



Dolvi Works:

Geetapuram,
Dolvi, Taluka - Pen,
Dist. Raigad - 402 107. Maharashtra, India.
CIN : L27102MH1994PLC152925
Phone : +91 2143 663000/3100/3200
Fax : +91 2143 277533/42
Website : www.jsw.in

November 28, 2022

JSWSL/COP 2 – 3.5 MTPA/ENV/MoEF&CC/2022

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: Submission of Six Monthly Compliance report of Environmental Clearance for 3.5 MTPA Coke Oven Plant at JSW Steel Plant Ltd. at Dolvi, Raigad District, Maharashtra (Formerly known as M/s. Dolvi Coke Projects Ltd)

Ref: i) MoEF&CC Letter - F No J-11011/497/2017-IA-II(I) dated 01 /02/2018.

ii) 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 Environmental Clearance for 3.5 MTPA Coke Oven Plant at JSW Steel Ltd. at Dolvi, Raigad District, Maharashtra.

This is for your kind information & record please.

Thanking you,

Yours faithfully,
For JSW Steel Ltd

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

SIX MONTHLY COMPLIANCE REPORTS OF ENVIRONMENT CLEARANCE CONDITIONS

Sub: 3.5 (1.0+2.5) MTPA Coke Oven and By-product plant – Transfer of 1.0 MTPA Coke oven and by-product plant – from EC of 3 to 5 MTPA and 2.5 MTPA Coke Oven with by-product plant from EC of 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 in Geetapuram, Village Dolvi, Tehsil – Pen, District- Raigad, Maharashtra to M/s Dolvi Coke Projects Limited regarding.

Ref: 1) Environmental Clearance for 3.5 MTPA Coke Oven Plant at Dolvi Coke Projects Ltd. vide letter No F.No. IA-J-11011/497/2017-IA-II(I) dated 01/02/2018.

2) 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.

The production facilities after the expansion are given below:

S. No	Technological Facility	EC accorded for Facilities under 5 MTPA	EC accorded for Facilities under 5 to 10 MTPA	Total unit capacities at 10 MTPA	Status as on October 2022
1.	DR1 (Gas based Mega Module)	2.0 MTPA (by augmentation)	2.0 MTPA	4.0 MTPA	<ul style="list-style-type: none">• 2 MTPA plant in operation• 2 MTPA plant under 5-10 MTPA, & technology finalization under progress
2.	Pellet Plant	4.0 MTPA	9.0 MTPA	13.0 MTPA	<ul style="list-style-type: none">• 4 MTPA plant in operation• 9 MTPA plant under 5-10 MTPA, Plant is commissioned and in operation.
3.	Coke Ovens including By-product plant	2.0 MTPA	2.5 MTPA	4.5 MTPA	<ul style="list-style-type: none">• 1.0 MTPA in operation under EC M/s. Amba River Coke Ltd• 3.5 MTPA Coke Oven, EC transferred to Dolvi Coke Projects Ltd (DCPL) and further changed as JSW Steel Ltd.• 3.0 MTPA plant is in operation (Battery A, B, C & D)

