VARDHMAN SPECIAL STEEL LIMITED
C-58, C-59m, FOCAL POINT, DHANDARI KALAN/ PHASE III
JAMALPUR, LUDHIANA(EAST), LUDHIANA, PUNJAB

Half Yearly EC Compliance Report (Period 1st April, 2025 to 30th Sept, 2025) F.No. IA-J-11011/74/2013-IA-II (I) Dated- 23.06.2021		
INDUSTRY DETAILS		
1.	Project Type	Steel Industry
2.	Name of the Project	M/s. Vardhman Special Steels Ltd.
3.	Clearance letter (s) F.NO. &Date	Environment Clearance has been obtained from Ministry of Environment, forest and Climate Change, Govt. of India vide F.No. IA-J-11011/74/2013-IA II (I) dated 23rd June 2021. Copy of the same is attached as **Annexure-1**
4.	Location	C-58, Industrial Focal Point, Phase-III
a)	District (s)	Ludhiana-141010
b)	State (s)	Punjab
5.	Address for correspondence	M/s. Vardhman Special Steels Ltd. C-58, Industrial Focal Point, Phase-II Ludhiana, Punjab -141010
6.	Salient features	Productivity improvement through technology upgradation of steel melting shop with Electric Arc Furnace, Installation of 2nd LRF, Replacing FO Boiler with mechanical Vacuum Pumping System for Vacuum Degassing, Addition of third Strand in caster, Upgradation of existing RHF & Installation of Kocks Mills along with other modifications from 2,00,000 TPA to 2,80,000 TPA. We have already obtained CTO for 2.8 LTPA wide no CTOA/Renewal/LDH1/ 2024/25748982 & CTOW/ Renewal/LDH1/ 2024/25748893 is attached as **Annexure-2** & valid up to 30.06.2026. As required by the State Pollution Control Board, the approval from the State Competent Authority has been obtained under press Note 17 (1984 series). Copy of the same is already submitted. • Plant site co-ordinates are Latitude 30°53'12.60'' N to 30°53'11.46'' N and Longitude 75°54'17.57'' E, 75°54'19.77'' E, elevation 250 m. • The project covers an area of 27.74 acres (or 11.22 ha) • The nearest railway station is Ludhiana, which

		is 6.5 km in WNW direction. ● Nearest airport is Chandigarh Airport is 87 km in ESE. ● No National Parks/wildlife sanctuary/ reserve forests exist within 10 km of study area. ● The project site is located within Government approved industrial Focal Point, Ludhiana.
a)	Of the project	The project covers an area of 112259.8 sq.m (or 27.74 acres)
b)	Of the environment	The total water requirement of the project is 766 m3/day. No additional ground water is required for the project. Total electricity demand of 38000 KVA is being supplied by Punjab State Power Corporation Ltd. to run the plant for 24 hrs.
7.	Breakup of the Project area	--
a)	Submergence area	Not Applicable
8.	Breakup of the project affected population with enumeration of those losing houses/dwelling units only, agricultural land and landless laborers/land landless laborers/ artisans.	Not applicable as no new land has been acquired. The expansion/ modernization is within the existing project.
a)	SC/ST/Adivasis	Not Applicable
b)	Others (Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures, If a survey has been carried out give details and year of survey).	Not Applicable
9.	Financial Details	
a)	Project cost as originally planned and subsequent revised estimates and the year of price reference.	Rs. 169 Crores.
b)	Allocation made for Environment management plan with item wise year of assessment.	As per EMP proposed expenditure on Environment protection measures as below:-

Environment Expenditure

S. No.	Particulars	Aprox. Capital Cost (in Lacs)	Aprox. Recurring Cost (in Lacs)
1.	Air Pollution Control	1880	30.49
2.	Waste Management	50	84.82
3.	Environment Laboratory	-	-
4.	Green Belt	190	12.05
5.	Others	670	73.51
Total		2790	200.87

c)	Benefit cost ratio/Internal rate of return and year of assessment.	10.61% for H2 (ear 2024-2025 EBITDA to Sales)
d)	Whether (c) includes the cost of environmental management as shown in (b) above.	Yes
e)	Actual expenditure incurred on the project so far.	1300095345/-
f)	Actual expenditure incurred on the environmental management plans so far.	The actual capital cost & recurring expenditure done on the environmental management plan as given in the table below:

