



E&P/LDH/ 90/2024  
28<sup>th</sup> Nov 2024

**To,**  
**The Deputy Director-General of Forests (Central),**  
Directorate of Environment, Forest & Climate Change,  
Integrated Regional office, Bays No.24-25,  
Sector 31-A, Dakshin Marg, Chandigarh- 160 030

**Subject:** - Submission of half-yearly compliance report on the stipulated environmental clearance terms and conditions in respect of 0.75 million tons per annum (MTPA) of crude Steel Production through EAF at Industrial Plot A-1, Kadiana Khurd Village (Adjacent to Hi-Tech Cycle Valley), Ludhiana East Tehsil, Ludhiana District, Punjab by M/s Tata Steel Limited for April'24 to September'2024.

**Reference:** - Environment Clearance Identification No. EC23B008PB183863, issue on dated 10/08/2023.

Sir,  
Kindly find enclosed Six-Monthly Compliance Report for the period from April'24 to September'2024. for the conditions stipulated in Environmental Clearance of 0.75 Million Tonnes Per Annum (MTPA) of Crude Steel Production Through EAF at Industrial Plot A-1, Kadiana Khurd Village (Adjacent to Hi-Tech Cycle Valley), Ludhiana East Tehsil, Ludhiana District, Punjab by M/s Tata Steel Limited for your kind considerations.

The copy of above compliance report also being sent in soft format through e-mail (seacpb2017@gmail.com) & (seiaapb2017@gmail.com) for kind perusal. Also copy of compliance report being uploaded on MOEF&CC Parivesh Portal.

We trust the information furnished is in line with your requirement.

Thanking you,  
Yours sincerely,

**David William Augustine**  
**Chief, Ludhiana Project**  
Email - [da.william@tatasteel.com](mailto:da.william@tatasteel.com)  
Mob - +91 620 790 1838

Encl: As above

Copy To:

- 1) The Member Secretary, State Pollution Control Board,
- 2) The Regional Officer, Ludhiana-1, State Pollution Control Board. Ludhiana.

**TATA STEEL LIMITED**

C 44-47, Phase 2, Focal Point, Ludhiana, Punjab, 141 010  
Registered Office: Bombay House, 24 Homi Mody Street, Fort Mumbai 400 001 India  
Tel 91 22 6665 8282 Fax 91 22 6665 7724 Website [www.tatasteel.com](http://www.tatasteel.com)  
Corporate Identity Number L27100MH1907PLC000260

S.no	Terms & Conditions	Compliance Status
<b>1</b>	<b>Statutory compliance-</b>	
a	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project	<b>Not applicable</b> , no forest land has been involved in project.
b	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	<b>Not applicable</b> , no wildlife area covered under the wildlife (Protection) Act 1972 is involved in the project.
c	The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. 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. (in case of the presence of schedule-I species in the study area)	<b>Not applicable</b> , no forest land has been involved in project.
d	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 Punjab Pollution Control Board	<b>Complied.</b> Consent to Establish has been granted from Punjab state pollution control board on dated 30.10.2023 for the period of 5 years. CTE copy attached as annexure 1
e	The project proponent shall obtain the necessary permission from the Central Ground Water Authority/competent authority concerned, in case of drawl of groundwater and also in case of drawl of surface water required for the project. In case of non-grant of permission by CGWA for ground water abstraction, the industry shall make alternative arrangements by using surface water or treated city sewage effluent after obtaining permission from the competent authority.	<b>Complied</b> , 1.We had obtained NOC from Punjab Water resource development Authority for drawl of ground Water. NOC attached as <b>annexure-2</b> . 2.We had also made agreement with PSIEC to supply surface water from reservoir which is developed in Hi Tech valley. Copy attached as <b>annexure-3</b>
d	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.	<b>Shall be Complied.</b> Hazardous waste authorization will be obtained before plant operation.
e	The project proponent shall comply with the siting criteria, standard operating practices, code of practice and guidelines if any prescribed by the SPCB/CPCB/MoEF&CC for such type of units.	<b>Shall be complied.</b> Agreed to comply such criteria.
f	The project proponent shall comply with the CLU conditions imposed by the competent authority, if any.	<b>Shall be Complied.</b> We have obtained the Industrial land plot No-A-1 from PSIEC and as per PSIEC

