

JSWSL/ENV/MoEF&CC/2023

November 28, 2023

To

The Regional Officer,
Ministry of Environment, Forest and Climate Change,
Regional Office (WCZ), Ground Floor,
East Wing, New Secretariat Building,
Civil Line, Nagpur-440001

Sub: Six monthly compliance report of EC conditions for i) 3.0 MTPA steel plant, ii) expansion from 3 to 5 MTPA integrated steel plant and iii) expansion from 5 to 10 MTPA integrated steel plant of JSW Steel Ltd. located at Geetapuram, Village Dolvi, Tehsil Pen, District Raigad, Maharashtra.

Ref: i) Environmental Clearance for 3 MTPA vide letter No J-11011/4/96-IA-II dated 31-12-1996.
ii) Environmental Clearance for expansion of steel plant from 3 to 5 MTPA vide letter No J-11011/166/2011-IA-II(I) dated 21-11-2012.
iii) Environmental Clearance for expansion of steel plant from 5 to 10 MTPA vide letter No J-11011/176/2013-IA-II(I) dated 25-08-2015.
iv) Environmental Clearance for changes in configuration for proposed expansion of integrated steel plant from 5 to 10 MTPA vide letter No J-11011/76/2013-IA-II(I) dated 16/06/2020

Sir,

With reference to above, please find enclosed herewith six monthly compliance report of EC conditions for following:

- i) Environment Clearance for 3.0 MTPA steel plant – **Annexure I**
- ii) Environment Clearance for expansion from 3 to 5 MTPA integrated steel plant - **Annexure II**
- iii) Environment Clearance for expansion from 5 to 10 MTPA integrated steel plant of JSW Steel Ltd., Dolvi Works – **Annexure III**
- iv) Environment Clearance for changes in configuration for proposed expansion of integrated steel plant from 5 to 10 MTPA vide letter No J-11011/76/2013-IA-II(I) dated 16/06/2020 – **Annexure IV**

Submitted for kind information & records please.

Thanking you,

Yours faithfully,
For JSW Steel Limited



Dr. Anand Rai
Vice President (Head - Environment)

- CC: 1) The Director, MoEF&CC, Indira Paryavaran Bhawan, Jor Bagh, Lodi Road, New Delhi-110003.
2) The Zonal officer, CPCB, Parivesh Bhawan, Opp. VMC Ward Office No. 10, Subhanpura, Vadodara-390 023, Gujarat.
3) The Regional Officer, MPCB, Raigad, Raigad Bhavan, CBD Belapur, Navi Mumbai

COMPLIANCE CONDITIONS OF LETTER No J-11011 / 4 / 96 – IA – II dated 31-12-1996.

Subject: 3.0 MTPA integrated Steel Plant at Raigad District, Maharashtra by M/s. JSW Steel Ltd.

Ref: Environmental Clearance for 3 MTPA steel plant vide letter No J-11011/4/ 96 – IA–II, dated 31-12-1996 & vide letter No J-11011/76/2013-IA II(I), dated July 30, 2015.

The status report on stipulated Environmental condition, point-wise explanations are as follows.

S. NO	ENVIRONMENTAL CLEARANCE CONDITIONS	COMPLIANCE STATUS AS ON SEPTEMBER 2023
i)	The project authorities must strictly adhere to the stipulations made by the Maharashtra Pollution Control Board and the State Government.	<p>Being Complied</p> <p>JSW Steel Ltd., Dolvi works has obtained Consent to operate for all plants from Maharashtra Pollution Control Board and following the guidelines given by Maharashtra Pollution Control Board (MPCB) Consent conditions and State Government time to time.</p>
ii)	No expansion or modifications of the plant should carried out without prior approval of this Ministry	<p>Being Complied</p>
iii)	The Gaseous emissions from various process units should confirm to the load / mass based standards notified by this Ministry on 19th May 1993 and standards prescribed from time to time. The State Board may specify more stringent standards for the relevant parameters, keeping in view the nature of the industry and its size and location. At no time the emission level should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should be put out of operation immediately and should not be restarted	<p>Complying with</p> <ul style="list-style-type: none"> • The company has installed adequate Air Pollution Control measures like Bag Filters, ESPs, Wet scrubbers, Dry Cyclones in each unit of the plant to control the emission level within the MPCB / CPCB norms. • Conditions of Consent to operate as prescribed by MPCB is being complied. • Gaseous emissions from the process units are well within the prescribed standards as notified by the Ministry.

	until the control measures and rectified to achieve the desired efficiency.	
iv)	At least five ambient air quality monitoring stations should be provided in consultation with the State Pollution Control Board for measurement of SO ₂ , NO _x , Particulate Matter etc. Stack emissions should also be monitored regularly by setting up automatic stack monitoring facilities. Data on stack emissions also with the ambient air quality and work environment air quality should be submitted along with statistical analysis to the state pollution control board once in three months and to this Ministry once in six months.	<p>Complying with</p> <ul style="list-style-type: none"> • Five Continuous Ambient Air Quality Monitoring stations have been installed in consultation with MPCB. All these stations are connected to URL of MPCB & CPCB & data is being transmitted online on real time basis for PM_{2.5}, PM₁₀, SO₂, NO_x & CO. • 32 Nos. Continuous Stack Emission Monitoring systems are installed at all major stacks & connected to URL of MPCB & CPCB & data is being transmitted online on real time basis. • Data on Stack Emission, Ambient Air Quality and Work Environment Air Quality are monitored and submitted as per guidelines to; <ul style="list-style-type: none"> a) MPCB - Once in three months, also as & when required, b) MOEF&CC, Nagpur & Delhi – Once in Six month, c) CPCB, New Delhi – Monthly basis
v	In plant control measures for checking fugitive emissions, spillage of chemicals / raw materials etc. should be provided and properly maintained specially in the critical areas like blast furnace, sintering plant etc.	<p>Various measures have been provided to control the fugitive emissions;</p> <ul style="list-style-type: none"> • Dust Suppression such as; <ul style="list-style-type: none"> - Dry Fog System / Water spraying in junction houses / Transfer Towers at Raw Material Handling System (RMHS) & other units. - All the Junction houses and Conveyors are covered to avoid fugitive emissions while transfer of material through conveyor. - Constructed Covered Sheds for Raw Material storage (Coal, Coke, Iron Ore Pellets and Fluxes) - Cyclone with Venturi Scrubbing system at Sponge Iron Plant, SMS and Gas Cleaning Plant at Blast Furnace. - Vacuum based road sweeping machines and mist type mobile water tankers are provided for control of road emissions. • Dust Extraction system with bag filters have been provided for;

		<ol style="list-style-type: none"> 1) Blast Furnace 1 - Stock House – Bag Filters and Cast House – Reverse Air Bag Filter & ESP. 2) Sinter Plants – ESP & Bag Filters 3) Steel Melting Shop (SMS) 1 – Gas Cleaning Plants (GCPs) 1, 2, 3 & 4 with Bag Filters for primary & secondary fume extraction system. In SMS 1- Modification of GCPs 1, 2 & 3 by increasing the capacity of ID Fan, modified Bag filters, High Temperature Quenching Tower (HTQ) and mixing chamber to control the fugitive emissions. 4) Lime Calcination plants – Installed De-dusting system with Bag filters at Kiln, Lime and Lime stone handling areas. <p>Hence the point is being complied</p>
vi	<p>Adequate effluent treatment facilities should be provided so that the treated effluent conforms to the prescribed standards.</p>	<p>Complying with</p> <ul style="list-style-type: none"> • Adequate effluent treatment facilities have been provided at all units and the treated water is recycled back in the process. • In Blast Furnace 1, Waste Water treatment plant of capacity 2496 CMD, provided with Flash Mixer, Common, Collection Tank, Thickener, Sludge Storage Tank, Vacuum Drum Filters • Steel Melting Shop (SMS) 1 and Hot Strip Mill (HSM) 1, the Waste Water treatment plant of Capacity 3408 CMD provided with Scale Pits, Pressure Sand Filters, Flash Mixer, Thickener, Sludge Holding Tank, Filter Press the water system are closed loop system. • In Sponge Iron Plant, Waste Water treatment facility provided with Capacity 3624 CMD. Waste water is treated in Classifier, Clarifier, High rate thickner and routed through Sludge pond wherein the sludge is separated and water is reused for Electric Arc Furnace (EAF) slag cooling at SMS1. • All the cooling tower blowdown is being treated in the ETP of capacity 250 M3/hr and the treated water is reused in process and

		slag cooling purpose. There is no waste water discharge outside the plant premises.
vii	Adequate number of influent and effluent quality monitoring stations should be set up in consultation with the state Pollution Control Board. Regular monitoring should be carried out for the relevant parameters. Routine toxicology test of effluent with fish and fish food organisms should also be regularly done at least once in a month. Monitored data along with statistical analysis and interpretation in the form of report should be submitted to this Ministry once in six months and to the state pollution Control Board once in three months.	<ul style="list-style-type: none"> • There is no discharge of waste water from the plant to outside, however, water & wastewater sampling points have been set up in consultation with MPCB. • Regular monitoring is being carried out; Toxicology test of effluent with fish is being done once in a month. • All monitoring reports are submitted as per guidelines to; <ol style="list-style-type: none"> 1) MPCB - Once in three months, also as & when required, 2) MOEF&CC, Nagpur & Delhi – Once in Six month, 3) CPCB, New Delhi – Monthly basis <p>Hence the point is being complied</p>
viii	There will be no discharge of treated effluents outside the plant premises. The treated effluent should be recycled and reused as process water. Treated domestic waste should be used for development of green belt.	<ul style="list-style-type: none"> • As mentioned above in point - vi. • Water pollution control systems are provided in all plants and the treated water is recycled in the process and reused for EAF slag cooling and dust suppression. • Treated domestic water from the Sewage Treatment Plant is used for plantation purpose. There is no waste water discharge from the plant. <p>Hence the point is being complied</p>
ix	Fresh water should not utilized as cooling water. The cooling water drawn from the creek should be discharged into the creek at an outfall point recommended by NIO. Feasibility of recycling the cooling water should also be evaluated and the report should be submitted to the Ministry within three month.	<ul style="list-style-type: none"> • Cooling water is re-circulated in the system / process after treatment in close loop treatment facility and only makeup water is added. • No water is either drawn or discharged into the creek. • Cooling water is sourced from Amba River <p>Hence the point is being complied</p>
x	No Coke oven plant should be set up without the approval of this Ministry.	<p>Complied with</p> <ul style="list-style-type: none"> • Coke Oven plant has been set up after obtaining of separate EC from MoEF&CC vide letter No J-11011/286/2007-IA-II(I) dated 12/01/2009.
xi	Guard pond of sufficient holding capacity should be provided to cope up with the effluents discharged due to process disturbances. The contributing units shall	Intermediate Storage facility provided for handling the effluent in case of exigencies. However, wastewater treatment system is installed at various units and the treated waste

	be immediately shutdown and will not be restarted without bringing the system back to normalcy. Details of design and capacity of the guard pond should be submitted to the Ministry within a period of 6 months.	water is recycled / reused. Hence the point is being complied
xii	A perspective plan for 100 % utilization of slag should be prepared and submitted to this Ministry within six months for approval. The project authorities in their own interest should have a long term to tie-up with the user industry like cement.	Complied with <ul style="list-style-type: none"> • 100% granulated slag of Blast furnace is used in Cement Plant for making of Cement in JSW Group Company (JSW Cement Ltd).
xiii	Raw materials should be brought to the plant site by sea / rail to the extent possible. Finished products should also be transported through road should kept to the bare minimum to avoid any traffic congestion in the area and cities.	<ul style="list-style-type: none"> • All the raw materials are being brought to the plant site by sea route through our Captive Jetty of JSW Dharamter Port Pvt Ltd. • Finished products (HR Coils) are transported through rail / sea and minimum by road. Hence the point is being complied
xiv	A green belt of adequate width and density should be provided in all around the plant in consultation with the State forest Department, specially selecting local species. About 2500 plants per HA of the land should be provided. 30 % of the total land area should be developed as green belt.	Green belt is being developed as per the further amendment in EC obtained dtd 16.06.2020. Green Belt within Plant (EC Condition 16%): Presently, 13% green belt is developed over 197.6 acre land within the plant premises with 2,11,388 nos of trees. Balance 45.6 acre (3%) green belt area is to being developed with 46,200 nos of trees. Green belt developed with tree density 2500 trees/hectare and local species. Green Belt Outside Plant in 10 Km area (EC Condition 33%): Green belt outside the plant premises has been developed over 1137 Acres i.e. 74.8% against the EC condition of 33%. Green belt outside the plant premises is developed in forest land in proximity of the plant area in consultation with local forest department over 125 Acre land and Mangrove Plantation over 1012 Acre.
xv	Approval from the Sate Government should be obtained for quarrying the adjacent hillocks to obtain fill materials for leveling the proposed site to 3 – 3.5 m above MSL. The creek / river should not	Being Complied with <ul style="list-style-type: none"> • The fill material taken form authorized material suppliers for leveling of site. • The creek or the river has not been dredged for leveling the site.

	be dredged to be obtained fill material for leveling the site. The project proponent should also take adequate care to ensure that run off material does not flow into the river / creek during the site leveling.	<ul style="list-style-type: none"> All requisite steps were taken to ensure that the run off material do not flow into the river/creek during site leveling.
xvi	Approval under CRZ notification should be obtained for the extension of the existing jetty. The proposed storages facilities should beyond 150 m from HTL of creek / river.	Complied with <ul style="list-style-type: none"> Approval for CRZ Clearance obtained for construction and expansion of jetty. The Raw material is stored beyond 150 m from HTL of Creek / river.
xvii	The project authorities should set up laboratory facilities for collection and analysis of samples under supervision of the competent technical personnel. Who will directly report to the Chief Executive.	Complied. Environmental Laboratory is in place for collection and analysis of samples under the supervision of competent technical personnel and he is directly reporting to President.
xviii	A environment Management cell should be established with suitably qualified people to carry out various functions under the control of the Senior Executive who will report directly to Head of the Organization.	Complied. An Environment Management cell is established with qualified people to carry out various functions under the control of the Senior Executive who reports directly to Head of the Plant.
xix	Medical surveillance of workers especially w r t the pneumoconiosis etc. should be done regularly and records maintained.	Being Complied As per the Factories Act, regular health checkups done for workers and employees & records are maintained on regular basis.
xx	The funds earmarked for the Environmental protection measures should not be diverted for other purpose its break up and year wise expenditure should be reported to this Ministry.	Being Complied with <ul style="list-style-type: none"> The funds earmarked for environmental protection is utilized for the same purpose. Environmental expenditure for the year 2022-23 for operation and maintenance cost, Power cost, Treatment Cost for Pollution Control systems and Solid Waste Management are Rs 592.26 Crores.
3	This Ministry or any competent authority may stipulate any further conditions or alternations in the existing conditions after review of the compliance report and other reports submitted by the project proponent from time to time.	Noted and the plant shall be complied as per the conditions stipulated by competent authority.
4	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
5	The above conditions will be enforced, inter-alia under the provisions of the water (Prevention& Control of Pollution)	Complying with <ul style="list-style-type: none"> The water (Prevention& Control of Pollution) Act 1974

	<p>Act 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.</p>	<ul style="list-style-type: none">• The Air (Prevention and Control of Pollution) Act, 1981• The Environment (Protection) Act 1986• The Public Liability Insurance Act, 1991 along with their amendments and rules.
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Annexure II

COMPLIANCE CONDITIONS OF File No J-11011/166/2011-IA-II (I) dated 21st November 2012.

Sub: Expansion from 3.0 MTPA to 5.0 MTPA Integrated Steel Plant along with installation of Pellet Plant - 4.0 MTPA and 300 MW Captive Power Plant at Geethapuram, Village Dolvi, Tehsil Pen, District Raigad in Maharashtra by M/s JSW Steel Limited.

Ref: Environmental Clearance for expansion of integrated steel plant from 3 to 5 MTPA vide letter No J-11011/166/2011-IA-II (I) dated 21st November 2012 & vide letter No J-11011/76/2013-IA II(I), dated July 30, 2015.

Sr. No.	ENVIRONMENTAL CLEARANCE CONDITIONS	COMPLIANCE STATUS AS ON SEPTEMBER 2023
1	Waste gases from Blast furnace and coke ovens will be utilised for power generation. Fugitive emissions from raw material handling section will be suppressed by dry fogging system / water sprinkling.	<p>Complying with</p> <ul style="list-style-type: none"> • Waste Gas from Blast Furnace (BF) and Coke Oven Gas (COG) is used in 55 MW Captive Power Plant and other plants as fuel. • Gas Holders provided for storing the Coke Oven Gas, LD and BF Gases. Gas Holder will help the steady network flow for distribution of gas in constant pressure (Operating pressure 996 mmWC. Also it helps to proper utilization of waste gases. Total CO2 Savings will be approximately 660000 Ton of CO2 per year. Energy saving approximate 1 Million Gcal/Year. Total cost for both gas holders is Rs 86.97 (Rs 33.2 Crores + Rs 53.77 Crores) • De-dusting System with Bag filters at Junction houses of raw material handling section in Blast Furnace and Coke Oven Plants. De-dusting System with Bag filters at

		<p>Stock House - 2 Nos Cast house fume extraction system with Bag Filters</p> <ul style="list-style-type: none"> • Dust suppression by dry fog systems / water spraying systems provided at Raw Material Handling Section (RMHS) and other applicable areas. • All conveyors and Junction houses of Raw Material Handling systems are closed system. • Total Investment on Yard sprinklers, De-dusting system and Dry fogging system Rs 77.29 Crores <p>Details of covered shed for storage of Raw Material;</p> <ul style="list-style-type: none"> • Covered shed for Jetty yard-A with a capacity of 110,000MT for Coal Storage • Covered shed for Jetty yard-B with a total capacity of 305,000 MT for Iron Ore and Flux. • Covered Sheds (2 Nos) for Pellet and Coke Storage of Capacity-1,20,000 MT each. • Covered shed for storing Iron Ore Bearing Material and Flux is in progress. Capacity 4,27,000 MT <p>Total expenditure on cover shed is approximately 320 Crores.</p> <p><u>Environmental Benefits of Covered Shed:</u></p> <ul style="list-style-type: none"> • No fugitive emission during handling of material • No water contamination during rains • No spillage of material on roads • Covered storage shed will prevent dust emission in the environment during operation of the yard. <p>To control the fugitive emissions in Coke Oven Plant, following Control Measures are provided;</p> <ul style="list-style-type: none"> • Bag Filters for coal crushing & mixing
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		<p>station & route</p> <ul style="list-style-type: none"> • Ground De-dusting system with Bag Filters – connected to charging and pushing, primary crusher, coke cutter, secondary coke crusher area • Bag Filters for coke screen house & Silo. • Dust suppression system at all the transfer points, coal handling and coke handling route. <p>Hence the condition has been complied</p>
2	<p>The makeup water requirement for the proposed expansion will be 2,590 m³/day and the existing consumption is 833.3 m³/day, which shall be sourced from the State Water Resources Dept. from Nagothane dam at K.T. Bandhara. Maximum recycling of wastewater will be done after treatment to achieve zero discharge. Treated wastewater will be used for dust suppression and green belt development. Effluent streams such as cooling tower blow down, floor washings etc. will be used for fugitive dust suppression, water sprinkling etc. Sewage will be treated in septic tanks. Bag filter dust will be recycled in the process. Blow down water from power plant will be reused in steel melting shop slag yards for spraying on hot slag. Blow down water from Blast furnace recirculation system will be reused in the slag granulation plant as make up water to SGP recirculation water system. Treated waste water from coke oven by products plant will be used in the system itself.</p>	<p>Complying with</p> <ul style="list-style-type: none"> • The makeup water requirement for the proposed expansion is limited to 2590 m³/hr (inadvertently mentioned as m³/day) besides the existing consumption for 3 MTPA plant • The water is sourced from the Nagothane dam at K.T. Bandhara as per the allocation from the Water Resources Department of Maharashtra. • Treated waste water & cooling tower blow down (CTBD) are used for dust suppression, slag cooling & plantation. There is no waste water discharge from the plant. • Sewage is treated in septic tanks & STPs & reused for gardening. • Bag Filter dust is recycled & reused in the process of Sinter & Pellet Making. • Blow down of power plant is used in SMS slag recovery plant for dust suppression. • Blow down water from Blast furnace 1 recirculation system is reused in the slag granulation plant (SGP) as make up water to SGP recirculation water system. • Treated water from Coke oven by-product is used in coke quenching <p>Hence the condition has been complied</p>

