



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

To,

The Chief Engineer
Mormugao Port Trust
Headland, Sada, Goa-403804, Headland, Sada, Goa-403804, South
Goa, Goa-403804

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/GA/MIS/93270/2015 dated 25 Apr 2019. The particulars of the environmental clearance granted to the project are as below.

- | | |
|--|--|
| 1. EC Identification No. | EC23A033GA173882 |
| 2. File No. | 10-33/2015-IA-III |
| 3. Project Type | Modernization |
| 4. Category | A |
| 5. Project/Activity including Schedule No. | 7(e) Ports, Harbours |
| 6. Name of Project | Redevelopment of Berths 8, 9 and Barge Berth at the Port of Mormugao, Goa. |
| 7. Name of Company/Organization | Mormugao Port Trust |
| 8. Location of Project | Goa |
| 9. TOR Date | 16 Feb 2016 |

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 13/07/2023

(e-signed)
Amardeep Raju
Scientist E
IA - (INFRA-1 sector)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH. Please quote identification number in all future correspondence.

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F.No.10-33/2015-IA.III
Government of India
Ministry of Environment, Forest and Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi - 110003

Date: 6th July, 2023

To,

The Chairman
M/s Mormugao Port Trust
Administrative Office,
Headland, Sada, Goa - 403804
Email: prem.mpt@gmail.com

Subject: Redevelopment of Berths 8, 9 and Barge Berth at the Port of Mormugao, Goa by M/s Mormugao Port Trust - Environmental and CRZ Clearance - reg.

Sir,

This has reference to your online proposal No.IA/GA/MIS/93270/2015 dated 25.04.2019, submitted to this Ministry for grant of Environmental and CRZ Clearance in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 and Coastal Regulation Zone (CRZ) Notification, 2011, under the Environment (Protection), Act, 1986.

2. The proposal for grant of Environmental and CRZ Clearance to the project 'Redevelopment of Berths 8, 9 and Barge Berth at the Port of Mormugao, Goa' by M/s Mormugao Port Trust was considered by the Expert Appraisal Committee (Infra-2) in its 42nd meeting held during 10 - 12 July 2019 and 48th meeting held during 28 - 29 January, 2020. Correction in the minutes has been made in the 49th EAC (Infra-2) meeting held during 25-26 February, 2020. The details of the project, as per the documents submitted by the project proponent, and also as informed during the above meeting, are under:

- i. The port of Mormugao, one of the oldest ports of India was commissioned in 1885 and is among the twelve Major Ports of the country. The Mormugao Port is a leading Major Port on the West Coast of India, located at the entrance of Zuari estuary on the West coast of India (State of Goa).
- ii. The main stay of the redevelopment project is to serve the export needs of the Goa iron ore. Other general cargo including containers will also form an important part of the envisaged facility. The proposed redevelopment project will provide facilities predominantly for iron ore export and general cargo. Coal, if handled at a later stage, will be managed under a fully covered dome type structure with stringent norms to avoid fugitive dust emission.
- iii. The total Berth frontage which will be available for development is 1050 m. It is proposed to shift the berth face up to 50 m from the existing face. Proposed project envisages the reclamation in an area of 6.50 ha. Hence, the total backup area after reclamation 27.00 Ha. It is proposed to use the backup area for handling and storage of iron ore, coal/coke, general cargo and containers as a part of the redevelopment. It is proposed that berth No 8 will be converted to handle general cargo and containers and depending on market demand at later stage coal/coke if handled will be through closed shed and mechanized facilities. MoPT proposes to dredge the outer channel up to (-) 19.8 m CD and the manoeuvring area up to (-) 19.5 m CD. The optimal capacity of the terminal is found to be 19.22 MTPA. Proposed Cargo for Berth 8, 9 & 9A is as follows:



Berth No.	Present Cargo	Proposed Cargo
Berth 8	Liquid	General Cargo, Containers and Coal/coke
Berth 9	Iron Ore	Iron Ore
Berth 9A	Iron Ore	Iron Ore

