

**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: 5<sup>th</sup> April, 2023

To

**M/s JSW Steel Ltd**  
**Dolvi, Geetapuram**  
**District Raigad**  
**Maharashtra – 402107**  
*Email: anand.rai@jsw.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 5<sup>th</sup> 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 17<sup>th</sup> January, 2023 and 7<sup>th</sup> 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 16<sup>th</sup> 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 25<sup>th</sup> 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 m<sup>3</sup>/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 1057m<sup>3</sup>/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 m<sup>3</sup>/h having density 1001 kg/m<sup>3</sup> 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 1,057m<sup>3</sup>/h. However, the planning for actual discharge is 615 m<sup>3</sup>/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 1,057m<sup>3</sup>/h. However the planning for actual discharge is 615 m<sup>3</sup>/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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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 31<sup>st</sup> 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



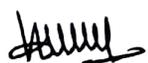
conditions in a time bound manner. The Ministry may revoke or suspend the CRZ clearance, if implementation of any of the above conditions is not found satisfactory.

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, 15<sup>th</sup> 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, 3<sup>rd</sup> and 4<sup>th</sup> Floor, Opp. Cine Planet, Sion Circle, Mumbai - 400022, Maharashtra.
6. Guard File / Monitoring File / Website / Record File.

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