3	<p>BF slag will be granulated and used for cement manufacturing. Slag from SMS production will be used in the sinter plant, in land / road / area development or for manufacturing of insulated bricks etc. Mill scale, flue dust from the blast furnace, dust from the bag filters will be used in Sinter plant.</p> <p>All pumps and motors will be selected from less noise generating types. Ear plugs will be provided to employees working in high noise prone areas. DG set will be provided with silencer.</p>	<ul style="list-style-type: none"> • 100% granulated slag of Blast furnace - 1 is used in Cement Plant for making of Cement in JSW Group Company. • SMS- EAF slag is used in the sinter plant, in internal roads / land reclamation, area and construction of concrete structures and road construction in National Highways. • Mill scale, flue dust from Blast Furnace 1, dust from Bag Filters used in Sinter plant. • GCP dust from SMS 1 is used in Sinter Plant and Pellet plant • Low noise level pumps and motors are used. • Ear plugs / Ear muffs provided to all employees working in high noise prone areas. • DG sets having provided with silencer. <p>Hence the condition has been complied</p>
4	<p>All the integrated steel plant are listed as S. No 3 (a) as Primary Metallurgy Industries under category A of the Schedule of EIA Notification 2006 and appraised by the Expert Appraisal Committee (Industry-I) of MoEF.</p>	<p>Complying with</p> <p>As per the EIA Notification 2006 and as per the EC conditions stipulated by MoEFCC for integrated steel plant listed as S.No 3 (a) as Primary Metallurgy Industries under category A</p>
5	<p>The proposal was considered by the expert Appraisal Committee -1 (industry) in its 37th Meeting held during 14th and 15th June 2012. The Committee recommended the proposal for Environmental clearance subject to stipulation of specific conditions along with other environmental conditions. Public hearing was conducted on 28.02.2012.</p>	<p>Industry is complying with</p> <p>all the general conditions and specific conditions stipulated in the Environment Clearance.</p> <p>Complied the points raised during Public Hearing.</p>
6	<p>Based on the information submitted by you, presentation made by you and consultant, M/s. MECON Limited., Ranchi, the Ministry of Environment and Forests hereby accords Environmental clearance to the above project under the provision of EIA Notification dated 14th September 2006 subject to strict compliance of the following specific and general</p>	<p>Industry is complying the general conditions and specific conditions stipulated in the Environment Clearance under the provision of EIA Notification 2006.</p>

	conditions.	
Specific Conditions;		
i	Measures shall be undertaken to mitigate particulate levels in the ambient air and a time bound action plans shall be submitted. On-line ambient air quality monitoring with proper O&M and continuous stack monitoring facilities for all the process stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), gas cleaning plant, scrubber, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm ³ by installing energy efficient technology.	<p>Complied</p> <ul style="list-style-type: none"> • Adequate dust control measures (Bag filters, ESPs, Venturi Scrubbers, Cyclones) have been provided to all the units to mitigate particulate levels in the ambient air quality. Environmental monitoring parameters are well within the prescribed standards as per the Consent granted by MPCB. • Five Continuous Ambient Air Quality Monitoring stations have been installed in consultation with MPCB. All these stations are connected to URL of MPCB & CPCB & data is being transmitted online on real time basis for PM_{2.5}, PM₁₀, SO₂, NO_x & CO with proper O&M • Continuous Stack Emission Monitoring systems are installed at all major stacks (Process stacks) & connected to URL of MPCB & CPCB & data is being transmitted online on real time basis. • Electrostatic precipitator (ESPs), gas cleaning plants, scrubbers, bag filters etc. are provided to all units & PM levels are well within the prescribed norms as per MPCB Consent conditions.
ii	As proposed, Electrostatic precipitator (ESP) shall be provided to sinter / Pellet plant, WHRB, DE Plants and dust catcher followed by venturi scrubbers to blast furnace to control SPM levels within 50 mg/Nm ³ . Fume extraction system shall be provided to induction furnaces to control the emissions within the prescribed standards.	<ul style="list-style-type: none"> • Electrostatic precipitator provided in Blast Furnace 1, Sinter Plants & Pellet plant, • Cast House Fume Extraction System, Waste Heat Recovery Boiler (WHRB), Dust Extraction System and dust catcher followed by venturi scrubbers, de-dusting system with bag filters in stock houses in Blast Furnace are provided. • The emission level from the stacks are well within the prescribed standards. The Six Monthly Stack Emission Monitoring Report is submitted and the

		<p>copy is attached herewith.</p> <ul style="list-style-type: none"> • JSW Steel Ltd., Dolvi, there is no Induction Furnace installed, however in Steel Melting Shop 1, Electric Arc Furnace (EAF) connected with - Gas Cleaning Plants (4 Nos) with bag filters provided with primary and secondary fume extraction systems. The emission level is well within the prescribed standards. The existing Gas Cleaning plants (GCPs 1, 2 &3) were modified and the guaranteed parameters of PM level in stacks are < 50 Mg/Nm³. <p>Hence the point is being complied</p>
iii	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826 (E) dated 16th November, 2009 shall be followed.	<p>Complied</p> <p>On line Ambient air quality monitoring system (5 Nos) installed in the plant for the parameters PM10, PM2.5, SO₂, NO_x, CO and the data is uploaded in the CPCB and MPCB servers.</p>
iv	Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/Code of Practice issued by the CPCB shall be followed. New standards for the sponge iron plant issued by the Ministry vide G.S.R. 414 (E) dated 30th May, 2008 should be followed.	<p>Complying with</p> <p>Adequate measures have been taken to control the gaseous emission levels.</p> <ul style="list-style-type: none"> • Secondary fugitive emissions at Blast Furnace 1 - Cast House de-dusting system with Bag filters, Stock House de-dusting system with Bag filters. • Gas Cleaning Plants (4 Nos) for Electric Arc Furnace (EAF) of Steel Melting Shop (SMS – 1) from all the sources and are well within the permissible limits issued by the Ministry and regularly monitored. • A new standard for the sponge iron plant issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 is being followed. As per the new guidelines of Sponge Iron Plant, the monitoring for stack emissions, work place monitoring etc. are carried out and the reports are within the CPCB

		norms.
v	Total makeup water requirement for expansion shall not exceed 2,590 KLD. Efforts shall further be made to use maximum water from the rain water harvesting sources. Use of air cooled condensers shall be explored and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent should be treated and used for ash handling, dust suppression and green belt development. No effluent shall be discharged and 'zero' discharge shall be adopted. Sanitary sewage should be treated in septic tank followed by soak pit.	<p>Complying with</p> <ul style="list-style-type: none"> • The makeup water requirement for the proposed expansion is within the water allocated and less than 2590 m3/hr. • Roof Top Rain water harvesting system have been implemented. • Closed circuit cooling towers are provided to optimize water consumption. • All effluent is treated & recycled in the process and reused in slag cooling, dust suppression & plantation purpose. • No waste water is discharged to outside the plant premises except run off during monsoon. • Septic tank followed by soak pits provided in all plant areas. • Sewage Treatment Plants (STP) 3 Nos provided for treatment of sewage. The treated sewage water is used for gardening.
vi	Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	<p>Complying with</p> <ul style="list-style-type: none"> • Roof top Rain water harvesting system has been established (at 12 various buildings of Oxygen Plant, Coke Oven, Power Plant, MRSS and Admin.) • The harvested rain water is being used in the cooling towers as make up water. • Since the water table is very high, therefore recharging ground water table is not feasible.
vii	Regular monitoring of influent and effluent surface, sub-surface and ground water (including chromite) should be ensured and treated wastewater should meet the norms prescribed by the State Pollution Control Board or described under the E (P) Act whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Bhopal, SPCB and	<p>Complying with</p> <ul style="list-style-type: none"> • Regular monitoring of influent and effluent surface, sub-surface is being done by MoEFCC approved and NABL accredited labs & the results of all parameters are well within the prescribed standards. The plant is not using any ground water. • Analysis reports are submitted to the

	CPCB.	<p>Regional Office, MoEF&CC, MPCB & CPCB on regular basis.</p> <p>All monitoring reports are submitted as per guidelines to;</p> <ul style="list-style-type: none"> • MPCB - Once in three months, also as & when required, • MOEF&CC, Nagpur & Delhi – Once in Six month, • CPCB, New Delhi – Monthly basis
viii	The water consumption shall not exceed as per the standard prescribed for the steel plants.	<p>Water consumption is well within the prescribed norms & CREP guidelines for the steel plants (less than 5 m³/ton of crude steel)</p> <p>Specific water consumption for the steel plant for 2022-23 (up to March 2023) is 2.48 M³/TCS</p> <p>Hence the point is being complied</p>
ix	Vehicle pollution due to transportation of raw material and finished products shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.	<p>Complying with</p> <ul style="list-style-type: none"> • Transportation of raw material is mainly through sea route to captive jetty and further to the steel plant via closed conveyors. • Rs 320 Crores have been spent for covered shed for storage of raw material like coal, Iron Ore and Flux at Jetty & Raw Material storage yard to control the dust emission. • Transportation of finished products is mainly by rail. • Adequate dust suppression systems have been provided to control dust emissions during loading and unloading of the raw material and finished product. <p>Dust Suppression such as; - Dry Fog System / Water spraying in junction houses / Transfer Towers at Raw Material Handling System (RMHS) & other units. - All the Junction houses and Conveyors are covered to avoid fugitive emissions while transfer of material through conveyor.</p>
x	All internal roads shall be black topped. The roads shall be regularly cleaned with mechanical	Complying with

	sweepers. A 3 tier avenue plantation using native species shall be developed along the roads.	<ul style="list-style-type: none"> All internal roads are concreted & Vacuum based road sweeping machines (6 Nos) and mist type mobile water tankers (2 Nos) are provided for control of road emissions. Avenue plantation using native species have been planted along the roads.
xi	Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of Solid/hazardous waste should be submitted to the Ministry's Regional Office at Bhopal, SPCB and CPCB.	<p>Complying with</p> <p>Proper handling, storage, utilization and disposal of all the solid wastes like Iron ore fines, coke fines, fluxes and scales generated from the plant is used in Sinter Plants & Pellet Plant. Material have been shifted through conveyor, closed bulkers and loaded by pneumatic conveying system.</p> <p>The report of Solid wastes and Hazardous wastes generation and disposal are regularly submitted as mentioned below.</p> <ul style="list-style-type: none"> MPCB - Once in three months, also as & when required, MOEF&CC, Nagpur & Delhi – Once in Six month, CPCB, New Delhi – on Monthly Basis.
xii	Proper embankment shall be provided for the sludge disposal area.	<p>Complying with</p> <ul style="list-style-type: none"> Proper embankment provided to contain sludge at all generating points- Sponge Iron Plant, Blast Furnace 1 and Hot Strip Mill 1. Sludge generated from the Effluent treatment plants (Sponge Iron Plant, Blast Furnace, are used in sinter making & Pelletization process. In sludge handling areas filter press and vacuum drum filters installed at Sponge Iron Plant, Hot Strip Mill and Blast Furnace.
xiii	Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office	Risk and Disaster Management plan is prepared and has been already submitted to MoEF&CC along with EIA Report

	at Bhopal, SPCB and CPCB within 3 months of issue of environment clearance letter.	
xiv	As proposed, green belt shall be developed in 33 % of plant area as per the CPCB guidelines in consultation with the DFO.	<p>Green belt is being developed as per the further amendment in EC obtained dtd 16.06.2020.</p> <p>Green Belt within Plant (EC Condition 16%): Presently, 13% green belt is developed over 197.6 acre land within the plant premises with 2,11,388 nos of trees. Balance 45.6 acre (3%) green belt area is to being developed with 46,200 nos of trees. Green belt developed with tree density 2500 trees/hectare and local species.</p> <p>Green Belt Outside Plant in 10 Km area (EC Condition 33%): Green belt outside the plant premises has been developed over 1137 Acres i.e. 74.8% against the EC condition of 33%. Green belt outside the plant premises is developed in forest land in proximity of the plant area in consultation with local forest department over 125 Acre land and Mangrove Plantation over 1012 Acre.</p>
xv	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants should be implemented.	<p>Complying with</p> <p>The recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the steel plants are implemented.</p> <ul style="list-style-type: none"> • Coke oven plant – Tar sludge / ETP sludge are reused in the Coking process. • Blast Furnace – Energy recovery of top blast furnace gas is being done with power generation through TRT by using top pressure of BF gas. • Coke Oven Plant - Coke Dry Quenching systems (3 Nos) (CDQ) installed and recover the sensible heat of red hot coke, reduce energy consumption and pollution and improve the quality of

		<p>coke. Each CDQ will reduce water consumption by 1920 m³/day and energy of 70 MW will be recovered along which will reduce the CO₂ emissions by approx. 10.9 Lac.t CO₂eq</p> <ul style="list-style-type: none"> • Steel Melting Shop (SMS), secondary de-dusting system (Gas Cleaning Plants 4 Nos) has been installed to control fugitive emissions • Coal Injection Plant for direct injection of pulverized coal in furnace has been implemented. Present rate of CDI in our Blast Furnace is 200 Kg/THM (average for the year 2022-23). • Blast Furnace Slag (BF) Slag- 100% utilized in Cement plant. • Electric Arc Furnace Slag (EAF) slag- 100 % for construction activities, land filling in the low lying areas of expansion projects and is also being used for internal road making and Concrete and asphalt roads. • Presently Steel slag is used as aggregates for construction roads in National Highways with coordination with Central Road Research institute (CRRRI), New Delhi. • Cast House Fume extraction system inclusive of tap holes, runners, skimmers, ladle and charging points have been provided to control Fugitive emissions from Blast Furnace. <p>• The specific water consumption for the year 2022 – 23 (April to March 2023) was 2.48 m³/t of crude steel which is well below the targets for flat products and as well as for long products.</p> <ul style="list-style-type: none"> • Online Stack Monitoring System have been installed on all major stacks (33 Nos) and 5 Nos Online Ambient Air Quality Monitoring System. The real time data is
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		interlinked with MPCB and CPCB server.
xvi	The company shall adopt well laid down corporate environment policy and identified and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with environmental clearance, environmental laws and regulations.	Complied Environment Policy is in place and being complied in adherence to Environmental Clearance, Environmental Laws and Rules and Regulations.
xvii	All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 28th February, 2012 should be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Bhopal.	Complying with The commitments made to the public during the Public Hearing / Public Consultation meeting held on 28th February, 2012 is being implemented and a separate budget is maintained for implementing the projects/ issues under CSR activities. In 2022-23 the industry has spent Rs 20.05 crores on CSR activities. Following are the activities carried out in 2022-23: Education: UDAAN Scholarship, School Infrastructure Development and ASPIRE – Life Skills Distribution of School Infrastructure and skills enhancement: Total 52 Schools and 71 Anganwadis benefitted this scheme. Around 3700+ Students participated and 213 Teachers JSW UDAAN Scholarship: The Scholarship Award for JSW UDAAN is Rs 1.05 Cr. Since beginning total 596 Students benefitted. In the year 2022-23 total 207 students received the scholarship. JSW ASPIRE Project: Under this project, conducted adolescent School Programme for life skills and academic education conducted in 26 Schools and over 3000 + students benefitted for this project. Health & Nutrition: Adolescents Health & MCH Program, Care & Support to

		<p>Migrating Population, Vision Care, Community Health Camps. Under this scheme JSW Steel is doing Quality & affordable healthcare services and Maternal & Child Health Care and Non Communicable diseases Control & rehabilitation of differently able.</p> <p>Health & Wellness initiatives taken at Sanjeevani Hospital:</p> <ul style="list-style-type: none"> • The hospital covers 4.5 Acres Land and provided 73 BEDS and 10 OPDS with ICU, PICU and NICU, Maternal & Child Health Care • The facilities with services available in the Sanjeevani hospital is provided Intellectual Disability, Eye Care Services, Heart Surgeries, CT SCAN, USG, ECHO , X RAY, Knee replacement <p>Community Development: Development of Rural Infrastructure and Linkage with Livelihood, Community Care, Road & Domestic Safety, Pathways & Roads, Community Halls Illumination and Govt. Schemes convergence. 15 Gram panchayats, 33 villages and more than 52000 peoples benefitted though this activities. Constructed 12 Community Buildings and 8 KM Road & Pathways in the nearby villages.</p> <p>Natural Resource Management: Water Projects: Drinking & Domestic and Mangrove restorations</p> <p>Water, Environment & Sanitation scheme provided the Water Resource through laying of pipelines at 33 villages. Provision of HDPE tanks, Roof rain water harvesting systems, Community Ponds, Pipelines,</p>
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		Elevated storage reservoir, Ground water reservoir, Check Dams, Bunds, Filtration units.
xviii	At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program should be ensured accordingly in a time bound manner.	<p>Complying with</p> <p>CSR activities in various sectors are being done in the surrounding villages and a time bound action plan for various CSR activities have been submitted to MoEF&CC as per EAC recommendation of 2.5% of project cost.</p> <p>Amount spent on CSR Activities: For 2022-23 (April to March 2023): Rs 20.5 Crores.</p> <p>The above amount has been spent on Social Development- (Education & Training), Skill Development, Water and Sanitization, Agriculture, Rural Development, Health, Solid Waste Management and Community Development.</p>
xix	The company shall provide housing for construction labour within the site with all necessary Infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	<p>Industry has Complied the conditions during installation and commissioning of the plant.</p> <p>Provided housing for labour within the site with all necessary Infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STPs, safe drinking water, medical health care, crèche etc.</p> <p>After completion of the project activities the temporary structures have been dismantled and removed.</p>
General Conditions:		
i	The project authorities must strictly adhere to the stipulations made by the Maharashtra State Pollution Control Board and the state government.	Complied All the terms & conditions stipulated by Maharashtra Pollution Control Board (MPCB) and State Government are being followed.
ii	No further expansion or modification in the plant shall be carried out without prior approval of the ministry of Environment and Forests.	Complied As per the EC conditions, expansion or modifications of the plant was done. Industry has done in all expansion activities after obtaining prior

		Environmental Clearance from MoEF&CC.
iii	The gaseous emission from various process units shall conform to the load/mass based standards notified by this ministry on 19 th may, 1993 and standards prescribed from time to time. The State Boards may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.	Adequate Air Pollution Control measures have been provided to each unit of the plant and the Gaseous emissions from the process units are well within the prescribed standards as notified by the Ministry. Complied the Consent conditions as per the Maharashtra Pollution Control Board under The Air Act, The Water Act and Hazardous Waste Management & handling and Transboundary Rules. Hence the point is being Complied
iv	At least four ambient monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, SO2 and NOx are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this ministry including its regional office at Bhopal and the SPCB/CPCB ones six months.	Complying with <ul style="list-style-type: none"> • Five Continuous Ambient Air Quality Monitoring stations have been installed in consultation with MPCB. All these stations are connected to URL of MPCB & CPCB & data is being transmitted online on real time basis for PM2.5, PM10, SO2, NOx & CO. • 33 Nos. Continuous Stack Emission Monitoring systems for plants under 5 MTPA (Phase I) are installed at all major stacks & connected to URL of MPCB & CPCB & data is being transmitted online on real time basis. • Data on Stack Emission, Ambient Air Quality and Work Environment Air Quality are being submitted to; <ul style="list-style-type: none"> • MPCB - Once in three months, • MOEF&CC, Nagpur & Delhi – Once in Six month, • CPCB, New Delhi – Monthly basis Hence the point is being Complied.
v	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th may, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilised for plantation purpose.	Industrial Waste water generated from the plant is treated in the plants and reused in the process/ slag cooling purpose. There is no discharge of industrial waste water to outside the plant premises.

