

**F. No.J-11011/513/2017-IA-II (I)**  
Government of India  
Ministry of Environment, Forest & Climate Change  
Impact Assessment Division

\*\*\*

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

Dated: 27<sup>th</sup> December, 2019

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: Drilling of 15 exploratory wells by M/s Oil and Natural Gas Corporation Ltd in Nohta-Damoh-Jabera PML Block, Vindhyan Basin, District Damoh (Madhya Pradesh) - Environmental Clearance - reg.**

Sir,

This has reference to your online proposal No.IA/MP/IND2/110504/2017 dated 6<sup>th</sup> September, 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 drilling of 15 exploratory wells by M/s Oil and Natural Gas Corporation Ltd in Nohta-Damoh-Jabera PML Block, Vindhyan Basin, District Damoh (Madhya Pradesh).

3. The estimated project cost is Rs. 600 crore. Total capital cost earmarked towards environmental pollution control measures is Rs.15 Crores. Total employment generation will be 30 persons.

4. There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc within 10 km distance from the project site. There are total 12 Reserved Forests (RF) such as Khamkhera RF, Kuluva RF, Athai RF, Rajnagar RF, Mariya RF, Pateriya RF, Gidra RF, Bansipur RF, Aloni RF, Devatara RF, Kusmi RF, Gharaghar RF located within the allotted NDJ block area (1135 sq km).

5. Total water requirement is 20 cum/day which will be met from private tankers. Effluent of 5 cum/day quantity will be treated through **mobile** ETP system coupled with RO. The plant will be based on Zero Liquid discharge system (if applicable). Drilling is a temporary activity lasting for 40-60 days.

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 standard ToR for the project was granted by the Ministry on 2nd December, 2017. Public hearing was conducted by the State Pollution Control Board on 7th June, 2019.

8. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meeting held on 23-25 October, 2019, wherein the project proponent and their accredited consultant 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.

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 **drilling of 15 exploratory wells by M/s Oil and Natural Gas Corporation Ltd** in Nohta-Damoh-Jabera PML Block, Vindhyan Basin, District Damoh (Madhya Pradesh), under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions as under:-

#### **A. Specific conditions:-**

- i. No drilling shall be carried out in Protected Areas/forest area.
- ii. Approach road shall be made pucca to minimize generation of suspended dust.
- iii. Total fresh water requirement shall not exceed 20 cum/day/well proposed to be met through tankers/ground water. Mobile ETP shall be installed coupled with RO to reuse the treated water in drilling system. Size of the waste shall not exceed from the hole volume of the well + volume of drill cutting expected to be generated 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.
- iv. No lead acid batteries shall be utilized in the project/site.

#### **B. General Conditions**

##### **I. Statutory compliance**

- (i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, if drilling is carried in Forest areas.
- (ii) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- (iii) 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.
- (iv) The project proponent shall obtain and adhere to statutory clearance under the Coastal Regulation Zone Notification, 2011, as applicable

##### **II. Air quality monitoring and preservation**

- (i) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with
- (ii) 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 stations each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- (iii) 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 16th November, 2009 for PM10, PM2.5, SO2, NOX, CO, CH4, HC, Non-methane HC etc.

- (iv) During exploration, production, storage and handling, the fugitive emission of methane, if any, shall be monitored.
- (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.

### **III. Water quality monitoring and preservation**

- (i) 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. Domestic sewage shall be disposed off through septic tank/soak pit.
- (ii) The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- (iii) 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.
- (iv) 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 30th August, 2005.

### **IV. Noise monitoring and prevention**

- (i) Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (ii) 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.
- (iii) The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

### **V. Energy Conservation measures**

- (i) The energy sources for lighting purposes shall preferably be LED based.

### **VI. Waste management**

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

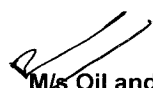
### **VII. Safety, Public hearing and Human health issues**

- (i) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

- (ii) 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.
- (iii) 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.
- (iv) On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority
- (v) The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored the area in original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations
- (vi) 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.
- (vii) 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.
- (viii) 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
- (ix) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (x) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xi) 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.

### **VIII. Corporate Environment Responsibility**

- (i) As proposed, Rs.9 crores shall be allocated for Corporate Environment Responsibility (CER). The CER plan shall be implemented during the plant construction stage and before commissioning of the project.
- (ii) The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.



- (iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- (iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- (v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

## **IX. Miscellaneous**

- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- (iv) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- (v) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- (vi) The project proponent 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, commencing the land development work and start of production operation by the project.
- (vii) Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office
- (viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- (ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- (x) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- (xi) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

**10.** 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.

11. 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.

12. 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.

13. 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.

14. This issues with the approval of the competent authority.

(डा. आर. बी. लाल)  
(Dr. R. B. Lal)  
विशेषज्ञ (E)/अतिरिक्त निदेशक  
पर्यावरण एवं वन विभाग, नई दिल्ली  
Ministry of Environment, Forest and Climate Change  
भारत सरकार, नई दिल्ली  
Govt. of India, New Delhi

Copy to: -

1. The Principal Secretary, Department of Housing and Environment, Government of Madhya Pradesh, Paryavaran Parisar, E- 5, Arera Colony, Bhopal- 462016 (Madhya Pradesh)
2. The Principal Secretary, Department of Housing and Environment, Government of Madhya Pradesh, Paryavaran Parisar, E- 5, Arera Colony, **Bhopal**- 462016 (Madhya Pradesh)
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, **Delhi** -32
4. The Member Secretary, Madhya Pradesh Pollution Control Board, E-5, Arera Colony, Paryavaran Parisar, **Bhopal** - 462 016 (MP)
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, **New Delhi** – 3
6. Member Secretary, Central Ground Water Authority, 18/11, Jamnagar House, Man Singh Road, **New Delhi**-110011
7. District Collector, **Damoh, (MP)**
8. Guard File
9. Record File
10. Monitoring File/ Website of MoEF&CC

(Dr. R. B. Lal)  
Scientist 'E'/Additional Director