To

The General Manager (HSE),
Indian Oil Corporation Ltd,
Paradip Refinery Project,
Village Abhaychandrapur, P.O. Jhimani,
District Jagatsinghpur – 754 141 (Odisha)

Sub: ‘Pet Coke Evacuation Project’ for Paradip Refinery in District Jagatsinghpur (Odisha) by Indian Oil Corporation Ltd – CRZ Clearance - reg.

Sir,

This has reference to your application dated 12.11.2015 submitted the above mentioned proposal to this Ministry for grant of CRZ Clearance in terms of the provisions of the Coastal Regulation Zone (CRZ) Notification, 2011 under the Environment (Protection) Act, 1986.

2. The proposal for ‘Pet Coke Evacuation Project’ for Paradip Refinery in Tehsil Balikuda, District Jagatsinghpur (Odisha) by Indian Oil Corporation Ltd, was considered by the Expert Appraisal Committee (EAC) in the Ministry for Infrastructure Development, Coastal Regulation Zone, Building/ Construction and Miscellaneous projects, in its 153rd EAC meeting held on 18 – 20 November, 2015.

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

(i) **Project proposal:** The proposal is to install Pet Coke Evacuation system for IOCL Paradip Refinery, Odisha which will have an above ground conveyor belt in Tehsil Balikuda of District Jagatsinghpur (Odisha).

(ii) **Justification:** Indian Oil Corporation Limited (IOCL) has set up its 10th Refinery i.e. Paradip Refinery Project (PDRP) at Paradip, Odisha, which is the most modern coastal Refinery in Eastern India. This Refinery will process 15 MMTPA crude to get the desired petroleum products (LPG, Gasoline, Naphtha, Kerosene, ATF etc.) and by-products such as Sulphur, petroleum coke (Pet coke) etc. Pet coke is separated as residue by-product which is a solid high carbon material. This Pet coke can serve as either energy source or carbon source. About 71% total Fuel grade pet coke is used as energy source. IOCL’s Paradip Refinery shall produce about 1.3 million metric tons of pet coke. It is proposed to convey the pet coke from south refinery to north refinery by combination of pipe conveyor and troughed conveyer to silos located at Rapid Loading System (RLS) in north refinery from where the material shall be transported by rail.
4. The proposal was considered by the EAC in its 153rd meeting held on 18-20 November, 2015, and was recommended for grant of CRZ Clearance. As per CRZ Notification, 2011, the proposed pet coke evacuation project will be falling in the following CRZs areas:

(a) CRZ-IA (Mangroves with 50m buffer): 1820.9 m
(b) CRZ- II (Developed area with boundary & road): 137.17 m
(c) CRZ-IVB (Water area of the Santra Creek): 87.35 m

Thus, the total length in the above mentioned CRZs will be 2045.42 m.

The project components: A mechanized system has been envisaged to convey about 1.3 million metric tonnes per annum (MMTPA) pet coke produced from refinery's Delayed Coking unit and coke storage area to Railway Wagon Loading System from where Pet Coke shall be dispatched to different location through Railways. The above system shall comprise the following facilities:

(a) Pet coke evacuation and Transportation through a combination of Pipe conveyor & troughed belt Conveyor
(b) Intermediate storage silos (2 Nos@2000T each)
(c) Rapid Loading System for Railway Rake Loading.
(d) For railway loading, a dedicated railway siding from Paradip railway station to Refinery with Wagon loading facility & required nos. of in-motion weighing system has also been envisaged for the system.

The storm water drain shall be provided with sedimentation pits and oil-water interceptors. Pipe conveyor has been envisaged as transportation media for Petcoke from refinery to Railway wagon Loading System. Also provision of Intermediate storage Silos (2 nos.) each of 2000 T capacity has been envisaged for the system. Capacity of Pipe conveyor has been envisaged 750 TPH (rated). Length of the conveyor system shall be approximately 4.0 Km upto Railway Loading System (RLS) within refinery. Railway alignment with the provision of Y-junction has been envisaged in this Railway loading system.

Electrical power and water requirement shall be met through the existing refinery.

Waste water generation is estimated to be 80 m$^3$/day which will be treated in the existing ETP of refinery.

No solid waste generation involved.

The total 4.6 kilometer long conveyor systems is envisaged to be added in existing system for evacuation of Pet Coke through wagon loading system. Pipe conveyor covers 4.1 kilometer length in total length.

SCZMA Approval: The Odisha Coastal Zone Management Authority (OCZMA) has recommended the project vide their letter No.56/OCZMA dated 25.08.2015.

Investment/Cost: The total cost of the project is Rs.238.5 crore.

Benefits of the project: This project will reduce energy consumption due to closed conveyor mode of transportation of pet coke and reduced transportation losses and fugitive emissions, transit losses are the lowest etc.
and amendments thereto & circulars issued thereon and subject to the compliance of the specific and general conditions as below:-

A. SPECIFIC CONDITIONS:

(i) The project proponent shall undertake periodic inspection and maintenance to avoid spillages, wear and tear of the proposed conveying system.

(ii) Adequate safe guards including alarm and emergency shutdown system shall be provided for the proposed conveying system.

(iii) Proper fire hydrant and fire extinguisher shall be provided at appropriate locations conforming to prevailing norms or fire safety.

(iv) There shall no destruction of the mangrove during construction as well as the operation phase.

(v) The top soil of excavated area during the construction shall be kept separately and to be used for vegetation.

(vi) The labour camps, storage of material and machinery during construction phase shall be located outside the CRZ.

(vii) Crossing of creek shall be on trestles with adequate clearance thereby having negligible impact on the flow.

(viii) During construction, solid waste generated will include packaging and wrapping material, stubs of spent welding electrodes, used rags and housekeeping etc. The project proponent shall ensure disposal of such wastes at approved sites. There shall be no disposal in CRZs.

(ix) There shall be no ground water withdrawal within CRZ limits.

(x) All the recommendations and conditions specified by Odisha Coastal Zone Management Authority (OCZMA) vide letter No. 56/OCZMA dated 25.08.2015, shall be complied with.

(xi) Project proponent shall implement all the recommendations stipulated in the EIA, EMP and Risk Assessment reports pertaining to the project.

(xii) 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.

(xiii) 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.

B. GENERAL CONDITIONS:

(i) ‘Consent to Establish’ shall be obtained from the State Pollution Control Board under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.

(ii) A copy of the clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector’s Office/ Tehsildar’s office for 30 days.
(iii) The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its concerned Regional Office.


6. Officials from the Regional Office of MoEF&CC, Bhubaneswar who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF&CC should be forwarded to the CCF, Regional Office of MoEF&CC, Bhubaneswar.

7. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.

8. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the CRZ Clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

9. 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.

10. The project proponent should 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 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 & 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 Bhubaneswar.

11. 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.

12. 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.

13. 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.
14. 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&CC, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO$_2$, NOx (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.

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&CC by e-mail.

\[\text{(S.K. Srivastava)}\]
\text{Scientist E}

Copy to:
1) The Director and Special Secretary, Forest and Environment Department/Member Secretary, Orissa Coastal Zone Management Authority, Orissa Secretariat, Bhubaneshwar - 1
2) The Chairman, CPCB, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32.
3) Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forests and Climate Change, Regional Office (EZ), A/3, Chandersekharpur, Bhubaneswar - 751 023.
4) The Member Secretariat, Orissa Pollution Control Board, A-118, Nilakantha Nagar, Unit-VIII, Bhubaneswar - 751012.
5) Guard File.
6) Monitoring File.

\[\text{(S.K. Srivastava)}\]
\text{Scientist E}