		Hence the point is being Complied
vi	The overall noise level 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 level should conform to the standards prescribed under EPA rules, 1989 viz. 75dBA (daytime) and 70 dBA (night time).	Noise control measures installed in the plants like acoustic hoods, silencers, enclosures etc. on all sources of noise generation & measured noise level are well with in prescribed standards. The ambient noise level is monitored in the boundary of the plant and the values are well within the standards prescribed under EPA rules, 1989 viz. 75dBA (daytime) & 70 dBA (night time). Hence the point is being Complied
vii	Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the factory Act.	As per the Factories Act, regular health surveillance done for all the workers and employees & records are maintained on regular basis. Hence the point is being Complied
viii	The company shall develop surface water harvesting structure to harvest the rain water for utilization in the lean season besides recharging the ground water table.	Roof top Rain water harvesting system is being implemented 12 buildings and the harvested rain water is being used in the cooling towers. Since the water table is very high, therefore recharging ground water table is not being done.
ix	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, drinking water supply and health care etc.	<ul style="list-style-type: none"> • Environmental protection measures & safeguards recommended in EIA/EMP report are being complied. • Socio – economic development activities / programmes like supply of drinking water, health care camps & community development programmes, Self Help Groups, Training and education, Rural Development, Sanitary etc. are being carried out on regular basis and will be continued as per plan. Hence the point is being Complied.
x	Requisite amount shall be earmarked towards capital cost and recurring cost/annum for environment pollution controls measures to implement the conditions stipulated by the ministry of environment and forest as well as the state Government. An implementation schedule	Requisite amount is earmarked towards capital cost and recurring cost/annum for environment pollution controls measures to implement the conditions stipulated by the MoEF&CC as well as the State Government.

	for implementing all the conditions stipulated herein shall be submitted to the regional office of the ministry of the Bhopal. The funds so provided shall not be diverted for any other purpose.	The funds earmarked for Environmental pollution control measures are properly utilized. The funds earmarked is not diverted any other purpose.
xi	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila parishad /municipal corporation, Urban local body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	Complied A copy of clearance letter is already submitted to concerned Panchayat, Zillah Parishad/Municipal Corporation, Urban Local Body and the local NGO. The Environment Clearance letter also put on the JSW Web site.
xii	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the regional office of the MOEF at Bhopal. The respective zonal office of the CPCB and the CECB. The criteria pollutant levels namely; PM10, SO2, NOx (ambient levels as well as stack emission) or critical sectoral parameters, indicated project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Complied. The status of compliance of the stipulated environment clearance conditions, including results of monitoring data on their website and shall update the same on six monthly basis. The EC compliance and Environmental monitoring reports are submitted to MoEFCC, CPCB. The CEMS data and CAAQMS data are displayed at the main gate.
xiii	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the regional office of MoEF, the respective Zonal office of CPCB and the SPCB. The Regional office of this Ministry at Bhopal / CPCB / SPCB shall monitor the stipulated conditions.	Being Complied. The six monthly Environmental Clearance compliance report and Environmental monitoring reports are submitted to Regional Office of MoEFCC, MPCB and CPCB.
xiv	The Environmental Statement for each financial year ending 31 st March in Form V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules 1986, as amended subsequently, shall also be put on the website of the company along with	Being submitted regularly Plant wise Environment Statement for 2021-22 prepared and submitted to MPCB portal and uploaded on the web site of the company. Also the same are submitted to regional

	the status of compliance conditions and shall also be sent to the respective Regional Office of the MoEF at Bhopal by e-mail.	office of MoEFCC along with six monthly EC compliance report.
xv	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at http://moef.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locally concerned and a copy of the same should be forwarded to the Regional Office, Bhopal.	Published in newspaper as per guidelines namely in Local newspaper Dainik Krushiwal, Raigad Times, Ramprahar dated 24/11/2012 and English newspaper Indian Express dated 26/11/2012. Hence this point is complied.
xvi	Project authorities 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 and the date of commencing the land development work.	Complied
11	The ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
12	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Noted
13	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules 2008 and the Public (Insurance) Liability Act 1991 along with their amendments and Rules.	The plant is regularly complying for <ul style="list-style-type: none"> • The water (Prevention & Control of Pollution) Act 1974, • The Air (Prevention and Control of Pollution) Act, 1981 • The Environment (Protection) Act 1986 • The Public Liability Insurance Act, 1991 along with their amendments and rules.

Point-wise Compliance Reports of Environment Clearance

Expansion of Integrated Steel Plant from 5 to 10 MTPA and Power Plant from 300 MW to 600 MW (Gas Based) of M/s JSW Steel Limited at Geethapuram, Village Dolvi, Tehsil Pen, District Raigarh in Maharashtra. (Letter No J-11011/176/2013-IA-II(I) dated 25/08/2015 amendment dated 23/01/2018

Sr. No.	Condition	Compliance Status
1	This has reference to your letter no Nil dated 6 th February 2015 along with copies of EIA/EMP report seeking Environmental Clearance under provisions of the EIA Notification 2006 for the project mentioned above. The ToR to the project was awarded by MoEF&CC vide letter dated 28 th May 2013 for preparation of EIA/EMP report. The proposed project activity is listed at Sr. No 3(a) in primary metallurgical industry under Category “A” of the Schedule of EIA Notification 2006 and appraised by the Expert Appraisal Committee (Industry).	Noted
2	The Ministry of Environment, Forests and Climate Change (MoEF&CC) has examined your application of EC for the aforesaid project. It is noted that M/s JSW Steel Limited (JSWSL) proposes to expand the integrated steel plant to 10.0 MTPA from existing 5.0 MTPA at Geethapuram, Dolvi in Raigad District of Maharashtra. The existing steel plant is based on the Direct Reduced Iron (DRI)- Blast Furnace- CONARC-Ladle Furnace and VD/VOD- Continuous Casting- Rolling Mill (CSP) Route. The expansion would be based on proven BF- BOF Route. Expansion of 3.0 MTPA Steel Plant to 5.0 MTPA and 300 MW Captive Power Plant is under	Noted

Sr. No.	Condition	Compliance Status
	<p>implementation. The Site falls between Longitude- 73° 00' 00"- 73° 05' 00" E, Latitude 18° 39' 00" - 18° 45' 00" N. Lnad comprises Dolvi, Jui Bapuji & Khar Karavi Village. Pen is the nearest railway station at about 8 Km (aerial distance) on the Konkan Railway line connecting Mumbai- Mangalore along the West Coast of India. The nearest Airport is Mumbai (National and International) located about 80 Km in North direction from the proposed project site. The Company has about 1200 acres of land in its possession for its existing operating integrated steel plant complex of 5.0 MTPA capacity. Some of the proposed additional capacities are proposed to be setup within the existing plant and some need relocated acquiring additional 600 acre of land. There is no national park, biosphere reserve, sanctuary, habitat of migratory bird, archaeological site, defence installation, etc. within 10 Km of the periphery of the plant boundary. The total project cost is estimated to be Rs. 17000 Cr. The CSR Budget is Rs. 225 Cr. For 5 MTPA project and Rs. 425 Cr for 10 MTPA project. The requirement of total manpower for the proposed expansion project will be about 5000. However, the proposed Integrated Steel plant will additionally generate more than 15000 indirect secondary and tertiary employments.</p>	

Sr. No.	Condition				Compliance Status																																																																																															
3	<p>The production facilities after the expansion are given below: (Expansion of JSWSL (existing 5 MTPA to 10 MTPA))</p> <table border="1" data-bbox="315 355 1180 1406"> <thead> <tr> <th data-bbox="315 355 383 451">S. No</th> <th data-bbox="383 355 600 451">Technological Facility</th> <th data-bbox="600 355 831 451">EC accorded for Facilities under 5 MTPA</th> <th data-bbox="831 355 976 451">EC accorded for</th> <th data-bbox="976 355 1180 451">Total unit capacities at 10 MTPA</th> </tr> </thead> <tr> <td data-bbox="315 451 383 555">1.</td> <td data-bbox="383 451 600 555">DR1 (Gas based Mega Module)</td> <td data-bbox="600 451 831 555">2.0 MTPA (by augmentation)</td> <td data-bbox="831 451 976 555">2.0 MTPA</td> <td data-bbox="976 451 1180 555">4.0 MTPA</td> </tr> <tr> <td data-bbox="315 555 383 619">2.</td> <td data-bbox="383 555 600 619">Pellet Plant</td> <td data-bbox="600 555 831 619">4.0 MTPA</td> <td data-bbox="831 555 976 619">4.0 MTPA</td> <td data-bbox="976 555 1180 619">8.0 MTPA</td> </tr> <tr> <td data-bbox="315 619 383 730">3.</td> <td data-bbox="383 619 600 730">Coke Ovens including By-product plant</td> <td data-bbox="600 619 831 730">2.0 MTPA</td> <td data-bbox="831 619 976 730">2.5 MTPA</td> <td data-bbox="976 619 1180 730">4.5 MTPA</td> </tr> <tr> <td data-bbox="315 730 383 794">4.</td> <td data-bbox="383 730 600 794">Sinter Plant</td> <td data-bbox="600 730 831 794">2.8+3.2 MTPA</td> <td data-bbox="831 730 976 794">8.0 MTPA</td> <td data-bbox="976 730 1180 794">14.0 MTPA</td> </tr> <tr> <td data-bbox="315 794 383 898">5.</td> <td data-bbox="383 794 600 898">Blast Furnace including Pig casting</td> <td data-bbox="600 794 831 898">3.6 MTPA (by augmentation)</td> <td data-bbox="831 794 976 898">4.5 MTPA</td> <td data-bbox="976 794 1180 898">8.1 MTPA</td> </tr> <tr> <td data-bbox="315 898 383 938">6.</td> <td data-bbox="383 898 600 938">SMS (CONARC)</td> <td data-bbox="600 898 831 938">5.2 MTPA (by</td> <td data-bbox="831 898 976 938">--</td> <td data-bbox="976 898 1180 938">5.2 MTPA</td> </tr> <tr> <td data-bbox="315 938 383 970">7.</td> <td data-bbox="383 938 600 970">SMS -BOF</td> <td data-bbox="600 938 831 970">--</td> <td data-bbox="831 938 976 970">6.0 MTPA</td> <td data-bbox="976 938 1180 970">6.0 MTPA</td> </tr> <tr> <td data-bbox="315 970 383 1026">8.</td> <td data-bbox="383 970 600 1026">Ladle Furnace (LF)</td> <td data-bbox="600 970 831 1026">2x200t +205t</td> <td data-bbox="831 970 976 1026">2X300t</td> <td data-bbox="976 970 1180 1026">2x200t +205t 2X300t</td> </tr> <tr> <td data-bbox="315 1026 383 1090">9.</td> <td data-bbox="383 1026 600 1090">VD/VOD & RH-TP</td> <td data-bbox="600 1026 831 1090">1x200t+1x205t</td> <td data-bbox="831 1026 976 1090">2x300t</td> <td data-bbox="976 1026 1180 1090">1x200t +1x205t 2x300t</td> </tr> <tr> <td data-bbox="315 1090 383 1217">10.</td> <td data-bbox="383 1090 600 1217">CSP(HRC Coil) Thin Caster-cum-Hot Strip Finishing Train</td> <td data-bbox="600 1090 831 1217">3.5 MTPA (By Augmenting)</td> <td data-bbox="831 1090 976 1217">-</td> <td data-bbox="976 1090 1180 1217">3.5 MTPA</td> </tr> <tr> <td data-bbox="315 1217 383 1297">11.</td> <td data-bbox="383 1217 600 1297">Conventional Slab Caster</td> <td data-bbox="600 1217 831 1297">2x1 strands (3.68 MTPA)</td> <td data-bbox="831 1217 976 1297">2x2 strands (5.72)</td> <td data-bbox="976 1217 1180 1297">Total 6 strands (9.4 MTPA)</td> </tr> <tr> <td data-bbox="315 1297 383 1353">12.</td> <td data-bbox="383 1297 600 1353">Billet Caster</td> <td data-bbox="600 1297 831 1353">-</td> <td data-bbox="831 1297 976 1353">1x6 Strands</td> <td data-bbox="976 1297 1180 1353">6 strands (1.5 MTPA)</td> </tr> <tr> <td data-bbox="315 1353 383 1406">13.</td> <td data-bbox="383 1353 600 1406">Plate Mill</td> <td data-bbox="600 1353 831 1406">1.5 MTPA</td> <td data-bbox="831 1353 976 1406">-</td> <td data-bbox="976 1353 1180 1406">1.5 MTPA</td> </tr> </table>				S. No	Technological Facility	EC accorded for Facilities under 5 MTPA	EC accorded for	Total unit capacities at 10 MTPA	1.	DR1 (Gas based Mega Module)	2.0 MTPA (by augmentation)	2.0 MTPA	4.0 MTPA	2.	Pellet Plant	4.0 MTPA	4.0 MTPA	8.0 MTPA	3.	Coke Ovens including By-product plant	2.0 MTPA	2.5 MTPA	4.5 MTPA	4.	Sinter Plant	2.8+3.2 MTPA	8.0 MTPA	14.0 MTPA	5.	Blast Furnace including Pig casting	3.6 MTPA (by augmentation)	4.5 MTPA	8.1 MTPA	6.	SMS (CONARC)	5.2 MTPA (by	--	5.2 MTPA	7.	SMS -BOF	--	6.0 MTPA	6.0 MTPA	8.	Ladle Furnace (LF)	2x200t +205t	2X300t	2x200t +205t 2X300t	9.	VD/VOD & RH-TP	1x200t+1x205t	2x300t	1x200t +1x205t 2x300t	10.	CSP(HRC Coil) Thin Caster-cum-Hot Strip Finishing Train	3.5 MTPA (By Augmenting)	-	3.5 MTPA	11.	Conventional Slab Caster	2x1 strands (3.68 MTPA)	2x2 strands (5.72)	Total 6 strands (9.4 MTPA)	12.	Billet Caster	-	1x6 Strands	6 strands (1.5 MTPA)	13.	Plate Mill	1.5 MTPA	-	1.5 MTPA	<p>Complied. 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	14.	CRM (Hot Rolled Skin Pass + Cold Rolled Full Hard Coil + Hot Rolled Pickled & Oiled Coil)	1.0 MTPA	1.5 MTPA	2.5 MTPA	8.	Ladle Furnace (LF)	Commissioned
	15.	Galvanizing Line (Cold Rolled Steel Strips, Hot Dip Zinc Coated Full Hard)	0.6 MTPA	-	0.6 MTPA	9.	VD/VOD & RH-TP	- 1x200t+1x205t in operation - 1x200t +1x205t 2x300t to be implemented.
	16.	Electrical Steel CRGO line	0.4 MTPA	-	0.4 MTPA	10.	CSP(HRC Coil) Thin Strip Caster-cum-Hot Finishing Train	Commissioned
	17.	Tin Plate Mill	0.4 MTPA	-	0.4 MTPA	11.	Conventional Slab Caster	Commissioned
	18.	Colour Coating Plant	0.5 MTPA	-	0.5 MTPA	12.	Billet Caster	Commissioned
	19.	Lime/Dolo Plant	1800 TPD	1800 TPD	3600 TPD	13.	Plate Mill	To be implemented
	20.	Oxygen Plant	4100 TPD	3500 TPD	7600 TPD	14.	CRM (Hot Rolled Skin Pass + Cold Rolled Full Hard Coil + Hot Rolled Pickled & Oiled Coil)	To be implemented
	21.	Hot Rolling Mill with shearing & slitting line	-	5.0 MTPA	5.0 MTPA	15.	Galvanizing Line (Cold Rolled Steel Strips, Hot Dip Zinc Coated Full Hard)	To be implemented
	22.	Bar Mill	-	1.4 MTPA	1.4 MTPA	16.	Electrical Steel CRGO line	To be implemented
	23.	Slag & Clinker Grinding Unit	"	10 MTPA	10 MTPA	17.	Tin Plate Mill	To be implemented
	24.	Captive Power Plant	300 MW	300 MW	600 MW (based on surplus gases of BF & Coke)	18.	Colour Coating Plant	To be implemented
	25.	Township	-	150 acres	150 acres			

Sr. No.	Condition	Compliance Status	
		19. Lime/Dolo Plant	Commissioned
		20. Oxygen Plant	Commissioned
		21. Hot Rolling Mill with shearing & slitting line	Commissioned
		22. Bar Mill	Commissioned
		23. Slag & Clinker Grinding Unit	Implemented, EC transferred to JSW Cement Ltd.
		24. Captive Power Plant	Commissioned
		25. Township	To be implemented
4	<p>The total water requirement for the 10 MTPA steel plant, 600 MW power plant and township will be about 116 MLD. At present JSW ISPTA Steel Ltd. Dolvi Works has been allocated about 56 MLD water from River Amba, Nagothane, K.T. Bandhara and consent for 30 MLD has been obtained. Application is in progress for the balance amount. M/s JSW has permission for drawl of 53.66 MLD from irrigation department, Govt. of Maharashtra. Water drawl from River Amba sanctioned. Permission for additional 65 MLD water is under consideration of Govt. of Maharashtra. It was further stated that the region received heavy rainfall of about 3000 mm annually and surplus water is available in the Dam.</p>	<p>Agreement with Irrigation department, Raigad, GOM for total 160.84 MLD has been executed, copy enclosed as Annexure-1.</p>	
5	<p>The wastewater generated from indirect cooling circuit would be routed through the cooling tower and pressure filter for recycling purpose. The wastewater generated from the coke ovens will be treated in a bio-oxidation plant to reduce the level of phenolic compounds, oil & grease and cyanide. The treated wastewater will</p>	<p>Complied. Indirect cooling circuit is routed through cooling tower and pressure filter. Details of Pressure filter and photograph enclosed as Annexure-2(a). Wastewater generated from the coke ovens is treated in a bio-oxidation</p>	

Sr. No.	Condition	Compliance Status
	<p>be reused in the system. The wastewater of gas cleaning plants of blast furnace and steel melt shop containing suspended solids will be clarified in the wastewater treatment plant. The clarified water will be recycled to the waste gas cleaning units. Similarly, the wastewater coming out from the continuous casting machine will be treated to remove scale and oil and the treated water will be recycled after cooling. The plant sanitary wastewater will be treated in sewage treatment plant and the treated water will be used for dust suppression and maintenance of plant green belt.</p>	<p>and De-phenolisation plant to meet the treatment standards. Photograph of BOD Plant are attached as Annexure-2(b)</p>
6	<p>De-dusting system with bag filters at all dust generating locations in all the units have been installed to control dust emission as well as in the BF cast house and SMS and dust emission levels at work zone are within prescribed limit. For the expansion project (5 MTPA), which is under various stages, secondary fugitive dust emission system will be installed at the BF cast house, SMS and all other units.</p>	<p>Complied All necessary air pollution control devices provided:</p> <ul style="list-style-type: none"> • Stack of adequate height & diameter with continuous stack monitoring facilities for all the stacks are provided, 46 nos of stacks are connected through OCEMS to CPCB and MPCB. • ESP (17nos) and Bag Filters (157nos), Cyclone & Venturi Scrubber (06 nos), Dry Cyclone separator (01 no) are provided to control the PM emission from stacks within norm. • Raw Material handling area, yard sprinklers, dry fog system, Dust extraction systems provided to control the fugitive emissions. Constructed covered sheds for Raw Material storage purpose. • Covered shed for Jetty yard-A with a capacity of 110,000MT for Coal Storage • Covered shed for Jetty yard-B with a total capacity of 305,000 MT for Iron Ore and Flux. • Covered Sheds (2 Nos) for Pellet and Coke Storage of Capacity- 1,20,000 MT each. • Covered shed for storing Iron Ore Bearing Material and Flux is in

Sr. No.	Condition	Compliance Status
		<p>progress. Capacity of the covered shed is 4,27,000 MT</p> <p>Environmental Benefits of Covered Shed:</p> <ul style="list-style-type: none"> • No fugitive emission during handling of material • No water contamination during rains • No spillage of material on roads • Covered storage shed prevents dust emission in the environment during operation of the yard. • Total expenditure on covered shed will Rs 320 Crores • Investment on Yard sprinklers, De-dusting system and Dry fogging system Rs 77.29 Crores • Energy efficient technologies provided in the Plant like waste heat recovery system, Top gas recovery turbine from Blast furnace and Gas Based power plant. • All internal roads are made by concrete. • Regular operation of Road Sweeping machines and water sprinkler on road. • Transfer of De-dusting system dusts and other secondary dusts generated from Pollution Control equipment by bulkers. • The transfer of raw material from Jetty to plant is 100 % through belt and pipe conveyors thereby eliminating any chances of fugitive emission through transportation of material from outside plant to the raw material yard there by improving the Ambient Air Quality.
7	Public hearing was conducted on 28.01.20214 at Pen Education Society's Jaikisan Vidya Mandir and Higher Medium School at Wadkhal, Taluka Pen, Dist Raigad, Maharashtra. The issue raised during the public hearing inter alia include measures for pollution	Complied.

