

F.No. 11-62/2009-IA.III
Government of India
Ministry of Environment & Forests
(IA Division)

Paryavaran Bhawan,
CGO Complex, Lodhi Road,
New Delhi - 110 003.

Dated: 13th November, 2009.

To
M/s. Krishnapatnam Port Company Ltd.,
1259, Lakshmi Towers,
Road No.36, Jubilee Hills,
Hyderabad - 500 033.

Subject: Environmental and CRZ clearance for the development of Krishnapatnam Port in Phase-II at Krishnapatnam, Sri Potti Sriramulu Nellore District, Andhra Pradesh by M/s. Krishnapatnam Port Company Ltd. - Reg.

This has reference to your application No: KP/MoEF/PH-II/113, dated 06.05.2009 and subsequent letters dated 13.05.2009 seeking prior Environmental and CRZ Clearance for the above project under the EIA Notification - 2006 and Coastal Regulation Zone (CRZ) Notification, 1991. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification - 2006 and Coastal Regulation Zone Notification, 1991 on the basis of the mandatory documents enclosed with the application viz., the Questionnaire, EIA, EMP and the additional clarifications furnished in response to the observations of the Expert Appraisal Committee constituted by the competent authority in its meetings held on 20th - 22nd July, 2009 and 27th - 28th August, 2009.

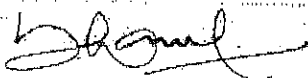
2. It is interalia, noted that the proposal involves the development of existing all weather, deep water, multipurpose port in Phase-II at Krishnapatnam with an investment of Rs.6000 Crores. The Environmental Clearance for the phase-I was issued vide letter No.10-22/2005-IA-III, dated 26-07-2006. The Krishnapatnam deep water Port is located at Latitude 14° 15' 10" N and Longitude 80° 08' 5" E on East Coast. The facilities created so far are located on the northern bank of Khandaleru creek. The existing port covers an area of 440 Ha and consists of three operating berths of 850 m length. The berthing facilities developed so far include one Iron Ore Berth of 262 m, one Coal Berth of 338 m and one General Cargo Berth of 250 m to accommodate Panamax vessels of 60,000 DWT to handle 18million tones of iron ore, 6million tones of iron ore, 4 million tones of general cargo. The length of approach channel is 8.50 km with uniform width of 160 m and draft of (-) 14.40 m. The length of entrance channel of 1.50 km with uniform width of 160 m and draft of (-) 13.80 m. The diameter of the turning basin is 450 m



with a depth of (-) 13.80 m. The port is provided with two break waters and the length of North Breakwater is 606 m extending from the shore upto (-) 2.50 m contour depth, the length of South Breakwater is 1607 m extending from the shore upto (-) 5.0 m contour depth. KPCL has undertaken further studies on tranquility of harbor basin as a result of which the alignment of the channel has been changed to 84.50° N against 105° N.

3. The Phase-II development activities spread over an area of 800 Ha. It include the extension of North Breakwater to 1312 m to a depth of (-) 5.5 m and South Breakwater to 1624 m to a depth of (-) 5.8 m for better tranquility inside the basin. The Phase-II development includes construction of 4 dedicated coal berths on North and one on South with a capacity to handle about 39 MTPA, one Container berth on North and 5 container berths on South to handle 3.30 million TEU. In addition, 2 General Cargo Berths on North of 5.0 MTPA capacity for handling heterogeneous solid cargo and one POL berth for handling 0.3 MTPA of liquid cargo using flexible hoses. The new construction includes additional dredging at berths from (-) 13.2 m CD to (-) 15.0 / (-) 18.0 m CD to accommodate bulk cargo vessels. The depth of the approach channel will be increased from (-) 14.40 m CD to (+) 21.0 m CD and Turning Circle will be increased from (-) 13.80 m CD to (-) 20.50 m CD. The total additional dredging required for berths, deepening of inner and outer channels and turning circle will be about 52.0 million cum. Out of which 9.0 million cum will be utilized for reclamation purpose. The balance dredge material of about 43.0 million cum will be disposed beyond (-) 20.0 m depth in designated offshore disposal site as determined by the National Institute of Ocean Technology (NIOT) for phase -I by suitably extending the phase-I dumping grounds to 5 km x 7 km for Phase-II disposal after duly conforming by additional mathematical model studies. Fugitive dust modeling studies for coal handling and storage areas were carried out using the Industrial Source Complex, Short Term (ISCST3) dispersion model which reveals that the resultant ground level concentrations are found to be well within the National Ambient Air Quality Standards (NAAQS).