4.	Sinter Plant	2.8+3.2 MTPA	4.0 MTPA	10.0 MTPA	<ul style="list-style-type: none"> 2.8+2.5 MTPA plants are in operation. The 8 MTPA plant under 5-10 MTPA is being amended to 4 MTPA for which amendment done. Technology to be
5.	Blast Furnace including Pig casting	3.6 MTPA (by augmentation)	4.5 MTPA	8.1 MTPA	<ul style="list-style-type: none"> 3.5 MTPA plant in operation 4.5 MTPA plant under 5-10 MTPA, Plant is Commissioned and in operation.
6.	SMS (CONARC)	5.2 MTPA (by augmentation)	--	5.2 MTPA	5.2 MTPA Plant in operation
7.	SMS -BOF	--	6.0 MTPA	6.0 MTPA	Plant is commissioned and in operation.
8.	Ladle Furnace (LF)	2x200t +205t	2X300t	2x200t +205t 2X300t	<ul style="list-style-type: none"> 2x200t +205t LF in operation 2X30t LF under 5-10 MTPA is commissioned and in operation
9.	VD/VOD & RH-TP	1x200t+1x205t	2x300t	1x200t +1x205t 2x300t	<ul style="list-style-type: none"> 1x200t+1x205t in operation 1x200t +1x205t 2x300t Under 5-10 MTPA, techno-commercial discussion in Progress.
10.	CSP(HRC Coil) Thin Caster-cum-Hot Strip Finishing Train	3.5 MTPA (By Augmenting)	-	3.5 MTPA	3.5 MTPA plant in operation.
11.	Conventional Slab Caster	2x1 strands (3.68 MTPA)	2x2 strands (5.72 MTPA)	Total 6 strands (9.4 MTPA)	<ul style="list-style-type: none"> 2x1 strands (3.68 MTPA) in operation 2x2 strands (5.72 MTPA) under 5-10 MTPA, is commissioned and trial run in progress.
12.	Billet Caster	-	1x6 Strands	6 strands (1.5 MTPA)	1x6 strands (1.5 MTPA) plant in operation.
13.	Plate Mill	1.5 MTPA	-	1.5 MTPA	Technology to be finalised.

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	Technology is finalised and application for Consent To Establish is under process.
15.	Galvanizing Line (Cold Rolled Steel Strips, Hot Dip Zinc Coated Full Hard)	0.6 MTPA	-	0.6 MTPA	Technology is finalised and application for Consent To Establish is under process.
16.	Electrical Steel CRGO line	0.4 MTPA	-	0.4 MTPA	Technology to be finalised.
17.	Tin Plate Mill	0.4 MTPA	-	0.4 MTPA	Technology to be finalised.
18.	Colour Coating Plant	0.5 MTPA	-	0.5 MTPA	Technology to be finalised.
19.	Lime/Dolo Plant	1800 TPD	1800 TPD	3600 TPD	<ul style="list-style-type: none"> 1800 TPD plant in operation 1800 TPD plant under 5-10 MTPA, is commissioned and in operation.
20.	Oxygen Plant	4100 TPD	3500 TPD	7600 TPD	<ul style="list-style-type: none"> 4100 TPD plant in operation 3500 TPD plant under 5-10 MTPA is commissioned and in operation.
21.	Hot Rolling Mill with shearing & slitting line	-	5.0 MTPA	5.0 MTPA	5 MTPA plant under 5-10 MTPA, is commissioned and in operation.
22.	Bar Mill	-	1.4 MTPA	1.4 MTPA	1.4 MTPA Plant in operation.
23.	Slag & Clinker Grinding Unit	"	10 MTPA	10 MTPA	EC transferred to JSW Cement Ltd.
24.	Captive Power Plant	300 MW	300 MW	600 MW (based on surplus gases of BF & Coke Oven)+RLN G	<ul style="list-style-type: none"> 55 MW Gas based CPP in operation. 175 MW CPP (Gas based) and 70 MW from CDQ under 5 -10 MTPA commissioned and plant is in operation.