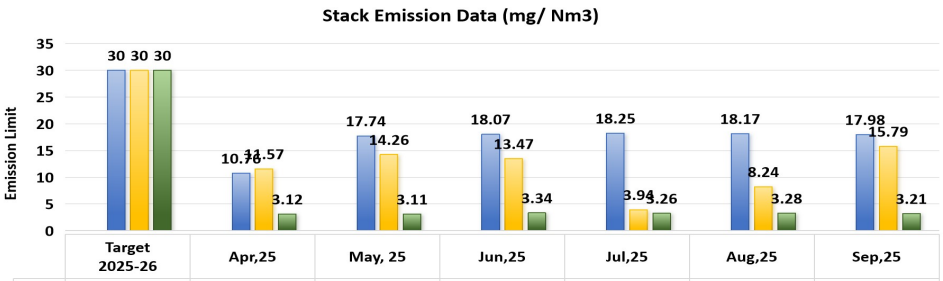
Expenditure for Environment Management Plan
(For Period 1st April, 2025 to 30th Sept, 2025)

S. No.	Particulates	Aprox. Recurring Cost (in Rs.)
1.	FES Stack/ APCD maintenance (Bag Filters)	780273.00
2.	Hazardous Waste Management	8473725.00
3.	Bio Medical Waste Management	8140.00
4.	Environment	2268694.00
5.	Green Belt	1204682.00
6.	Safety/Fire Fighting	7309116.75
7.	ETP	42000.00
	Total	20086630.75

10.	Forest Land requirement	Not Applicable
a)	The status of the approval for diversion of forest land for non forestry use.	Not Applicable
b)	The status of clear felling.	Not Applicable
c)	The status of compensatory a forestation programmer in the light of actual field experience so far.	Not Applicable
11.	The status of clear felling in non-forest areas (such as submergence area of reservoir, approach road) if any, with quantitative information.	Not Applicable
12.	Status of construction.	Completed
a)	Date of commencement (actual and/or planned)	Phase I(2,00,000 TPA to 3,00,000 TPA):June'2022; Phase II (2,00,000 TPA to 2,80,000 TPA):December '2022.
b)	Date of completion (actual and /or planned)	Phase I: - In Process, Phase II: - Completed on 31st December 2022.
13.	Reasons for the delay if the project is yet to start.	Not Applicable

COMPLIANCE STATUS OF ENVIRONMENT CLEARANCE LETTER F. NO. IA-J-11011/74/2013-IA-II (I) DATED- 23.06.2025		
A. SPECIFIC CONDITIONS		
S. NO	**SPECIFIC CONDITIONS**	**COMPLIANCE STATUS**
1.	Overall emissions of PM, SOx and NO› shall not exceed the values PM = 357.5 kg/day; SOx = 846.7 kg/day and NOx — 207.3 kg/day as committed by the proponent post expansion.	Complied, The overall Emissions values are being adhered and the current emission level for PM is below 30 mg/Nm3. The test result of all stacks of plant are well within the permissible range. Our online data is continusaly uploaded on PPCB & CPCB server. The Screenshot is given below.
CEMS Online Data Status		

2.	Use of Furnace Oil as a fuel will be prohibited for the existing and expansion project post expansion. Project proponent shall use PNG for heating purposes in line with Regional Air Quality Management Strategy of Punjab Pollution Control Board.	Complied, The Plant is using the Natural Gas as fuel through PNG supply from GAIL. The Gas is being used in RHF/CCM & SMS area as fuel as per CTO/EC condition. We have spent Rs. 18.94 Crore for PNG fuel consumption from 1st April, 2025 to 30th Sept, 2025. The copy of Agreement with GAIL is attached as **Annexure-3.**
3.	Particulate Matter emissions from all the stacks shall be less than 30mg/Nm3.	Agreed & Complied, The industry is maintaining PM levels less than 30 mg/Nm3. The Report are attached as **Annexure-4.**