- iv. The area in front of Berth 8, 9 and 9A will have to be deepened to -19-50 m for the movement of cape-size vessels. The dredging quantity has been estimated to be 2.70 million cum. Reclamation of the water area is proposed to facilitate additional area utilized for storage of Cargo. Total area to be reclaimed is around 6.50 ha. The total quantity of the material required for the reclamation has been estimated as about 8.20 lakh cum.
- v. The total indicative Power requirement (maximum demand) for the mechanical coal handling system, iron ore handling, general cargo and container handling has been envisaged to be around 24.33 MW.
- vi. Water demand shall include raw water for greenery and landscape, dust suppression and Potable water for terminal users, port users and canteen and ship supply. Potable water requirement during construction has been estimated as 60 cum/day and water requirement during operation phase will be 40 cum/day. The source of potable water for the Port is Public Works Department, Goa.
- vii. The quantity of domestic sewage generated during operation phase is about 32 KLD and shall be treated in the existing Sewage Treatment Plants of MPT. Treated water shall be used for green belt development.
- viii. The storm water drainage on the surface of the proposed Berths will be accomplished by providing necessary drains.
- ix. The requirement of water for firefighting will be catered by use of seawater. Fire protection in Ports shall consist of the following - Fire Protection, Fire Alarms, Fire-Fighting Equipments, appropriate uses of Fire Fighting equipment's & agents like water, foam, carbon dioxide & powder are commonly used.
- x. CRZ mapping on a scale of 1:4000 includes the HTL/LTL map covering an area of 7 km radius from project site for the proposed dredging of navigation channel project has been done through Institute of Remote Sensing (IRS) Anna University, Chennai.
- xi. Terms of Reference (ToR) was granted by MoEFCC vide letter F.No.10-33/2015-IA.III dated 16.02.2016.
- xii. Public Hearing was conducted on 28.04.2017, 04.05.2017 and 05.05.2017.
- xiii. The project has been recommended by Goa Coastal Zone Management Authority (GCZMA) vide Letter No. GCZMA/S/18-19/51/1961 dated 24.01.2019 and letter no. GCZMA/S/18-19/51/01 dated 03.03/04.2023
- xiv. Investment cost of the project is Rs. 1145.36 Crore.
- xv. Employment potential: 400 Nos. during construction.
- xvi. Benefits of the project: It will result in freight advantage thereby industries stands to benefit. Import will be cheaper and export more competitive, resulting in overall economic growth of the Nation and employment creation.

3. The project/activity is covered under category 'A' of item 7 (e) i.e. Ports, harbours, break waters, dredging' of the schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level.

4. The proposal was earlier considered by the EAC (Infra-2) in its 42nd meeting held during 10-12 July, 2019. The EAC during deliberation noted that ToR to the project was granted vide letter F.No. 10-33/2015-IA.III dated 16.02.2016 and was valid up to 15.02.2019. The online application was made by the project proponent on Ministry's portal on 25.04.2019. The project proponent has informed that they had submitted online EC application on 06.02.2019 which

was verified on 15.02.2019 and EDS reply was submitted on 25.04.2019. The project proponent also informed the EAC that Existing POL Berth No. 8, Iron ore Berth No. 9, barge berths and Mechanical Ore Handling Plant (MOHP) comprised of the dedicated iron ore handling facility. Berth No. 8 has very low occupancy rate and iron ore handling facility has been decommissioned. All the old equipment and structures have been removed. Berths 8, 9, barge berths and the MOHP occupy about 35% of the main operational area of the port. These areas need to be put to gainful use. Present proposal is for redevelopment of berth No. 8, 9 and barge berths, back up area and installation of mechanized handling equipment. The berths will handle capsized vessels. Two berths will be dedicated iron ore berths and one berth will be a multipurpose general cargo berth to handle variety of cargoes like bauxite, limestone, gypsum, steel coils, fertilizers, granite etc.

The Committee deliberated upon the issues raised during the Public Hearing/Public Consultation meeting conducted by the Goa State Pollution Control Board on 28.04.2017, 04.05.2017, and 05.05.2017. The issues were raised regarding impact of dredging on Fishermen, pollution control measures, traffic congestion due to increase in no. of rakes, steps taken to control coal combustion, impact of noise pollution on marine life etc. The Committee noted that issues have been responded by the project proponent during presentation. However, some of the issues have not been addressed satisfactorily. After deliberation, the EAC asked the project proponent to submit point wise reply to the issues raised /representation submitted during public hearing and time bound action plan, upload copy of certified compliance report issued by the MoEF&CC Regional Office, Bangalore on environmental conditions stipulated in the existing environmental clearance, submit source apportionment study identifying and quantifying the sources of pollution from individual activities being carried out in the project and the findings/recommendations of the study relevant for the protection of environment in the area, upload Volume-II of the EIA Study as it is claimed that the proceedings of the public hearing are covered in Volume-II of the EIA Study and Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 01.05.2018. Project Proponent had submitted the additional information on Ministry's website on 18.12.2019. Accordingly, proposal was re-considered by EAC in its 48th meeting held during 28-29 January, 2020.

5. The EAC in its 48th meeting held during 28-29 January, 2020, deliberated upon the information submitted by the project proponent. The EAC also deliberated on the certified compliance report letter No. EP/12.1/26, 30,49,2 of 13-14 & 2 of 15-16/Goa dated 05.04.2019 issued by the MoEF&CC's Regional Office (South Zone), Bangalore. As per the compliance report most of the conditions of the Environmental Clearance are found to be complied. The project proponent informed that Source apportionment study was not included in ToR issued by MoEF&CC on 16.02.2016. However, as per the directives of Goa Pollution Control Board, MPT has appointed IIT, Mumbai to carry out source apportionment study. IIT, Mumbai has submitted preliminary report in February 2019, Phase one report in September 2019 and raw data report in December 2019. IIT Mumbai has requested GSPCB for the extension of time for submission of Final Report and the same is consented by GSPCB.