25.	Township	-	150 acres	150 acres	Work not yet started.
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Sr. No.	ENVIRONMENTAL CLEARANCE CONDITIONS	COMPLIANCE STATUS AS ON OCTOBER 2022
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.	<ul style="list-style-type: none"> 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}, PM₁₀, SO₂, NO_x & CO, they have also provided expert O&M. For existing plants under 5 to 10 MTPA, the project proponent has installed Continuous Stack Emission Monitoring systems at all major stacks (32 Nos) & connected to URL of MPCB & CPCB & data is being transmitted online on a real time basis. The project proponent has been submitting Data on Stack Emission, Ambient Air Quality and Work Environment Air Quality 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 <p>For installation of CEMS for plants under 5 to 10 MTPA expansion units, the project proponent has issued PO for all major stacks 33 Stacks (12 Nos Process stacks and 21 Nos Non process stacks). Installation and commissioning work is completed and data configuration in progress.</p>
ii	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.	<ul style="list-style-type: none"> The project proponent has installed Effluent Treatment Plant for existing Blast Furnace 1 (BF1) and Coke Oven plant and they are designed to meet the norms. <p>For Expansion project under 5 to 10 MTPA the project proponent has considered the following:</p> <ul style="list-style-type: none"> Effluent Treatment Plant (ETP) has been designed for Blast Furnace, Hot Strip Mill and installation work is in progress. The ETP has been designed to meets the norms of effluent standards.

		<ul style="list-style-type: none"> • Coke Oven plant II - BOD Plant has been installed and commissioned to treat the waste water generated from Coke oven plant. • The project proponent has provided Centralized Sewage treatment plant for treating the domestic effluent. • The waste water treatment plant provided by the project proponent has been designed to meet the cyanide standards stipulated by MoEF&CC under EPA Act 1986.
iii	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>As per the EC FJ-11011/76/2013-IA.II(I) dated 16/06/2020, the project proponent has developed Green belt in 250 acres in the plant premises and in 510 acres outside the plant. The expansion of the steel plant from 5 to 10 MTPA in contiguous to earlier facilities, so the project proponent accordingly is developing Green Belt in and outside the premises as recommended by the EAC, MoEF&CC in a period of 5 years once the expansion projects are completed.</p> <p>Following is the data of No of trees planted up to date by the project proponent</p> <p>Big Trees 209492 Nos Small Trees 666247 Nos Lawn Development 4593646 Square Feet.</p> <ul style="list-style-type: none"> • Total Plantation inside the plant premises is approximately 84 Acres. • The total plantation area Outside the plant is around 890 Acres out of which 124 Acres (50 Hectares) has been done in the forest land and Mangrove Plantation is in 766 Acres (310 Hectares) however the requirement is 502 Acre only. • The project proponent has spent Rs.3.04 Crores on Mass plantation drive with a target of One Million tree plantation in and outside the premises & in nearby villages which was carried out in (2021-22). • The project proponent has spent Rs. 6.49 Crores on plantation for the year 2021-22. • Rs 4.41 Crores spent on plantation for the year 2022-23 (Up to October 2022).

		<ul style="list-style-type: none"> The project proponent had organized programs for making people aware of the importance of plantation through Gram-Panchayat.
iv	<p>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>	<p>The Project proponent through its apex organization JSW foundation is carrying out CSR activity in and around Dolvi works. JSW foundation is supported by JSW Steel Limited. The project proponent has spent the following Amount on CSR Activities:</p> <p>The project proponent has spent Rs 48.75 Crores for the year 2021-22 (up to March 2021).</p> <p>For 2022-23 (April to October 2022): Rs 9.72 Crores</p> <p>The above amount was spent on Social Development- (Education & Training), Skill Development, Water and Sanitization, Agriculture, Rural Development, Health, Solid Wastes and Community Development.</p>
v	<p>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 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</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 under CER activities will be implementing in accordance with the Ministry 's OM vide F.No.22 -65/2017-IAIII dated 1st May 2018 within the Project implementation period. A separate budget is incurred under CER activities, which is included in the Budget proposal.</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>