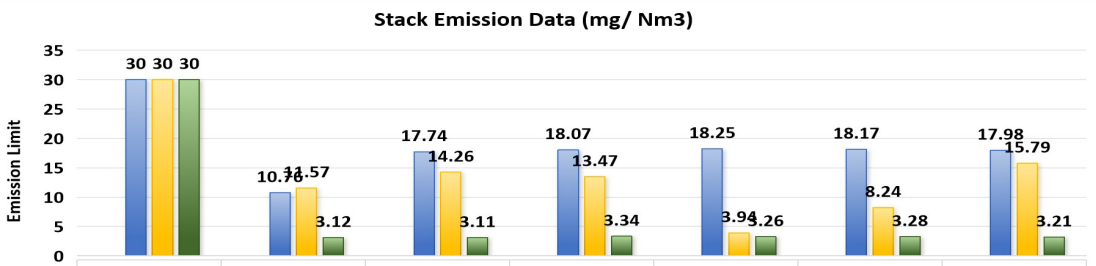


	Target 2025-26	Apr,25	May, 25	Jun,25	Jul,25	Aug,25	Sep,25
RHF	30	10.76	17.74	18.07	18.25	18.17	17.98
LRF	30	11.57	14.26	13.47	3.94	8.24	15.79
EAF	30	3.12	3.11	3.34	3.26	3.28	3.21

4.	Specific water consumption after expansion shall maintained at 0.95 m3/ T of steel as committed by the PP.	Complied, All Efforts will be done to conserve water. We have obtained ground water NOC from the PWRDA & The water consumption is well within limits as specified in condition of ground

		water NOC. NOC copy attached as **Annexure-5.**
5.	300 KLD treated water from CETP of M/s. JBR technologies shall be used in expansion project.	Agreed & Accepted, Agreement with JBR Technologies has been signed for 300 KLD Water supply. The same shall be taken Post Expansion if needed for greenbelt outside the VSSL campus area for watering of green belts and plantation. The Copy of Agreement is attached as **Annexure-6.**
6.	All roads shall be made Pucca and a vacuum cleaner shall be used to clean the roads.	Agreed & Complied, Vacuum Mechanical Sweeping Machines has been purchased for plant and surrounding areas and put to use. Make of the machine is IPC Tennant. In-house roads are pucca and cleaned through said machine on daily basis.
Photographs of Sweeping Machines		
7.	Community Rain Water Harvesting (RWH) shall be taken up to recharge 230000 KLA of water which is more than the annual consumption of the plant.	Agreed, The same shall be done as per Compliance and we are working on it. We have written to PWRDA to advise on the method and technology for executing the same and once the approved method is shared to us, we shall do the needful.
8.	Green belt inside the plant at present is only 3.01 Acres. Additional 6.19-acre land inside the plant shall be covered under green belt to make it 35 %. Two- acre land adjacent to the plant in the Focal Point has been given by authorities, which shall be planted and maintained by project proponent. Total green belt after this shall be 40 % of the total project area.	Agreed & Being Complied, Plantation /greenbelt development has been carried out widely within the plant and approx. 6.19-acre land developed and approx. 17 Acre forest additional Greenbelt as per Miyawaki Technique in Focal Point, Ludhiana DMC Village Malakpur, Village Mansuram, PAU, R & D Centre Focal Point, Ludhiana Challikhoo Amritsar, Vardhman MCL Park Ludhiana & Patiala focal point. Copy attached as as **Annexure 7.**
9.	100 % slag generated in the facility shall be utilized.	Agreed & Complied, Slag is being utilized for the Cement Plant and Paver Work. Agreement is already done with Cement Manufacturing Unit and local paver units & slag is supplied to local vendor.

