



**F. No.J-11011/339/2016-IA-II (I)**  
Government of India  
Ministry of Environment, Forest & Climate Change  
Impact Assessment Division

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Indira Paryavaran Bhavan,  
Vayu Wing, 3<sup>rd</sup> Floor, Aliganj,  
Jor Bagh Road, New Delhi-110 003

Dated: 22<sup>nd</sup> April, 2020

To

**M/s Oil and Natural Gas Corporation Ltd,**  
3<sup>rd</sup> Floor, Tower- A, Pandit Deen Dayal Upadhyay Urja Bhawan,  
5A & 5B, Nelson Mandela Marg,  
Vasant Kunj, **N Delhi** -70

**Sub: Offshore oil/gas development by drilling of four wells by M/s Oil and Natural Gas Corporation Limited under the NELP V Offshore BlockCB-OSN-2003/1 at Aliabet Field, Ankleshwar Asset (Gujarat) - Environmental Clearance and CRZ Clearance- reg.**

Sir,

This has reference to your online proposal No.IA/GJ/IND2/60507/2016 dated 27<sup>th</sup> June, 2019 along with the EIA/EMP report for the above mentioned project.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for Offshore oil/gas development by drilling of four wells by M/s Oil and Natural Gas Corporation Limited under the NELP V Offshore BlockCB-OSN-2003/1 at Aliabet Field, Ankleshwar Asset (Gujarat).
3. Land area available for the project is 6.4 ha. The estimated project cost is Rs. 156.40 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 1.17 crores and the Recurring cost (operation and maintenance) will be about Rs. 0.1 Crore per annum. The project will provide employment for 20 persons directly and 30 persons indirectly.
4. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc within 10 km from the project site. Narmada estuary is at a distance of 3.5 km in NW direction.
5. Total water requirement of 25 cum/day will be met from tankers supply. DG sets of 1250 kVA capacity will be used as standby during power failure. Air emissions from point sources will be mainly from diesel engines and power generators. To control SO<sub>2</sub> emissions HSD with low sulphur content will be used.
6. The project/activity is covered under category A of item 1(b) 'Offshore and onshore oil and gas exploration, development & production' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC).
7. The terms of reference (ToR) for the project was granted on 29<sup>th</sup> April, 2017. Public hearing for the proposed project has been exempted as per the provisions contained in Para 7(ii) of EIA Notification 2006.

  
EC for M/s Oil and Natural Gas Corporation Ltd

8. The proposal for environmental clearance was considered by the EAC (Industry-2) in its meetings held on 29-31 July, 2019, 26-27 September, 2019 and 25-27 February, 2020. The project proponent and their accredited consultant M/s Global Management and Engineering Consultant International have presented the EIA/EMP report. The Committee found the EIA/EMP report to be satisfactory, complying with the ToR, and recommended the project for grant of environmental clearance and CRZ Clearance.

9. The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

10. The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended the proposal.

11. The Committee noted that the present proposal involves CRZ and environmental clearance and the Committee considered the recommendations of GCZMA forwarded to this Ministry vide letter dated 24<sup>th</sup> April, 2019. The Committee found the EIA/EMP report and marine environment studies is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.

12. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for **Offshore oil/gas development by drilling of four wells by M/s Oil and Natural Gas Corporation Limited** under the NELP V Offshore BlockCB-OSN-2003/1 at Aliabet Field, Ankleshwar Asset (Gujarat), under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions as under:-

**A. Specific Condition**

- (i) Conditions stipulated by the GCZMA shall be satisfactorily implemented.
- (ii) No drilling shall be carried out in Protected Areas.
- (iii) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- (iv) As proposed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged to any surface water body, sea and/or on land. Mobile ETP along with RO plant shall be installed to treat the waste water.

(v) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

(vi) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.

(vii) Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, CH<sub>4</sub>, HC, Non-methane HC etc.

(viii) During exploration, production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.

(ix) The project proponent also to ensure trapping/storing of the CO<sub>2</sub> generated, if any, during the process and handling.

(x) Approach road shall be made pucca to minimize generation of suspended dust.