	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.	
vi	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.	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
vii	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.	The project proponent is not discharging waste water outside the plant boundary during normal operation. The project proponent has conveyed that In case it is necessary to discharge effluent that are meeting the discharge norms fit to the marine environment, at that time permission of the relevant authority shall be obtained by them.
viii	No untreated effluent should be reused for any process.	The project proponent is not reusing Untreated waste water for any process.
ix	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	The project proponent for all new units under 5 to 10 MTPA has provided all necessary air pollution control devices. <ul style="list-style-type: none"> • The project proponent has provided Raw Material handling area with yard sprinklers, dry fog system, Dust extraction systems to control the fugitive emissions. They have also Constructed covered sheds for Raw Material storage purpose. • The project proponent has provided Covered shed for Jetty yard-A with a capacity of 110,000MT for Coal Storage • The project proponent has provided 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. • The project proponent has made Investment on Yard sprinklers, De-dusting system and Dry fogging system to the amount of Rs 77.29 Crores • The project proponent has provided 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,

		<p>Blast Furnace II and Lime Calcination Plants 5,6,7)</p> <ul style="list-style-type: none"> • The project proponent has provided Stacks of adequate height & diameter with continuous stack monitoring facilities for all the stacks as per the requirement. • The project proponent has provided Energy efficient technologies in the Plant like waste heat recovery system, Top gas recovery turbine from Blast furnace and Gas Based power plant. • The project proponent has provided all internal roads made of concrete. • The project proponent is regularly operating Road Sweeping machines and water sprinkler on road. • The project proponent has been regularly transferring dust of De-dusting system and other secondary dusts generated from Pollution Control equipment by bulkers. • The project proponent is 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.
x	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.	<ul style="list-style-type: none"> • 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 a time basis for PM_{2.5}, PM₁₀, SO₂, NO_x & CO with proper O&M • The project proponent installed Continuous stack monitoring facilities (CEMS) for 33 Stacks (12 process and 21 Non process stacks). Installation and commissioning is completed and data configuration is under progress. • The project proponent has provided adequate air pollution control devices. Gaseous emission levels including secondary fugitive emissions from all the sources will be controlled within the permissible limits
xi	Dust suppression system and bag filters should be installed to control the fugitive	The project proponent has provided yard sprinklers, Dry fogging system for Raw Material

	<p>dust emissions at conveyor and transfer points, product handling, loading and unloading points,</p>	<p>Handling areas and dust extraction system in the junction houses and transfer points.</p> <p>They have Installed Covered sheds (4 Nos) for Raw Material storage purpose. The same is mentioned as below</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. • New Covered shed for storing Iron Bearing Raw Material and Flux is in progress • Investment on Yard sprinklers, De-dusting system and Dry fogging system to the tune of Rs 77.29 Crores <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>
xii	<p>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>	<p>The project proponent has provided Adequate waste water treatment facilities to reduce makeup water consumption.</p> <p>The project proponent has also conveyed that wherever possible, rain water harvesting system at rooftop shall be implemented.</p> <p>The project proponent is implementing the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the steel plants regarding specific water consumption.</p> <p>The project proponent's specific water consumption for the year 2022 – 23 (April to October 2022) was 2.59 m³/ton 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"> • The project proponent has provided Dry Gas Cleaning plant in Blast Furnace. The traditional wet scrubbing process has high pressure drop due to which the energy recovery is low (14 MW) but the bag filter has

		<p>low pressure drop thus has high energy recovery (36 MW), by using Dry GCP process the energy recovery has increased by approximately 22 MW, which will reduce specific water consumption.</p> <ul style="list-style-type: none"> The project proponent has provided in 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.
xiii	<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>The project proponent has implemented Rain Water Harvesting system in the existing plant (at 12 various buildings of Oxygen Plant, Coke Oven, Power Plant, MRSS and Admin.) and the same shall be implemented in the expansion projects in a phased manner.</p>
xiv	<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>The project proponent has provided Effluent treatment plants in Hot Strip Mill and Blast Furnace.</p>
xv	<p>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.</p>	<p>The project proponent has confirmed that the Captive Power plant for the existing and the expansion project are gas based. Hence Fly Ash is not generated in the process. Therefore Fly Ash utilization is not relevant to them.</p>
xvi	<p>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.</p>	<p>The project proponent has not used and Hazardous material in the plant during construction phase and in plant operation phase. They have also conveyed that the hazardous wastes generated from the plant shall be stored in designated place and disposed to authorized recyclers as per the Hazardous Wastes</p>