The EAC, therefore, based on the information submitted, examination of the submitted documents, clarifications provided by the project proponent during appraisal of the project and after detailed deliberations on all the issues recommends the project for grant of Environmental and CRZ Clearance with stipulated specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity. Based on the recommendation of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environmental and CRZ Clearance to the project 'Redevelopment of Berths 8, 9 and Barge Berth at the Port of Mormugao, Goa by M/s Mormugao Port Trust under the provisions of the EIA Notification, 2006 and



amendments/circulars issued thereon, and subject to the specific and general conditions as under:-

A. Specific Conditions:

- i. Construction activity shall be carried out strictly according to the provisions of the CRZ Notification, 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- ii. All the recommendations and conditions specified by the Goa State Coastal Zone Management Authority (GCZMA) who has recommended the project vide letter No. GCZMA/S/18-19/51/1961 dated 24.01.2019 and letter no. GCZMA/S/18-19/51/01 dated 03.03/04.2023 shall be complied with.
- iii. Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- iv. The project proponent shall comply with the air pollution mitigation measures as submitted.
- v. The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.
- vi. Dredging shall not be carried out during the fish breeding season.
- vii. Dredging, etc shall be carried out in the confined manner to reduce the impacts on marine environment including turbidity and turbidity should be monitored during the dredging.
- viii. No underwater blasting is permitted.
- ix. Dredged material shall be disposed safely in the designated areas and also to be utilized for beach nourishment. With the enhanced quantities, the impact of dumping on the coastal environment should be studied and necessary measures shall be taken on priority basis if any adverse impact is observed.
- x. Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring report.
- xi. While carrying out dredging, an independent monitoring shall be carried out by Government Agency/Institute to check the impact and necessary measures shall be taken on priority basis if any adverse impact is observed.
- xii. The recommendations of apportionment study carried out by IIT, Bombay should be implemented and a copy of the report should be submitted to MoEF&CC.
- xiii. The total fresh water requirement during construction phase has been estimated as 60 m³ will be met from existing sources of Mormugao port. Fresh water requirement during operation phase has been estimated as 40 KLD. The water will be taken from Public Works Department (PWD), Goa.
- xiv. The quantity of domestic sewage generated during operation phase is about 32 KLD and shall be treated in the existing Sewage Treatment Plants of MPT. Treated water shall be used for green belt development.
- xv. Marine ecological studies and its mitigation measures for protection of phytoplankton, zooplanktons, macrobenthos, Crabs, Catfishes, Prawns, Silver bellies and Flat fishes etc. prepared by CSIR-National Institute of Oceanography (NIO) as given in the EIA-EMP Report shall be complied with in letter and spirit.
- xvi. A copy of the Marine and riparian biodiversity management plan duly validated by the State Biodiversity Board shall be obtained and implement in letter and spirit.
- xvii. A continuous monitoring programme covering all the seasons on various aspects of the coastal environs need to be undertaken by a competent organization available in the State or by entrusting to the National Institutes/renowned Universities/accredited



- Consultant with rich experiences in marine science aspects. The monitoring should cover various physico-chemical parameters coupled with biological indices such as microbes, plankton, benthos and fishes on a periodic basis during construction and operation phase of the project. Any deviations in the parameters shall be given adequate care with suitable measures to conserve the marine environment and its resources.
- xviii. Continuous online monitoring of for air and water covering the total area shall be carried out and the compliance report of the same shall be submitted along with the 6 monthly compliance report to the regional office of MoEF&CC.
- xix. Effective and efficient pollution control measures like covered conveyors/stacks (coal, iron ore and other bulk cargo) with fogging/back filters and water sprinkling commencing from ship unloading to stacking to evacuation shall be undertaken. Coal and iron ore stack yards shall be bounded by thick two tier green belt with proper drains and wind barriers wherever necessary.
- xx. Sediment concentration should be monitored fortnightly at source and disposal location of dredging while dredging.
- xxi. Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components as part of the management plan. Marine ecology shall be monitored regularly also in terms of all micro, macro and mega floral and faunal components of marine biodiversity.
- xxii. Rock blasting, which adversely affects the local biota, is planned while dredging.
- xxiii. There are chances of fish mortality due to blasting. During blasting, monitoring should be carried out for the health of fish also.
- xxiv. Spillage of fuel / engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life, particularly benthos. This shall be prevented by suitable precautions and also by providing necessary mechanisms to trap the spillage.
- xxv. Necessary arrangements for the treatment of the effluents and solid wastes/ facilitation of reception facilities under MARPOL must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986. The provisions of Solid Waste Management Rules, 2016. E- Waste Management Rules, 2016, and Plastic Waste Management Rules, 2016 shall be complied with.
- xxvi. All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.
- xxvii. Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.
- xxviii. Necessary arrangement for general safety and occupational health of people should be done in letter and spirit.
- xxix. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to the RO, MoEF&CC along with half yearly compliance report.
- xxx. The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.
- xxxi. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them to address the concerns raised during the public consultation. The project proponent shall initiate the activities proposed by them, based on the commitment made in the public hearing, and incorporate in the Environmental Management Plan and submit to the Ministry. All other activities including pollution control, environmental protection and conservation, R&R, wildlife and forest conservation/protection measures including the NPV, Compensatory afforestation etc., either proposed by the