10.	All stockyards shall be having impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the run off material.	Agreed & Being Complied, Mobile Dust Suppression machine has been purchased from Cloud- Tech company for our steel plant to help suppress any sort of dust originating from any source and same is being used in VSSL and adjoining area of focal point roads Ludhiana & same is regularly used for plant purpose.
B. GENERAL CONDITIONS		
(I)	**GENERAL CONDITIONS**	**COMPLIANCE STATUS**
1.	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 / construe to approvals/ consent/ permissions etc., required to be obtained or standards/ conditions to be followed under any other Acts/ Rules/ Subordinate legislation, etc., as may be applicable to the Project.	Agreed and accepted.
(II)	**Air Quality monitoring and Preservation**	**COMPLIANCE STATUS**
1.	The Project Proponent shall install 24x7 continuous monitoring systems at process stacks to monitor stack emissions as well as Continuous Ambient Air Quality Stations (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specifications through labs recognized under Environment (Protection) Act, 1986 or NABL accreditedlaboratories.	Agreed, Industry is already having CEMS at EAF and RHF and also maintaining CAAQMS. The said CEMS of EAF is connected to SPCB/CPCB servers and are calibrated on schedule by MoEF/NABL/SPCB approved Labs. Continuous Ambient Air Quality Monitoring Station of Horiba make has also been installed at site and data is being sent to Government and also monitored regularly.



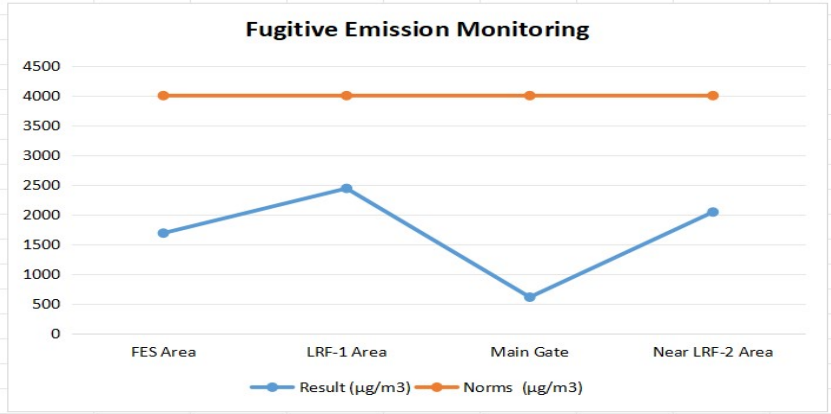
	Target 2025-26	Apr,25	May, 25	Jun,25	Jul,25	Aug,25	Sep,25
RHF	30	10.76	17.74	18.07	18.25	18.17	17.98
LRF	30	11.57	14.26	13.47	3.94	8.24	15.79
EAF	30	3.12	3.11	3.34	3.26	3.28	3.21

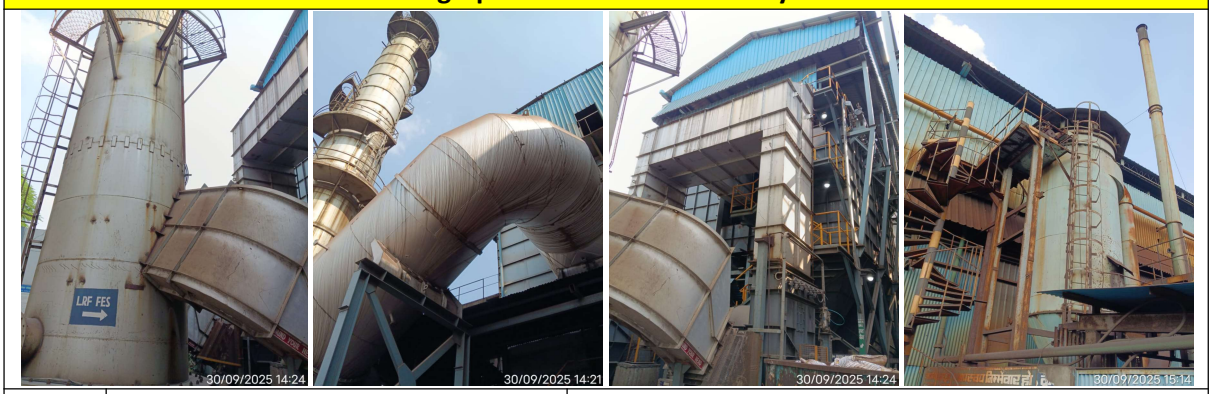
Photographs of CAAQMS

2.	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.	Agreed & Complied, Same is being done on quarterly basis. The fugitive emission reports are enclosed as **Annexure-8** and results are well within the permissible limit. VSSL is using the Anti Smog gun for Control Fugitive emission within & outside the plant. The photographs of ASG. The same is based on cloud method.

