To

The Chief Engineer (Project & Marine),
M/s Inland Waterways Authority of India,
A-13, Sector-1, Noida - 201 301,
Uttar Pradesh.

Subject: Development of Stretch between Pankapal to Dhamra and Paradip of National Waterway No 5 in the State of Odisha for Navigation by M/s Inland Waterways Authority of India – ToR reg.

Sir,

This has reference to your letter No. IWAI/NW-5/7/2014-15 dated 10.11.2014 forwarding along with application seeking for Terms of Reference for the aforesaid project.

2. The proposal was considered by the EAC in its 141st meeting held on 26th – 28th November, 2014 and the proponent has informed that:

   i. Inland Waterways Authority of India (IWAI) an autonomous and Statutory Body under the administrative control of Ministry of Shipping came into existence on 29.10.1986.

   ii. Responsible for development, management, maintenance and regulation of the declared National waterways (NWs) for inland navigation and promotion of Inland Water Transport in the country.

   iii. Five NWs declared with total length of 4332 km and sixth one under consideration of Govt. for declaration.

    iv. NW-5 of 588 km with East Coast Canal, Brahmani and Mahanadi delta river system was declared w.e.f. 25.11.2008.

   v. Commercially viable stretch between Coal mines of Talcher to Paradip Port & Dhamra Port for 332 km being developed for providing the sustainable and economically viable mode of transport.

   vi. A MOU between Govt. of Odisha, Paradip Port Trust (PPT), Dhamra Port Company Ltd. (DPCL) & IWAI entered for developing the identified stretch under two phases.

      • 1\textsuperscript{st} Phase = 201 km between Pankapal to Dhamra & Paradip

      • 2\textsuperscript{nd} Phase = 131 km between Talcher to Pankapal
vii. Initially development of Phase-I is being taken up on priority basis.
viii. Main component of project:
   a. Development of Fairway with 3.0m LAD for movement of cargo vessels of above 1500T.
   b. Terminal facilities.
   c. Navigational aids.
ix. Fairway Development:
   - Dredging & excavation of 16 Mcum in both tidal and non-tidal reaches.
   - Dismantling and reconstruction of two barrages with navigation locks at Sujanpur and Jokadia.
   - Bank Protection Works with widening of narrow stretches.
x. Terminal Facilities
   - Temporary Terminal with pontoon & gangway by IWAI at Jokadia.
   - Approach road, storage and handling facilities.
   - Utilities, amenities and services.
xi. Proposed to handle cargo of 1.65 MTPA (Iron Ore, Thermal Coal (imported), Industrial Products, Other Minerals)
 xii. Daily demand of potable water: 5,000 l/day. Source: River
xiii. Quantity of Capital Dredging -16 M cum, Dredged material can be used for strengthening the existing embankment on both sides of the river; constructing new embankment; reclaiming land in low lying areas.
xiv. The proposed Waterway of 110 Km, falls under CRZ area.
 xv. **Wildlife issues**: Project is located within 5 km from the boundary of Protected Areas and Eco-sensitive areas.
   (a) The Bhitarkanika Wildlife Sanctuary is about 1 km from the project site. Kalibhanj Dian Reserved Forest is an island located at the mouth of Dhamra River. The proposed waterway skirts off the Reserved Forest for about a stretch of 9.7 km. This island is a part of Bhitarkanika Wildlife Sanctuary.
   (b) The waterway passes parallel to the boundary of Gahirmatha Marine National Park at a varying distance of 3.0 to 5.0 km on the shore side through the Jambu Creek from the mouth of Hansua River to the mouth of Kharinasi River.
   (c) Waterway passes through Hatamundia Reserved Forest.
   xvi. Proposed project does not involve diversion of Forest Land
   xvii. **Cost**: The cost of the project is approximate Rs. 824.24 Crores.
   xviii. There are no **court cases/violation** pending with the project proponent.
   xix. DPR has been prepared by M/s WAPCOS (A Govt. of India Undertaking).
3. The Expert Appraisal Committee (EAC) has considered the proposal in its 141\textsuperscript{st} meeting held on 26\textsuperscript{th} – 28\textsuperscript{th} November, 2014 and recommended for the TOR with the following specific TOR with general conditions for preparation of the Environment Impact Assessment (EIA) Report and Environment Management Plan (EMP) in respect of the Development of Stretch between Pankapal to Dhamra and Paradip of National Waterway No 5 in the State of Odisha for Navigation by M/s Inland Waterways Authority of India:

   (i) Submit a copy of feasibility study conducted for the proposed project.

   (ii) Hydrodynamic study on waterway along with sea inlets to ensure water availability throughout the year along with proposed draft along different sections of waterway to meet navigation requirement of proposed vessels with their size with full weight.

   (iii) Location of the proposed terminal within the waterway on the map. Justification should be provided whether CRZ clearance is also required for the terminals in view of their location within the CRZ limits.

   (iv) List of components should be submitted for which the CRZ clearance is required.

