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No.J-16011/30/2003-IA-III  
Government of India  
Ministry of Environment and Forests  
(IA-III Division)

Paryavaran Bhavan,  
CGO Complex, Lodhi Road,  
New Delhi - 110003.

Dated the July 21, 2004 EE

Sub: Environmental clearance for the proposed Single Point Mooring (SPM), Crude Oil Terminal (COT) and connecting pipes at Mundra Port, District Kachchh, by M/s Gujarat Adani Port Ltd (GAPL). - regarding.

Reference is invited to the letter No.ENV-10.2002-124-P (Part I) dated October 8, 2003 from Department of Forests and Environment, Government of Gujarat, letter No. GMB/N/PVT/277 (10)/2573 dated 11<sup>th</sup> June, 2003 and your letter No. Nil dated 24<sup>th</sup> November, 2003 and 6<sup>th</sup> February, 2004. CRZ map provided by the National Institute of Oceanography dated 15.6.2000 for the above site have been considered. No Objection Certificates from Gujarat Pollution Control Board vide letter No. PC/NOC/391/1039 dated 8<sup>th</sup> January, 2002 on the above mentioned subject have been considered.

2. The proposal involves:

- (a) Single Point Mooring (SPM) with anchoring, mooring and crude oil transfer system, The proposed SPM location is approximately at a distance of 9985m from the Mundra port lighthouse and is located around latitude  $22^{\circ} 40' 03''$  N; longitude  $69^{\circ} 39' 18''$  E.
- (b) floating hose strings for pumping crude oil from berthed tanker to the SPM,
- (c) underbuoy hose strings for transferring crude oil from the SPM to the Pipeline and Manifold (PLEM),
- (d) the PLEM connecting the underbuoy hoses to the submarine pipeline and,
- (e) COT for intermediate storage of crude oil which will be constructed on 2000 acres of the non-operational salt works with the port back-up area. This land will be raised / levelled using dredged material. The COTs area will be divided in plots to serve as onshore storage facility for each SPM separately. The facilities provided at the COTs will include, crude oil de-watering, crude oil booster pump station, crude oil transfer pumps, slop tank and pump, API separator and ETP, control room, emergency power supply, fire fighting set-up, raw water supply, electrical power station and other supporting facilities. The storm water drainage system of the terminal will be designed for monsoon season runoff.

The Environment Impact Assessment (EIA) prepared by National Institute of Oceanography (NIO) estimates that about 0.25 ha. of mangroves habitats will be destroyed due to laying of pipelines.

The proposal has been examined and environmental clearance to this project is hereby accorded subject to effective implementation of the following environmental safeguards and conditions:-

## A. SPECIFIC CONDITIONS:

- (i) Mangrove afforestation in 25 ha. of area, suitably identified in consultation with State Forest Department. The GAPL shall bear the cost of the said land as well as the cost of the plantation of mangroves and its sustenance and implant within 6 months from the date of this clearance letter. Further, it shall be ensured that mangroves in the vicinity of the salt works are not affected due to the project.
- (ii) In addition to the mangrove plantation, GAPL should also take up massive green belt developments in 30 acres of land in and around the project in consultation with the Forest Department. Detailed plan indicating the area identified for the mangrove plantation as indicated at (i) above and for green belt development along with the financial outlay shall be provided to this Ministry within 6 months from the date of receipt of this letter.
- (iii) No dredging activity shall be carried out.
- (iv) No ground water should be tapped at the project site / within CRZ area.
- (v) Adequate facilities as listed in National Oilspill Disaster Contingency Plan for the Mundra Port which includes fire fighting equipment of 1200 cum/hr spray capacity with 2 monitor fitted with the dolphin 2,3,4 and 5, oil spill dispersant foam liquid etc. should be maintained and put into operation immediately in case of oil spills.
- (vi) The duration of construction phase of the project should be kept to a maximum of 8 months to avoid impact on marine environment and birds as suggested by NIO.
- (vii) It shall be ensured that there is no displacement of people, houses or fishing activity as a result of the project.
- (viii) The project proponents must make necessary arrangements for disposal of solid wastes and for the treatment of effluents/liquid wastes. It must be ensured that the effluents/liquid wastes are not discharged into the seawater.
- (ix) The camps of labour shall be kept outside the Coastal Regulation Zone area. Proper arrangements for cooking fuel shall be made for the labour during construction phase so as to ensure that mangroves are not cut/destroyed for this purpose.
- (x) Regular drills should be conducted to check the effectiveness of the on-site Disaster Management Plan. The recommendations made in the Environmental Management Plan and Disaster Management Plan, as contained in the Environmental Impact Assessment and Risk analysis reports of the project, shall be effectively implemented.
- (xi) The entire stretch of the pipelines shall be buried underground except at the booster pumping station, which will be properly fenced and the station would be manned round the clock. The buried lines will be protected with anticorrosive coaltar based coating. The coating will be tested by high voltage detector in accordance with prescribed standards.
- (xii) Markers shall be installed at every 30 m to indicate the position of the line. Regular patrolling of the pipelines needs to be done. This will help in identifying any activity that have the potential to cause pipeline damage or to identify small leaks whose effects are too small to be detected by instrument.
- (xiii) There should be display boards at critical locations along the pipeline viz road/rail/river crossings giving emergency instructions as well as contact details of GAPL. This will ensure prompt information regarding location of accident during any emergency. Emergency Information board should contain emergency instructions in addition to contact details.