4. As per the National Institute of Oceanography (NIO), the proposed development activities fall within the 500 m. of CRZ area to the open sea and 200 m in the case of Khandaleru creek Buckingham Canal. The coastal stretch on the northern side near the breakwaters is covered by sand and Casuarina trees. The existing mangroves adjacent to the Buckingham Canal are protected as stipulated in the Environmental Clearance accorded on 26-07-2006. There are no ecologically sensitive areas in the vicinity of Port. The Indian National Centre for Ocean Information Services (INCOIS) carried out the study on Shoreline Changes due to construction of the port facilities. The study results show that there is no significant permanent change in the shoreline except slight erosion on the northern side and small deposition on the southern side of breakwaters. The monitoring is being continued to



obtain more data to decide on the nature of stability measures that maybe called for over a longer period.

5. The project falls under activity 7(e) "Port and Harbours" of EIA Notification 2006 and also attracts CRZ Notification 1991. The construction and expansion of Ports and Harbours along with infrastructural facilities including operational construction activities are permitted as per para 2 (viii) of the Notification. The proposed development activities fall within 500 m CRZ area to the open sea and 100 m. in the case of Kandaleru creek Buckingham Canal. The area of proposed port is classified as creek as per the CRZ landuse land cover map of the area and falls under CRZ-III and the inter tidal zone is falling in between HTL and LTL is categorized as CRZ I (ii). The costal stretch on the northern side near the back waters is covered by sand and casuarina trees. The Government of Andhra Pradesh has forwarded the proposal for the issue of CRZ Clearance vide letter No.2286/CZMA/2009, dated 11.05.2009. For the Phase-II development of port, TOR was issued on 4th April, 2008 and public hearing was held on 20.02.2009.

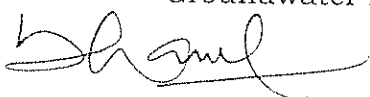
4. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of Environmental and CRZ Clearance for the project. Accordingly, the Ministry hereby accord necessary Environmental and CRZ Clearance for the above project as per the provisions of EIA Notification - 2006 and CRZ Notification, 1991 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:

5. Specific Conditions:

- (i) All the conditions as stipulated by the Forests & Environment Department, Govt. of Andhra Pradesh vide letter No. 2286/CZMA/2009, dated 11.05.2009 shall be strictly complied.
- (ii) All the details/information submitted by the project proponent vide letter No. KP/MOEF/PH-II/174, dated 17.08.2009 shall be strictly complied.
- (iii) The hydro-dynamic studies shall be undertaken to ascertain the impact to the shoreline in the stretch and ecologically sensitive areas and the report shall be submitted to the Ministry.
- (iv) Ministry has taken a decision that the plantation of mangroves shall be undertaken on an area of 50 ha., as the phase-II of the project spreads over 800 ha.



- (v) Six monthly monitoring shall be carried out and a comparative analysis shall be made to examine for any mitigative measures required.
- (vi) The temperature, salinity and tidal inflow shall be monitored weekly.
- (vii) The greenbelt of 100 m. width shall be developed around the coal stack yard as per the request in the public hearing.
- (viii) Impact on the drawal of the water from the Kandaleru creek shall be regularly monitored and report submitted to the Ministry.
- (ix) Continuous monitoring on disposal of dredged material shall be put in place for both pre and post monsoon periods.
- (x) No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- (xi) Oil spills if any shall be properly collected and disposed as per the Rules.
- (xii) The approach channel shall be properly demarcated with lighted buoys for safe navigation and adequate traffic control guidelines shall be framed. The fishermen shall be suitably educated and informed about the traffic guidelines.
- (xiii) The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.
- (xiv) No destruction of mangrove is permitted. The project proponent shall take up mangrove plantation/green belt in the project area, wherever possible. Adequate budget shall be provided in the Environment Management Plan for such mangrove development.
- (xv) The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.
- (xvi) There shall be no withdrawal of groundwater in Coastal Regulation Zone area, for this project. In case any ground water is proposed to be withdrawn from outside the CRZ area, specific prior permission from the concerned State / Central Groundwater Board shall be obtained in this regard.



