



**F.No. IA-J-11011/44/2018- IA II(I)**  
**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**(IA-II Section)**

**By Speed Post/Online**

Indira Paryavaran Bhawan  
Jorbagh Road, New Delhi - 3

Dated: 15<sup>th</sup> April, 2020

To

**M/s Oil and Natural Gas Corporation Limited**  
Deendayal Urja Bhavan, 5, Nelson Mandela Marg  
Vasant Kunj, Delhi - 110070

Email: head\_env@ongc.co.in

**Sub: Exploration in Kangra-Mandi PEL Block in Mandi and Kangra Districts, Himachal Pradesh by M/s Oil and Natural Gas Corporation Limited - Environmental Clearance - reg.**

Sir,

This has reference to your proposal No. IA/HP/IND2/72539/2018 dated 13<sup>th</sup> August 2019, submitting the EIA/EMP report on the above subject matter.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for exploration in Kangra-Mandi PEL Block in Mandi and Kangra District, Himachal Pradesh by M/s Oil and Natural Gas Corporation Limited.

3. The block area available for the drilling operations is 1828 sqkm, out of which land requirement for each will be 1.5 ha. The estimated project cost is Rs. 215 crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 15 crores and the recurring cost (O&M) will be about Rs. 0.4 crores per annum. The project will provide employment for 30-40 persons in shifts at site. Industry proposes to allocate Rs. 1.61 crore towards Corporate Environment Responsibility.

4. There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the block area. Beas river is flowing through the block area.

5. Total fresh water requirement is estimated to be 20 cum/day proposed to be met from tanker supply. Effluent of 6 cum/day will be treated through mobile ETP system. Domestic effluent of 2 cum/day will be disposed through septic tank and soak pit.

Power requirement during operation will be met through 3 x 1250 kVA DG sets. Additionally, 1 x1250 kVA DG set shall be kept as standby for drilling activities.

Drill cuttings of approximately 150-450 cum/well shall be stored in well designed HDPE line pit at site, and after drying by solar evaporation shall be covered with top layer of soil.

EC for M/s Oil and Natural Gas Corporation Limited

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6. The project/activity was 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 in the Ministry. The Ministry vide Notification dated 16<sup>th</sup> January, 2020 has categorized all projects in respect of off-shore and onshore oil and gas exploration as 'B2' projects.

7. Standard Terms of Reference (ToR) for the project was issued on 22<sup>nd</sup> March 2018. Public Hearing for the project has been conducted by the Himachal Pradesh State Pollution Control Board on 14<sup>th</sup> June, 2019 at District Mandi and on 15<sup>th</sup> June, 2019 at District Kangra.

8. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meeting held on 26-27 September 2019 in the Ministry, wherein the project proponent and their accredited consultant M/s ABC Technolabs India Pvt Ltd, 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.

9. 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 Exploration in Kangra-Mandi PEL Block in Mandi and Kangra District, Himachal Pradesh by M/s Oil and Natural Gas Corporation Limited**, under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as under:-

- (i) 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.
- (ii) 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.
- (iii) 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.
- (iv) 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.
- (v) 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.



- (vi) During exploration, production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- (vii) The project proponent also to ensure trapping/storing of the CO<sub>2</sub> generated, if any, during the process and handling.
- (viii) Approach road shall be made pucca to minimize generation of suspended dust.
- (ix) 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.
- (x) Total fresh water requirement shall not exceed 20 cum/day. 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.
- (xi) 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.
- (xii) 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.
- (xiii) 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.
- (xiv) 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.
- (xv) 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.



- (xvi) 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.
- (xvii) 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.
- (xviii) Emergency Response Plan shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.
- (xix) 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.
- (xx) All the commitments made to the public during public hearing/consultation shall be satisfactorily implemented.
- (xxi) 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.
- (xxii) No lead acid batteries shall be utilized in the project/site.
- (xxiii) Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.
- (xxiv) Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office.
- (xxv) 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.

**10.** The grant of environmental clearance is further subject to compliance of other terms and conditions mentioned in the Ministry's OM No. 22-34/2018-IA.III dated 9<sup>th</sup> August, 2018 regarding standardization of environmental clearance conditions related to Offshore and onshore oil and gas exploration, development & production, as applicable to the proposed project.

**11.** 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.

12. 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 the Environment (Protection) Act, 1986.

13. 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.

14. The above conditions will be enforced, *inter alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

(डा. आर. बी. लाल)  
(Dr. R. B. LAL)  
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**Copy to: -**

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2. The Secretary, Department of Environment, Science and Technology, Government of Himachal Pradesh, NH 22, SDA Complex, Kasumpti, Shimla, Himachal Pradesh 171009
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Himachal Pradesh State Pollution Control Board, Him Parivesh, Phase -III, New Shimla, Himachal Pradesh - 171 009
5. The District Collector, District Mandi, Himachal Pradesh
6. The District Collector, District Kangra, Himachal Pradesh
7. Guard File/Monitoring File/Website/Record File

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