project proponent based on the social impact assessment and R&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also become part of EMP and shall be implemented.

B. Standard Conditions:

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of Schedule-I species in the study area)
- iv. 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.
- v. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- vi. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

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 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (for projects involving incineration).
- ii. As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bagfilter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator. Online pollutant monitoring shall be provided as per CPCB guidelines for monitoring particulate matter, SO₂, NO_x and CO from the incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.
- iii. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory.
- iv. Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.
- v. Gas generated in the Land fill should be properly collected, monitored and flared.
- vi. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the project area at least at four locations (one within the



project area and three outside the project area), covering upwind and downwind directions.

III. **Water quality monitoring and preservation:**

- i. The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
- iii. The depth of the land fill site shall be decided based on the ground water table at the site.
- iv. Rain water runoff from the landfill area and other hazardous waste management area shall be collected and treated in the effluent treatment plant.
- v. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- vi. The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
- vii. All leachates arising from premises should be collected and treated in the ETP followed by RO. RO rejects shall be evaporated in MEE. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
- viii. Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.
- ix. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
- x. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

IV. **Noise monitoring and prevention:**

- i. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. **Energy Conservation measures:**

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- ii. Provide LED lights in their offices and residential areas

VI. **Waste management:**

- i. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, shall be handled in the premises.
- ii. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.



- iii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- iv. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.

VII. Green Belt:

- i. Green belt shall be developed in area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the Air Port.
- ii. Top soil shall be separately stored and used in the development of green belt.

VIII. Marine Ecology:

- i. Dredging shall not be carried out during the fish breeding and spawning seasons.
- ii. Dredging, etc shall be carried out in the confined manner to reduce the impacts on marine environment.
- iii. The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.
- iv. While carrying out dredging, an independent monitoring shall be carried out through a Government Agency/Institute to assess the impact and necessary measures shall be taken on priority basis if any adverse impact is observed.
- v. A detailed marine biodiversity management plan shall be prepared through the NIO or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity and submitted to and implemented to the satisfaction of the State Biodiversity Board and the CRZ authority. The report shall be based on a study of the impact of the project activities on the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, sub-tidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standards survey methods and include underwater photography.
- vi. Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components including all micro, macro and mega floral and faunal components of marine biodiversity.
- vii. The project proponent shall ensure that water traffic does not impact the aquatic wildlife sanctuaries that fall along the stretch of the river.

IX. 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.
- ii. 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.
- iii. Occupational health surveillance of the workers shall be done on a regular basis.

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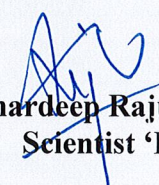
X. Corporate Environment Responsibility:

- i. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or share-holder's / 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 report to the head of the organization.
- iii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and 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.
- iv. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

XI. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently (for projects involving incineration).
- ii. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed (For projects involving only Landfill without incineration).
- iii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iv. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be

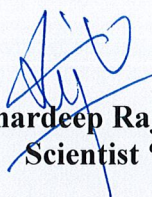
- monitored and displayed at a convenient location near the main gate of the company in the public domain (in case of incineration involved).
- viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- ix. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- x. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- xi. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xii. 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.
- xiii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi. 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.
- xvii. 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.
6. This issues with the approval of the Competent Authority.


(Amardeep Raju)
Scientist 'E'

Copy to:

1. The Secretary, Department of Science, Technology, & Environment, Government of Goa, Saligaon, Pilerene Industrial Estate, Goa - 403114.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum- Office Complex, East Arjun Nagar, Delhi - 32.
3. The Addl. Principal Chief Conservator of Forests (SZ), Ministry of Environment, Forests and Climate Change, Kendriya Sadan, 4th Floor, E&F Wing, II Block, Koramangala, Bengaluru - 560034.
4. The Member Secretary, Goa State Pollution Control Board, 1st Floor, Dempo Tower, Patto Plaza, Patto Centre, Panjim, Goa - 403001.
5. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.

6. Guard File/ Record File/ Notice Board.
7. MoEFCC website.


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Scientist 'E'