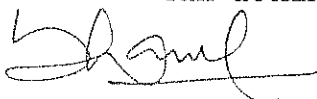
- (xvii) The Hazardous waste generated shall be properly collected and handled as per the provisions of Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008.
- (xviii) The waste water generated from the activity shall be collected, treated and reused properly.
- (xix) Sewage Treatment facility should be provided in accordance with the CRZ Notification.
- (xx) No solid waste will be disposed of in the Coastal Regulation Zone area. The solid waste shall be properly collected, segregated and disposed as per the provision of Solid Waste (Management and Handling) Rules, 2000.
- (xxi) Installation and operation of DG set if any shall comply with the guidelines of CPCB.
- (xxii) There shall be no reclamation / dredging of areas.
- (xxiii) Air quality including the VOC shall be monitored regularly as per the guidelines of CPCB and reported.
- (xxiv) The project proponent shall undertake green belt development.
- (xxv) Necessary clearances from all the concerned agencies shall be obtained before initiating the project.
- (xxvi) Project proponent shall install necessary oil spill mitigation measures in the shipyard. The details of the facilities provided shall be informed to this Ministry within 3 months from the date of receipt of this letter.
- (xxvii) No hazardous chemicals shall be stored in the Coastal Regulation Zone area.
- (xxviii) The project shall not be commissioned till the requisite water supply and electricity to the project are provided by the PWD/ Electricity Department.
- (xxix) Specific arrangements for rainwater harvesting shall be made in the project design and the rain water so harvested shall be optimally utilized.
- (xxx) The facilities to be constructed in the CRZ area as part of this project shall be strictly in conformity with the provisions of the CRZ Notification, 1991 and its amendment. The facilities such



as office building and residential buildings which do not require water front and foreshore facilities shall not be constructed within the Coastal Regulation Zone area.

6. General Conditions:

- (i) Adequate provision for infrastructure facilities including water supply, fuel and sanitation must be ensured for construction workers during the construction phase of the project to avoid any damage to the environment.
- (ii) Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.
- (iii) Borrow sites for each quarry sites for road construction material and dump sites must be identified keeping in view the following:
 - (a) No excavation or dumping on private property is carried out without written consent of the owner.
 - (b) No excavation or dumping shall be allowed on wetlands, forest areas or other ecologically valuable or sensitive locations.
 - (c) Excavation work shall be done in close consultation with the Soil Conservation and Watershed Development Agencies working in the area, and
 - (d) Construction spoils including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they shall not leach into the ground water.
- (iv) The construction material shall be obtained only from approved quarries. In case new quarries are to be opened, specific approvals from the competent authority shall be obtained in this regard.
- (v) Adequate precautions shall be taken during transportation of the construction material so that it does not affect the environment adversely.
- (vi) Full support shall be extended to the officers of this Ministry/ Regional Office at Bangalore by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in



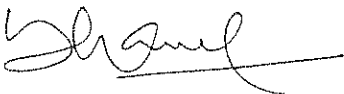
respect of mitigation measures and other environmental protection activities.

- (vii) Ministry of Environment & Forests 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.
- (viii) The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.
- (ix) 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 and Forests.
- (x) 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.
- (xi) Andhra Pradesh Pollution Control Board shall display a copy of the Clearance letter at the Regional Office, District Industries Center and Collector's Office/Tehsildar's office for 30 days.

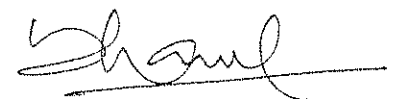
7. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification 1994, including the amendments and rules made thereafter.

8. 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.

9. 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 Clearance and copies of clearance letters are available with the Andhra Pradesh State Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at <http://www.envfor.nic.in>. The advertisement should be made within 10 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.



10. Environmental 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.
11. Any appeal against this Environmental Clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.
12. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/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.
13. The proponent shall upload the status of compliance of the stipulated EC 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, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, 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.
14. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
15. 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 EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.




(Bharat Bhushan)
Director (IA-III)

13.11.2008

Copy to:

- (1) The Special Chief Secretary, Department of Environment, Forests, Science and Technology, Government of Andhra Pradesh, Secretariat, Hyderabad.
- (2) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 110 032.
- (3) The Chairman, Andhra Pradesh Coastal Zone Management Authority and Environment, Forests Science and Technology, Government of Andhra Pradesh, Hyderabad.
- (4) The Member Secretary, Andhra Pradesh Pollution Control Board, Hyderabad.
- (5) The CCF, Regional Office, Ministry of Environment & Forests(SZ), Kendriya Sadan, IVth floor, E&F wings, 17th Main Road, Koramangala II Block, Bangalore - 560 034.
- (6) IA - Division, Monitoring Cell, MOEF, New Delhi - 110 003.
- (7) Guard file.


(Bharat Bhushan)
Director (IA-III)