iv.	Garland drains and collection pits shall be	Garland drains and collection pits are
	provided for each stockpile to arrest the run-off in	provided for each stockpile to arrest the
	the event of heavy rains and to check the water	run-off in the event of heavy rains and to
	pollution due to surface runoff.	check the water pollution due to surface
		runoff.
	IV. Noise monitoring and prevention	
i.	Noise quality shall be monitored as per the	Noise quality is monitored every month as
	prescribed Noise Pollution (Regulation and	per the prescribed Noise Pollution
	Control) Rules, 2000 and report in this regard shall	(Regulation and Control) Rules, 2000. It
	be submitted to Regional Officer of the Ministry as	varies from 40.2 dBA to 74.5 dBA at day
	a part of six-monthly compliance report.	time and 51.3 dBA to 63.4 dBA at night time.
	V. Energy Conservation measures	
i.	Energy conservation measures may be adopted	LED lights provided at everywhere for
	such as adoption of solar energy and provision of	energy conservation. Solar energy adoption
	LED lights etc., to minimize the energy	feasibility study is carried and CAPEX
	consumption.	proposal submitted for approval of the solar
		project.
	VI. Waste management	
i.	Used refractories shall be recycled as far as	Used refractories are provided to agency for
ii.	possible.  Kitchen waste shall be composted or converted to	recycle.  Kitchen waste is composted in
II.		
	biogas for further use.	vermicomposting pit. CAPEX approval is taken for organic composting machine.
		Composting machine is received at site and
		it will be installed after completion of civil work.
-	VII. Green Belt	WOTK.
i.	The project proponent shall prepare GHG	GHG emissions inventory for the plant is
	emissions inventory for the plant and shall submit	prepared internally. For reduction of GHG
	the programme for reduction of the same	emissions furnace oil has been replaced
	including carbon sequestration including	with Natural Gas by installing NG station.
	plantation.	For reduction of the same including carbon
	Pro section of the se	sequestration by plantation, Carbon
	SPON CO	sequestration study of trees has been
	AND SEED	carried out by competent agency for
	TEP Z	existing green belt.
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	VIII For a series of the series	
	VIII. Emergency preparedness	Emergency proposedness plan based and the
i.	Emergency preparedness plan based on the	Emergency preparedness plan based on the
	Hazard identification and Risk Assessment (HIRA)	Hazard identification and Risk Assessment
	and Disaster Management Plan shall be	(HIRA) and Disaster Management Plan has
	implemented.	been approved and implemented.
ii.	The project proponent shall carry out heat stress	Heat stress analysis for the workmen who
	analysis for the workmen who work in high	work in high temperature work zone has
	temperature work zone and provide Personal	been carried out internally and Personal
	Protection Equipment (PPE) as per the norms of	Protection Equipment (PPE) provided
	Factory Act.	accordingly as per the norms of Factory Act.
iii.	Occupational health surveillance of the workers	Occupational health surveillance of the
	shall be done on a regular basis and records	workers are carried on a regular basis and
	maintained.	records maintained as per the F & B
		guideline.
	IX. Environment Management	
i.	The project proponent shall comply with the	Noted and complied with.
	provisions contained in this Ministry's OM vide	
	F.No. 22-65/2017-IA.III dated 30/09/2020.	
ii.	The company shall have a well laid down	Environmental policy has been laid down
	environmental policy duly approved by the Board	and approved by Board of Directors.
	of Directors. The environmental policy should	
	prescribe for standard operating procedures to	4
	have proper checks and balances and to bring into	