		documents CLU already obtained by PSIEC.
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S.no	Conditions	Status
<b>2</b>	<b>Air quality monitoring and preservation</b>	
A	The project proponent shall install 24x7 continuous emission monitoring system at the inlet as well as at the outlet (stack) of each APCD to monitor the SPM concentration with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31 <sup>st</sup> March 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories	<b>Shall be Complied.</b> We have awarded the work order to procure and install the CEMS system to all process stack during commissioning of plant.
B	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	<b>Complied.</b> We have monitored the Fugitive emission through NABL approved third party laboratory to monitor fugitive dust emission in plant premises. Report attached as <b>annexure 4</b> .
C	The project proponent shall install a system to carry out Manual Ambient Air Quality monitoring for parameters relevant to the main pollutants released (e.g. PM <sub>10</sub> and PM <sub>2.5</sub> in reference to PM emission, and SO <sub>2</sub> and NO <sub>x</sub> in reference to SO <sub>2</sub> and NO <sub>x</sub> emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.	<b>Shall be Complied.</b> Agreed and make arrangement to conduct manual monitoring of ambient air quality as per board specification.
D	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 the Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.	<b>Shall be Complied.</b> Monthly summary report will be submitted along with compliance report after plant get operational.
E	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources	<b>Shall be Complied.</b> We shall initiate to procure and install the APC system to dust generating point during commissioning of plant.
D	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags	<b>Shall be Complied.</b> We will install broken bag detection system to track leakage of bag and plus jet system to cleaning of bag.

E	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, etc. regularly	<b>Shall be Complied.</b> We will deploy enough cleaning equipment's to maintain the plant housekeeping during plant operation.
F	Recycle and reuse of 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 should be ensured.	<b>Shall be Complied.</b> We will dispose off through co-processing/ recycler/ TSDF facilities during operation.
G	The project proponent shall use leak-proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin	<b>Shall be Complied.</b>
H	The project proponent shall provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc	<b>Shall be Complied.</b> We will make arrangement to cover the raw materials i.e., Ferroalloys, lime, dolomite in plant premises.
I	The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.	<b>Shall be Complied.</b> Fumes treatment plant has been ordered and provision to connect with primary & secondary point of furnace.
J	Design and implementation of the ventilation system for adequate air changes as per the ACGIH document for all tunnels, motor houses, Oil Cellars should be ensured.	<b>Shall be Complied.</b> We have provision to provide good air circulation facility in shed to maintain the good working condition.
<b>3</b>	<b>Water quality monitoring and preservation</b>	
A	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.	<b>Complied.</b> We have started the ground water monitoring through third party NABL approved laboratory in plant as well as nearby village area. Monitoring report attached as <b>annexure-4</b> for your kind reference. We have installed piezometer in plant area to monitor ground water table.
B	Garland drains and collection pits shall be provided for each stock pile to arrest the runoff in the event of heavy rains and to check the water pollution due to surface run off.	<b>Shall be Complied.</b> We will consider making garland drain and collection pit around stock pile area.
C	The project proponent shall practice rainwater harvesting to the maximum possible extent. As an additional safety measure, the stream carrying waste water of the village shall be diverted in one corner of Phytoid plants trench (designed based on the technology developed by CSIR-NEERI's) divided into different parts, the overflow of each chamber shall be allowed to enter into another chamber which will ultimately lead to the purification of water and collected into the pond to avoid any contamination of ground water aquifer. Pond water will percolate through natural strata (without injection) to augment the ground water and remaining water shall be used for irrigation purposes by pumping method in the nearby fields	<b>Shall be Complied.</b>

