



**File No. IA-J-11011/86/2019-IA-II(I)**

Government of India  
Ministry of Environment, Forest & Climate Change  
Impact Assessment Division

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

Dated: 17<sup>th</sup> March, 2021

To,

**M/s Oil and Natural Gas Corporation Limited,**  
Jorhat and Golaghat Districts, Assam

**Sub: Onshore Development and Production of oil & gas from 53 wells in 7 ML blocks by M/s Oil and Natural Gas Corporation Limited located in Jorhat and Golaghat districts, Assam - Consideration of Environment Clearance regarding.**

Sir,

This has reference to your online proposal No. IA/AS/IND2/99149/2019, dated 25<sup>th</sup> November, 2020 for environmental clearance to the above mentioned project.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for Onshore Development and Production of oil & gas from 53 wells in 7 ML blocks by M/s Oil and Natural Gas Corporation Limited located in Jorhat and Golaghat districts, Assam.

3. All offshore and onshore oil and gas exploration, development & production proposals are listed at S.N. 1(b) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

4. The ToR for the project was granted by Ministry vide letter No. IA-J-11011/86/2019-IA-II(I) dated 14<sup>th</sup> April, 2019. Public Hearing for the proposed project was conducted by the Assam Pollution Control Board on 30<sup>th</sup> September 2020, at Borbali ME School field, Sarupathar, Golaghat and on 20<sup>th</sup> October 2020 at Borholla, Jorhat respectively. Public Hearing was chaired by the Additional Deputy Commissioner Golaghat and Jorhat respectively. Major issues raised during public hearings included queries on CSR activities like installation of Solar lights, repair of roads and provision of drinking water, which are already a part of CSR activities of ONGC. ONGC has provided estimated budget and an expected timeline for completion of the activities in response to issues raised in the Public hearing. There is no Litigation Pending against the proposal.

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**5. The details of products and capacity are as under: -**

S.No	Product Details	Existing Quantity	Proposed Quantity	Total quantity (Estimated)
1	Development & production well	None	1.76 MMt	1.76 MMt

**6.** Total land area of the seven PML blocks is 231.2 sq. km. The estimated project cost is Rs. 1325 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 15 lakh and the Recurring cost (operation and maintenance) will be about Rs. 12 lakh per annum. Total Employment will be 30 persons as direct & 30 persons indirect. Total budget of Rs. 1.7 Crore is kept to address the issues raised during the public hearing. The company shall implement this budget in comprehensive (village-wise) development plan in 130 villages as submitted in Ministry.

**7.** There are no national parks, Biosphere Reserves, Tiger/Elephant Reserves, etc. within 10 km distance from the project site. However, some areas under of East Lakhbari, Golaghat Extn IIA and Golaghat Extn IIA (addl) falls within ESZ of Nambor Wildlife Sanctuary. Also, some parts of East Lakhbari PML, kalyanpur PML, Golaghat Extn IIA (addl) are located within Nambar South Reserved Forest and Rengma Reserved Forest. Dhansiri River flows on the western side of the East Lakhbari PML and Kalyanpur PML block boundaries. The river flows on both the eastern and western sides of the Golaghat Extn IIA PML and Golaghat Extn IIA (addl) PML; and the river flows in a highly meandering course within the block along the eastern boundary.

**8.** Ambient air quality monitoring was carried out at 8 locations during October 2019 to January 2020 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (72.60– 78.00µg/m<sup>3</sup>), PM<sub>2.5</sub> (37.58 – 40.20 µg/m<sup>3</sup>), SO<sub>2</sub> (10.32 – 20.48 µg/m<sup>3</sup>) and NO<sub>2</sub> (17.10- 34.90µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.56 µg/m<sup>3</sup>, 0.75µg/m<sup>3</sup> and 16.0 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>x</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

**9.** Total water requirement is 25 m<sup>3</sup>/day of which fresh water requirement of 15m<sup>3</sup>/day will be met through Tankers. The plant will be based on Zero Liquid discharge system. Effluent of 20 m<sup>3</sup>/day quantity will be treated through installation of Effluent Treatment Plant.