   (v) Study on the availability of draught for the movement of the vessels.

   (vi) Requirement of number of bridges, road crossings, obstructions to be dismantled/removed/reconstructed and its impact on the local population as well as on the environment.

   (vii) Describe the project site, geology, topography, climate, transport and connectivity, demographic aspects, socio cultural and economic aspects, villages, settlements and meteorological data.

   (viii) Examine details of land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images.

   (ix) Submit the details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.

   (x) Examine the impact of proposed project on the nearest settlements.

   (xi) Examine baseline environmental quality along with projected incremental load due to the project.
(xii) Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio-economic and health.

(xiii) Examine the details of water requirement, use of treated waste water and prepare a water balance chart.

(xiv) Details of Solid waste generation treatment and its disposal should be examined.

(xv) A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.

(xvi) Details of transport of materials for construction which should include source and availability should be examined.

(xvii) Details of National Highways/State Highways/expressways falling along the corridor and the impact of the development on them be examined.

(xviii) The evaluation of impacts should be analyzed depending upon the nature (positive and negative), duration (short term and long term) reversibility, and magnitude (negligible, low, medium, high), etc. of the impacts based on the objective assessments.

(xix) A map demarcating HTL/LTL prepared through an authorized agency and superimposing the plan if the past project is falling under CRZ should be submitted.

(xx) Recommendations of the SCZMA for the components proposed within CRZ area should be submitted.

(xxi) Details of afforestation measures indicating land and financial outlay should be examined.

(xxii) Identify, predict and assess the environmental and sociological impacts on account of the project. A detailed description with costs estimates of CSR should be incorporated in the EIA/EMP report.

(xxiii) Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.

(xxiv) Details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster should be submitted.

(xxv) R&R details shall be submitted.
General Guidelines

(i) The EIA document shall be printed on both sides, as far as possible.

(ii) All documents should be properly indexed, page numbered.

(iii) Period/date of data collection should be clearly indicated.

(iv) Authenticated English translation of all material provided in Regional languages.

(v) The letter/application for EC should quote the MoEF&CC File No. and also attach a copy of the letter prescribing the TOR.

(vi) The copy of the letter received from the Ministry on the TOR prescribed for the project should be attached as an annexure to the final EIA-EMP Report.

(vii) The final EIA-EMP report submitted to the Ministry must incorporate the issues in TOR and that raised in Public Hearing. The index of the final EIA-EMP report, must indicate the specific chapter and page no. of the EIA-EMP Report where the specific TOR prescribed by Ministry and the issue raised in the P.H. have been incorporated. Questionnaire related to the project (posted on MoEF&CC website) with all sections duly filled in shall also be submitted at the time of applying for EC.

(viii) Grant of TOR does not mean grant of EC.

(ix) Grant of TOR/EC to the present project does not mean grant of approvals in other regulations such as the Forest (Conservation) Act 1980 or the Wildlife (Protection) Act, 1972.

(x) Grant of EC is also subject to Circulars issued under the EIA Notification 2006, which are available on the MoEF&CC website: www.envfor.nic.in.

(xi) The status of accreditation of the EIA consultant with NABET/QCI shall be specifically mentioned. The consultant shall certify that his accreditation is for the sector for which this EIA is prepared.

(xii) On the front page of EIA/EMP reports, the name of the consultant/consultancy firm along with their complete details including their accreditation, if any shall be indicated. The consultant while submitting the EIA/EMP report shall give an undertaking to the effect that the prescribed TORs (TOR proposed by the project proponent and additional TOR given by the MoEF) have been complied with and the data submitted is factually correct (Refer MoEF office memorandum dated 4th August, 2009).
While submitting the EIA/EMP reports, the name of the experts associated with/involved in the preparation of these reports and the laboratories through which the samples have been got analysed should be stated in the report. It shall clearly be indicated whether these laboratories are approved under the Environment (Protection) Act, 1986 and the rules made there under (Please refer MoEF office memorandum dated 4th August, 2009). The project leader of the EIA study shall also be mentioned.

All the TOR points as presented before the Expert Appraisal Committee (EAC) shall be covered.

4. A detailed draft EIA/EMP report should be prepared in terms of the above additional ToRs and should be submitted to the State Pollution Control Board for conduct of Public Hearing. Public Hearing to be conducted for the project in accordance with the provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.

5. You are required to submit the detailed final EIA/EMP prepared as per ToRs including issues raised during Public Hearing to the Ministry for considering the proposal for environmental clearance within 3 years as per the MoEF&CC O.M. No.J-11013/41/2006-IA-II(I) (P) dated 08.10.2014.

6. The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India/National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other Organization(s)/Laboratories including their status of approvals etc. vide notification of the MoEF dated 19.07.2013.

7. The prescribed ToRs would be valid for a period of three years for submission of the EIA/EMP Reports.

(Dr. Manoranjan Hota)
Director

Copy to:
The Member Secretary, Orissa State Pollution Control Board, Bhubaneshwar-751023