	focus any infringements/ deviation/ violation of	
	the environmental / forest / wildlife norms /	
	conditions. The company shall have defined	
	system of reporting infringements /	
	deviation / violation of the environmental / forest	
	/ wildlife norms / conditions and /or shareholders	y v
	/ 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.	
iii.	A separate Environmental Cell both at the project	Environmental Cell both at the project and
	and company head quarter level, with qualified	company head quarter level, with qualified
	personnel shall be set up under the control of	
	senior Executive, who will directly to the head of	of senior Executive, who is reporting
	the organization.	directly to the head of the organization.
	X. Miscellaneous	
i.	The project proponent shall make public the	The environmental clearance granted for
	environmental clearance granted for their project	project has already published in the local
	along with the environmental conditions and	newspaper Dharitri and New Indian express
	safeguards at their cost by prominently	(Odisha edition) on 18.08.2021.
	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.	
ii.	The copies of the environmental clearance shall be	It is submitted when EC is received.
	submitted by the project proponents to the Heads	
	of local bodies, Panchayats and Municipal Bodies	,
	in addition to the relevant offices of the	200
	Government who in turn has to display the same	MIPPO
	for 30 days from the date of receipt.	
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iii.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Half yearly EC compliance report along with monitoring data have been uploaded in company website and it is updated on half yearly basis.
iv.	The project proponent shall monitor the criteria pollutants level namely, PM10, NOx, SO2, (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	The criteria pollutants level namely, PM10, NOx, SO2, (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects are monitored through NABL laboratory and through online monitoring systems and online data displayed at the main gate for public information. Same data is uploaded in company website along with the half yearly compliance report. Stack emission varies from 21.6 mg/Nm3 to 29.8 mg/Nm3 and it is well within the limit of 30 mg/Nm3. Monthly Average PM10 value varies from 74 μg/m3 to 77.6 μg/m3, PM2.5 varies from 33.2 μg/m3 to 35.2 μg/m3, SO2 value varies from 16.5 μg/m3 to 19.3 μg/m3 and NOx value varies from 27.0 μg/m3 to 27.9 μg/m3
V.	The project proponent shall submit six-monthly reports on the status of the of compliance the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Noted and complied. Six monthly compliance report submitted before the due date in MOEF & CC office and website also.
vi.	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Environmental statement in Form-V has been submitted to SPCB before 30 <sup>th</sup> September of every year for preceding financial year.
vii.	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	Complied. CTE and CTO obtained and production commenced in the month of September 2021.
viii.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Noted and complied.
ix.	No further expansion or modifications in the plant shall be carried out without prior approval of the	It is followed.
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	Ministry of Environment, Forests and Climate Change (MoEF&CC).	
х.	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	
xi.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted.
xii.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Noted.
xiii.	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.	Agreed to extend all the cooperation from our organization.
xiv.	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.	Agreed with.