Sr. No.	Condition	Compliance Status
	control, information on gas holder installed in the project, infrastructure development for water supply in the neighbouring areas, repair of roads, road traffic, development of fishing activity, repair of kharland bund, arrangement for village candidates sent for training in Bellary, more employment generation for the local etc.	
8	The matter was considered in the 31 st meeting held on 8 th - 9 th January, 2015 when it was decided to visit the site. Accordingly, site visit was conducted on 9 th March 2015 by sub-committee. Based on the site visit report of the sub-committee and its recommendation the proposal was further considered by the Expert Appraisal Committee (Industry) during its 35 th meeting held on 26 th 27 th March 2015 and recommended the project for environmental clearance subject to stipulation of the following specific conditions and other mitigative measures and conditions for environmental protection:	Noted
9	The Ministry of Environment, Forests and Climate Change (MoEF&CC) on the basis of the aforesaid recommendations of the EAC (I), hereby decided to grant Environmental Clearance to the project under the provisions of EIA Notification dated 14 th September 2006, subject to strict compliance of the following Specific and General conditions:	Noted.
A	Specific Conditions	
i	The project proponent should install 24x7 air and water monitoring devices to monitor air emission and effluent discharge, as provided by CPCB and submit report to Ministry and its Regional Office.	Complying with <ul style="list-style-type: none"> • Continuous Emission Monitoring System is installed at 46 Nos stack & connected to MPCB & CPCB for transmission of data online on real time basis, Photo of screen of CEMS is attached as

Sr. No.	Condition	Compliance Status
		<p>Annexure-3.</p> <ul style="list-style-type: none"> Information submitted to Regional Office of MoEF&CC alongwith six monthly compliance.
ii	<p>The PP should ensure treatment of effluent particularly from Blast Furnace (BF) and Coke Oven plant. The plant should be designed to meet the cyanide standards stipulated by MoEF&CC under EPA Act 1986.</p>	<p>Complied.</p> <p>Effluent from Coke oven plants is being treated in Biological and De-phenolization Plants (BOD) for treatment of effluent as per standard. Effluent Treatment Plant (ETP) for effluent from gas cleaning plant of BF-1 is provided and for BF-2 the gas cleaning system is dry type, Hence, no effluent from gas cleaning of BF-2 generated. Photographs of Effluent Treatment Plants of Coke Oven Plants along with analysis report of treated effluent and ETP of Blast Furnace are enclosed as Annexure-4.</p>
iii	<p>The commitment made by the PP for plantation of the green belt to the tune of 655 acres should be expedited. Three rows of green belt, 12-15 meters wide, all along the periphery of the plant should be planted.</p>	<p>As per the EC further amended on 06.06.2020, green belt shall be developed in an area of 16% of project area within the project site and 33% of Project area within the 10 km of study area.</p> <p>Green Belt within Plant:</p> <p>Presently, 13% green belt is developed over 197.6 acre land within the plant premises with 2,11,388 nos of trees.</p> <p>Balance 45.6 acre (3%) green belt area is to being developed with 46,200 nos of trees. Green belt developed with tree density 2500 trees/hectare and local species.</p> <p>Green Belt Outside Plant in 10 Km area:</p> <p>Green belt outside the plant premises has been developed over 1137 Acres i.e. 74.8% against the EC condition of 33%.</p>

Sr. No.	Condition	Compliance Status
		Green belt outside the plant premises is developed in forest land in proximity of the plant area in consultation with local forest department over 125 Acre land and Mangrove Plantation over 1012 Acre.
iv	The CSR plan as submitted by the PP in the area of health care, rural infrastructure development, education, sports and cultural activity, Swachh Bharat Abhiyan with respect to the earlier projects and the ongoing project at Dolvi site are very slow in implementation. The CSR activities should be implemented expeditiously and simultaneously with the implementation of the project, and annual report on CSR activity should be submitted to the Ministry.	<p>Complied with JSW foundation is the apex organization which is responsible for implementation of CSR activity in and around Dolvi works. JSW foundation is supported by JSW Steel Limited. CSR activities in various sectors are being done in the surrounding villages and a time bound action plan for various CSR activities have been submitted to MoEF&CC as per EAC recommendation of 2.5% of project cost.</p> <p>Amount spent on CSR Activities: The project proponent has spent Rs 20.5 Crores for the year 2022-23 (up to March 2023). The above amount has been spent on Social Development-(Education & Training), Skill Development, Water and Sanitization, Agriculture, Rural Development, Health, Solid Wastes Management and Community Development.</p>
v	At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment (ESC) based on local needs. The proponent should prepare a detailed CSR Plan for every next 5 years for the existing-cum-expansion project, which includes village-wise, sector- wise (Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The	<p>The project proponent is carrying out CSR activities in various sectors are being done in the surrounding villages and a time bound action plan for various CSR activities have been submitted to MoEF&CC as per EAC recommendation of 2.5% of project cost.</p> <p>The CER activities shall be implemented in accordance with Ministry's OM vide F.No.22 -65/2017-IA III dated 1st May 2018 within the Project implementation period. A separate budget is</p>

Sr. No.	Condition	Compliance Status
	<p>CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head should be created and the annual capital and revenue expenditure on various activities of the Plan should be submitted as part of the Compliance Report to RO, at Bhopal. The details of the CSR Plan should also be uploaded on the company website and should also be provided in the Annual Report of the company.</p>	<p>incurred under CER activities, which are included in the Budget proposal. copy enclosed as Annexure 6. Amount spent on CER Activities is Rs 119.86 Crores. The above amount was spent on for construction of Multi-Speciality Hospital, Construction of Roads outside the plant premises, and expenditure on Tree plantation in nearby villages (outside the Plant).</p>
vi	<p>No development should be done on the creek-ward side of the land. Land area between HTL to 100 mts or width of the creek, whichever is less, on the landward side should be kept free from any type of development.</p>	<p>Complied. The project proponent has restricted Development of plant beyond 100 mtrs from HTL & kept the same free. The same was confirmed through Survey was carried out by IRS, Chennai.</p>
vii	<p>Full utilization of slag both BF and SMS should be implemented. The details should be submitted along with 6 monthly compliance reports.</p>	<p>Slag from BF and SMS is used in Cement Plant, land reclamation, Sinter plant and briquette making. Presently, utilization achieved is approx. 98% due to various constraints at user of slags. To further achieve 100% utilization of slag and strengthen the utilization, following activities are undertaken-</p> <ol style="list-style-type: none"> 1) Study conducted by Central Road & Research Institute (CRRI) for Construction of Concrete road by using Steel Slag (EAF Slag) as aggregates. 2) Study conducted by Central Road & Research Institute (CRRI) for Construction of Tetrapod using EAF slag for Marine Application 3) Desk and Wave Flume study for utilization of Steel Slag (EAF Slag) in Marine Application by CSIR –CWPRS. <p>Details of utilization of slag are submitted to regional Office of MOEF&CC with six monthly compliance.</p>

Sr. No.	Condition	Compliance Status
viii	No waste water will be discharged outside the plant boundary during normal operation. In case it become necessary to discharge effluent meeting norms fit to the marine environment, permission of the relevant authority should be obtained.	<p>Complied.</p> <p>Excess treated effluent conforming to standards is being discharged to Amba River Estuary as per the permission obtained from MoEFCC – CRZ Division vide letter No F.No.11-7/2023-IA. III dated 5th April 2023, copy enclosed as Annexure-9</p> <p>The permission is granted for discharge of treated water 615 M3/Hr.</p>
ix	No untreated effluent should be reused for any process.	<p>Complied.</p> <p>Wastewater is treated in ETP and treated effluent is reused industrial usage.</p>
x	Measures should be taken to reduce PM levels in the ambient air. Stack of adequate height & diameter with continuous stack monitoring facilities for all the stacks should be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), bag house, bag filters etc. should be provided to keep the emission levels below 50mg/Nm ³ and installing energy efficient technologies in the Plant	<p>Complied</p> <p>All necessary air pollution control devices provided:</p> <ul style="list-style-type: none"> • Stack of adequate height & diameter with continuous stack monitoring facilities for all the stacks are provided, 46 nos of stacks are connected through OCEMS to CPCB and MPCB. • ESP (17nos) and Bag Filters (157nos), Cyclone & Venturi Scrubber (06 nos), Dry Cyclone separator (01 no) are provided to control the PM emission from stacks within norm. • Raw Material handling area, yard sprinklers, dry fog system, Dust extraction systems provided to control the fugitive emissions. Constructed covered sheds for Raw Material storage purpose. • Covered shed for Jetty yard-A with a capacity of 110,000MT for Coal Storage • Covered shed for Jetty yard-B with a total capacity of 305,000 MT for Iron Ore and Flux. • Covered Sheds (2 Nos) for Pellet and Coke Storage of Capacity-

Sr. No.	Condition	Compliance Status
		<p>1,20,000 MT each.</p> <ul style="list-style-type: none"> • Covered shed for storing Iron Ore Bearing Material and Flux is in progress. Capacity of the covered shed is 4,27,000 MT <p>Environmental Benefits of Covered Shed:</p> <ul style="list-style-type: none"> • No fugitive emission during handling of material • No water contamination during rains • No spillage of material on roads • Covered storage shed prevents dust emission in the environment during operation of the yard. • Total expenditure on covered shed will Rs 320 Crores • Investment on Yard sprinklers, De-dusting system and Dry fogging system Rs 77.29 Crores • Top gas recovery turbine from Blast furnace and Gas Based power plant. • Energy efficient technologies provided in the Plant like waste heat recovery system, <ul style="list-style-type: none"> • Sinter plant- 1 Boiler (7 TPH) Waste Heat Recovery • Sinter plant- 2 Boiler (20 TPH) Waste Heat Recovery • Coke Oven -2 Boiler (9.2 TPH) Waste Heat Recovery • Coke Oven -2 Boiler (5.2 TPH) Waste Heat Recovery • Coke Oven -2 CD Boiler (5.2 TPH) Waste Heat Recovery • Steel Melting Shop-2 Boiler (74 TPH) Waste Heat Recovery • Coke Dry Quenching (CDQ) Boiler-1 (72 TPH) Waste Heat Recovery • CDQ Boiler -2 (94 TPH) Waste Heat Recovery

Sr. No.	Condition	Compliance Status
		<ul style="list-style-type: none"> • CDQ Boiler -3 (94 TPH) Waste Heat Recovery • All internal roads are made by concrete. • Regular operation of Road Sweeping machines and water sprinkler on road. • Transfer of De-dusting system dusts and other secondary dusts generated from Pollution Control equipment by bulkers. • The transfer of raw material from Jetty to plant is 100 % through belt and pipe conveyors thereby eliminating any chances of fugitive emission through transportation of material from outside plant to the raw material yard there by improving the Ambient Air Quality.
xi	<p>On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks should be provided and sufficient air pollution control devices. Gaseous emission levels including secondary fugitive emissions from all the sources should be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB should be followed.</p>	<p>Complied.</p> <ul style="list-style-type: none"> • Five Continuous Ambient Air Quality Monitoring stations have been installed in consultation with MPCB. All these stations are connected to URL of MPCB & CPCB & data is being transmitted online on real time basis for PM2.5, PM10, SO2, NOx & CO Photograph of one of the CAAQMS is enclosed as Annexure- 8. • Continuous Emission Monitoring System (CEMS) for all the required stacks as per CPCB guidelines is installed on 46 nos of Stacks. • Adequate air pollution control devices are provide including Bag Filters to control fugitive emissions.
xii	<p>Dust suppression system and bag filters should be installed to control the fugitive dust emissions at conveyor and transfer points, product handling, loading and unloading points,</p>	<p>Complied.</p> <p>Raw Material Handling areas, yard sprinklers, Dry fogging system, dust extraction system provided in the junction houses and transfer points.</p> <ul style="list-style-type: none"> • Dust suppression by dry fog systems / water spraying systems

Sr. No.	Condition	Compliance Status
		<p>provided at Raw Material Handling Section (RMHS) and other applicable areas.</p> <ul style="list-style-type: none"> • All conveyors and Junction houses of Raw Material Handling systems are closed system. <p>Details of covered shed for storage of Raw Material;</p> <ul style="list-style-type: none"> • Covered shed for Jetty yard-A with a capacity of 110,000MT for Coal Storage • Covered shed for Jetty yard-B with a total capacity of 305,000 MT for Iron Ore and Flux. • Covered Sheds (2 Nos) for Pellet and Coke Storage of Capacity-1,20,000 MT each. • Covered shed for storing Iron Ore Bearing Material and Flux is in progress. Capacity of the covered shed is 4,27,000 MT <p>In Steel melting shop, Blast Furnace, Lime Calcination Plants, Pellet Plant adequate de-dusting systems with ESPs, Dry Gas Cleaning Plant, Cyclones and Bag Filters provided.</p>
xiii	Water consumption should not exceed as per the CREP standard prescribed for the steel plants. Additional water, if any, required for the plant project operations should be met from rainwater stored in rainwater harvesting structures.	<p>Complied.</p> <ul style="list-style-type: none"> • The recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the steel plants are implemented regarding specific water consumption. The specific water consumption for the year 2022 - 23 (April to March 2023) was 2.48 m³/t of crude steel which is well below the CREP recommendation of 5 m³/t.

Sr. No.	Condition	Compliance Status
		<ul style="list-style-type: none"> • Dry Gas Cleaning plant, a Best Available Technology installed in Blast Furnace. The traditional wet scrubbing process has high pressure drop due which the energy recovery is low (14 MW) but the bag filter has low pressure drop thus has high energy to recovery (36 MW), by using Dry GCP process the energy recovery has increase approx. of 22 MW, which has reduced specific water consumption. • Coke Oven Plant - a Best Available Technology Coke Dry Quenching systems installed and recovered the sensible heat of red hot coke, reduce energy consumption and pollution and improve the quality of coke.
xiv	<p>Rainwater harvesting scheme should be prepared so that the rainwater can be collected, re-used and may be used for ground water recharge. The concrete drains should be de-silted and regular supervision of the areas should be carried out so that blocking of drains may be avoided for quick discharge of rainwater. Efforts should further be made to use maximum water from the rain water harvesting sources. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement.</p>	<p>Complied. Rain Water collection system for utilization of rainwater for cooling water make-up has been implemented at 12 various buildings of Oxygen Plant, Coke Oven, Power Plant, MRSS and Admin. Rainwater Harvesting through Recharge bore-well is not feasible in the area as the water table is high being close to river and sea.</p>
xv	<p>All the effluents should be treated and reused for dust suppression/green belt development. No effluent should be discharged and 'zero' discharge should be adopted.</p>	<p>Complying with Presently, treated effluent is partially discharged to the Amba River Estuary as per the permission obtained from MoEFCC – CRZ Division vide letter No F.No.11-7/2023-IA. III dated 5th April 2023. As per EC condition, ZLD shall be installed after completion and implementation of 100% projects from environmental Clearance. The permission is obtained for discharge of treated water approximately 615 M3/Hr.</p>

Sr. No.	Condition	Compliance Status
xvi	Full utilization of fly ash should be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003 and 2010. All the fly ash should be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding should be submitted to the Ministry's Regional Office at Bhopal.	Not Applicable. The Captive Power are gas based, hence Fly Ash is not generated in the process.
xvii	Hazardous materials required during construction phase and in plant operations should be stored properly as per the regulations and reused/recycled as per the E(P)A Rules.	Complied. Hazardous wastes generated from the plant is stored in designated place and disposed to authorized recyclers as per the Hazardous Wastes (Management and Handling and transboundary) guidelines and MPCB consent conditions.
xviii	Vehicles and construction machinery are properly maintained to minimize the exhaust emission as well as noise generation to meet prescribed standards.	Complied. The vehicle and construction machineries PUCs are checked at Main gate before entering the plant. Electric vehicles are used in the transport pool for internal transportation inside the plant.
xix	Risk and Disaster Management Plan along with the mitigation measures should be prepared and implemented.	Complied. Risk & Disaster Management plan has been prepared and implemented through Dedicated department of Health and Safety.
xx	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants should be implemented.	Complying with The recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants shall be complied as per the guidelines. The recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the steel plants are implemented. <ul style="list-style-type: none"> • Dry Gas Cleaning plant installed in Blast Furnace. The traditional wet scrubbing process has high pressure drop due which the energy recovery is low (14 MW) but the bag filter has low

Sr. No.	Condition	Compliance Status
		<p>pressure drop thus has high energy to recovery (36 MW), by using Dry GCP process the energy recovery has increase approx. of 22 MW, which will reduce CO2 emissions by approx. 1.4 Lac.tCO2eq. This system saves specific water consumption.</p> <ul style="list-style-type: none"> • Installed Gas Holders (Coke Oven Gas and LD Gas) which helps the steady network flow for distribution of gas in constant pressure (Operating pressure 996 mmWC). Also it helps to proper utilization of waste gases. It saves CO2 and Energy. • Coke oven plant – Tar sludge / ETP sludge are reused in the Coking process. • Blast Furnace TRT – Energy recovery of top blast furnace gas is being done with power generation through TRT by using top pressure of BF gas. • Coke Oven Plant – Coke Dry Quenching systems (3 Nos) installed and recover the sensible heat of red hot coke, reduce energy consumption and pollution and improve the quality of coke. Each CDQ will reduce water consumption by 1920 m3/day and energy of 70 MW will be recovered along which will reduce the CO2 emissions by approx. 10.9 Lac.t CO2eq • Steel Melting Shop (SMS), secondary de-dusting system (Gas Cleaning Plants 4 Nos) has been installed to control fugitive emissions • Coal Injection Plant for direct injection of pulverized coal in furnace has been implemented. Present rate of CDI in our Blast Furnace is 200 Kg/THM (average for the year 2022-23). • BF Slag- 100% utilized in Cement plant. • EAF slag- 100 % for construction activities for expansion projects by land filling in the low lying areas and is also being used for internal road making. Using EAF slag as aggregates for roads in National Highway (Concrete and asphalt roads) • Cast House Fume extraction system inclusive of tap holes,

Sr. No.	Condition	Compliance Status
		runners, skimmers, ladle and charging points have been provided to control Fugitive emissions from Blast Furnace.
xxi	All the commitments made to the public during public hearing/public consultation should be satisfactorily implemented and adequate budget provision should be made accordingly.	<p>Being Complied. Separate budget is maintained for implementing projects/ issues discussed during Public Hearing. CSR activities in various sectors are being done in the surrounding villages and a time bound action plan for various CSR activities have been submitted to MoEF&CC as per EAC recommendation of 2.5% of project cost.</p> <p>The project proponent has spent Rs 20.05 Crores for the year 2022-23 (April to March 2023). The above amount has been spent on Social Development-(Education & Training), Skill Development, Water and Sanitization, Agriculture, Rural Development, Health, Solid Wastes Management and Community Development.</p>
xxii	All the permanent workers should be covered under ESI Scheme. The company should have the provision for treatment of its workers at the local Nursing Homes & Hospitals in case of emergency. Annual Medical Check-up on some medical parameters like Blood test, Chest X-Ray, Eye test, Audiometry, Spirometry etc. should be conducted amongst the employees of the Company.	<p>Being Complied. As per the Factories Act, regular health check-up has been done for workers and employees & records are maintained on regular basis. Annual Medical Check-up conducted for medical parameters like Blood test, Chest X-Ray, Eye test, Audiometry, Spirometry etc.</p>
	B) General Conditions	
i	The project authorities must strictly adhere to the stipulations made by the Maharashtra Pollution Control Board and the State Government.	<p>Complying with Consent to Establish and Consent to operate received from Maharashtra Pollution Control Board (MPCB). The compliance is regularly monitored by MPCB.</p>

Sr. No.	Condition	Compliance Status
ii	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Noted and Shall be complied.
iii	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM ₁₀ , PM _{2.5} , SO ₂ and NO _x are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Nagpur and the SPCB/CPCB once in six months.	<p>Complying with 5 Nos. online Ambient Air Quality Monitoring Station with consultation of MPCB & data connected the same to MPCB & CPCB Website. Six monthly compliance including ambient air quality is submitted to Regional Office at Nagpur.</p>
iv	Industrial wastewater should 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 wastewater should be utilized for plantation purpose.	<p>Being Complied. Waste water treatment facility is provided to treat the industrial effluent. Treated effluent is used in the coke slag quenching. Treated Sewage from STP is used in plantation and green belt development.</p>
v	The overall noise levels in and around the plant area should 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 (daytime) and 70 dBA (night time).	<p>Complied. Noise control measures are implemented like acoustic hoods, silencers, enclosures etc. on all sources of noise generation.</p>
vi	Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	<p>Being Complied. As per the Factories Act, regular health check-ups for workers and employees are carried out on regular basis.</p>
vii	The company should develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	<p>Being Complied. Rain Water collection system for utilization of rainwater for cooling water make-up has been implemented at 12 various buildings of</p>

Sr. No.	Condition	Compliance Status
		Oxygen Plant, Coke Oven, Power Plant, MRSS and Admin. Rainwater Harvesting through Recharge bore-well is not feasible in the area as the water table is high being close to river and sea.
viii	The project proponent should also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	Being Complied
ix	Requisite funds should be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forests and Climate Change (MoEF&CC) as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein should be submitted to the Regional Office of the Ministry at Nagpur. The funds so provided should not be diverted for any other purpose.	Being Complied. Rs 806 Crores have been spent as investment on Pollution Control System (Air, Water and Solid wastes). The revenue expenditure on Environmental protection for the year 2022-23 was Rs 592.26 Crores.
x	A copy of clearance letter should be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter should also be put on the web site of the company by the proponent.	Complying with The project proponent has submitted a copy of clearance letter to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local Body and the local NGO. Acknowledgement copy of submission is enclosed as Annexure-10 The clearance letter is also uploaded to the JSW Steel web site.
xi	The project proponent should upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and should update the same periodically. It should simultaneously be sent to the Regional Office of the MOEFCC at Nagpur. The respective Zonal Office of	Complied. The project proponent has been uploading the status of compliance of the stipulated environment clearance conditions, including results of monitoring data on JSW Steel website on a six monthly basis.- Screenshot of website display enclosed as Annexure- 11.