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- (xiv) During operation phase, proper precautions should be taken to avoid any oil spills and no oily wastes shall be discharged into the water bodies.
  - (xv) All conditions stipulated by the Forest and Environment Department, Government of Gujarat should be strictly implemented.
  - (xvi) All conditions stipulated by Gujarat Pollution Control Board vide their letter No. PC/NOC/381/1039 dated 8<sup>th</sup> January, 2002 should be implemented.

**B. GENERAL CONDITIONS:**

- (i) Construction of the proposed structures should be undertaken meticulously confirming to the existing Central/local rules and regulations. All the construction designs/drawings relating to the proposed construction activities must have approvals of the concerned State Government Department/Agencies.
- (ii) The project authorities should take appropriate community development and welfare measures for the villagers in the vicinity of the project site, including drinking water facilities. A separate fund should be allocated for this purpose.
- (iii) To meet any emergency situation, appropriate fire-fighting system should be installed. Appropriate arrangements for uninterrupted power supply to the environment protection equipment and continuous water supply for the fire fighting system should be made.
- (iv) A separate Environment Management Cell with suitably qualified staff to carry out various environment related functions should be set up under the charge of a Senior Executive who will report directly to the Chief Executive of the Company.
- (v) The funds earmarked for environment protection measures should be maintained in a separate account and there should be no diversion of these funds for any other purpose. A year-wise expenditure on environmental safeguards should be reported to this Ministry's Regional Office at Bhopal.
- (vi) Full support should be extended to the officers of this Ministry's Regional Office at Bhopal and the officers of the Central and State Pollution Control Board by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigative measures and other environmental protection activities.
- (vii) In case of deviation or alteration in the project including the implementing agency, a fresh reference should be made to this Ministry for modification in the clearance conditions or imposition of new one for ensuring environmental protection. The project proponents should be responsible for implementing the suggested safeguard measures.
- (viii) This Ministry reserves the right to revoke this clearance, if any of the conditions stipulated are not complied with to the satisfaction of this Ministry.
- (ix) This Ministry or any other competent authority may stipulate any other additional conditions subsequently, if deemed necessary, for environmental protection, which should be complied with.
- (x) A copy of the clearance letter should be marked to the concerned Panchayat/local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.
- (xi) State Pollution Control Board/Committee should display a copy of the clearance letter at the District Industries Center and Collector's Office/ Tehsildar's Office for 30 days from the date of receipt of this letter.
- (xii) The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded

- environmental clearance and copies of clearance letters are available with the Gujarat State Pollution Control Board and may also be seen at website of the Ministry of Environment & Forests at <http://www.envfor.nic.in/>.
- (xiii) The project proponents should inform Regional Office Bhopal 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 work.
  - (xiv) The project proponent will obtain the Forest clearance for any stretch of land if it passes through the forest land.
  - (xv) So as to maintain ecological features and avoid damage to the ecosystem, movement of vehicles in the Inter Tidal Zone shall be restricted to the minimum.
  - (xvi) Since the pipeline passes along mangrove areas and the mud flats of Mundra area, the project proponents will ensure adequate protection to the mangroves.
  - (xvii) Budgetary break up for Environmental Management Plan for the project to be mentioned.

The above mentioned stipulations will be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (protection) Act, 1986, the Hazardous Chemicals (Manufacture, Storage and Import) Rules, 1989, the Coastal Regulation Zone Notification, 1991 and its subsequent amendments and the Public Liability Insurance Act, 1991 and the Rules made thereunder from time to time. The project proponents should also ensure that the proposal complies with the provisions of the approved Coastal Zone Management Plan of Gujarat and the Supreme Court's order dated 18<sup>th</sup> April, 1996 in the Writ Petition No.664 of 1993 to the extent the same are applicable to this proposal.

( Dr. E.V. Muley )

Additional Director (Scientific)

To

The Chairman,  
Gujarat Adani Port Ltd.  
Registered Office: "Adani House", Near Mithakhali Circle  
Navrangpura, Ahmedabad - 380 009.  
Gujarat

Copy to:

1. Deputy Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office, Western Region, Arera Colony, Bhopal.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 110032.
3. Shri J. K. Vyas, Director (Environment), Forests & Environment Department, Government of Gujarat, Block No.14, 8<sup>th</sup> Floor, Sachivalaya, Gandhinagar - 382010.
4. DIG (SU), Regional Office Cell, Ministry of Environment & Forests, New Delhi.
5. The Chairman, Gujarat State Pollution Control Board, Gandhinagar.
6. Guard File.
7. Monitoring Cell.
8. Director (EI) Ministry of Environment & Forests, New Delhi.

( Dr. E.V. Muley )

Additional Director (Scientific)