Fugitive Emission Monitoring

S.No.	Location	Result (µg/m3)	Norms (µg/m3)
1	FES Area	1685	4000
2	LRF-1 Area	2438	4000
3	Main Gate	607	4000
4	Near LRF-2 Area	2040	4000

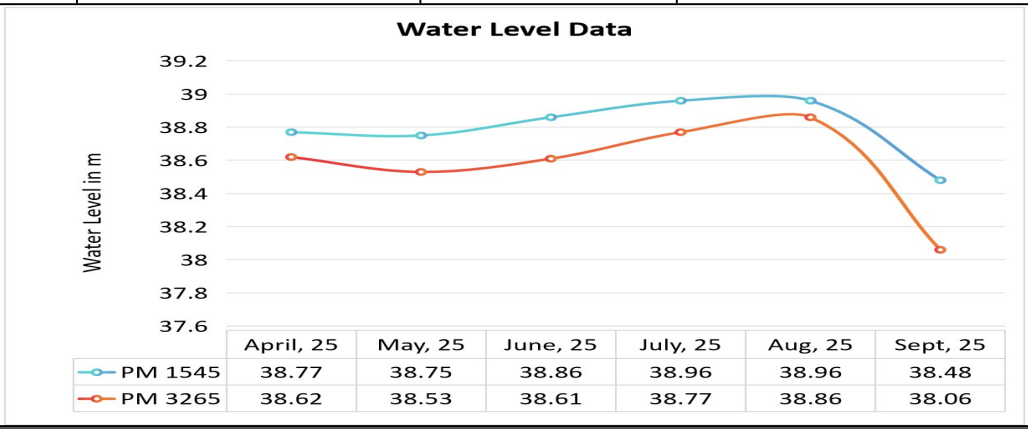


Photographs of Anti Smog Gun		
3.	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, to comply prescribed stack emission and fugitive emission standards.	Agreed & Complied, VSSL as responsible Industry has already installed the APCD on dust generating points. We have installed Fume Extraction system for capturing Primary & Secondary Emissions generated during the process at EAF and same system has been placed at LRF & MHS system also.
Photographs of Fume Extraction System		
		
4.	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	Agreed & Complied, Appropriate System has been installed with glass fibre filter for Vacuum Degassing unit of our plant. Bag cleaning facility is already provided for EAF,LRF,MHS and Shot Blasting in compliance to the norms.
5.	The project proponent shall ensure covered transportation and conveying of ore, coat and other raw material to prevent spillage and dust generation.	Agreed & Complied, All raw material is kept in stores within enclosed covered shed area due to which no spillage and dust generation is there.
6.	The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.	Complied, Primary & Secondary FES is well in place for EAF & LRF, For MHS we have a dedicated separate FES.
7.	Wind shelter fence and chemical	Agreed & Complied, The wind shelter wall is

	spraying shall be provided on the raw material stock piles	already made in the plant and scrap storage area.
Photographs wind shelter wall		
8.	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, oil cellars	Agreed, The same is already existing and proper ventilation design is in place.
(III)	**Water Quality Monitoring and Preservation**	**Reply**
1.	The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometer/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 end NABL accredited laboratories.	Agreed & Complied, Two Piezometers have been installed at our plant premises (GWR01545 & GWR03265). Ground Water Sampling is conducted twice a year in March & September as a part of Compliance to monitor water quality. Ground Water reports are submitted to MoEF&CC/PPCB and water level data submitted to PWRDA on monthly basis. Same are enclosed as **Annexure-9**.