Sr. No.	Condition	Compliance Status
	CPCB and the SPCB. The criteria pollutant levels namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects should be monitored and displayed at a convenient location near the main gate of the company in the public domain.	<p>The EC compliance report and Environmental monitoring reports (for Air, Water, Solid Waste and Hazardous wastes) are submitted to MoEFCC, CPCB, and MPCB on six monthly basis.- Copy of email enclosed as Annexure-12.</p> <p>The CEMS data and CAAQMS data are displayed at the main gate.</p>
xii	The project proponent should also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEFCC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Nagpur / CPCB / SPCB should monitor the stipulated conditions.	The project proponent has been submitting six monthly Environmental Clearance compliance report and six monthly Environmental monitoring reports to Regional Office of MoEFCC, MPCB and CPCB.
xiii	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, should also be put on the website of the company along with the status of compliance of environmental conditions and should also be sent to the respective Regional Office of the MOEFCC at Nagpur by e-mail.	<p>Complied.</p> <p>Environment Statement (Form-V) for 2022-23 submitted to MPCB, Compliance of Environmental Clearance is submitted to Regional Office of the MOEF&CC at Nagpur by e-mail.</p>
xiv	The Project Proponent should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forests and Climate Change (MoEF&CC) at http://envfor.nic.in . This should be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in	<p>Complied.</p> <p>The project proponent has Published the information of receipt of Environment clearance from MoEFCC in newspaper as per guidelines provided in Local newspaper Dainik Krushiwal, Raigad Times, Ramprahar dated August 30, 2015 and English newspaper Indian Express dated September 01, 2015.</p> <p>Copy of newspaper publication is enclosed as Annexure-13.</p>

Sr. No.	Condition	Compliance Status
	the region of which one should be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Nagpur.	
xv	Project authorities should inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Complied. All the information of stages of development of projects are submitted to regional Office, MOEF&CC, Nagpur alongwith six monthly compliance report.
11	The ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
12	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Noted
13	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules 2008 and the Public (Insurance) Liability Act 1991 along with their amendments and Rules.	The plant is regularly complying for <ul style="list-style-type: none"> • The Water (Prevention and Control of Pollution) Act 1974 • The Air (Prevention and Control of Pollution) Act 1981 • The Environment (Protection) Act 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules 2008 • The Public (Insurance) Liability Act 1991 along with their amendments and Rules.

Copy of all Water drawl permission letters Annexure-3.2

List of all Water drawl permission letters of JSWSL, Dolvi

Sn	Description	Permitted drawl quantity (in MLD)
1.	7.00 MLD (ARCL) WATER AGREEMENT	7.00
2.	9.00 MLD (JSW VILLAGERS) WATER AGREEMENT	9.00
3.	35.70 MLD (JSW) WATER AGREEMENT	35.70
4.	55.16 MLD (JSW) WATER AGREEMENT	55.16
5.	58.98 MLD (JSW) WATER AGREEMENT	58.98
Total permitted quantity for drawl		165.84

Annexure-2 a



Pictorial view of Cooling tower chemical treatment at captive Power plant -2

• Annexure-2 b



Pictorial view of BOD Plant Coke oven -1

• Annexure-2 b



Pictorial view of Aerobic and anoxic treatment of BOD Plant Coke oven -2

Annexure-3



Central Pollution Control Board

W

SPCB Regional Office

" Kalpataru Point, 3rd and 4th floor, Opp. Cine Planet, Sion Circle, Mumbai-400 022. "

Industry Representatives

JSW Steel Ltd - Integrated Steel Plant Capacity 5 to 10

Iron and Steel

MTPA(08MH164)

Vill- Geetapuram , Dolvi, Tal. Pen, Dist- Raigad, Raigad Maharashtra PIN - 402107

Station: 46



FLUE

NOX

10.1
mg/Nm³

Diagnostic Status

Oct 7, 2023
10:00:00 AM
Time



[View Diagnostics](#) [View Data](#)

SO2

10.1
mg/Nm³

Diagnostic Status

Oct 7, 2023
10:00:00 AM
Time



[View Diagnostics](#) [View Data](#)

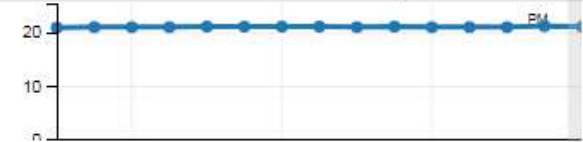
PM

21.2
mg/Nm³

Diagnostic Status

Oct 7, 2023
10:00:00 AM
Time

50 mg/Nm³
Prescribed
Standard



[View Diagnostics](#) [View Data](#)

SILO

PM

12.2
mg/Nm³

Diagnostic Status

Oct 7, 2023
10:00:00 AM

50 mg/Nm³
Prescribed
Standard



Annexure- 4



Pictorial view of Blast furnace – 1 ETP

Green belt at the Entry gate



Green belt at Admin building and Gas Storage



Green belt at Internal Roads



Green belt at SMS-1 plant



Green belt around Temple within plant at Entry gate



Green belt along internal roads



Green Belt along Boundary Wall



Green belt at peripheral road



Green belt near Junction house/conveyor belt route



Green belt along conveyor belt route



Green belt at Sponge Iron Plant



Green belt at Gas receiving Station



Green belt at open area within plant



Green belt near LD Plant and internal road



Green belt at HSM Plant



Green belt near power Plant



Green belt in open area near Main Gate



Green belt at receipt and dispatch yard



Green belt around oxygen plant and rail track



Annexure 6

CER Details for five years (in Crores)

S. No	Programme	Program details	Total	2017-18	2018-19	2019-20	2020-21	2021-22
1	Health	Construction of a new Multi speciality Hospital Jindal Sanjeevani Dolvi Hospital (70 beds) located near the plant on the road to Wadkhal. The hospital will serve the healthcare needs of the local community and employees at affordable costs making healthcare accessible to the local community.	65	10	20	25	10	-
2	Water	Provision of drinking water to 45 villages along the makeup water line to the steel plant.	15	2	8	5		
		Construction of Rain Water Harvesting at roof top of nearby villages and nearby schools.	0.76	0.17	0.14	0.15	0.15	0.15
		Renovation of community ponds nearby villages	0.45	0.08	0.07	0.1	0.1	0.1
3	Infrastructure	Construction of internal village roads, pathways, Drainage and installation of solar street lights	16.35	1.75	3.4	3.6	3.8	3.8
4	Skill development	Supporting Infrastructure facilities at Industrial Training Institutes (ITIs) at Nagothae and Pen. JSW Skill school at Wadkhal, Pen for tailoring, fish, hand gloves, vegetable shop, other livelihood options.	8	1.5	1.25	1.75	1.75	1.75
5	Agricultural and Scientific support	Support of better farming practices, market linkages and create awareness about Agri allied business	4.25	0.65	0.9	0.9	0.9	0.9
6	Plantation	Mangrove plantation within 10 KM area from the plant. (345 Acres). Tree Plantation at Forest land of nearby plant area (Dolvi, Khakarav).	9	1.25	1.75	2	2	2

		Avenue Plantation at NH in the plant area.						
		TOTAL	118.81	17.4	35.51	38.5	18.7	8.7

**Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)**

SUMMARY RECORD OF THE FOURTH (4th) MEETING OF EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF INDUSTRY-I SECTOR PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.

The fourth meeting of the Expert Appraisal Committee (EAC) for Industry-I Sector in terms of the provisions of the EIA Notification, 2006 for Environmental Appraisal of Industry-I Sector Projects was held on 25th – 26th February, 2016 in the Ministry of Environment, Forest and Climate Change. Prof. Arun Pandey, Member of EAC has expressed his inability to attend the meeting due to prior departmental engagements. The list of participants is annexed.

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

Confirmation of the minutes of the 3rd Meeting

The minutes of the 3rd meeting, as circulated were confirmed.

4.3 ENVIRONMENTAL CLEARANCE (EC)

4.3.1 Cement manufacturing unit of M/s Mehboob Cement Industries Pvt. Ltd. located at Village Wuyan Bala, Tehsil Pampore, District Pulwama, Srinagar, Jammu & Kashmir [J-11011/247/2015-IA.II(I)]

The project proponent and their consultant made a presentation before the Committee. It was informed that the project is located at Village Wuyan Bala, Tehsil Pampore, District Pulwama, Srinagar. It is a green field project for the production capacity of 600 TPD cement. The proposal was initially submitted to State Environmental Impact Assessment Authority (SEIAA) on 18.01.2013 for grant of Terms of Reference (TOR), as per EIA Notification, 2006. Subsequently, the project was appraised by the SEIAA and ToRs were prescribed to the project on 23.02.2013.

The project proponent mentioned that the Dachigam National Park is located at a distance of 6.5 Km (Aerial distance) from the project site and the Dachigam National Park is in the buffer zone i.e. within the 10 km radius of the project site. The General Condition of EIA Notification, 2006 is applicable to the project; therefore, the proponent submitted the proposal to MoEFCC for appraisal.

During the discussions, the proponent was informed by the Committee that the Ministry *vide* amendment in EIA Notification, 2006 [SO No. 1599 (E) dated 25.06.2014], modified the provisions of the General Condition as, *'any project or activity specified in category 'B' will be appraised at the Central level as Category 'A', if located in whole or in part within 5 km. from the boundary of (i) Protected Areas notified under the Wildlife (Protection) Act, 1972 (53 of 1972); (ii) Critically Polluted areas as notified by the Central Pollution Control Board constituted under the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) from time to time; (iii) Eco-sensitive areas as notified under sub-section (2) of section 3 of the*

- xvi. The proponent shall prepare a detailed CSR Plan for every year for the next 5 years for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.
- xvii. The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to bring into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- xviii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- xix. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.
- xx. The project proponent shall provide for LED lights in their offices and residential areas.

4.5 ANY OTHER ITEM

4.5.1 Partial transfer of Environmental Clearance for 1MTPA Coke Oven Plant and 2.5 MTPA Coke Oven Plant from M/s JSW Steel Ltd to M/s Dolvi Coke Projects Ltd. located at Village Dolvi, Taluka Pen, District Raigad, Maharashtra regarding amendment in Environment Clearance (F.No. J-11011/76/2013-IA.II(I))

The Environmental Clearance to the project of 3.0 MTPA to 5.0 MTPA Integrated Steel plant at Village Dolvi, Taluka Pen, District Raigad in Maharashtra was accorded *vide* letter J-11011/166/2011-IA-II (I) dated 21st November 2012 to M/s JSW Steel Ltd and further expansion of its project up to 10 MTPA was accorded environmental clearance *vide* letter J-11011/76/2013-IA II (I) dated 25th August 2015.

It has been explained by the project proponent that the expansion projects up to 5 MTPA have been established. The existing steel plant is based on the Direct Reduced Iron (DRI) - Blast Furnace-CONARC - Continuous Casting – Rolling Mill (CSP) route. The expansion is based on proven BF - EAF route.

The project proponent mentioned that the environment clearance for steel plant up to 5 MTPA includes 1.0 MTPA recovery type Coke Oven. Further, the environment clearance up to 10 MTPA plant includes 2.5 MTPA recovery type coke oven plant. It is proposed to combine the Coke Ovens of 1.0 MTPA and 2.5 MTPA, which are part of the earlier ECs as mentioned above into a single 3.5 MTPA Coke Oven plant in same location under 5 MTPA to 10 MTPA expansion project. By combining both the Coke Ovens into one the pollution load and other resource requirement like water will not increase; however the land requirement and Capital Cost will be optimized for setting up a single Coke oven in-place of setting up two small and separate coke ovens. Also this will have varied and distinct advantages in terms of lower land foot print with compact design for better operational and maintenance practices and logistics for handling coal and coke.

Total project cost of the coke oven plant of 3.5 MTPA will be Rs 2520 Crores. In order to optimize the capital expenditure, it is proposed to outsource the establishment and operations of the Coke Oven facility. The 3.5 million ton Coke Oven will be established and operated by an Associate Company, called Dolvi Coke Projects Limited and JSW Steel will be the largest shareholder of the SPV. JSW Steel Ltd. will sign the take or pay agreement from the associate company. This arrangement will help JSW to optimize the requirement of capital expenditure for setting up 10 Million ton capacity at Dolvi Works.

The project proponent further mentioned that while granting the environmental clearance for the expansion project, Ministry *vide* its specific condition No (iii) stipulated that *'The commitment made by the PP for plantation of the green belt to the tune of 655 acres should be expedited. Three rows of green belt, 12-15 meters wide, all along the periphery of the plant should be planted'*. The project proponent mentioned that they are in the process of developing green belt with three tier plantation along the periphery and avenue plantation along the internal roads inside the premises. JSW Steel Ltd. is fully committed to comply with the 33% green belt requirement. However, it is becoming difficult to get continuous land at Dolvi, Taluka Pen, District Raigad to comply with 33% green belt cover along the periphery premises. Therefore, the project proponent requested to grant permission for plantation in nearby areas in degraded private/ Government land outside the plant premises in coordination with District Revenue/ Forest Department, Raigad, Maharashtra or plantation in line with the condition stipulated by the Maharashtra Pollution Control Board in its Consent to Operate, which states "The applicant shall bring minimum 33% of the available open land under green coverage / plantation".

Regarding CSR related activity the project proponent mentioned that EAC on 26th March, 2015, directed to allocate 2.5% of the total project cost to be spent on CSR activities, which includes 2% of the annual profit as provided in clause No 135 of the Companies Act 2013. Accordingly, the CSR plan of 10 years was submitted to MoEFCC and was accepted. However while granting the environmental clearance, an amount equivalent to 5% of the total cost of the project to be earmarked towards the Enterprise Social Commitment (ESC) based on local needs, has been mentioned as per the specific conditions, point no (v), of the EC dated 25.08.2015. The project proponent requested to consider the CSR plan of 2.5% of the project cost as submitted.

Based on the presentation made and discussions held in detail, the Committee opined as under:

- (i) Regarding combining of the two Coke Oven plants of 1.0 MTPA and 2.5 MTPA, which were part of earlier ECs, into a single 3.5 MTPA Coke Oven plant in the same location under 5 MTPA to 10 MTPA expansion project to be operated by their Associate Company, called Dolvi Coke Projects Limited is an administrative decision to be taken by the Ministry. However, as there is no provision in the notification for partial transfer of the environment clearance, the Committee has; therefore, deferred decision in the matter and referred matter to Ministry.
- (ii) Regarding plantation, the Committee agreed to the submission of the project proponent and recommended the proposal of plantation in nearby areas in degraded private/ Government land outside the plant premises in consultation and coordination with District Revenue/ Forest Department, Raigad, Maharashtra.
- (iii) With regard to reconsideration of CSR budget, the Committee recommended to revise the condition for 2.5% of the total cost of the project for CSR instead of 5%.

4.5.2 Expansion of Steel Plant by M/s Drolia Electrosteels Private Limited, located at Siltara, Block Dharsiwa, District Raipur, Chhattisgarh [F. No. J-11011/386/2008-IA-II (I)]

The above proposal was considered by the Reconstituted Expert Appraisal Committee (Industry) during its 33rd meeting held on 10th -11th February, 2015. The Committee after deliberations recommended for extension of validity of environment clearance for a period of 5 years with effect from 15th December, 2013.

However, in the meantime an amendment in the EIA Notification, 2006 was issued by the Ministry vide Gazette Notification No. S.O. 1141(E) dated 29th April, 2015, extending the period of validity of Environment Clearance from 5 years to 7 years. Therefore, the environment clearance accorded to the Project vide letter No. J-11011/386/2008-IA-II (I) dated 15.12.2008 stands valid upto 14.12.2015. Therefore a communication was sent to the project proponent that in case of seeking further extension of environment clearance beyond 14.12.2015, an application as per the provisions of EIA Notification, 2006 as amended may be submitted afresh by online to the Ministry.

The project proponent *vide* online application No. IA/CG/IND/19892/2008 dated 29th September, 2015 requested for extension of validity of environment clearance dated 15.12.2008 for further period of 3 years.

The implementation status of the project as informed by the proponent is indicated below:

S. No.	Facility	Capacity	Facilities implemented	Yet to be Implemented
1	Sponge Iron (100tpdX2nos DRI kilns)	66000 TPA	66000 TPA	-
2	Semi Finished Steel billet & Ingot	166000 TPA	145200 TPA	20800 TPA
3	Iron Ore beneficiation	200000 TPA		200000 TPA

Annexure- 8



Pictorial view of Continuous ambient air quality monitoring station

F.No.11-7/2023-IA.III
Government of India
Ministry of Environment, Forest and Climate Change
IA-III Section (CRZ)

Indira Paryavaran Bhawan
Jor Bagh Road
New Delhi - 110003
Dated: 5th April, 2023

To

M/s JSW Steel Ltd
Dolvi, Geetapuram
District Raigad
Maharashtra – 402107

Email: anand.raijsw.in

Subject: Installation of Discharge of Treated Effluent System from Integrated Steel Plant at JSW Steel Ltd into Amba Estuary at Dolvi, Taluka Pen, District Raigad, Maharashtra by M/s JSW Steel Ltd - CRZ Clearance - regarding.

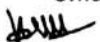
Sir,

This has reference to your proposal No. IA/MH/CRZ/288138/2022 dated 5th January, 2023 on the above mentioned project proposal for CRZ Clearance, in accordance with the provisions of the Coastal Regulation Zone (CRZ) Notification, 2011 issued under the Environment (Protection) Act, 1986.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for CRZ Clearance to the project for Installation of Discharge of Treated Effluent System from Integrated Steel Plant at JSW Steel Ltd into Amba Estuary at Dolvi, Taluka Pen, District Raigad, Maharashtra by M/s JSW Steel Ltd.

3. The proposal was considered by the Expert Appraisal Committee (EAC) for Infrastructure Development, Coastal Regulation Zone, Building / Construction and Miscellaneous projects, in its meetings held on 17th January, 2023 and 7th February, 2023. The project proponent and their consultant made detailed presentation and informed as under:

- (i). The project located in Village Dolvi, Raigad at Latitude: 18° 42' 16.30" N and Longitude: 73° 01' 41.40" E. and activity located in CRZ IV(B) area.
- (ii). Length of pipeline from shore to outfall point is 118m. Width of excavation for pipe laying is 2.5m. Therefore, area of proposed activity is 295 Sq.m.
- (iii). M/s JSW Steel Ltd. has proposed to discharge treated effluent into Amba estuary in compliance to the specific condition no. iv of the environmental clearance amendment accorded by MoEFCC vide F. No. J-11011/76/2013-IA. II (I) dated 16th June 2020.
- (iv). The specific condition no. iv in the aforesaid amendment clearance states that "The project proponent shall achieve zero liquid discharge (ZLD) at the end completion of all the facilities. In the meantime, the treated wastewater shall be discharged into sea after obtaining necessary permission/ clearance from the concerned regulatory authority."
- (v). M/s JSW Dolvi executing expansion of its steelmaking capacity from 5 MTPA to 10 MTPA for which environmental clearance has been accorded by MoEFCC vide letter no J-11011/76/2013-IA II (I) dated 25th August 2015. Some facilities of the expansion program have been commissioned.
- (vi). Currently, the effluents generated from operating facilities are treated in individual effluent treatment plants and used in Coke and slag quenching. However, with



commissioning of facilities like Coke Dry Quenching, gas based boilers and power plants surplus treated water about 615 m³/h will be generated after commissioning of all facilities by December 2025.