## EC Title:

Environmental Clearance of 60 MW (Phase-I) Captive Power Plant of ArcelorMittal Nippon Steel India Limited, Paradeep

## EC clearance No & Date:

EC obtained from SEIAA, Orissa vide letter no. SEIAA/219/ENV, dated 16.04.2011

## STIPULATED CONDITIONS:

1	OLATED CONDITIONS.			
	SI.	DETAILS OF THE CONDITIONS	STATUS	
	1	The applicant (project proponent) will take necessary measures for prevention, control and mitigation of air pollution, water pollution, noise pollution and land pollution including solid waste management as mentioned by him in Form-I, Final EIA reports and Environment Management Plan (EMP) in compliance with the prescribed statutory norms and standards.	Necessary measures like dust extraction system and dust suppression system are implemented to prevent air pollution. Process waters and effluents are being treated and then recycled for green belt purposes. Ensured no water discharge to outside. Online monitoring systems installed. Regular monitoring of air and water quality at site being done.	
	2	The applicant will take necessary steps for socio- economic development of the people of the area	Necessary requirements like employment, education, health care,	

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	on need-based assessment for providing employment, education, healthcare, drinking water and sanitation, road and communication facilities etc. after a detailed primary socioeconomic survey.	drinking water and sanitation, road and communication facilities etc. are provided for social development of the people.
3	The applicant will comply to the points, concerns and issues raised by the people during public hearing on 24 <sup>th</sup> January, 2010 in accordance with the commitments made by him thereon.	Complied.
4	The applicant will take statutory clearance / approval /permissions from the concerned authorities in respect of his project as and when required.	We have obtained Consent to Establish & Consent to Operate from SPCB, Odisha, Factory License, AAI clearance, Petroleum storage clearance. Authorization for Hazardous waste management & disposal clearance and Labour License.
5	For post environmental clearance monitoring, the applicant will submit half-yearly compliance report in respect of the stipulated terms and conditions of Environmental Clearance to the State Environmental Impact Assessment Authority (SEIAA), Orissa on 1st June and 1st December of each calendar year.	Half-yearly compliance report is being submitted to SEIAA on or before 1 <sup>st</sup> June and 1 <sup>st</sup> December every year.
6	Land acquisition and transfer to EPOL should be complete in all respects before start of construction.	Land is transferred in the name of ArcelorMittal Nippon Steel India Ltd (AMNS) after the acquisition by AMNS.
7	High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50mg/Nm <sup>3</sup>	Electrostatic Precipitators (ESP) of 99.9% efficiency, having 5 field (4 operational and 1 standby) are installed. PM value varies from 32.5 mg/Nm3 to 36.1 mg/Nm3 and it is well within the limit of 50 mg/Nm3.
8	Excess water along with storm water during monsoon should not be discharged into the surrounding low lying area. The storm water shall be stored in reservoir and after treatment shall be used for dust suppression.	Ensured no excess water including stormwater is being discharged into the surrounding low laying area. The storm water is stored in settling pond and the treated storm water is being utilized for dust suppression & greenbelt development.
9	The storm water during monsoon will be collected in a pond and after appropriate treatment shall be stored in a reservoir for use in plantation, dust suppression etc. at no point of time the water will	Run off pit/pond is presently storing the storm water for re-use in plantation and dust suppression during non-monsoon period.
	be discharged to surrounding areas.	period.

	properly treated, stored and 100% recycled in the process.	treatment plant (Capacity 20 M3/hr). 100% recycling in the process is being ensured.
11	The DOWR, GoO may be appraised of the allocation of required amount of water from ESOL to EPOL and the purpose of use other that already approved. A clearance to this effect may be produced before start of construction activity.	Filtered slurry water from Pellet plant of ArcelorMittal Nippon Steel India Limited is being used by Captive Power Plant for dayto-day Operation.  However, ArcelorMittal Nippon Steel India Limited has permission from the Dept. of Water Resources, GoO for drawl of water from Taladanda Canal @ 3550 m3/hr, which is used only in case of emergency.
12	No ground water shall be extracted for the project work at any stage.	No ground water is being extracted, rather we are using filtered slurry water from Pellet Plant, AMNSI Paradeep.
13	Details of fly ash utilization including low land filling. Long term leaching of harmful trace metals, especially in contact with higher saline environment has not been ensured yet. Therefore 100% utilization should be implemented as per fly ash notification for other uses like bricks, cement filter, building block etc.	100% fly ash is being utilized. Ash is being supplied to nearby brick manufacturers and rest is utilized for filling of low lying areas of the plant. Impervious lined ash pond is designed by NIT Rourkela to store fly ash at the time of requirement. We have ensured no harmful parameter in the ground water test report.
14	The technical specification of AFBC system, lime requirement along with point of injection into the bed, peak temperature of combustion, SO2 and NOx emission potential etc. from the manufacturer to ensure the pollution potential (both qualitative and quantitative) of the proposed project with respect to bed ash, fly ash, effluents, emissions etc. to be submitted to SEIAA before commissioning of the plant.	Technical Specifications of AFBC system, lime injection system, SO2 and NOx emission potential are submitted.
15	Storing of unutilized ash in a pond, filling up of low lying areas, use in road construction etc. should be as per Notification issued by MOEF for fly ash utilization and amended in 2009.	100% fly ash is being utilized. Ash is being supplied to nearby brick manufacturers and rest is utilized for filling of low lying areas of the plant.
16	The proponent shall treat the flue gas through Flue Gas De-sulfurization (FGD), if SO2 emission level exceed the prescribed norm.	The ground level concentration of SO2 in the impact area of the proposed power plant is within the prescribed norms by using low Sulphur content coal having Sulphur content around 0.35%.
17	Adequate dust extraction system such as cyclones / bag filters and water spray system in dusty areas such as in coal handling and ash handling points,	Dust extraction system (Bag filters) and Dust suppression systems (High pressure water spraying system) have already been positive.