(xi) The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.

(xii) Total fresh water requirement shall not exceed 25 cum/day proposed to be met tanker supply, and prior permission shall be obtained from the concerned regulatory authority.

(xiii) The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.

(xiv) Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30<sup>th</sup> August, 2005.

(xv) Water requirement for onshore drilling is permitted to the tune of 25 M3 per day per well. PP to install Mobile ETP coupled with RO to reuse the treated water in drilling system. Size of the waste shall be equal to the Hole volume+ volume of drill cutting and volume of discarded mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix with waste water. Alternatively, if possible pit less drilling be practiced instead of above.

(xvi) Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven

technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.

(xvii) The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.

(xviii) The company shall develop a contingency plan for H<sub>2</sub>S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H<sub>2</sub>S detectors in locations of high risk of exposure along with self containing breathing apparatus.

(xix) The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and Regional Office.

(xx) Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.

(xxi) Emergency Response Plan shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.

(xxii) On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.

(xxiii) At least 2% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.

(xxiv) No lead acid batteries shall be utilized in the project/site.

(xxv) Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.

(xxvi) Oil content in drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office.

(xxvii) Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

## **B. General Conditions:**

(i) The Project Proponent shall obtain all other statutory/necessary permissions/recommendations/NOCs prior to start of construction/operation of the project, which inter alia include, permission/approvals under the Forest (Conservation) Act, 1980; the Wildlife (Protection) Act, 1972; the Coastal Regulation Zone Notification, 2019, as amended from time to time, and other Office Memoranda/Circular issued by the Ministry of Environment, Forest and Climate Change from time to time, as applicable to the project.

(ii) The project proponent shall ensure compliance of 'National Emission Standards', as applicable to the project, issued by the Ministry from time to time. The project proponent shall also abide by the rules/regulations issued by the CPCB/SPCB for control/abatement of pollution.

(iii) The project authorities shall adhere to the stipulations made by the State Pollution Control Board/Committee, Central Pollution Control Board, State Government and any other statutory authority.

(iv) The project proponent shall prepare a site specific conservation plan and wildlife management plan in case of the presence of Schedule-1 species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approval. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.

(v) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. 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.

(vi) The energy source for lighting purpose shall be preferably LED based, or advance having preference in energy conservation and environment betterment.

(vii) The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.

(viii) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 shall be followed.

(ix) 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 Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

(x) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and to utilize the same for process requirements.

(xi) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all

employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.

(xii) The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(xiii) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented.

(xiv) The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.

(xv) A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

(xvi) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.

(xvii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.

(xviii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.

(xix) The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated shall be submitted 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 environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.

(xx) 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/Committee and may also be seen at Website of the Ministry and at <https://parivesh.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 concerned Regional Office of the Ministry.

(xxi) The 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 start of the project.

(xxii) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

**13.** The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

**14.** Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

**15.** Any appeal against this environmental 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.

**16.** The above conditions will 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, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

**17.** This issues with the approval of the competent authority.

(डा. आर. बी. लाल)  
(Dr. R. B. LAL)  
वैज्ञानिक 'ई' / Scientist 'E'  
पर्यावरण, वन एवं जल संसाधन विभाग  
Min. of Environment, Forest and Climate Change  
भारत सरकार, नई दिल्ली  
Govt. of India, New Delhi

(Dr. R. B. Lal)

Scientist 'E' / Additional Director

**Copy to: -**

1. The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8<sup>th</sup> Floor, **Gandhi Nagar** - 382 010 (Gujarat)
2. The Dy. Director General (Western Zone), MoEF&CC, Regional Office, E-5, Arera Colony, Link Road -3, Ravishankar Nagar, **Bhopal** - 462 016 (MP)
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, **Delhi** -32
4. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhawan, Sector 10 A, **Gandhi Nagar**-382 043 (Gujarat)
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, **New Delhi** - 3
6. District Collector, **Bharuch**, (Gujarat)
7. Guard File/Record File/Monitoring File/Website of MoEF&CC

(Dr. R. B. Lal)

Scientist 'E' / Additional Director