- (vii). A comprehensive ZLD unit with RO systems and evaporators will be installed and commissioned by December 2025. The ZLD system will thus be functional by December 2025, ensuring 100% reuse of wastewater and zero liquid discharge.
- (viii). Maximum plume dispersion is expected to 310 m in worst case scenario (considering 1057m³/h) as per the effluent dispersion modelling study carried out by NIO.
- (ix). Fishing areas for the local fishermen are about 1000 m away from the proposed discharge location.
- (x). Based on marine studies it is recommended that the treated effluents of 1057 m³/h having density 1001 kg/m³ generated by the M/s JSW steel plant, Dolvi, may be released at Lat: 18° 42' 16.30" N; Long: 73° 01' 41.40" E through four port diffuser.
- (xi). The diffuser specifications are recommended as follows: Inner diameter of ports = 0.1766 m, No of ports = 4, Port elevation from sea bed = 0.5 m, Angle of port = 15°, Minimum distance between ports = 4.0 m, Jet Velocity = 3.0 m/s.
- (xii). Treated effluents will be collected in the sump which will be located at south side of the plant boundary and will be pumped to Amba Estuary. The total maximum discharge water considered for study is 1,057m³/h. However, the planning for actual discharge is 615 m³/h. Type of pump - Vertical Centrifugal Pumps.
- (xiii). Discharge – Cross country pipeline laid along the existing conveyor feeding raw material to steel plant from M/s JSW Dharamtar Port. Final discharge location of treated waste water as per the location decided by NIO through waste water dispersion modelling study. Online effluent analyser provided and connected to MPCB & CPCB.
- (xiv). A comprehensive marine quality monitoring program shall include monitoring parameters of Water quality, Sediment quality and Flora & Fauna.
- (xv). Approximately 10 KLD water will be required for drinking and construction purpose which will be sourced from existing water supply system. The JSW Steel Ltd has water supply approved from Irrigation Department of Government of Maharashtra.
- (xvi). Approximately 6 kg/day of domestic solid waste is estimated to be generated from labour. The solid waste will be disposed to authorized recycler.
- (xvii). Treated effluents will be collected in the sump which will be located at south side of the plant boundary and will be pumped to Amba Estuary. The total maximum discharge water considered for study is 1,057m³/h. However the planning for actual discharge is 615 m³/h.
- (xviii). M/s JSW steel, Dolvi has been carrying out Mangrove plantation since 2016 by involving local women community. In 2016-2017 it has planted 105000 plants; in 2017-2018 it has planted 3,00,000 plants. In 2018-2019 around 3,00,000 mangroves plantation is planned and in 2019-2020 it will plant another 3,00,000 mangroves.
- (xix). The Baseline Monitoring Locations:

Monitoring location	Station no	Geographic Co-ordinates
Amba Estuary mouth	1	18° 49' 59.16"N; 72° 56' 39.48"E
Patalganga estuary mouth	2	18° 48' 40.26"N; 72° 58' 29.94"E
Ganeshpuri	3	18° 46' 09.42"N; 72° 59' 35.34"E

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RIL DP		
Dharamtar port	4	18° 45' 08.58"N; 72° 59' 06.48"E
Upper estuary	5	18° 42' 10.44"N; 73° 01' 42.60"E
Upper estuary	6	18° 36' 10.20"N; 73° 05' 08.82"E
Upper estuary	7	18° 32' 44.28"N; 73° 07' 46.26"E
Kasumata devi mandir	TS	18° 41' 43.00"N; 73° 01' 39.50"E

- (xx). About 25 of employment likely to be generated by the project and estimated cost of the project is ₹22.3 Crores.
- (xxi). The Maharashtra Coastal Zone Management Authority intimated that the route of pipeline falls largely in the CRZ III area, the pipeline falls at the river end in CRZ IB, CRZ IVB area and activity is a permissible as per CRZ Notification 2011. The Maharashtra Coastal Zone Management Authority has recommended the proposal for CRZ clearance *vide* its Letter No. CRZ 2020/CR86/TC4 dated 22/06/2022.

4. The Committee made detailed deliberation on the proposal. The Committee noted that the proposed discharge of treated effluent and the discharge system shall be discontinued post commissioning of ZLD system by 2025. The Committee also noted that the MCZMA recommended and intimated that the route of pipeline falls largely in the CRZ III area, the pipeline falls at the river end in CRZ IB, CRZ IVB area and activity is a permissible as per CRZ Notification 2011. The PP shall ensure that the treated effluent discharge into sea / marine outfalls as per the prescribed standards of by CPCB / SPCB. The Committee further also advised to PP forward immediately by e-mail to all EAC Members about the detail of the untreated and treated effluent quality of various parameters for the present effluent stream from the plant. The same has been submitted by PP *vide* e-mail / letter No. Nil, dated 07/02/2023 and same also circulated to all EAC members including MoEFCC and also accepted by EAC while approving the minutes.

The Committee after detailed deliberations and considering the submissions made by the project proponent recommended the proposal for CRZ Clearance, subject to certain terms and conditions.

5. Based on the recommendation of the Maharashtra Coastal Zone Management Authority and considering the submissions made by the project proponent, the Ministry of Environment, Forest and Climate Change, in acceptance of the recommendations of the Expert Appraisal Committee (CRZ), hereby accords CRZ Clearance to the project for **Installation of Discharge of Treated Effluent System from Integrated Steel Plant at JSW Steel Ltd into Amba Estuary at Dolvi, Taluka Pen, District Raigad, Maharashtra by M/s JSW Steel Ltd**, under the provisions of the CRZ Notification, 2019 and amendments thereto, subject to the compliance of terms and conditions as under:-

PART A – SPECIFIC CONDITIONS:

- (i) All construction shall be strictly in accordance with the provisions of the CRZ Notification, 2011, as amended from time to time.
- (ii) The proposed discharge of treated effluent and the discharge system shall be discontinued post commissioning of ZLD system by the end of year 2025 and dismantling the pipeline and all the associated infrastructure.
- (iii) The monitoring plan should be prepared for the automated water quality after discharge of treated water into Amba estuary and six monthly monitoring reports should be submitted to Regional Office of MoEFCC.
- (iv) M/s JSW Steel Ltd. should comply with the effluent dispersion modelling study carried out by the NIO in January 2019 to predict the maximum dilution of the treated effluent around the point of discharge in Amba Estuary.

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- (v) M/s JSW Steel Ltd. should strictly ensure disposal of treated effluent discharge into Sea or marine outfalls to the prescribed standards of CPCB / SPCB.
- (vi) No storage reservoir for sea water shall be permitted and only pipelines conveyance system shall be installed.
- (vii) Any temporary physical infrastructure setup and excavated material during laying of Pipelines shall not be dumped in water bodies or adjacent areas and the site shall be restored to its original condition after completion of construction of work.
- (viii) No groundwater shall be extracted within the CRZ area to meet the water requirements during the construction and/or operation phase of the project.
- (ix) Permanent labour camp, machinery and material storage shall not be set up in the CRZ area.
- (x) All the conditions stipulated by the Maharashtra Coastal Zone Management Authority for CRZ clearance 2011 *vide* its Letter No. CRZ 2020/CR86/TC4 dated 22/06/2022 and commitments made by the PP before the MCZMA and EAC shall be followed in letter and spirit.
- (xi) All necessary clearance from the concerned authority, as may be applicable should be obtained prior to commencement of project or activity.

PART B - GENERAL CONDITIONS:

- (i). Management of solid waste in accordance with the Solid Waste Management Rules, 2016 shall be strictly implemented.
- (ii). 'Consent to Establish' and /or 'Consent to Operate' shall be obtained from State Pollution Control Board under the provisions of Air (Prevention and Control of Pollution) Act, 1981 and / or the Water (Prevention and Control of Pollution) Act, 1974, as may be applicable.
- (iii). Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of Competent Authority.
- (iv). All liquid waste arising from the proposed development will be disposed of as per the norms prescribed by Central / State Pollution Control Board. There shall not be any disposal of untreated effluent into the sea / coastal water bodies. It shall be ensured that the wastewater generated is treated in the STP as committed by the project proponent. The treated waste water shall be reused for landscaping, flushing and / or HVAC cooling purposes etc. within the development. The project proponent should also make alternate arrangement for situation arising due to malfunctioning of STP. There shall be regular monitoring of standard parameters of the effluent discharge from STP under intimation to the SPCB.
- (v). Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- (vi). A copy of the clearance letter shall be uploaded on the website of the concerned State Coastal Zone Management Authority / State Pollution Control Board. The Clearance letter shall also be displayed at the Regional Office, District Industries Centre and Collector's Office / Tehsildar's Office for 30 days.

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- (vii). A six-monthly monitoring report shall need to be submitted by the project proponent to the concerned Regional Office of this Ministry regarding the implementation of the stipulated conditions.
- (viii). The Ministry of Environment, Forest & Climate Change or any other Competent Authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.
- (ix). Full co-operation shall be extended to the officials from the Regional Office of MoEF&CC, during monitoring of implementation of environmental safeguards stipulated. It shall be ensured that documents/data sought pertinent is made available to the monitoring team. A complete set of all the documents submitted to MoEF&CC shall be forwarded to the concerned Regional Office of MoEF&CC.
- (x). In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.
- (xi). The Ministry reserves the right to add additional safeguard measures subsequently, if considered necessary, and to take action to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner, including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, for non-compliance.
- (xii). All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponent from the respective Competent Authorities.
- (xiii). The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded CRZ Clearance and copies of clearance letters are available with the State Pollution Control Board (SPCB) and may also be seen on the website of the Ministry of Environment, Forest and Climate Change at <https://parivesh.nic.in/>. The advertisement should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the concerned Regional Office of this Ministry.
- (xiv). A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (xv). The proponent shall upload the status of compliance of the stipulated conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB.
- (xvi). The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the project proponent along with the status of compliance of clearance conditions and shall also be sent to the respective Regional Office of the Ministry by e-mail.
6. This Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.
7. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said



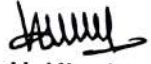
conditions in a time bound manner. The Ministry may revoke or suspend the CRZ clearance, if implementation of any of the above conditions is not found satisfactory.

8. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

9. Any appeal against this CRZ clearance 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.

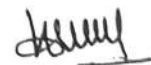
10. The above conditions shall be enforced, *inter-alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

11. This issues with approval of the Competent Authority.


(Dr. H. Kharkwal)
Scientist 'E' (CRZ)

Copy to:

1. The Principal Secretary, Environment Department, Government of Maharashtra, Annexe Building, Mantralaya, Mumbai- 400032, Maharashtra.
2. The Deputy DGF (C), MoEF&CC Regional Office(WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Line, Nagpur- 440001, Maharashtra.
3. The Member Secretary, Maharashtra Coastal Zone Management Authority (MCZMA), Environment and Climate Change Department, 15th Floor, New Administrative Building, Mantralaya, Mumbai- 400032, Maharashtra.
4. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 110032.
5. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th Floor, Opp. Cine Planet, Sion Circle, Mumbai - 400022, Maharashtra.
6. Guard File / Monitoring File / Website / Record File.


(Dr. H. Kharkwal)
Scientist 'E' (CRZ)



JSW Steel Limited

Dolvi Works : Geetapuram,
Dolvi, Taluka - Pen,
Dist.: Raigad - 402107, Maharashtra, India.
CIN. : L27102MH1994PLC152925
Phone : +91 2143 277501-15
Fax : +91 2143 277533/42
Website : www.jsw.in

जेएसडब्ल्यु / डोलवी ग्रामपंचायत / इसी/२०१५

दिनांक : २९/०८/२०१५.

प्रती,
माननीय सरपंच,
ग्रामपंचायत डोलवी,
ता. पेण, जि रायगड.

विषय : - वन व पर्यावरण मंत्रालय नवी दिल्ली यांचेकडून प्रकल्पविस्तारास पर्यावरणाचा ना हरकत प्रमाणपत्र प्राप्त झाल्याचे कळविणेबाबत.

महोदया,

जेएसडब्ल्यु स्टील लिमिटेड डोलवी, ता. पेण, जि. रायगड या प्रकल्पाला भारत सरकार पर्यावरण, वन आणि क्लायमेट चेंज मंत्रालय (आय. ए. विभाग), पर्यावरण भवन, जोर बाग रोड, अली गंज, नवी दिल्ली ११० ००३ यांच्याकडून दिनांक २५.०८.२०१५ रोजी एकीकृत लोह उत्पादन क्षमता पाच मेट्रीक टन प्रतिवर्षापासून दहा मेट्रीक टन विस्तारासहीत आणि ३०० मेगावॅट पासून ६०० मेगावॅट वायु आधारित ऊर्जा प्रकल्प विस्तारास पर्यावरणाचा नाहरकत प्रमाणपत्र प्राप्त झाले आहे.

सदरच्या प्रमाणपत्राची प्रत पर्यावरण, वन आणि क्लायमेट चेंज मंत्रालयामध्ये व त्यांच्या <http://moef.nic.in> या संकेत स्थळावर आणि महाराष्ट्र प्रदुषण नियंत्रण मंडळाकडे व कंपनीच्या www.jsw.in या संकेत स्थळावर पाहण्यासाठी उपलब्ध आहे.

सदरील नाहरकत प्रमाणपत्राची प्रत आपल्या माहितीसाठी सोबत सादर करित आहोत.

माननीयांस सविनय सादर.

आपला आभारी
जेएसडब्ल्यु स्टील लिमिटेड डोलवी करीता

अरुण महादेव शिर्के
डेप्युटी जनरल मॅनेजर (प्रशासन)

सोबत - नाहरकत प्रमाणपत्राची प्रत



Part of O. P. Jindal Group

प्रत मिळाली
लेखनिक 31/08/2015
4:05 PM
ग्रामपंचायत, डोलवी, ता. पेण

Regd. Office : JSW Centre,
Bandra Kuria Complex,
Bandra (East), Mumbai - 400 051
Phone : +91 22 4286 1000
Fax : +91 22 4286 3000



JSW Nuagaon Mine EC Compliance Report Dec 2021 with annexures	Download
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JSW Steel Ltd. Salem works - Bio Medical Waste - Monthly Register -Till Oct 2021	Download
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JSW Steel Ltd Salem works EC Half year compliance report for the period July 20 Dec 20	Download



Samarth Patil <samarth.patil@jsw.in>

Fwd: Six Monthly EC Compliance report and Environment Monitoring report of M/s JSW Steel Ltd., Dolvi, Raigad District, Maharashtra

P Benjamine <ponniah.benjamine@jsw.in>
To: Samarth Patil <samarth.patil@jsw.in>

Sat, Oct 7, 2023 at 6:41 PM

----- Forwarded message -----

From: **P Benjamine** <ponniah.benjamine@jsw.in>

Date: Fri, Jun 2, 2023 at 10:06 PM

Subject: Six Monthly EC Compliance report and Environment Monitoring report of M/s JSW Steel Ltd., Dolvi, Raigad District, Maharashtra

To: <eccompliance-mh@gov.in>

Cc: <westzonepcb@yahoo.com>, <rorraigad@mpcb.gov.in>, SRO RAIGAD2 <sroraigad2@mpcb.gov.in>, Anand Kumar Rai <anand.raai@jsw.in>, Pramod Nandusekar <pramod.nandusekar@jsw.in>, Pradeep Sudarshanan Velu <pradeep.velu@jsw.in>

- Ref: i) Environmental Clearance for 3 MTPA vide letter No J-11011/4/96-IA-II dated 31-12-1996.
- ii) Environmental Clearance for expansion of steel plant from 3 to 5 MTPA vide letter No J-11011/166/2011-IA-II(I) dated 21-11-2012.
- iii) Environmental Clearance for expansion of steel plant from 5 to 10 MTPA vide letter No J-11011/176/2013-IA-II(I) dated 25-08-2015.
- iv) Environmental Clearance for changes in configuration for proposed expansion of integrated steel plant from 5 to 10 MTPA vide letter No J-11011/76/2013-IA-II(I) dated 16/06/2020
- v) Environmental Clearance for 3.5 (1.0+2.5) MTPA Coke Oven and By-product plant – Transfer of Environmental Clearance accorded for 3.5 MTPA Coke oven plant and By-product plant located at Geetapuram, Dolvi from M/s. Dolvi Coke Projects Ltd. To M/s. JSW Steel Ltd vide EC Letter No F.No. IA-J-11011/497/2017-IA-II(I) dated 22/11/2021.

Dear Sir,

With reference to above, please find enclosed herewith six monthly compliance report of EC conditions for JSW Steel Ltd., Dolvi Works, Taluka - Pen, Maharashtra as per the following:

- i) Environment Clearance for 3.0 MTPA steel plant – **Annexure I**
- ii) Environment Clearance for expansion from 3 to 5 MTPA integrated steel plant - **Annexure II**
- iii) Environment Clearance for expansion from 5 to 10 MTPA integrated steel plant of JSW Steel Ltd., Dolvi Works – **Annexure III**
- iv) Environment Clearance for changes in configuration for proposed expansion of integrated steel plant from 5 to 10 MTPA vide letter No J-11011/76/2013-IA-II(I) dated 16/06/2020 – **Annexure IV**
- V) Environmental Clearance for 3.5 (1.0+2.5) MTPA Coke Oven and By-product plant – Transfer of Environmental Clearance accorded for 3.5 MTPA Coke oven plant and By-product plant located at Geetapuram, Dolvi from M/s. Dolvi Coke Projects Ltd. To M/s. JSW Steel Ltd vide EC Letter No F.No. IA-J-11011/497/2017-IA-II(I) dated 22/11/2021.
- vi) Six Monthly Environment Monitoring report for plants under JSW Steel Ltd., Dolvi Works

Submitted for kind information and record please.

We are uploading the information on Parivesh Portal for the above documents.

Thanks & Regards,

P Benjamine
JSW Steel Ltd., Dolvi Works,
Taluka - Pen, Raigad District
Maharashtra
Mobile No 8805022035

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Thanks & Regards,

P. Benjamine
JSW Steel Ltd

3 attachments



Env Monitoring Report JSW Steel Dolvi - Oct 2022 to March 2023 - F.pdf

6829K



EC Compliance Report for JSW Steel Ltd Dolvi Maharashtra May 2023-F.pdf

3118K



EC Compliance report 3.5 MTPA COP JSW Steel Dolvi May 2023.pdf

1090K

•Annexure- 13

Date - 1-09-2015



JSW Steel Limited
Dolvi Works : Geetapuram,
Dolvi, Taluka - Pen,
Dist. : Raigad - 402 107,
Maharashtra, India.
CIN : L27103MH1998PLC152925
Phone : +91 2143 277501-15
Fax : +91 2143 27753942
Website: www.jsw.in

PUBLIC NOTICE

Government of India, Ministry of Environment, Forest and Climate Change (I. A. Division), Indra Paryavaran Bhawan, Jor Bagh Road, Ali Ganj, New Delhi - 110003 has accorded Environmental Clearance for Expansion of Integrated Steel Plant from 5 MTPA to 10 MTPA and Power Plant from 300 MW to 600 MW (Gas Based) to M/s. JSW Steel Ltd. at Geetapuram, Village Dolvi, Tehsil Pen, District Raigad in Maharashtra on 25th August, 2015.

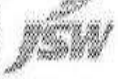
The copy of this Environmental Clearance Letter is available with Maharashtra Pollution Control Board (MPCB) and at website of Ministry of Environment, Forest and Climate Change at <http://moef.nic.in> and company website www.jsw.in

Sd/-
M/s. JSW Steel Ltd.
Geetapuram, Village Dolvi,
Tehsil - Pen, District Raigad,
Maharashtra - 402 107.

Place : Dolvi
Date : 27/08/2015

Regd. Office : JSW Centre, Bandra Kurla Complex, Bandra (East),
Mumbai - 400 051. Phone : +91 22 4286 1000

The Indian EXPRESS Tue, 01 September 2015
epaper editions [epaper.indianexpress.c](http://epaper.indianexpress.com)



PUBLIC NOTICE

Government of India, Ministry of Environment, Forest and Climate Change (I.A. Division), Indra Paryavaran Bhawan, Jor Bagh Road, Ali Ganj, New Delhi-110003 has accorded Environmental Clearance for Expansion of Integrated Steel Plant from 5 MTPA to 10 MTPA and Power Plant from 300 MW to 600 MW (Gas Based) to M/s JSW Steel Ltd. at Geetapuram, Village Dolvi, Tehsil pen, District Raigad in Maharashtra on 25th August, 2015.