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	transfer areas and other vulnerable dusty areas shall be provided.	installed in coal handling, ash handling areas and working efficiently.
18	Fly ash shall be collected in dry form and storage facility (silos) shall be provided. 100% fly ash utilization shall be ensured as per fly ash notification of MOEF, Govt. of India. Unutilized fly ash and bottom ash shall be stored in the ash pond separately through high concentration slurry disposal method. Mercury levels along with other heavy metals (Pb, Cr, As etc.) should be monitored in the fly ash / bottom ash, leachates and effluents emanating from the ash pond.	We have provided necessary silos for storage of ash. Ash is conditioned in ash conditioner and then transported through trucks to local brick manufactures. Ash pond is lined with impervious material and ensured leach test from ash pond. No harmful material found in water samples taken from nearby area.
19	The ash pond should be constructed with impervious lining and ash pond embankment should be stone pitched.	As per the guidelines of fly ash notification we have developed impervious lined ash storage area designed by NIT, Rourkela.
20	The treated effluents conforming to the prescribed standards shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary. Arrangements shall be made so that effluents and storm water do not get mixed.	The treated effluents are reused completely in the plant for green belt and dust suppression purpose.
21	A sewage treatment plant shall be provided, and the treated sewage shall be used for raising greenbelt plantation.	Complied. The treated sewage water is being used for greenbelt.
22	Rainwater harvesting should be adopted. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of clearance and detail shall be furnished to the SEIAA, Orissa.	Run off pit/pond is developed to store run off water from roof top. Same is being used during non-monsoon period for wheel washing station and green belt development.
23	Adequate safety measures shall be provided in the plant area to check / minimize spontaneous fires in coal yard, especially during summer season. Details of these measures to be taken along with location plant layout shall be submitted to the SEIAA, Orissa.	Water sprinkling systems provided and the coal is stored in compacted form to avoid air ingress and thereby minimize the spontaneous fires. Additionally, height of the coal stack is being maintained to ensure safety.
24	Storage facilities for auxiliary liquid fuel such as LDO and / HFO / LSHS shall be made in the plant area where risk is minimum. On site and offsite Disaster Management Plans shall be prepared to meet any eventuality in case of an accident taking place. Mock drills shall be conducted regularly and based on the same, modifications required, if any shall be incorporated in the Disaster Management	Storage facility for storing of LDO has been made in the area having minimum risk. Risk assessment has also been done in EIA study and an on-site emergency plan has been prepared & duly approved in the office of Director of Factories, Odisha. Periodic mock drills conducted in presence of govt. authorities & nearby industries and report submitted.