**10.** The power requirement during the site preparation and construction phase would be met by 3 Nos. of DG Sets. The power requirement for drilling will be met by using the four Diesel Generator Sets of 750 kVA, 3 working and 1 standby. Stack of 7.7 m will be provided as per CPCB norms to the proposed DG sets. Multi cyclone separator/ bag filter with a stack will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm<sup>3</sup> for the proposed boilers



**11. Details of Process emissions generation and its management:**

The operation of DG sets, movement of vehicles and machineries during construction and drilling, flaring of natural gas will result in the generation of air pollutants, if gas reserves are encountered during drilling operations. Stacks will be used with DG sets and flare system as per CPCB norms.

**12. Details of Solid waste/Hazardous waste generation and its management:**

Drill cuttings and spent drilling mud will be disposed to HDPE lined pit within the drill site. The kitchen waste will be disposed through approved waste handling contractors. Recyclable wastes will be periodically sold to authorized local waste recyclers. Hazardous waste (waste and used oil) will be managed in accordance with Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016.

**13.** The proposal was considered by the EAC in its 30<sup>th</sup> meeting held on 17<sup>th</sup> February, 2021 in the Ministry, wherein the project proponent and their consultant M/s. AECOM Indian Private Limited, presented the EIA/EMP report as per the ToR. The Committee found the EIA/EMP report complying with the ToR and recommended the project for grant of environmental clearance.

**14.** 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.

**15.** 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 Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee. 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** for grant of environmental clearance.

**16.** The environmental clearance granted to the project/activity is strictly under



the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain 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, from the State Pollution Control Board, prior to construction & operation of the project.

**17.** 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 **Onshore Development and Production of oil & gas from 53 wells in 7 ML blocks by M/s Oil and Natural Gas Corporation Limited located in Jorhat and Golaghat districts, Assam**, 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). The company shall 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.
- (ii). No pipelines or its part shall be laid in the Forest land/Protected Area without prior permission/approval from the Competent Authority.
- (iii). 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.
- (iv). During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- (v). The project proponent also to ensure trapping/storing of the CO<sub>2</sub> generated, if any, during the process and handling.
- (vi). Approach road shall be made pucca to minimize generation of suspended dust.
- (vii). The project proponent 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.

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- (viii). Total fresh water requirement shall not exceed 15m<sup>3</sup>/day will be met through Tankers. Prior permission shall be obtained from the concerned regulatory authority. Mobile ETP coupled with RO shall be installed 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.
- (ix). The company shall construct the garland drain 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.
- (x). 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 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.
- (xi). 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.
- (xii). The project proponent shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At fixed installations or plants use of 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.
- (xiii). The project proponent 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.
- (xiv). Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations.
- (xv). 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 DGH / Indian Petroleum Regulations.

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- (xvi). As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall be completed within time as proposed.
- (xvii). No lead acid batteries shall be utilized in the project/site.
- (xviii). Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xix). Oil content in the drill cuttings shall be monitored and report & shall sent to the Ministry's Regional Office.
- (xx). The project proponent 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 Condition:**

- (i) 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/SEIAA, as applicable. 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/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (ii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iii) 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

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

- (iv) 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. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (v) 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.
- (vi) 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.
- (vii) 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.
- (viii) 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.
- (ix) 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.

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- (x) 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.
- (xi) 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.

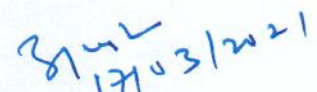
**18.** The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the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

**19.** 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.

**20.** 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.

**21.** 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.

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

  
(Ashok Kr. Pateshwary)  
Director

**Copy to: -**

1. The Secretary, Environment & Forest, H-Block, 2<sup>nd</sup> Floor, Janata Bhawan, Dispur, Guwahati - 781006 (Assam)
2. The Chief Conservator of Forests (North Eastern Zone), Ministry of Environment, Forest and Climate Change, Regional Office, Law-U- Sib, Lumbatngen, Near MTC Workshop, Shillong-793021 (Meghalaya)
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Pollution Control Board Assam, Bamunimaidam, Guwahati - 21 (Assam)

5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, New Delhi
6. District Collector, Jorhat and Golaghat, Assam
7. Guard File/Monitoring File/ Parivesh Portal /Record File

*31/03/2021*

**(Ashok Kr. Pateshwary)**  
**Director**

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