

F. No. J-11011/642/2009- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan
CGO Complex, Lodhi Road
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Dated 20th September, 2010

To, ✓
Shri Dr. B.N. Sharma, General Manager
(Chem)-IC HSE, Western Offshore Basin
M/s ONGC Limited
Eastern Express Highway
Sion, Mumbai-400 022, Maharashtra.

E-mail: sharmajswarup@hotmail.com ; Fax No.-022-2404 5396.

Subject: Exploratory Drilling in Offshore NELP VI BlockGS-OSN-2004/1 and NEPL VII Block MB-OSN-2005/1, MB-OSN-2005/5 and MB-OSN-2005/6 in West Coast of India by M/s ONGC Limited -Environment clearance reg.

Ref. : Your letter no. ONGC/WOB/HSE/NELP VII/2010 dated 30th June, 1010.

Sir,

This has reference to your letter no. ONGC/WOB/HSE/NELP VII/2010 dated 30th June, 1010 and subsequent communication dated 21st July, 2010 and 5th August, 2010 requesting for environmental clearance/approval of Environmental Impact Assessment report as per EIA Notification, 2006. The Environmental Impact Assessment Notification, 2006 is not applicable to all the above offshore blocks as distance from the coast is beyond 12 nautical miles. However, as per the provisions of Model Production Sharing Contract (MPSC), the proponent need to obtain approval of EIA/EMP report from the MoEF.

2.0 The Ministry of Environment and Forests has examined the proposal and it is noted that M/s ONGC Limited have proposed for Exploratory Drilling in Offshore NELP VI BlockGS-OSN-2004/1 and NEPL VII Block MB-OSN-2005/1, MB-OSN-2005/5 and MB-OSN-2005/6 in West Coast of India. M/s ONGC Limited acquired the block GS-OSN-2004/1 in the NELP VI round of bidding in April, 2007. Blocks MB-OSN-2005/1, MB-OSN-2005/5 & MB-OSN-2005/6 were awarded to Consortium of ONGC & GSPC, under operatorship of ONGC under NEPL VII round of bidding in January, 2009. Distance from the coast for the NELP VI Block GS-OSN-2004/1 is 50-70 km. Distance from the coast for the blocks MB-OSN-2005/1, MB-OSN-2005/5 & MB-OSN-2005/6 is beyond 12 nautical miles. The wells will be drilled up to a depth of 3000 - 4000 mts for the block GS-OSN-2004/1 and are beyond 12 nautical miles from the nearest coasts. The wells will be drilled upto a depth of 2250 -3650 mts for the blocks MB-OSN-2005/1, MB-OSN-2005/5 & MB-OSN-2005/6. Block-wise details of the wells are given below: ✓

S.N	Blocks	No of wells	Cost	Area
01	NELP VI Block GS-OSN-2004/1	2 wells as per commitment in PSC + 2 additional wells in case of HC indication	Rs. 400.00 Crores	6589 km2
02	NEPL VII Blocks MB-OSN-2005/1	5 wells as per commitment in PSC + 2 additional wells in case of HC indication	Rs. 575.00 Crores	2811 km2
03	NEPL VII Blocks MB-OSN-2005/5	3 wells as per commitment in PSC+2 additional wells in case of HC indication	Rs. 375.00 Crores	2402 km2
04	NEPL VII Blocks MB-OSN-2005/6	3 wells as per commitment in PSC+ 2 additional wells in case of HC indication	Rs. 375.00 Crores	2820 km2

3.0 Stacks of adequate height will be provided to the DG sets. Water requirement of 40 m³/day/well will be met from the ONGC's supply at shore and sea water. Drill cuttings (1000 m³/well) will be thoroughly washed and separated from drilling fluid and discharged to the sea intermittently below the water surfaces. Waste water generated on drilling rig will be disposed to the sea after testing for oil content by sheen test. Waste oil will be brought to shore for disposal. Water based mud will be used. Synthetic oil based mud will be used only in case of difficulty in formation.

4.0 All the offshore/onshore oil & gas exploration projects have been listed at S. no. 1 (b) as category 'A' projects as per the EIA notification 2006 but the project activity is beyond 12 nautical miles. The above proposal was considered in 6th meeting of the Expert Appraisal Committee (Industry-2) held on 14th December, 2009 for preparation of EIA/EMP. The Committee approved the EIA/EMP in 13th EAC (I-2) meeting held during 19th-20th August, 2010.

5.0 Public hearing is not applicable as the activities are located in the offshore and beyond territorial water (12 nautical miles).