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		Plan (DMP). Sulfur content in the liquid fuel will not exceed 0.5%.	
	25	Regular monitoring of ground water in and around the ash pond area shall be carried out, records maintained, and half yearly reports shall be furnished to the SEIAA, Orissa.	Regular monitoring of ground water is being carried out and records maintained. Half yearly report submitted to SEIAA, Orissa.
	26	A green belt of adequate width and density preferably with local species along the periphery of the plant & alongside roads etc. shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% of the total land area shall be under permanent green cover. The project proponent shall ensure proper maintenance of green belt throughout the year & for this purpose they may engage professionals in this field for creation and maintenance of the green belt. An action plan for this purpose shall be prepared accordingly and submitted to the SEIAA, Orissa.	Green belt is developed by planting local species of Radhachuda, karanj, sishoo, mehgani, chakunda, etc. Also fruit bearing trees like mango, jackfruit, chikoo, guava, are planted surrounding plant. More than 36500 saplings were planted inside the plant area of around 36.5 acres of land. The survival rate is more than 95%.
	27	First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Necessary first aid and sanitation arrangements have already been made to meet the requirements of the contract workers.
	28	Noise levels emanating from turbines and air compressors shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipments like earplugs / earmuffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc. shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non-noisy / less noisy areas.	The turbine and air compressors are housed in suitable acoustic enclosures. Noise levels outside the enclosures does not exceed the stipulated standards. The necessary PPEs such as ear plugs and earmuffs are provided to the employees working in high noise areas. Periodic medical examination of the people working in these areas is undertaken.
	29	Regular monitoring of ground level concentration of SO2 NOx, RSPM, (PM10 & PM2.5), etc. shall be carried out in the impact zone and records to be maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB, Orissa.	We have 03 nos manual and portable monitoring stations arranged for monitoring of ground level concentration of SO2 NOx, RSPM, (PM10 & PM2.5), etc. in concurrence with the statutory requirements. Sampling and analysis is being done by NABL accredited and CPCB authorized party. Monthly reports are being submitted to OSPCB. Monthly Average PM10 value varies from 64.93 μg/m3 to 82.07 μg/m3, PM2.5 varies from 33.75 μg/m3 to 41.85 μg/m3, SO2 value varies from 14.0 μg/m3 to 19.28 μg/m3

		and NOx value varies from 17.2 μg/m3 to 26.48 μg/m3.
30	Provision shall be made for housing of construction laborers within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Infrastructure has already developed for the existing & proposed project (like canteen, toilet, labour colony, STP, drinking water.) inside the Captive power plant premises.
31	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	Environment Management Cell is formed. Member list is submitted at Regional Office, Paradeep.
32	Half yearly report on the status of implementation of the stipulated conditions and environmental safeguards shall be submitted to the appropriate authorities.	Half yearly report for the period of April-September and October-March is being submitted on 1 <sup>st</sup> December & 1 <sup>st</sup> June respectively.
33	Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year wise expenditure should be reported.	The project cost includes the capital cost of all the environmental protection measures which has been budgeted separately. These funds is being used only for the implementation of the environmental protection schemes.
34	The need of the local people should be appropriately addressed in the CSR activities to be undertaken by the project proponent in the area. An action plan in this regard should be prepared and submitted to SEIAA, Orissa.	A well-developed team at AMNSI is taking care of all CSR activities. A detailed CSR plan has been prepared and has been implemented / ongoing.  (CSR report is attached as Annexure 1)
35	The above-mentioned stipulated conditions shall be complied in time bound manner. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment Protection (EP) Act, 1986.	All the conditions stipulated above are being complied.

Authorized Signature



Half yearly CSR Highlights (October 2023- March 2024)

ArcelorMittal Nippon Steel india Ltd.
Paradeep



# **Thematic Area wise Highlights**

#### Health

- 6398 patients were treated through Mobile Medical Unit.
- 15 awareness programmes were conducted through MMU on the themes like Clean India on Gandhi Jayanti, International day for old age persons, World Arthritis Day and Hand washing awareness, cold and cough, viral fever etc.

#### Education

- Setting up of digital pathsala, an Al based learning system in 08 middle schools has been completed and training of the teachers are going on.
- Need assessment of 25 Anganwadi completed as a part of development of Model Anganwadi.

