

F.No.11-65/2013-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi - 3

Date: 22nd June, 2017

To,

The General Manager (Projects & Maintenance),
M/s Cochin Shipyard Limited,
Administrative Building, Perumanoor P.O.,
Kochi, Kerala- 682 015

Fax: 0484-2370897/2383902

Subject: Augmentation of existing ship repair facility at Cochin Port of District Ernakulam, Kerala by M/s Cochin Shipyard Ltd - Environmental and CRZ Clearance - reg.

Sir,

This has reference to your online Proposal No. IA/KL/MIS/22905/2013 dated 6th October, 2015, submitted to this Ministry for grant of Environmental and CRZ Clearance in term 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 '**Augmentation of existing ship repair facility at Cochin Port of District Ernakulam, Kerala by M/s Cochin Shipyard Ltd**' was considered by the Expert Appraisal Committee (Infra-2) in its meeting held on 18th - 20th November, 2015, 23rd - 24th May, 2016, and 24th - 25th November, 2016.

3. The details of the project, as per the documents submitted by the project proponent, and also as informed during the above said EAC meeting, are reported to be as under:-

(i) M/s Cochin Shipyard Ltd has proposed for augmentation of existing ship repair facility at Cochin Port of District Ernakulam, Kerala. Existing Cochin Ship Repair Facility was established in 1938 at Wellington Island with a dry dock and one afloat berth having the following features: i) Dry Dock – 66m length, 12.5m width and 4m depth ii) Two Cranes iii) Afloat repair berth of 90m length without any crane capacity Existing facility is capable of only accommodating maximum size of ships length ≤ 64 m, breadth ≤ 12.5 and draught of 4m. Total area required for the proposed project is 17 ha (Land) + 15 ha (water front) area.

(ii) It is reported that Mangalavanam Bird Sanctuary is located at distance of 4.3 km. Proposed activities within 17 ha port area allocated by Cochin Port Trust to Cochin ship Yard. No additional reclamation or land acquisition is required.

(iii) Details of the existing facilities are as given below:

Shoreside Facilities

1. Graving dock of size 66mx12.5mx7m
2. Afloat repair berth (L jetty) 90mx10m

V. Singh

Landside Facilities

1. Main workshop building (3885 sqm)
2. Administrative Office Building (544 sqm)
3. Technical Staff Building (309 sqm)
4. Canteen Building (860 sqm)
5. Warehouse complex (3650 sqm)

(iv) Following are the proposed facilities, ISRF:

S. No.	Production area	Main dimensions (preliminary)	Total area [m ²]
New Facilities			
1.	Ship lift	135m x 27m Lifting capacity: 6,000T	3,645
2.	Transfer section	"A" 132m x 90m	11,880
3.	Transfer section "B"	132m x 90m	11,880
4.	Work stations "NORTH"	135m x 115m 2 workstations	12,150
5.	Work station	"SOUTH" 135m x 115m 2 workstations	12,150
6.	Jetty 1	300m x 29m	8,700
7.	Jetty 2	537m x 15m	8,055
8.	Electrical / electronic workshop	35m x 25m	875
9.	Engine repair shop	35m x 25m	875
10.	Pipe shop /boiler repair	70m x 25m	1,750
11.	Steel fabrication / Locksmith shop	70m x 25m	1,750

(v) In addition to the above mentioned workshops and work areas a number of ancillary buildings and areas are necessary for the ISRF process. These ancillary buildings / areas and stations will include:

- a) Stores, e.g. store for outfitting material, paint store, grit store, store for staging material
- b) Maintenance areas, e.g. utilities maintenance and service, maintenance area for cranes and fork lifts
- c) Administration buildings, information office
- d) Social buildings / facilities, e.g. hygiene centres, toilets, canteen, first aid
Security facilities, fire station
- e) Electrical and mechanical service stations and buildings, substations, distribution
- f) facilities, water supply and wastewater, compressors Internal heavy transport management
- g) Waste and scrap management
- h) Work areas and facilities for subcontractors (including social facilities)

(vi) Water requirement from Kerala Water Authority (KWA) for proposed facility complex will be 528 m³ /day. The storm water collected from the facility will be let out in seawater after treating it in the effluent treatment plant.