		(Management and Handling and transboundary) guidelines and MPCB consent conditions. They will be maintaining the records as per the guidelines.
xvii	Vehicles and construction machinery are properly maintained to minimize the exhaust emission as well as noise generation to meet prescribed standards.	The project proponent currently is checking all the vehicle and construction machineries PUCs properly at Main gate before they are entered into the plant.
xviii	Risk and Disaster Management Plan along with the mitigation measures should be prepared and implemented.	The project proponent has prepared and submitted Risk & Disaster Management plan to MoEF&CC, New Delhi along with EIA.
xix	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants should be implemented.	<p>The project proponent has conveyed that 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> <p>The project proponent has implemented the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the steel plants.</p> <ul style="list-style-type: none"> • The project proponent has installed Dry Gas Cleaning plant in Blast Furnace. The traditional wet scrubbing process has high pressure drop due to which the energy recovery is low (14 MW) but in the present system the bag filter has low pressure drop hence there is high energy recovery (36 MW), by using Dry GCP process the energy recovery has increased approx. to 22 MW, which will reduce CO₂ emissions by approx. 1.4 Lac.tCO₂eq. This system saves specific water consumption. • The project proponent has 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. • The project proponent in Coke oven plant is reusing the Tar sludge / ETP sludge in the Coking process. • The project proponent has installed Blast Furnace TRT – Energy recovery of top blast furnace gas with power generation through

		<p>TRT by using top pressure of BF gas.</p> <ul style="list-style-type: none"> • The project proponent has installed in Coke Oven Plant – Coke Dry Quenching systems (3 Nos) installed to recover the sensible heat of red hot coke, reduce energy consumption and pollution and improve the quality of coke. Each CDQ will recover energy of 70 MW, which will reduce the CO₂ emissions by approx. 10.9 Lac.t CO₂eq. • The project proponent has installed Steel Melting Shop (SMS), secondary de-dusting system (Gas Cleaning Plants 4 Nos) to control fugitive emissions. • The project proponent has installed Coal Injection Plant for direct injection of pulverized coal in furnace. Present rate of Coal Direct Injection in our Blast Furnace is 150 Kg/THM (average for the year 2021-22). • The project proponent is utilizing BF Slag-100% in Cement plant. • The project proponent is utilizing 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. • The project proponent has installed 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.
xx	<p>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>	<p>The project proponent is maintaining Separate budget for implementing the projects/ issues as discussed during Public Hearing.</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>The project proponent has spent Rs 48.75 Crores on CSR activities for the year 2021-22 (up to March 2021).</p> <p>For 2022-23 (April to October 2022): Rs 9.72</p>