Ground Water Level (in meter)

S. No.	Month	PM 01545	PM 03265
1	April, 25	38.77	38.62
2	May, 25	38.75	38.53
3	June, 25	38.86	38.61
4	July, 25	38.96	38.77
5	Aug, 25	38.96	38.86
6	Sept, 25	38.48	38.06



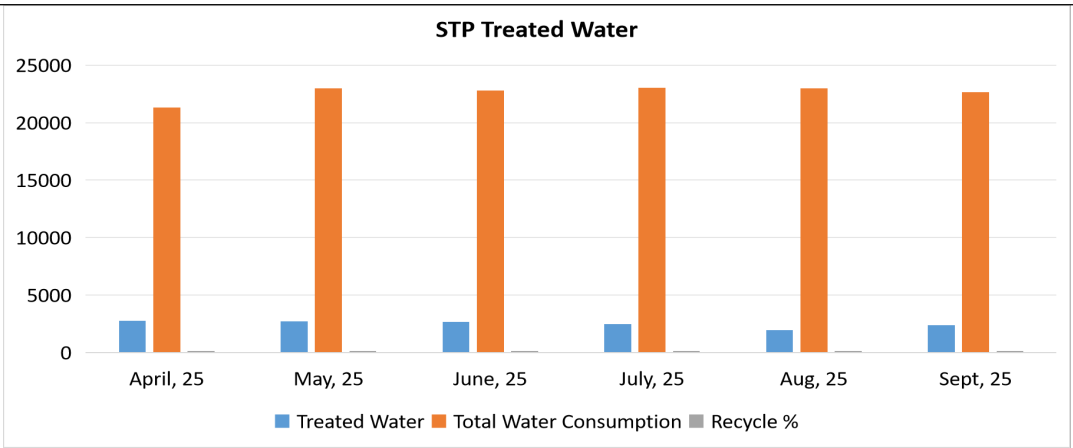
Photographs of Piezometers

2.	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run.	Agreed, Arrangements are in place to meet any such run off.
3.	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	Agreed & Being Complied, Thermax make STP of 100 KLD capacity is installed in Plant and fully operational.

Photographs of STP Plant (100 KLD)

STP TREATED WATER

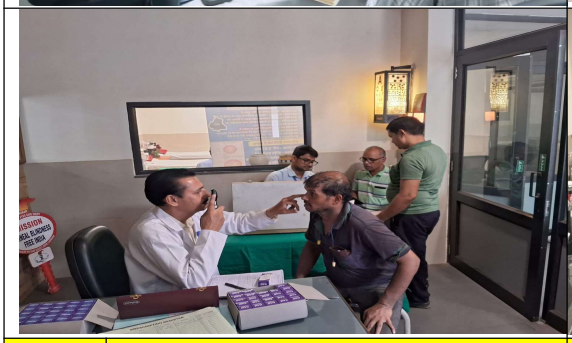
S. No.	Month	Treated Water	Monthly Water Consumption(in KL)	Recycle %
1	April, 25	2768	21300.19	13.00
2	May, 25	2715	22970.17	11.82
3	June, 25	2670	22813.50	11.70
4	July, 25	2487	23010.37	10.81
5	Aug, 25	1958	22983.43	8.52
6	Sept, 25	2400	22632.36	10.60
	Total	14998	135710.02	11.05



4.	The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.	Agreed, we have ordered ETP to the Thermax and same will be installed by 28.02.2026.
(IV)	**Noise Monitoring and Prevention**	**Compliance Status**
1.	Noise quality shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	Agreed and Being Complied, Noise levels are maintained by providing Canopy and acoustic chamber and results are within prescribed limits. Test reports are submitted to RO MoEF&CC in every Half yearly report. Reports are enclosed as **Annexure-10.**
(V)	**Energy Conservation Measures**	**Compliance Status**
1.	Energy conservation measures may be adopted such as adoption of solar energy and provision of LED lights etc., to minimize the energy consumption.	Agreed, LED lights are placed in all Plant premises.
(VI)	**Waste Management**	**Compliance Status**
1.	Used refectories shall be recycled as far as possible	Complied, The used refectories are being sent to Chardikala recycler for re-utilization as per norms.
2.	Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried and briquettes and reused in melting Furnaces	Agreed, the ETP is installation is under process Same shall be completed by 28.02.2026 and complied this condition.
3.	Kitchen waste shall be composted or converted to biogas for further use	Complied, Kitchen waste is being sent to Govt/ MCL approved A to Z Waste Management for further processing for composite.
(VII)	**Green Belt**	**Compliance Status**
1.	The Project proponent shall prepare GHG emissions inventory for the	Agreed & Being Complied, Study for GHG / Carbon Emissions is being done through DNV and