The copy of this Environmental Clearance Letter is available with Maharashtra Pollution Control Board (MPCB) and at website of Ministry of Environment, Forest and Climate Change at <http://moef.nic.in> and company website www.jsw.in

Place : Dolvi
Date : 27/08/2015

M/s. JSW Steel Ltd.
Geetapuram, Village Dolvi,
Tehsil-Pen, Dist- Raigad,
Maharashtra-402 107



जाहीर सूचना

भारत सरकार, पर्यावरण, वन आणि क्लायमेट वॉज मंत्रालय (आय ए विभाग), पर्यावरण भवन, जोर बाग रोड, अली गंज, नवी दिल्ली ११०००३ यांच्याकडून मे. जे.एस. डब्ल्यू. स्टील लिमिटेड, गीतापूरम गाव डोल्वी, ता. पेण, जि. रायगड, महाराष्ट्र यांना दि. २५.०८.२०१५ रोजी एकीकृत लोह उत्पादन क्षमता पाच मेट्रीक टन प्रतिवर्षापासून दहा मेट्रीक टन विस्तारासहित आणि ३०० मेगावॉटपासून ६०० मेगावॉट वायू आधारित ऊर्जा प्रकल्प विस्तारास पर्यावरणाचे नाहरकत प्रभावपत्र प्राप्त झाले आहे.

सदरच्या प्रभावपत्रावरील प्रत पर्यावरण, वन आणि क्लायमेट वॉज मंत्रालयामध्ये व त्याच्या <http://moef.nic.in> या संकेत स्थळावर आणि महाराष्ट्र प्रदूषण नियंत्रण संस्थाकडे व कंपनीच्या www.jsw.in या संकेत स्थळावर पाहण्यासाठी उपलब्ध आहे.

स्थळ : डोल्वी
दिनांक : २७.०८.२०१५

मे. जे.एस.डब्ल्यू. स्टील लिमिटेड,
गीतापूरम, गाव-डोल्वी,
ता. पेण, जि. रायगड,
महाराष्ट्र ४०२ १०७.

Copy of newspaper publication for EC

SIX MONTHLY COMPLIANCE REPORTS OF ENVIRONMENT CLEARANCE CONDITIONS

Changes in Plant configuration for proposed expansion of Integrated Steel Plant from 5 to 10 MTPA by M/s JSW Steel Limited at Geethapuram, Village Dolvi, Tehsil Pen, District Raigad in Maharashtra [No J-11011/76/2013-IA-II(I) dated 16/06/2020].

The production facilities after the expansion are given below:

S. No	Technological Facility	EC accorded for Facilities under 5	EC accorded for Facilities under 5 to 10 MTPA	Total unit capacities at 10 MTPA	Status as on September 2023
1.	DR1 (Gas based Mega Module)	2.0 MTPA (by augmentation)	2.0 MTPA	4.0 MTPA	- 2 MTPA plant in operation & - 2 MTPA plant under technology finalization.
2.	Pellet Plant	4.0 MTPA	9.0 MTPA	13.0 MTPA	- commissioned and in operation.
3.	Coke Ovens including By-product plant	2.0 MTPA	2.5 MTPA	4.5 MTPA	3 MTPA Capacity commissioned
4.	Sinter Plant	2.8+3.2 MTPA	4.0 MTPA	10.0 MTPA	2.8+2.5 MTPA plants operational, balance capacity to be implemented.

5.	Blast Furnace including Pig casting	3.6 MTPA (by augmentation)	4.5 MTPA	8.1 MTPA	8.0 MTPA capacity implemented.
6.	SMS (CONARC)	5.2 MTPA (by augmentation)	--	5.2 MTPA	5.2 MTPA capacity implemented.
7.	SMS -BOF	--	6.0 MTPA	6.0 MTPA	6.0 MTPA Commissioned
8.	Ladle Furnace (LF)	2x200t +205t	2X300t	2x200t +205t 2X300t	Commissioned
9.	VD/VOD & RH-TP	1x200t+1x205t	2x300t	1x200t +1x205t 2x300t	- 1x200t+1x205t in operation - 1x200t +1x205t 2x300t to be implemented.
10.	CSP(HRC Coil) Thin Caster-cum-Hot Strip Finishing Train	3.5 MTPA (By Augmenting)	-	3.5 MTPA	Commissioned
11.	Conventional Slab Caster	2x1 strands (3.68 MTPA)	2x2 strands (5.72 MTPA)	Total 6 strands (9.4 MTPA)	Commissioned
12.	Billet Caster	-	1x6 Strands	6 strands (1.5 MTPA)	Commissioned

13.	Plate Mill	1.5 MTPA	-	1.5 MTPA	To be implemented
14.	CRM (Hot Rolled Skin Pass + Cold Rolled Full Hard Coil + Hot Rolled Pickled & Oiled Coil)	1.0 MTPA	1.5 MTPA	2.5 MTPA	To be implemented
15.	Galvanizing Line (Cold Rolled Steel Strips, Hot Dip Zinc Coated Full Hard)	0.6 MTPA	-	0.6 MTPA	To be implemented
16.	Electrical Steel CRGO line	0.4 MTPA	-	0.4 MTPA	To be implemented
17.	Tin Plate Mill	0.4 MTPA	-	0.4 MTPA	To be implemented
18.	Colour Coating Plant	0.5 MTPA	-	0.5 MTPA	To be implemented
19.	Lime/Dolo Plant	1800 TPD	1800 TPD	3600 TPD	Commissioned
20.	Oxygen Plant	4100 TPD	3500 TPD	7600 TPD	Commissioned
21.	Hot Rolling Mill with shearing & slitting line	-	5.0 MTPA	5.0 MTPA	Commissioned
22.	Bar Mill	-	1.4 MTPA	1.4 MTPA	Commissioned

23.	Slag & Clinker Grinding Unit	-	10 MTPA	10 MTPA	Implemented, EC transferred to JSW Cement Ltd.
24.	Captive Power Plant	300 MW	300 MW	600 MW (based on surplus gases of BF & Coke Oven)+RLNG	Commissioned
25.	Township	-	150 acres	150 acres	To be implemented

Sr. No.	ENVIRONMENTAL CLEARANCE CONDITIONS	COMPLIANCE STATUS AS ON SEPTEMBER 2023
A) Specific Conditions		
i	PP Shall develop green belt in an area of 16% of project area within the project site and 33% of Project area within the 10 km of study area.”	<p>Green Belt within Plant:</p> <p>Presently, 13% green belt is developed over 197.6 acre land within the plant premises with 2,11,388 nos of trees. Balance 45.6 acre (3%) green belt area is to being developed with 46,200 nos of trees. Green belt developed with tree density 2500 trees/hectare and local species.</p> <p>Green Belt Outside Plant in 10 Km area:</p> <p>Green belt outside the plant premises has been developed over 1137 Acres i.e. 74.8% against the EC condition of 33%. Green belt outside the plant premises is developed in forest land in proximity of the plant area in consultation with local forest department over 125 Acre land and Mangrove Plantation over 1012 Acre.</p>

ii	The CER activities shall be implemented in accordance with this Ministry's OM vide F.No.22 -65/2017-IAIII dated 1 st May 2018 within the Project implementation period.	<p>Being Complied.</p> <p>The project proponent is carrying out CSR activities in various sectors and in and around the surrounding villages and a time bound action plan for various CSR activities have been submitted to MoEF&CC as per EAC recommendation of 2.5% of project cost.</p> <p>The project proponent has spent an amount of Rs. 119.86 Crores on CER Activities.</p> <p>The project proponent has spent the above amount on Construction of Multi-Speciality Hospital, Construction of Roads outside the plant premises, and expenditure on Tree plantation in nearby villages (outside the Plant).</p>
iii	Treated domestic wastewater generated from township shall be reused and recycled.	Shall be Complied when construction of Township will be done.
iv	The Project Proponent Shall achieve Zero Liquid Discharge (ZLD) at the end completion of all the facilities. In the meantime the treated wastewater shall be discharged into sea after obtaining necessary permission /clearance from the concerned regulatory authority.	<p>Being Complied.</p> <p>Zero Liquid Discharge (ZLD) will be achieved at the end completion of all the facilities.</p> <p>Meanwhile, excess treated effluent conforming to standards is being discharged to Amba River Estuary as per the permission obtained from MoEF&CC – CRZ Division vide letter No F.No.11-7/2023-IA. III dated 5th April 2023, The permission is granted for discharge of treated water 615 M3/Hr.</p>
B) General Conditions		
I. Statutory Compliance:		

i	The Project Proponent shall obtain Consent to Establish /Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act.1974 from the concerned State Pollution Control Board / Committee.	Complied. Copies of Consent to Operate obtained from MPCB for all plants
ii	The Project proponent Shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water /from the competent authority concerned in case of drawl of surface water required for the project.	Complied. Water supply to the project is from Irrigation Department, Raigad, GOM.
iii	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules , 2016 as amended from time to time	Complied. Authorization under the Hazardous and other Waste Management Rules , 2016 is granted by MPCB as a part of Combined Consent and Authorization document.
II. Air quality monitoring and preservation		
i	The Project Proponent Shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31 st March 2012 (Integrated iron & Steel) ; G.S.R 414 (E) dated 30 th May 2008(Sponge Iron) as amended from time ; S.O 3305 (E) dated 7 th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Complied. 24x7 continuous emission monitoring system (CEMS) is provided at 46 nos of stacks as per guidelines of CPCB and MPCB consent requirement.
ii	The Project Proponent Shall monitor fugitive emission in the plant premise at least once in every quarter through labs	Complied. Ambient Air Quality within pant is monitored every quarter for parameters

	recognised under Environment (Protection) Act, 1986.	particulate and gaseous pollutants.
iii	The Project Proponent Shall install system to carry out Continuous Ambient Air Quality monitoring for common / criterion parameters relevant to the main pollution released (e.g. PM ₁₀ and PM _{2.5} in reference to PM emission, and SO ₂ and NO _x 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.	Complied. The project proponent has installed five Continuous Ambient Air Quality Monitoring stations in consultation with MPCB. All these stations are connected to URL of MPCB & CPCB & data is being transmitted online on real time basis for PM _{2.5} , PM ₁₀ , SO ₂ , NO _x & CO with proper O&M.
iv	The cameras shall be installed at suitable location for 24x7 recording of battery emission on the both sides of coke oven batteries and videos shall be preserved for at least one – month recording.	Complied. Camera installed at the Coke Oven battery with facility of storage of data.
v	Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.	Complied. Sampling facility at process stacks and at quenching towers provided as per CPCB guidelines. The access for monitoring on stack is provided through spiral ladder as well as man lifter machine.
vi	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and result of manual stack monitoring and manual monitoring of air quality / fugitive emissions to Regional office of MoEF&CC, Zonal office of CPCB and regional office of SPCB along with six – Monthly monitoring report.	Complied. Six Monthly Environment Monitoring Report is submitted to MoEFCC along with EC compliance report
vii	Appropriate Air Pollution Control (APC) system shall be 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.	Complied. <ul style="list-style-type: none"> • Stack of adequate height & diameter with continuous stack monitoring facilities for all the stacks are provided, 46 nos of stacks are connected through OCEMS to CPCB and MPCB. • ESP (17nos) and Bag Filters (157nos), Cyclone & Venturi Scrubber (06 nos), Dry Cyclone separator (01 no) are provided to control the PM emission from stacks within norm

		<ul style="list-style-type: none"> • Raw Material handling area with yard sprinklers, dry fog system, Dust extraction systems to control the fugitive emissions. Covered sheds for Raw Material storage purpose provided. • Covered shed for Jetty yard-A with a capacity of 110,000MT for Coal Storage • Covered shed for Jetty Yard-B with a total capacity of 305,000 MT for Iron Ore and Flux. • Covered Sheds (2 Nos) for Pellet and Coke Storage of Capacity-1,20,000 MT each. • Covered shed for storing Iron Ore Bearing Material and Flux is in progress. Capacity of the covered shed is 4,27,000 MT. • Investment on Yard sprinklers, De-dusting system and Dry fogging system to the amount of Rs 77.29 Crores • Bag filter, ESPs with adequate capacity to keep the emission levels below 50mg/Nm³ in all plants (Steel Melting Shop II, Hot Strip Mill II, Blast Furnace II and Lime Calcination Plants 5,6,7) • Stacks of adequate height & diameter with continuous stack monitoring facilities for all the stacks as per the requirement. • Energy efficient technologies in the Plant like waste heat recovery system, Top gas recovery turbine from Blast furnace and Gas Based power plant. • All internal roads made of concrete. • Road Sweeping machines and water sprinkler on road. • Transferring dust of De-dusting system and other secondary dusts generated from Pollution Control equipment by bulkers. • Transferring raw material from Jetty to plant 100 % through belt and pipe conveyors thereby eliminating any chances of fugitive emission through transportation of material from outside plant to the raw material yard there by improving the Ambient Air Quality.
Viii	The Project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of	<p>Complied. In De-dusting system leakage detection system provided.</p>

	bags.	Bag filters with mechanized bag cleaning system like pulse jet type is provided.
ix	Secondary emission control system shall be provide at SMS Converters.	Complied In SMS Converters, Dust extraction system with bag filters and ESPs provided to control the secondary emissions.
x	Pollution control system in the steel plant shall be provided as per the CREP Guidelines of CPCB.	Complied. The recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants shall be complied as per the guidelines. <ul style="list-style-type: none"> • BF Slag- 100% utilized in Cement plant. • Steel slag- Utilized 100 % for construction activities for expansion projects by land reclamation in the low lying areas and is also being used for internal road making. Further the slag shall be utilized for road construction (Internal roads and National Highways) and marine applications like tetrapod and other civil structures. • The specific water consumption for the year 2022 - 23 was < 2.48 m3/t of crude steel which is well below the targets for flat products and as well as for long products. • Dry Gas Cleaning plant installed in Blast Furnace. The traditional wet scrubbing process has high pressure drop due which the energy recovery is low (14 MW) but the bag filter has low pressure drop thus has high energy to recovery (36 MW), by using Dry GCP process the energy recovery has increase approx. of 22 MW, which will reduce CO2 emissions by approx. 1.4 Lac.tCO2eq. This system saves specific water consumption. • Installed Gas Holders (Coke Oven Gas and LD Gas) which helps the steady network flow for distribution of gas in constant pressure (Operating pressure 996 mmWC). Also it helps to proper utilization of waste gases. It saves CO2 and Energy. • Blast Furnace TRT – Energy recovery of top blast furnace gas is being

		<p>done with power generation through TRT by using top pressure of BF gas.</p> <ul style="list-style-type: none"> • Coke Oven Plant – Coke Dry Quenching systems (3 Nos) installed and recover the sensible heat of red hot coke, reduce energy consumption and pollution and improve the quality of coke. Each CDQ will reduce water consumption by 1920 m³/day and energy of 70 MW will be recovered along which will reduce the CO₂ emissions by approx. 10.9 Lac.t CO₂eq • Steel Melting Shop (SMS), secondary de-dusting system (Gas Cleaning Plants 4 Nos) has been installed to control fugitive emissions • Coal Injection Plant for direct injection of pulverized coal in furnace has been implemented. Present rate of CDI in our Blast Furnace is 200 Kg/THM (average for the year 2022-23). • Cast House Fume extraction system inclusive of tap holes, runners, skimmers, ladle and charging points have been provided to control Fugitive emissions from Blast Furnace.
xi	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors , roofs, regularly.	<p>Complied.</p> <ul style="list-style-type: none"> • Vacuum based Road sweeping machines are provided by the project proponent to clean the internal on regular basis. • Water tankers with sprinklers provided for water spraying on road. • Construction of all internal roads by Concrete. • Transfer of De-dusting system dusts and other secondary dusts generated from Pollution Control equipment by bulkers.
xii	Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices in the process after briquetting /agglomeration.	<p>Complied.</p> <p>Iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices like Bag Filters and ESPs are reused in the process (Sinter Plant and Pellet Plants).</p>
xiii	The projects proponent use leak proof trucks /dumpers carrying coal and other raw materials and cover them with tarpaulin.	<p>Complied.</p> <p>Majority of the raw material received in the plant is from Jetty through barges. From Barges the material is unloaded through Closed conveyors and pipe conveyors.</p>

		<p>Raw Material Handling areas, yard sprinklers, Dry fogging system, dust extraction system provided in the junction houses and transfer points.</p> <p>Covered sheds for Raw Material storage purpose:</p> <ol style="list-style-type: none"> 1. Covered shed for Jetty yard-A with a capacity of 110,000MT for Coal Storage 2. Covered shed for Jetty Yard-B with a total capacity of 305,000 MT for Iron Ore and Flux. 3. Covered Sheds (2 Nos) for Pellet and Coke Storage of Capacity- 1,20,000 MT each. 4. New covered shed for storing Iron Ore Bearing Material and Flux is in progress. Capacity of the covered shed is 4,27,000 MT <p>Total expenditure for covered shed 5 Nos is approximate Rs 320 Crores Investment on Yard sprinklers, De-dusting system and Dry fogging system to the tune of Rs 77.29 Crores.</p> <p>Transportation within plants for materials like lime etc is through closed bulker. Minimal transportation is through open truck and is done covered manner.</p>
xiv	Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (chain conveyors land based industrial vacuum cleaning facility).	<p>Complied. In wharf area of coke oven batteries regular cleaning is done.</p>
xv	Land – based APC systems to be installed to control coke pushing emissions	<p>Complied. Separate ground De-dusting systems provided to control the charging and pushing emissions from Coke oven plants.</p>
xvi	Monitor CO, HC and O ₂ in flue gases of the Coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.	<p>Complied. In Coke Oven plants monitoring parameters for CO, HC and Oxygen. On line monitoring of CO, HC, O₂ have been provided to measure the combustion efficiency in the Coke oven batteries. Also the cross leakages in the combustion chamber measured by separate sensors.</p>

xvii	Vapour absorption system shall be provided in place of vapour compression system for cooling of coke oven gas in case of recovery type coke ovens.	Complied. Vapour absorption system is provided.
xviii	In Case concentrated ammonia liquor is incinerated, adopt high temperature incineration to destroy Dioxins and Furans. Suitable NOx control facility shall be provided to meet the prescribed standards.	Not Applicable. No incineration of concentrated ammonia liquor. Claus process is assisted with ammonia de-composition furnace.
xix	The coke oven gas shall be subjected to desulphurization if the sulphur content in the coal exceeds 1%.	Complied. Sulphur content in coal is less than 1%, however, Desulphurization system has been provided in Coke oven plants. After Tar separation, Coke Oven gas is sent to Desulphurization section where the sulphur in the form of H ₂ S gets adsorbed to ammonia solution in the desulphurization tower. The liquor from de-sulphurization tower is sent to De-acidifier & Ammonia Stripping Unit (DASU) to generate sulphur containing vapours, which is further sent to Claus process for sulphur recovery.
xx	Wind Shelter fence and chemical spraying shall be provide on the raw material stock piles.	Complied. Closed covering sheds constructed for storing the raw materials (Coal and Coke). Raw material is being transported through closed conveyors. Raw Material Handling areas, yard sprinklers, Dry fogging system, dust extraction system provided in the junction houses and transfer points. Installed Covered sheds (4 Nos) for Raw Material storage purpose. <ul style="list-style-type: none"> • Covered shed for Jetty yard-A with a capacity of 110,000MT for Coal Storage. Covered shed for Jetty yard-B with a total capacity of 305,000 MT for Iron Ore and Flux. • Covered Sheds (2 Nos) for Pellet and Coke Storage of Capacity-1,20,000 MT each. • New covered shed for storing Iron Ore Bearing Material and Flux is in progress. Capacity of the covered shed is 4,27,000 MT • Investment on Yard sprinklers, De-dusting system and Dry fogging