		<p>Crores</p> <p>The above amount has been spent on Social Development- (Education & Training), Skill Development, Water and Sanitization, Agriculture, Rural Development, Health, Solid Wastes and Community Development.</p>
xxi	<p>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>	<p>The project proponent is carrying out regular health check-ups as per Factories Act, for workers and employees & records are maintained on regular basis.</p> <p>They are carrying out Annual Medical Check-up conducted for medical parameters like Blood test, Chest X-Ray, Eye test, Audiometry, Spirometry etc. is being conducted amongst the employees of the Company</p>
B) General Conditions		
i	<p>The project authorities must strictly adhere to the stipulations made by the Maharashtra Pollution Control Board and the State Government.</p>	<p>The project proponent has been issued Consent to Establish and Consent to operate from Maharashtra Pollution Control Board.</p> <p>They are following the guidelines stipulated by Maharashtra Pollution Control Board (MPCB) and State Government from time to time.</p> <p>The project proponent is in compliance to the Consent conditions.</p>
ii	<p>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).</p>	<p>The project proponent has acknowledge the same .</p>
iii	<p>At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, PM2.5, SO2 and NOx 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>	<p>The project proponent has installed 5 Nos. online Ambient Air Quality Monitoring Station with consultation of MPCB & data connected the same to MPCB & CPCB Website.</p> <p>The project proponent has submitted Environment monitoring reports on air, water and stack emissions are submitted to MPCB, CPCB and MoEFCC as per the conditions in EC and CTO.</p>
iv	<p>Industrial wastewater should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 313' December, 1993 or as amended from time to time. The treated wastewater should be utilized for plantation purpose.</p>	<p>The project proponent has provided Separate waste water treatment facilities to treat the industrial waste water.</p> <p>The project proponent will be reusing treated water in the plant process and slag quenching purpose.</p> <p>The project proponent is using Treated Sewage water for plantation purpose.</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).	The project proponent has maintained an overall noise level of (85 dBA) in and around the plant which is well within the standards The project proponent are measuring Ambient noise level and maintaining as prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).
vi	Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	The project proponent is carrying out as per the Factories Act, regular health check-ups for workers and employees & records are maintained on regular basis.
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.	The project proponent have implemented Rain Water Harvesting system in the existing plant (at 12 buildings of Oxygen Plant, Coke Oven, Power Plant, MRSS and Admin.) and will be extending the same to expansion projects.
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.	The project proponent is taking all Environment Protection measures and undertaking community development program in nearby villages and will be continuing the same for expansion projects. The project proponent has spent the following amount on CSR Activities: For 2022-23 (April to October 2022): Rs 9.72 Crores The project proponent has spent the above amount on Social Development- (Education & Training), Skill Development, Drinking water supply, Sanitization, Agriculture, Rural Development, Health, Solid Wastes, Self-help group and Community Development.
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.	The project proponent has for expansion projects provided sufficient fund earmarked towards Environment and Pollution Control Measures. Approximately Rs 806 Crores have been spent as investment on Pollution Control System (Air, Water and Solid wastes). The project proponent has allocated adequate fund for operation and maintenance of Pollution Control Systems. The project proponent will not be diverting funds for any other purpose.

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.	<p>The project proponent has submitted a copy of clearance letter to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local Body and the local NGO.</p> <p>The clearance letter is also uploaded to the JSW Steel web site.</p>
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 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 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.</p> <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.</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.	The project proponent has submitted Environment Statement for 2021-22 to MPCB, MoEFCC and uploading the same to the company website.

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 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.	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.
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.	The project proponent has intimated the Ministry for date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.
14	M/s. Dolvi Coke Projects Ltd shall abide by all the commitments and recommendations made in the EIA /EMP report and that during presentation to the EAC; commitments made during the Public Hearing held on 28/01/2014 for integrated steel plant	JSW Shall comply the Conditions as per the commitments made during Public Hearing.
15	The ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
16	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Noted
17	The PP shall ensure no change in the pollution load; and no conflict in sharing in common facilities in day to day operations.	The project proponent has confirmed that as per the amendment in the EC dated 22 November 2021, JSW Steel shall not change the pollution load.
18	All the liabilities regarding environmental issues of Coke Ovens including by-product plant will be the responsibility of the new company i.e. Dolvi Coke Projects Limited	The project proponent has confirmed that as per the amendment in the EC dated 22 November 2021, JSW Steel Ltd shall comply to all the Environmental issues of Coke Oven plant II
19	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	The project proponent has confirmed that as per the amendment in the EC dated 22 November 2021, JSW Steel Ltd shall regularly be complying for

	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.	<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.
20	This Environmental Clearance is partial modification of the J-11011/76/2013-IA II (I) dated 25th August 2015.	The project proponent has acknowledged the same.
21	Any appeal against this EC shall lie with the National Green Tribunal, if preferred within a period of 30 days as prescribed under section 16 of the National Green tribunal Act 2010.	The project proponent has acknowledged it and shall compile with the same.