	plant shall submit the program for reduction of the same including carbon sequestration including plants	Company is very serious about carrying proper GHG Study. After the calculation/data study GHG certificate issued by DNV & same is attached as **Annexure-11.**
(VIII)	**Public hearing and Human health Issues**	**Compliance Status**
1.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Agreed & Complied, The Company has a proper Disaster Management Plan/ Emergency Plan for plant operations submitted with District Administration & The same is attached as **Annexure-12.**
2.	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.	Complied, Heat Stress Analysis/GTT test is being done twice a year and PPE's are provided as per norms in respective work place. The reports enclosed as **Annexure-13.**
3.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	Agreed & Already Being Complied, The same is being fully complied and Medical checkup camp and other tests like spirometry, Audiometry, Routine checkup, RT-PCR, Eye Checkup, etc. are being done regularly and all report checked and verified by through Chief Medical Officer. Some test reports copy as evidence attached herewith as **Annexure-14**.

Photographs of Medical Test
(Spirometry/ Audiometry/ Dental Check-up/Eye Check up)

		
(IX)	**Corporate Social Responsibility**	**Compliance Status**
1.	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020.	Agreed and Being Complied and an amount of Rs. 1.27 crore spent on CSR during 1st April, 2025 to 30th Sept, 2025. The details along with Photographs attached as **Annexure-15.**
2.	The company shall have a well laid down environmental policy duly approve 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 and / 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.	Agreed & Complied. We have a well laid Environment Policy duly approved by the Board of directors. Same is enclosed as **Annexure-16.**
3.	A separate Environment Cell both at the Project and the Company Head quarter level, with qualified	Agreed & complied, The company has a well developed Environment Cell/ team to cater to all requirements. The team comprises of Environment

	personals shall be setup under the Control of Senior Executive, who will directly to the head of the Organization.	Engineer and Compliance team and EHS Head. Copy of same enclosed as **Annexure-17.**
(X)	**Miscellaneous**	**Compliance Status**
1.	The Project proponent shall make public the Environmental Clearance granted for their project along with the Environmental Clearance conditions and safe guards at their cost by prominently advertising it at least in 2 local newspaper of the district or State, of which one shall be in the vernacular language within 7 days and in addition this shall be displayed in the Project proponent's website permanently.	Agreed and same is Complied
2.	The copies of the Environmental Clearance shall be submitted by the Project proponent to the Head's of the local bodies, panchayat and municipal bodies in addition to the relevant offices of the government who in turn has to display the saying for 30 days from the date of receipt.	Agreed & Complied, The EC has been submitted in all government offices as specified.
3.	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.	Agreed & Complied, The status of the compliance is regularly uploaded on the website on half yearly basis. Last report has been submitted 22.05.2025. Online Submission of receipt enclosed as **Annexure-18.**
4.	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 disclosure to the public and put on the website of the company.	Agreed & Complied, The PM10, SO2, NO2, Ambient results are checked on monthly and half yearly basis and result on same are put on website along with Compliance report. Test report attached as **Annexure-19.**
5.	The project proponent shall submit six- monthly reports on the status of	Complied, Six monthly compliance reports are being regularly submitted to R.O (MoEF&CC),

	the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Chandigarh and PPCB. Last report has been submitted 22.05.2025. Online Submission of receipt enclosed as **Annexure-18.**
6.	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.	Complied, The Form V for period of 2024-25 submitted to PPCB dated 12.09.2025 vide Letter No - VSSL/2025/PPCB/7321. Copy of same attached as **Annexure - 20.**
7.	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.	Agreed, Expansion shall be completed by December'2022.
8.	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.	Agreed, The Company is committed for abiding by all the conditions / commitments made by it in EIA/EMP. Same are being done on regular basis.
9.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Agreed, We agree and accept that, in case of any further expansion or modification a prior approval from MoEF&CC will be taken.
10.	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.	Agreed , We agree to the said condition
11.	The Ministry may revoke or suspend	Agreed and accepted.

	the clearance, if implementation of any of the above conditions is not satisfactory.	
12.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Agreed
13.	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
14.	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