6.0 The environmental aspects of the above project have been examined and the Ministry of Environment and Forests hereby accords environmental clearance subject to strict compliance of the following conditions:-

A. SPECIFIC CONDITIONS:

- i) The company shall undertake conservation measures to protect the marine animals / biota in the region.
- ii) The International 'Good Practices' adopted by the Petroleum Industry viz international norms to safeguard the Coastal and Marine biodiversity shall be implemented by the company.
- iii) The company shall monitor the petroleum hydrocarbons and heavy metals concentration in the marine fish species regularly and submit report to the Ministry.
- iv) Total water requirement shall not exceed 40 m³/day/well. Water based mud system shall be used.
- v) Water based drilling mud shall be discharged to the sea after proper dilution as per Environment (Protection) Rules vide G.S.R 546(E) dated 30th August, 2005.

- vi) The drill cutting (DC, 1000 m³/well) wash water shall be treated to conform to limits notified under the Environment (Protection) Act, 1986, before disposal into sea. The treated effluent shall be monitored regularly.
- vii) M/s ONGC shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore and offshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.
- viii) Treated wastewater (produced water or formation water or sanitary sewage) shall comply with the marine disposal standards notified under the Environment (Protection) Act, 1986.
- ix) All the hazardous waste generated at the rig/offshore facility shall be properly treated, transported to on shore and disposed of in accordance with the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008. Used oil shall be sold to MoEF/CPCB authorized recyclers/reprocessors.
- x) Requisite infrastructure facilities shall be provided near the offshore installations so that booms and skimmers/chemical dispersants could be deployed immediately in case of oil leakage from the installations. Efforts shall be made to curtail the oil slick within 500 meters of the installation and accordingly, action plan and facilities to check the oil slick beyond 500 meters shall be provided.
- xi) Approval from DG Shipping under the Merchant Shipping Act prior to commencement of the drilling operations shall be obtained. At least 30 days prior to the commencement of drilling, the exact location shall be intimated to the Director General of Shipping and the Company shall abide by any direction he may issue regarding ensuring the safety of navigation in the area.
- xii) The Company shall take necessary measures to reduce noise levels such as proper casing at the drill site and meet DG set norms notified by the MoEF. Height of all the stacks/vents shall be provided as per the CPCB guidelines.
- xiii) The flare system shall be designed as per good oil field practices and Oil Industry Safety Directorate (OISD) guidelines. The stack height shall be provided as per the regulatory requirements and emissions from stacks will meet the MOEF/CPCB guidelines.
- xiv) The design, material of construction, assembly, inspection, testing and safety aspects of operation and maintenance of pipeline and transporting the natural gas/oil shall be governed by ASME/ANSI B 31.8/B31.4 and OISD standard 141.
- xv) The project authorities shall install SCADA system with dedicated optical fibre based telecommunication link for safe operation of pipeline and Leak Detection System. Intelligent pigging facility shall be provided for the entire pipeline system for internal corrosion monitoring. Coating and impressed current cathodic protection system shall be provided to prevent external corrosion.
- xvi) The project proponent shall also comply with the environmental protection measures and safeguards recommended in the EIA /EMP/RA/NIO report. ✓

- xvii) On completion of activities, the well shall be either plugged and suspended (if the well evaluation indicate commercial quantities of hydrocarbon) or killed and permanently abandoned with mechanical plugs and well cap. If well is suspended, it shall be filled with a brine solution containing small quantities of inhibitors to protect the well.
- xviii) Recommendations mentioned in the Risk Assessment & Consequence Analysis and Disaster Management Plan shall be followed.
- xix) Full drawings and details of Blow Out Preventor to encounter well kick due to high formation presence, if encountered, shall be submitted to the Ministry within 3 months of the issue of environment clearance.
- xx) Adequate funds both recurring and non-recurring shall be earmarked to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government alongwith the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.

B. GENERAL CONDITIONS:

- i. No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- ii. The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 2000 as amended subsequently. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained, wherever applicable.
- iii. The project authorities must strictly comply with the rules and regulation with regarding to handling and disposal of Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 wherever applicable. Authorization from the State Pollution Control Board must be obtained for collections/treatment/ storage disposal of hazardous wastes.
- iv. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
- v. A separate Environmental Management Cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.
- vi. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / 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 web site of the company by the proponent.

- vii. The project proponent shall upload the status of compliance of the stipulated environment clearance 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 the 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 projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- viii. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry / CPCB / SPCB shall monitor the stipulated conditions.
- ix. 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 alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.
- x. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office.
- xi. Project authorities 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 commencing the land development work.


7.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

8.0 The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

9.0 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.

10.0 The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) ✓


Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules



(Dr. P. B. Rastogi)
Scientist 'F'

Copy to :

1. The Secretary, Department of Environment and Forests, Govt. of Maharashtra, Mumbai - 400 001, Maharashtra.
2. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office, Link Road No. 3, E - 5, Arera Colony, Bhopal - 462 016, M.P.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Maharashtra Pollution Control Board, Shri Chatrapati Shivaji Maharaj Municipal Market Building, 4th Floor, Mata Ramabai Ambedaker Road, Mumbai - 400 001, Maharashtra.
5. Scientist 'G' (IA), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Guard File.
8. Monitoring File.
9. Record File.



(Dr. P. B. Rastogi)
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