D	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.	<b>Shall be Complied.</b> We will install CETP to recycle and reuse of water to minimize the water intake.
<b>4</b>	<b>Noise monitoring and prevention</b>	
A	Noise level survey shall be carried as per the prescribed guidelines and the report in this regard shall be submitted to the Regional Officer of the Ministry as a part of six-monthly compliance report	<b>Shall be Complied.</b> We will conduct noise study during operation of plant and same has been submitting along with Six monthly compliance report.
B	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during daytime and 70 dB(A) during nighttime.	<b>Complied.</b> We have conducted ambient noise level monitoring in plant area and report have been attached as <b>annexure-4</b> .
<b>5</b>	<b>Energy Conservation measures</b>	
A	The project proponent shall practice hot charging of slabs and billets/blooms as far as possible.	<b>Shall be Complied.</b> We had opted endless casting and rolling technology, hot billets directly fed to rolling process.
B	The project proponent shall provide solar power generation on rooftops of buildings, solar light system for all common areas, streetlights, parking around project area and maintain the same regularly	<b>Shall be Complied.</b> We will make provision to install solar based light in plant area.
C	The project proponent shall provide LED lights in their offices and residential areas	<b>Shall be Complied.</b> We had already considered to install LED lights in office area.
<b>6</b>	<b>Waste management</b>	
A	Used refractories shall be recycled as far as possible	<b>Shall be Complied.</b> We will make arrangement to recycle the use refractory through approved vendor.
B	100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office	<b>Not Applicable.</b> Fly ash shall not be generated by industries.
C	The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016	<b>Shall be Complied.</b> All hazardous waste generated during plant operation will be disposed off as per prescribed norms.
D	Kitchen waste shall be composted or converted to biogas for further use.	<b>Shall be Complied.</b> We will install Compost machine to convert all organic waste to compost.
<b>7</b>	<b>Green Belt</b>	
A	Green belt shall be developed in an area of 15.36 ha (equal to 33% of the plant area) with native tree species in accordance with SEIAA guidelines. Total 24000 tall saplings (minimum 6 feet height) of indigenous species such as Tun, Amaltas, Mulberry, Arjun, Jamun, Uttranjeeva, Kachnar etc. will be planted by September, 2025.	<b>Shall be Complied.</b> We have planted 3200 three-layer saplings planted along with plant boundary as per SEIAA guideline and balance plantation activities will be carried out in upcoming monsoon. Photograph Attached as <b>annexure-5</b> for your kind reference.

<b>8</b>	<b>Public hearing and Human health issues</b>	
A	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented	<b>Shall be Complied.</b> Agreed and plan will be prepared and implemented during installation & commissioning of plant.
B	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act	<b>Shall be Complied.</b> Agreed and plan will be prepared and implemented during installation & commissioning of plant.
C	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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project	<b>Not applicable.</b> There are no housing facilities to be constructed inside of plant boundary.
D	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	<b>Shall be Complied.</b> We are monitoring the health condition of workers who's involve in project construction and record to be maintained.
E	The project proponent shall carry out the activities apart from CER activities and spent an amount as commuted during the public hearing as per the public hearing action plan	<b>Being complied. We have</b> started the work as per public hearing action plan which was submitted during EC process to SEIAA. The compliance along with status report attached as <b>annexure 6</b> .
<b>9</b>	<b>Environment Management Plan</b>	
A	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to 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 to all / or 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.	<b>Shall be Complied.</b> Environmental Policy of Tata Steel Limited is applicable for all location. Policy Attached as <b>Annexure- 7</b> .
B	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of Senior Executive, who will directly report to the head of the organization	<b>Complied.</b> An Environmental Management Cell (EMC) has been formed, which is responsible for monitoring EMP and its implementation. Head - Environment is looking after environmental management at project site who reports to project in-charge (Ludhiana Project) and Chief (Environment) at corporate level.
C	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and will	<b>Shall be Complied.</b> We will adhere the EMP budget incorporated in EIA report and fund will not get diverted to any other purpose.