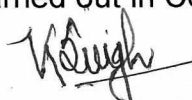


- (vii) The effluent from process, shops/areas, workstation, oil and grease will be treated in ETP having capacity of 500 m³/day. The wastewater generated from the toilets, bathrooms and other areas in the operation building will be treated in the Sewage Treatment Plant (STP). Two STPs of capacity 25 KLD and 15 KLD are proposed.
- (viii) The solid waste generated from various processes will be collected and disposed as per the Municipal Solid Waste Management Rules, 2000. Scrap and waste bins for separate collection of different materials and waste. Recyclable waste including scarp will be sold to the identified vendors approved by Kerala State Pollution Control Board. Construction and demolition (C&D) waste will generated during the modernization of the existing Cochin Ship Repair facility to International Ship Repair Facility.
- (ix) The dredging will ensure sufficient draft. The total quantity of the dredged material is estimated to be 600,000 m³ and it will be disposed to the identified one of two dumping ground locations in the outer sea about 21km away from the project site.
- (x) **SCZMA Recommendations:** The Kerala Coastal Zone Management Authority (KCZMA) has recommended the project vide their letter No. 3223/A2/15/KCZMA/S&TD dated 7th September 2015.
- (xi) **Investment/Cost:** The total cost of the project is Rs. 970.00 crores.
- (xii) **ToR Details:** TOR was granted for the project vide letter No.11-65/2013-IA-III dated 10th December, 2013.
- (xiii) **Public Hearing:** Public hearing was conducted on 24th March, 2015.
- (xiv) **Employment potential:** Construction phase, it will provide job opportunities to about 200 skilled and 350 unskilled manpower. The project will provide employment to about 2000 employees when the facility becomes fully operational.
- (xv) **Benefits of the project:** The establishment of a new International Ship Repair Facility by CSL for undertaking repair of small and medium size vessels along with other maritime related facilities will lead to the development of ancillary industries. ISRF will attract ship repair orders which are presently done in Sri Lanka, Malaysia etc. and thus will earn Foreign Revenue. This will boost up the benefits of ISRF as well as contribute towards economic advancement of the entire region. Enhancement of the infrastructure facilities due to ISRF project along with other basis facilities (transport, commutation, health etc.) is likely to provide a boost to the local economy and enhance the quality of life of the people living in and around the region.

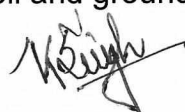
4. The Expert Appraisal Committee (Infra-2), after detailed deliberations on the project, has recommended the project for grant of Environmental and CRZ Clearance. As per recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environmental and CRZ Clearance for the project '**Augmentation of existing ship repair facility at Cochin Port of District Ernakulam, Kerala by M/s Cochin Shipyard Ltd**', under the provisions of the EIA Notification, 2006 and CRZ Notification, 2011 and amendments thereto and circulars issued thereon and subject to the compliance of the following specific and general conditions as under:-

A. SPECIFIC CONDITIONS:

- (i) Construction activity shall be carried out strictly according to the provisions of 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 conditions stipulated by MoEF&CC, Regional Office (Southern Zone) vide letter No. 4-KLB1112/2017-BAN/197 dated 7th June, 2017 shall be complied with'.
- (iii) The environmental clearance is subject to obtaining prior clearance for Wildlife from the Standing Committee of the National Board for Wildlife.
- (iv) All the recommendations and conditions specified by Kerala Coastal Zone Management Authority shall be complied with.
- (v) As proposed, PP shall carry out mangroves plantation in 2 ha. land and maintain.
- (vi) 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.
- (vii) 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.
- (viii) The ground water shall not be tapped within the CRZ areas by the PP to meet with the water requirement in any case.
- (ix) All excavation related dewatering shall be as duly authorized by the CGWA. A NOC from the CGWA shall be obtained for all dewatering and ground water abstraction
- (x) A detailed marine diversity conservation management plan based on possible environmental impacts shall be drawn up and implemented as suggested by the National Institute of Oceanography or any other institute on marine ecology. The plan should include the management of marine and intertidal biotopes, corals and coral communities, sea grasses and sea weeds, subtidal habitats, fishes, other marine flora and fauna(Micro, macro and mega) including turtles, birds and marine mammals as also productivity.
- (xi) Shrouding shall be carried out in the work site enclosing the dock/proposed facility area. This will act as dust curtain as well achieving zero dust discharge from the site. These curtain or shroud will be immensely effective in restricting disturbance from wind in affecting the dry dock operations, preventing waste dispersion, improving working conditions through provision of shade for the workers.
- (xii) Dust collectors shall be deployed in all areas where blasting (surface cleaning) and painting operations are to be carried out, supplemented by stacks for effective dispersion.
- (xiii) The work space shall be maintained as per international standards for occupational health and safety with provision of fresh air respirators, blowers, and fans to prevent any accumulation and inhalation of undesirable levels of pollutants including VOCs.
- (xiv) The diesel generators shall be used as back-up power supply and shall be run only during power cuts. Low sulphur content fuel will be used for the generators and will be subjected to periodical maintenance and servicing. This will cut down on emission volume to a considerable extent. Also, the DG sets will be provided with mufflers for pollutant emission control.
- (xv) Necessary arrangements for the treatment of the effluents and solid wastes 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.
- (xvi) All measures shall be taken during the excavation activity as deemed necessary from the geotechnical investigation of the soil and ground water profile.