## **Livelihood and Skill Development**

- Training of 50 students in 02 new batches has been completed at Skill center in IT Help Desk branch.
- Mushroom cultivation by 20 SHG members initiated at Nuagarh village. At first stage they have set up 20 beds from which 09 KG of mushroom produced.
- Three veterinary treatment camps organized at Baldia, Chakradharpur and Nuagarh villages where 456 livestock of 235 villagers undergone health checking and free medicine with the support of Block Veterinary Department.
- Stall organized at Baliyatra festival where 05 SHG groups of 50 members displayed and sale their products from Nuagarh, paradeepgarh and Bhutmundai Gram Panchayats.
- Womens Day celebrated at Nuagarh and Handia on 8th March to encourage the exposure of women groups in different development activities.

## **Potable water and Infrastructure Development**

- Supply of drinking water through water tanker twice a day to Handia Village towards a measure to combat drinking water scarcity in the village.
- Installation of 130 streetlights at Nuagarh, Paradeepgarh and Bhutmundai Grampanchayts have been completed
- Construction of the stadium at Paradeepgarh has been finished and only painting work is remaining. The field development has also been completed.
- The construction of water kiosk at Handia is completed and started disbursing RO water. The Unit will serve the community in discharging clean drinking water to the villagers.

## Others-

- Employee Volunteering Programme organized on Zenga Block making by 12 Employees.
- Safety training programme organized at Govt. ITI, Paradeep for the 40 passed out students in various disciplines requested by DTET.



## Thematic area updates

#### Health

- Health is a basic priority under the CSR arm of AMNS India. To provide basic health care service at the doorstep of the villagers, AMNS is running mobile Medical Unit in it's periphery villages.
- The unit is equipped with one Doctor, One Pharmacist, One driver cum attendant and is supervised by Social Protection Officer.
- In this quarter a total of 6398 patients treated in 110 camps through Mobile Medical Unit.
- 993 patients were undergone Blood pressure check-up and advised with suitable medicine and precautions.
- 41 critical patients were referred to Hospital for secondary care. Along these 15 awareness camps on Arthritis, cold and cough, viral fever, Clean India on Gandhi Jayanti, International day for old age persons, World Arthritis Day, Hand washing awareness programme was organized at Nuagarh, Baldia, Pipal and Paradeepgarh villages with the help of MHU doctor and staffs.









## **Education**

- To develop the pre-education facility and environment in it' periphery villages at Paradeep, AMNS India is in process of developing 25 Anganwadi centers in it's periphery villages. The basic aim of the initiative is to develop the infrastructure and pedagogy of the Anganwadi centers to make those model ones.

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## **Livelihood and Skill Development**

- Mushroom cultivation by 20 SHG members initiated at Nuagarh village. At first stage they have set up 20 beds from which 09 KG of mushroom produced. The groups are selling the Mushroom with Rs. 250/- to 270/- per KG.
- Cultivation of paddy at Chakradharpur village of Paradeepgarh Gram panchayat in 60 acres is in final stage of production.
- Stall organized at Baliyatra festival where 05 SHG groups of 50 members displayed and sale their products from Nuagarh, paradeepgarh and Bhutmundai Gram Panchayats. This is the largest open air festival organized once in year from ancient period where the trading of local products as well as products from different parts of the region displayed and sold.









- Support to Old Age Home- Recent generation is marching towards nuclear family because of which, old parents are being neglected. In some cases, those who have more than one child, none of them are also interested to take care of them as a financial burden. SO that many old age care homes are now developed. Like wise, one old age home is also developed at Handia village whaers 40 inmates are residing. Every month, AMNS is supporting them with dry rations for their food and nutrition need.
- Livestock Development- Animal Husbandry is an additional source of livelihood for the rural families and for some of the families it became the primary source of income also. Realizing this, AMNS has initiated the animal breed development programme with the partnership of BAIF. Artificial inscemination is the best process to for developing the breed in a short period. In this quarter, 89 Artificial Insemination conducted including 46 conventional and 43 shorted siemens as a part of Livestock breed Development Process. The programmed initiated in the technical collaboration with BAIF with an objective that



next generation calf can be produced for better milk output. Mineral Mixture of 88 KG support to 89 farmers for nutritional support for milk giving cows. This is a mineral supplement will fulfill the need of the milk giving cows so that their standard of health can be maintained and prohibit the health deterioration due to milk extraction. Three Veterinary camps were also organized at Baldia, Chakradhrpur and Nuagarh where 456 livestocks treated with free medicines and doctor consultation. The livestock owners gathered their animals at the designated place and get them treated one by one. The veterinary doctor guided them about the precautionary measures to be taken for the animal's health. 51 villagers also were distributed with 50 Kilograms of Mineral Mixture which helps as a protein supplement for the livestock for the betterment of their health.