		<p>system to the tune of Rs 77.29 Crores</p> <p>The project proponent has provided adequate de-dusting systems with ESPs, Bag Filters in Steel melting shop, Blast Furnace, Lime Calcination Plants, Pellet Plant.</p>
xxi	Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, Motor houses, oil Cellars.	<p>Complied.</p> <p>Adequate ventilation system has been provided for all motor houses, Oil cellars, Furnace areas by reputed vendors.</p>
xxi	The project proponent shall install dry Gas Cleaning Plant with bag filter for blast Furnace and SMS converter.	<p>Complied.</p> <p>Dry Gas Cleaning Plant with bag filter installed at Blast Furnace II and SMS Converter.</p> <p>In Steel Melting Shop Basic Oxygen Furnace Converter area provided with pollution control systems like ESP and Bag Filters.</p>
III Water quality monitoring and preservation		
i	The Project Proponent Shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R.277 (E) dated 31 st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30 th May 2008 (Sponge Iron)as amended from time to time; S.O. 3305 (E) dated 7 th December 2015(Thermal Power Plant) as amended from time to time and connected to SPCB and CPCB online Servers and Calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.	On line effluent monitoring systems is provided as per CPCB guidelines.
ii	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 recognised under Environment (Protection) Act. 1986 and NABAL accredited laboratories.	<p>Not Applicable.</p> <p>There is no ground water withdrawal and piezometer for monitoring ground water.</p>

iii	The Project Proponent shall monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional office of MoEF & Cc , Zonal office CPCB and Regional office of SPCB along with Six – Monthly monitoring report.	Complied. Report of effluent monitoring are sent to Regional Office, MoEF&CC Nagpur and MPCB along with six monthly monitoring report.
iv	The Project proponent shall provide the ETP for coke oven and by – product to meet the standards prescribed in G.S.R. 277 (E) dated 31 st March 2012 (Integrated iron & Steel); 3305 (E) dated 7 th December 2015 (Thermal Power Plant) as amended from time to time as amended from time to time.	Complied. Effluent Treatment Plant (ETP) i.e. Biological Oxidation and Dephenoloization (BOD) plant has been provided for the Coke Oven plant.
v	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	Complied. Sewage Treatment Plant provided for treatment of domestic wastewater to meet the prescribed standards.
vi	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.	Complied. Provisions of Garland drains, covered shed, settling tank, covered conveyer belt etc. have been provided at Raw Material Handling area to arrest the runoff during monsoon season and avoid pollution due to surface runoff. For storage of raw material like coal, Iron Ore and Flux storage yards are installed to avoid runoff the materials during monsoon.
vii	Tyre washing facilities shall be provided at the entrance of the plant gates.	Raw material shall be transported through closed conveyor belt from jetty to plant. Tippers and truck movement is restricted within premises. All internal road are concreted.
viii	CO ₂ injection shall be provide in GCP of SMS to reduce pH in circulating water to ensure optimal recycling of treated water for converter gas cleaning.	Optimal recycling of treated water is ensured by maintain required pH.
ix	The projects proponent shall make efforts to maximum possible extent.	Noted.
x	Treated water from ETP of COBP shall not be used for coke quenching.	Dry type quenching method is used for coke quenching.

xi	Water meters shall be provided at the inlet to all unit processes in the steel plant.	Complied. Water meters have been provided at individual units to measure the water consumption.
xii	The projects proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.	Complied. Blow down from the cooling tower of clean circuit will be fed as make-up water to cooling circuit of contaminated water. Pressure filtration system provided for cleaning the contaminated water Dry Gas Cleaning Plant provided at SMS Converter & Blast Furnace for water scrubber elimination, leading to the effective collection of LD gas and BF gas and will be utilized inside the plant. Coke dry quenching system installed at Coke oven plant.
IV Noise monitoring and prevention		
i	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional officer of the ministry as a part of six –monthly compliance report	Complied. Work place noise level is monitoring is carried out in the plant locations and submitted to MoEFCC on six monthly basis.
ii	The ambient noise levels should conform to the standards prescribed under E (P) rules, 1986 viz . 75 db (A) during day time and 70 db (A) during night time	Complied
V. Energy Conservation measures		
i	The project proponent shall provide TRTs to recover energy from top gases to blast furnaces.	In Blast Furnace Top Gas Recovery Turbine are provided to recover the energy from top gases. The top gas from blast furnace is having high pressure (5 bars) which is recovered through Top Recovery Turbine (TRT). The traditional wet scrubbing process has high pressure drop due which the energy recovery is low (14 MW) but the bag filter have low pressure drop thus has high energy to recovery (36 MW), by using Dry GCP process the energy recovery has increase approx. of 22 MW, which will reduce CO2 emissions by approx. 1.4 Lac.tCO2eq.

ii	Coke Dry Quenching (CDQ) Shall be provided for coke quenching for the both recovery and non – recovery type coke ovens ;	<p>Coke Dry Quenching (CDQ) system installed at Coke oven plants. The steam generated from the CDQ are generating power.</p> <p>Each CDQ will reduce water consumption by 1920 m3/day and energy of 70 MW will be recovered along which will reduce the CO2 emissions by approx. 10.9 Lac.t CO2eq.</p>
iii	Waste heat shall be recovered from sinter Plant coolers and Sinter Plants coolers and sinter Machines .	<p>Complied Existing Sinter plants I & II, Coke Oven plants, waste gas recovery systems with boilers are already installed.</p> <ul style="list-style-type: none"> • Energy efficient technologies provided in the Plant like waste heat recovery system, <ul style="list-style-type: none"> • Sinter plant- 1 Boiler (7 TPH) Waste Heat Recovery • Sinter plant- 2 Boiler (20 TPH) Waste Heat Recovery • Coke Oven -2 Boiler (9.2 TPH) Waste Heat Recovery • Coke Oven -2 Boiler (5.2 TPH) Waste Heat Recovery • Coke Oven -2 CD Boiler (5.2 TPH) Waste Heat Recovery • Coke Oven -1 Boiler (4.5 TPH) Waste Heat Recovery • Steel Melting Shop-2 Boiler (74 TPH) Waste Heat Recovery • Coke Dry Quenching (CDQ) Boiler-1 (72 TPH) Waste Heat Recovery • CDQ Boiler -2 (94 TPH) Waste Heat Recovery • CDQ Boiler -3 (94 TPH) Waste Heat Recovery
iv	Use torpedo ladle for hot metal transfer as far as possible. If ladles not used , provide covers for open top ladles.	<p>Complied</p> <p>In Blast Furnace I & II the hot metal is transferred through torpedo ladle.</p>

v	Use hot charging of slabs and billets / blooms as far as possible.	Complied The system is continuous process for making Hot rolled coils and TMT bars. Hence as per the existing practice, hot charging of slabs and billets / blooms process in place.
vi	Waste hot recovery system shall be provide in all units where the flue gas or process gas exceeds 300°C .	Existing Sinter plants I & II waste gas recovery systems with boilers are already installed. Coke oven plants heat recovery boilers provided. <ul style="list-style-type: none"> • Dry Gas Cleaning plant installed in Blast Furnace, the bag filter has low pressure drop thus has high energy to recovery (36 MW), by using Dry GCP process the energy recovery has increase approx. of 22 MW. This system saves specific water consumption. • Installed Gas Holders (Coke Oven Gas and LD Gas) which helps the steady network flow for distribution of gas in constant pressure (Operating pressure 996 mmWC). Also it helps to proper utilization of waste gases. It saves CO2 and Energy. • Blast Furnace TRT – Energy recovery of top blast furnace gas is being done with power generation through TRT by using top pressure of BF gas. • Coke Oven Plant – Coke Dry Quenching systems (3 Nos) installed and recover the sensible heat of red hot coke, reduce energy consumption and pollution and improve the quality of coke. Each CDQ will reduce water consumption by 1920 m3/day and energy of 70 MW will be recovered along which will reduce the CO2 emissions also.
vii	Explore feasibility to install WHRS at Waste Gases from BF Stoves: Sinter Machine Sinter Cooler ,and all reheating furnaces and if feasible shall be installed .	Complied Blast Furnace, Sinter plants and Coke oven plants, Waste Heat Recovery boilers are in place.
viii	Restrict Gas Flaring to < 1%	The Gas generated form Blast Furnace and Coke oven plants are used as fuel in other plants. Operation of Gas Based Captive Power plants of capacity 55 MW and 170 MW by Using BF and Coke oven gas.

		<p>Installed Gas Holders (Coke Oven Gas and LD Gas) of capacity 1 Lakhs M3 which helps the steady network flow for distribution of gas in constant pressure.</p> <p>Total CO2 Savings will be approximately 660000 Ton of CO2 per year. Energy saving approximate 1 Million Gcal/Year</p>
ix	Provide solar Power generation on roof tops of buildings for solar light system for the all common area, stress lights. Parking around projects area and maintain the same regularly ;	Being complied.
x	Proved LED lights in their officers and residential areas.	LED lights are provided in the plant offices and plant areas.
xi	Ensure installation of regenerative type burners on all reheating furnace.	Complied. Regenerative type burners are provided on reheating furnaces.
VI. Waste management		
i	An attrition grinding unit to improve the bulk density of BF granulated slag from 1.0 to 1.5 kg /I shall be installed to use slag as river sand in construction industry.	The project proponent has noted and will be complied as per the feasibility. Presently the BF Slag is 100 % used Cement making and used for construction activity.
ii	In Case of Non – Recovery coke ovens, the gas main carrying hot flue gases to the boiler, shall be insulated to conserve heat and to maximise heat recovery.	The existing coke oven plants are recovery type. The coke oven gas generated is used as fuel for various processes. Heat recovery system boilers installed at Coke oven plants. The waste heat lines are insulated to conserve heat and to maximise heat recovery.
iii	Tar sludge and waste oil shall be blend with coal charged in coke ovens (applicable only to recovery type coke ovens)	As per the standard operating procedures for Coke Oven plants, the Tar sludge is blended with coal and charging in the battery. Since the Coke oven plants are recovery type.
iv	Carbon recovery plant to recover the elemental to recover scrap , metallic and flux for recycling to sinter plant and SMS.	For existing plant the steel scrap generated from the plant is used in Electric Arc Furnace.

		The Solid wastes like Coal dust, Iron Ore fines, Lime Stone fines, Bag filter dust and ESP dusts are reused as raw material in Sinter Plants and Pellet plants.
v	Waste Recycling Plant shall be installed to recover scrap , metallic and flux for recycling to sinter plant and SMS.	Slag processing plant with Metal recovery system is in place. All the plant wastes like Bag Filter Dust, ETP sludge and Iron bearing materials are used in Sinter plants and Pellet Plant. The metal scarp like skull and MS scraps are used in Electric Arc Furnace and
vi	Used refractories shall be recycling for possible.	The used refractories are used in Steel melting shop as EBT filling mass and sold to outside parties and used for land filling.
vii	SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications . The Projects proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. . the Project proponent shall establish linkage for 100% reuse of rejects from waste recycling plant.	R&D work with various Govt agencies are carrying out the utilization of Steel slag for various purposes. EAF slag is being used for road construction (Internal roads and National Highways) and land reclamation purpose. As per the analysis report received form Central Building Research Institute, the Steel slag is suitable for road and other construction activity as aggregates. Also steel slag can be used for marine applications for making tetrapod and marine structures. BOF Slag will be processed by steam quenching technology and shall be used for construction purpose. Proposed project for converting the salg into sand (by processing in Slag to Sand plant).
viii	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.	This condition is not applicable to this plant. The Captive Power plant for the existing and the expansion project are Gas based. Hence Fly Ash will not be generated in the process. Therefore, Fly Ash utilization is not relevant to this plant.
ix	Oil Collection pits shall be provided in oil cellars to collect and reuse/ recycle Spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.	Oil cellar areas, oil collection pits have been provided to collect the spilled oil. This plant is not producing Cold Rolled Coil and don't have facility for

		storage of cold rolled coil.
x	The Waste oil grease and other hazardous waste like acidic sludge from picking galvanising chrome plating mills etc. Shall be disposed of as per the Hazardous & other waste (Management & Transboundary Movement) Rules 2016 Coal tar sludge / decanter shall be recycled to coke ovens .	<p>Complied The used and spent oil generated from the plant shall be sold to MPCB/CPCB authorized recyclers as per the Hazardous Waste (Management, Handling and Transboundary Movement) Rules.</p> <p>We don't have facility for producing galvanising chrome plating mill. Hence there will not be generation of acidic sludge.</p> <p>Coal tar sludge / decanter generated form Coke oven plant is being recycled to coke ovens as per the CREP Guidelines. Since the Coke oven plant is recovery type.</p>
xi	Kitchen waste shall be composed or converted to biogas for further use.	Noted and will be complied as per the feasibility. Presently the canteen waste is composed and converted into Bio gas.
VII. Green Belt		
i	Green belt shall be developed in are equal to 33% of the plant area with a native tree species in accordance with CPCB guideline .The greenbelt shall inter alia covert the entire periphery of the plant.	<p>Green Belt within Plant: Presently, 13% green belt is developed over 197.6 acre land within the plant premises with 2,11,388 nos of trees. Balance 45.6 acre (3%) green belt area is to being developed with 46,200 nos of trees. Green belt developed with tree density 2500 trees/hectare and local species.</p> <p>Green Belt Outside Plant in 10 Km area: Green belt outside the plant premises has been developed over 1137 Acres i.e. 74.8% against the EC condition of 33%. Green belt outside the plant premises is developed in forest land in proximity of the plant area in consultation with local forest department over 125 Acre land and Mangrove Plantation over 1012 Acre.</p>

ii	The Projects proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including planation.	GHG emissions inventory is being prepared for regular monitoring of CO2 emissions. Plant wise CO2 Emissions contributors are regularly monitored and action plan prepared.
VIII. Public hearing and Human health issues		
i	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management plan shall be implemented .	Complied Plant wise Hazard Identification and Risk Assessment (HIRA) and Disaster Management plan are already implemented.
ii	The project proponent shall carry out heat stress analysis for the workmen who work in in high temperature work zone provide personal protection Equipment (PPE) as per the norms of factory Act.	Complied Heat Stress analysis is being implemented for the workman who are working in high temperature area and adequate PPEs shall be provided. The records are maintained and submitted to statutory authorities by HR.
iii	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking mobile toilets ,mobile STP ,safe drinking water medical health care ,crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	During construction of housing colony, necessary infrastructure and facilities such as fuel for cooking mobile toilets, mobile STP, safe drinking water medical health care, crèche etc is being provided to the labours. After completion of the entire project activities, the same shall be removed.
iv	Occupational heath surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	As per the Factories Act, regular health check-up's have been done for workers and employees & records are maintained on regular basis.
IX CSR Environment Responsibility		
i	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental police should prescribe for standards operating to have proper check and balance 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	Environment Policy is in place and being complied in adherence to Environmental Clearance, Environmental Laws and regulations.

	/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.	
ii	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 to the head of the organization.	Separate Environment Cell is in place having qualified Environment personnel. Head of Environment dept reports to Head of the Plant i.e. President.
iii	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry / regional office along with the Six Monthly Compliance Report.	<p>A separate budget head created under Environment Management Programme and the fund marked for Environment protection measures shall be maintained separately and it will not have diverted for any other purpose.</p> <p>Rs 806 Crores spent for Expenditure on Environment Protection as capital investment for plants under Expansion from 5 to 10 MTPA steel Plant for pollution control devises for Air, Water and Solid Wastes.</p> <p>The revenue expenditure on Environmental protection for the year 2022-23 was Rs 592.26 Crores</p>
iv	Self environment audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	<p>Internal audit is conducted by our internal audit team.</p> <p>External audit also conducted by third party once in a year</p>
v	All the recommendation made the charter on corporate responsibility for Environment protection (CREP)_ for the Iron and steel plants shall implemented.	<p>The recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants shall be complied as per the guidelines.</p> <ul style="list-style-type: none"> • Blast Furnace – Energy recovery of top blast furnace gas is being done with power generation through TRT by using top pressure of BF gas. • DRY Gas Cleaning Plant installed in Blast Furnace. • Steel Melting Shop (SMS), secondary de-dusting system has been installed to control fugitive emissions

		<ul style="list-style-type: none"> • Coal Injection Plant for direct injection of pulverized coal in Blast Furnace has been implemented. Present rate of CDI in our Blast Furnace is 200 Kg/THM. • BF Slag- 100% utilized in Cement plant. • Steel slag- Utilized 100 % for construction activities for expansion projects by land reclamation in the low lying areas and is also being used for internal road making. Further the slag will be utilized for road construction and marine applications like tetrapod and other civil structures. • Cast House Fume extraction system inclusive of tap holes, runners, skimmers, ladle and charging points have been provided to control Fugitive emissions from Blast Furnace. • The specific water consumption for the year 2022 - 23 was < 2.48 m3/t of crude steel which is well below the targets for flat products and as well as for long products. <p>Online Stack Monitoring System have been installed on all stacks. The real time data is interlinked with MPCB and CPCB server.</p>
X. Miscellaneous		
i	The Projects proponent shall make public the environmental clearance granted for their projects along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspaper of the District or State ,of which one shall be in the vernacular language within seven days and addition this shall also be displayed in the project proponent’s website permanently.	<p>Complied</p> <p>Published in newspaper as per guidelines namely in Local newspaper Dainik Krushiwal, Raigad Times, Ramprahar dated 30th June 2020 and English newspaper Free Press Journal dated July 10, 2020 and the same was displayed on JSW website.</p>
	The copies of environmental clearance shall be submitted by the projects 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 .	<p>Complied</p> <p>A copy of Environment Clearance letter is already submitted to concerned Panchayat, Zillah Parishad/Municipal Corporation, Urban Local Body and the local NGO,</p>

iii	The project proponent shall up lode the status compliance of stipulated environment clearance conditions including results of monitored date on their website and update the same on half – yearly basis.	Noted and shall be complied on regular basis. Environmental Monitoring Report and EC Compliance status are regularly updated on the company website.
iv	The Projects Proponent shall monitor the criteria pollutants level namely; PM ₁₀ , SO ₂ , NO _x (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.	Complied Environmental parameters are monitored on monthly basis and the Six monthly environmental monitoring reports are submitted to MoEFCC and displayed the same in JSW Steel website
v	The Project proponent shall submit six- monthly reports on the status of the compliance of the stipulated Environmental conditional on the website of the ministry of environment ,Forest and Climate change at environmental Clearance portal.	Complied Six monthly environmental Clearance compliance reports are submitted to MoEFCC and displayed the same in JSW Steel website
vi	The Project proponent shall submit the environment statement for each financial year in from –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 Environment Statement reports are prepared and submitted to MPCB before 30 th September of every year. The same is uploaded on JSW Steel Website.
vii	The Project proponent shall inform the Regional office as well as 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.	Noted
viii	The Project authorities must strictly adhere to the stipulations mode by the state pollution control Board and the state Government.	Complied
ix	The Project proponent shall abide 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 .	Separate budget is maintained for implementing the projects/ issues as discussed during Public Hearing and as per the discussions with the Expert Appraisal Committee. JSW foundation is the apex organization which is responsible for

		<p>implementation of CSR activity in and around Dolvi works. JSW foundation is supported by JSW Steel Limited & will be complied.</p> <p>The project proponent has spent the following Amount on CSR Activities: The project proponent has spent Rs 20.05 Crores under CSR activity for 2022-23 (April to March 2023)</p> <p>The above amount has been spent on Social Development- (Education & Training), Skill Development, Water and Sanitization, Agriculture, Rural Development, Health, Solid Waste Management and Community Development.</p>
x	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment , Forests and Climate Change (MoEF/ CC).	Noted and shall be complied
xi	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.	Noted
xii	The Ministry may revoke or suspend the clearance if implementation of any of the above conditions is not satisfactory.	Noted
xiii	The Ministry reserves the right to stipulate additional conditions if found necessary. The company in a time bound manner shall implement these conditions.	Noted
xiv	The Regional office of this Ministry Monitor Compliance of stipulated conditional .The Project authorities should extended full cooperation to the officer (s) of the regional office by furnishing the requisite data /information/monitoring reports.	Noted and shall be complied
xv	The above conditions shall be enforced inter – alia under provisions of the water (Prevention & Control of Pollution) Act,1974 the Air (Prevention & Control of Pollution)Act,1981 , the Environment (Protection) Act ,1986 Hazardous and other Wastes (Management and transboundary Movement) Rules ,2016 and the Public	<p>The plant is regularly complying for</p> <ul style="list-style-type: none"> •The Water (Prevention and Control of Pollution) Act 1974 •The Air (Prevention and Control of Pollution) Act 1981 •The Environment (Protection) Act 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules 2008 •The Public (Insurance) Liability Act 1991 along with their amendments

	Liability Insurance Act, 1991 along with their amendments and Rules ,2016 and any other orders passed by the hon'ble supreme Court of India /High Court and any other Court of Law relating to the Subject matter.	and Rules.
xvi	Any appeal against this EC shall lie with National Green Tribunal ,if any, preferred within a period of 30 days as prescribed under section 16 of the National green Tribunal Act,2010.	Noted