- (xvii) Construction activity related wastes (C & D waste) shall be disposed off as per Solid Waste Management Rule, 2016.
- (xviii) All such solid and hazardous wastes including onboard wastes (while ships dock at the site) will be handled as per the Hazardous and other Waste (Management & Transboundary Movement) Rules, 2016.
- (xix) Silt curtains shall be used to contain the spreading of suspended sediment during dredging within the dredging area.
- (xx) The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.
- (xxi) Earth protection work shall be carried out to avoid erosion of soil from the shoreline/boundary line from the land area into the marine water body.
- (xxii) No ships docking at the proposed project site will discharge its on-board waste water untreated in to the estuary/ channel. All such wastewater load will be diverted to the proposed Effluent Treatment Plant of the project site.
- (xxiii) All effluent generated in the existing and proposed ship repairing centre shall be drained in to the ETP having capacity 300 KLD and equipped to treat the effluent into dischargeable standards. The oil-water separator of the ETP shall remove any unwanted oil & grease content from the effluent. The ETP shall be equipped to treat such effluent including the bilge water and other ship discharges to meet the general standards for discharge of effluent in marine coastal areas before disposal in to the channel. Ballast water from ships shall be stored at the facility and will be used in refilling of same before release of ships back into water.
- (xxiv) Workers shall be strictly enforced to wear personal protective equipments like dust mask, ear muffs or ear plugs, whenever and wherever necessary/ required. Special visco-elastic gloves will be used by labour exposed to hazards from vibration.
- (xxv) In case of repair of any old vessels, excessive care shall be taken while handling Asbestos & Freon gas. Besides, fully enclosed covering should be provided for the temporary storage of asbestos materials at site before disposal to CTSDf.
- (xxvi) Safety training shall be given to all workers specific to their work area and every worker and employee will be engaged in fire hazard awareness training and mock drills which will be conducted regularly. All standard safety and occupational hazard measures shall be implemented and monitored by the concerned officials to prevent the occurrence of untoward incidents/ accidents.
- (xxvii) The commitments made during the Public Hearing and recorded in the Minutes shall be complied with letter and spirit. A hard copy of the action taken shall be submitted to the Ministry.

B. GENERAL CONDITIONS:

- (i) Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.
- (ii) Full support shall be extended to the officers of this Ministry/ Regional Office at Bhubaneswar by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.



- (iii) A six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bhubaneswar regarding the implementation of the stipulated conditions.
- (iv) Ministry of Environment, Forest and 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.
- (v) The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.
- (vi) In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment, Forest and Climate Change.
- (vii) The project proponents shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.
- (viii) A copy of the clearance letter shall be marked to concerned Panchayat/local NGO, if any, from whom any suggestion/ representation has been made received while processing the proposal.
- (ix) A copy of this clearance letter shall also be displayed on the website of the concerned 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.

5. 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 proponents from the respective competent authorities.

6. The project proponent shall 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 Environmental and CRZ Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forest and Climate Change at <http://www.envfor.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 Regional office of this Ministry at Bangalore.

7. 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.

8. Any appeal against this 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.

9. Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.

10. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parish/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.

11. The proponent shall upload the status of compliance of the stipulated Clearance conditions, including results of monitored data on their website and shall update the same

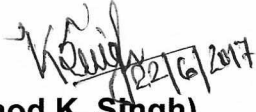
W. Singh

periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB.

12. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB.

13. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of Clearance conditions and shall also be sent to the respective Regional Office of MoEF&CC by e-mail.

14. The above stipulations would be enforced among others under the provisions of Water (Prevention and 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 and EIA Notification 1994, including the amendments and rules made thereafter.


(Dr. Vinod K. Singh)
Scientist D

Copy to:

1. The Additional Chief Secretary, Department of Environment & Climate Change, Pallimukku, Pettah P.O. Thiruvananthapuram – 695 024.
2. The Chairman, CPCB, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 32.
3. The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forests and Climate Change, Regional Office (SZ), Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, Bangalore – 560034.
4. The Member Secretary, Kerala State Pollution Control Board, Plamoodu Junction, Pattom Palace, P.O. Thiruvananthapuram – 695 004.
5. Guard File.
6. Monitoring Cell, MoEF&CC.


(Dr. Vinod K. Singh)
Scientist D