SHG and Farmers Development- 05 Farmers meeting organized with progressive farmers of Chakradharpur, pipal, Barei, Nuagarh, Singitali where 234 farmers nominated for upcoming moister crop cultivation. The farmers will be supported with necessary requirements for upcoming season for kharif cultivation. Mushroom producer group at Nuagarh has been reformed with 24 members for taking up of commercial mushroom cultivation.20 farmers selected for vegetable cultivation, 20 farmers selected for vermicompost preparation, 04 farmers selected for duck farming and 08 farmers selected for Setting up biogas plant in periphery villages from Nuagarh, Singitali, Baldia, Pipal and Chakradharpur.



**Tailoring Center-** Two tailoring centers are running, one at Baldia and the other at Paradeepgarh with 40 students. Each center is equipped with one trainer, tailoring machines, and the necessary infrastructure for operating the same. The students are imparted with practical as well as theory courses for tailoring. Each student has to undergo 6 months of course designed both for theory and practical.



## Day Celebration-

- Womens Day celebrated at Nuagarh and Handia on 8th March to encourage the exposure

of women groups in different development activities. 300 numbers of Women and ladies from the nearby villages participated in the programme to make it a grand success. Many competitions like Debate, Quiz, song was organized to show case their talent and they were also awarded with prizes.



 World Water Day was celebrated with the inmates of Govt. ITI and different competitions like quiz, essay and debate were organized as a part of awareness among the 56 students to conserve and preserve water for their future use.



## Infrastructure Development-

- Supply of drinking water through water tanker is in continuation to Handia Village. The tanker goes to the village twice in a day to cater for the drinking water need of the villagers. About 600 villagers benefited from the activity.
- Commercial process for Construction of Playground at Baldia village has been completed.
- Construction of stadium at Paradeepgarh is in progress and construction of gallery has been completed. The playground development including earth work will start from next week.
- Installation of 130 streetlights at Nuagarh, Paradeepgarh and Bhutmundai Grampanchayts have been completed. The dark spots in the area are being lighted with the brightness during the dark time. Near about 1500 villagers are benefited from the project.
- Construction of the stadium at Paradeepgarh has been finished and only painting work is remaining. The field development has also been completed. With this 95% of the work has been finished.
- The construction of water kiosk at Handia is completed and started disbursing RO water. The Unit will serve the community in discharging clean drinking water to the villagers. The unit will fulfill the water need of the villagers round the year.



- Construction of bamboo foot over bridge completed near Handia village for crossing the canal. It helped the pedestrians to reach the nearest communication point and the distance has reduced from 2 Kilometers to 200 meters. It helped the college going students and old age persons for the communication like going to educational institutes and for medical need also.
- The construction of Lok Vikas Kendra at Nuagarh has been started. The design team has already submitted the lay out for the same. The unit will serve the purpose of training and meeting of the SHG members at Nuagarh village.











## Other Activities-

- Employee Volunteering Programme organized on Zenga Block making by 12 Employees.
- Safety training programme organized at Govt. ITI, Paradeep for the 40 passed out students in various disciplines requested by DTET.







# **Beneficiaries Impacted**

# For the month of October 2023- March 2024

SI. No	Thematic Area	Lives Touched
1	Health	5188
2	Education	5300
3	Livelihood/Skill Development	1560
4	Portable Water & Infra	14300
5	Other Initiatives	40
	Total	26388

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