	not be diverted for any other purpose. The project proponent shall spend a minimum amount of Rs 138.56 Crore towards the capital cost and Rs 5.48 Crores/annum towards recurring cost including the environmental monitoring cost for the implementation of EMP as proposed in application proposal	
D	Year-wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report along with the Six-Monthly Compliance Report.	<b>Shall be Complied.</b>
E	Self-environmental audit shall be conducted annually. Every three years third-party environmental audit shall be carried out.	<b>Shall be Complied.</b> We will conduct environmental audit and report shall be submitted along with compliance report.
F	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plants shall be implemented	<b>Shall be Complied.</b> We will implement all the applicable recommendation of CREP in project.
<b>10</b>	<b>Validity</b>	
A	This environmental clearance will be valid for a period of ten years from the date of its issue or till the completion of the project, whichever is earlier	<b>Agreed.</b>
<b>11</b>	<b>Miscellaneous</b>	
A	The project proponent shall make public the environmental clearance 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	<b>Complied.</b> Environmental Clearance along with configuration & environmental safeguard has been published on 18 <sup>th</sup> August 2023 in Hindustan times in English and Punjabi Jagran in Punjabi language. And displayed on company website.
B	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	<b>Complied.</b> Environmental Clearance copy has been submitted all concern Government office with our letter no – E&P/LDH/27/2023 dated 6 <sup>th</sup> September 2023. Copy attached as <b>annexure-8</b> .
C	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	<b>Complied.</b> We have uploaded the half yearly EC compliance on company website <a href="https://www.tatasteel.com/corporate/our-organisation/environment/environment-compliance-reports/">https://www.tatasteel.com/corporate/our-organisation/environment/environment-compliance-reports/</a> . Screen shot of the same is attached as <b>Annexure-9</b> for your ready reference.
D	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters ,indicated for the projects and display the same at a convenient location for	<b>Shall be Complied.</b> We have awarded workorder to procure AAQMS & CSEMS and data will be displayed at convenient location for disclosure to the public and put on the website of the company.

	disclosure to the public and put on the website of the company	
E	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at environment clearance portal.	<b>Complied.</b> Compliance condition uploaded on Ministry of Environment, Forest, and Climate Change website Parivesh portal on dated 31 <sup>st</sup> May 2024 with Compliance No - EC/COMPLIANCE/72528367/2024.
F	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.	<b>Shall be Complied.</b> We will submit after plant get operational.
G	The project proponent shall inform the Regional Office of the Ministry and PPCB, 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.	<b>Shall be Complied.</b> We will intimate and get all applicable permission before start production from regulatory authority.
H	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government	<b>Agreed &amp; complied.</b>
I	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 SEAC and SEIAA	<b>Shall be Complied.</b>
J	No further expansion or modifications in the project shall be carried out other than those permitted in this EC without prior approval of SEIAA. In case of deviation or alterations in the project proposal from those submitted to the Ministry/SEIAA for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any	<b>Agreed.</b>
K	The Regional Office, MoEF&CC, Chandigarh, Punjab Pollution Control Board and SEIAA/ SEAC members nominated for the purpose shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) entrusted with this monitoring by furnishing the requisite data/ information/monitoring reports	<b>Agreed.</b>
<b>12</b>	<b>Additional Conditions</b>	
A	The project proponent shall submit the progress of developing the green belt in the six-monthly compliance report	<b>Shall be complied.</b> We agree to submit the tree plantation progress report along with compliance report.



B	The Project Proponent shall install online monitoring system at inlet as well as at the outlet of each APCD for monitoring SPM	<b>Shall be Complied.</b> We have awarded the workorder to procurement of online monitoring system for installation of Inlet & outlet of APCD
C	The Project Proponent shall submit compliance of the action plan proposed to address the public hearing issues along with the six-monthly compliance report of EC condition on Parivesh portal	<b>Complied,</b> Submitting herewith as annexure-10.
D	The project proponent will submit the revised EIA report incorporating the aforementioned observations of SEIAA within 60 days of grant of EC.	<b>Complied,</b> Revised EIA report has been submitted on dated 09.10.2023 with our letter no-E&P/LDH/0032/2023.
E	The project proponent will plant 24000 tall plants of indigenous tree species with minimum 8 feet height and at least 2 inches girth at collar height in 15.36 ha area (33% of total project area). Plantation should be completed by September, 2025.	<b>Shall be Complied.</b> We have planted 3200 three-layer saplings planted along with plant boundary as per SEIAA guideline and balance plantation activities will be carried out in upcoming monsoon. Photograph Attached as <b>annexure-5</b> for your kind reference.
F	The project proponent will submit the detailed plan for implementing AEA activities at a cost of Rs 25.9 crores within 60 days of grant of EC. The details of the activities selected, expenditure to be incurred thereon and timelines of implementation (maximum 5 years) should be clearly specified in the plan	<b>Complied.</b> AEA cost of 25.9 crore has been submitted along with revised EIA report on dated 09.10.2023. Copy attached as <b>annexure-11.</b>
G	The EC granted is liable to be suspended in case of failure to comply with decisions at S. No.'s d to f above.	<b>Complied.</b>



(Signature)

**Chief – Ludhiana Project**  
**Tata Steel limited**