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Ref: Proposal No. SIA/MP/IND2/246822/2021, Case No 9020/2022: Prior Environment Clearance for Exploratory Drilling (5 wells) in OALP-IV Block VNONHP-2019/2, Suon Valley, Vindhyan Basin at Village - Gunnor and Amanganj, Tehsil - Gunnor, Dist. Panna (MP) by M/s Oil and Natural Gas Corporation Ltd, through Chief General Manager, I/C HSE, Frontier Basins, ONGC, Ganga Building, IDT Campus, Kaulagarh Road, Dist. Dehradun, Uttrakhand Email - hsefb2020@gmail.com. Phone -01352793502

With reference to the above, the proposal has been appraised as per prescribed procedure & provisions under the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated 14th September 2006 and its amendments, on the basis of the mandatory documents enclosed with the application viz., Form 2, prefeasibility report, ppt. and additional clarifications furnished in response to observations by the State Expert Appraisal Committee (SEAC) and State Environment Impact Assessment Authority (SEIAA) constituted by the competent Authority.

- i. This is case of Prior Environment Clearance for Exploratory Drilling (5 wells) in OALP-IV Block VN-ONHP-2019/2, Suon Valley, Vindhyan Basin at Village -Gunnor and Amanganj, Tehsil - Gunnor, Dist. Panna (MP)
- ii. The exploratory well drilling of hydrocarbons in OALP-IV Block VN-ONHP-2019/2, is included under activities specified in Schedule (Activity 1b) of the EIA Notification dated 14thSeptember 2006 requires Environmental Clearance (EC) from the Ministry of Environment and Forests (MoEF&CC). However MoEF& CC recent Notification S.O. 236 (E), dated 16.01.2021 all project in respect of offshore and onshore oil and gas exploration are categorized as 'B2' projects" hence PP has applied for EC in SEIAA for B2.

Point	1 Jock VN-ONHF-2019/2 is as follows:-	
FUIIL	Latitude	Longitude
1	80° 10' E	
2	80° 30' E	24° 40' N
3	80° 30' E	24° 40' N
4	79° 50' E	24° 10' N
5		24° 10' N
6	79° 50' E	24° 27' N
7	79° 53' E	24° 27' N
8	79° 53' E	24° 28' N
	79° 55' E	24° 28' N
9	79° 55' E	24° 29' N
10	79° 56' E	
11	79° 56' E	24° 29' N
12	80° 10' E	24° 30' N
are is as Mult	00 IU E	24° 30' N

iii. Coordinates of the OALP-IV Block VN-ONHP-2019/2 is

- iv. There is no National park / Sanctuaries, Eco-sensitive areas (DFO letter dtd. 04.02.2022) and inter-State boundaries within 10 km of the proposed sitehence general conditions are not attracted as per EIA Notification 2006 its amendments.
- v. The case was considered in 557th SEAC meeting dtd. 03.03.2022 and
- vi. The acreage comprises approximately 3077.65 sq. km area. It has a Minimum Work Programme of 250 LKM of 2D and 350 SKM of 3D seismic data API and drilling of 12 wells within the specified period of 3 years.
- vii. To pursue the exploratory leads in well Hatta#2 in further strike continuity in eastern part and the leads obtained from recent flow of gas from bore-well at Jhumta in addition to exploration of prospectively of entire lower Vindhyan Sequence, drilling of about 12 exploratory wells is to be taken up in OALP Block VN-ONHP-2019/2 out of which, 5 are being proposed in based on initial study of existing data. Additional wells will be proposed for drilling based on results obtained from drilling integrated with available data and new 2D and 3D seismic under acquisition. These wells have been planned to explore a number of

prospective locale through drilling of vertical wells to target the promising gas reservoirs in the sub-surface.

- viii. The five (5) exploratory locations proposed for Environmental Clearance are located within the state of Madhya Pradesh. All locations lie within the administrative boundaries of Panna district.
- ix. It is expected that the proposed drilling activities in OALP Block VN-ONHP-2019/2 in Madhya Pradesh will lead to the establishment of commerciality and proper assessment of the tight gas reserve potential in this part of Vindhyan Basin. This, in turn, will facilitate firming up of the development strategy for the early monetization of the discovered gas pools and favorably help the country to meet the daunting challenge of ever increasing hydrocarbon demand.
- x. Exploratory drilling of these wells is temporary and of short duration and includes site preparation, well foundation, rig building, drilling and restoration of the well site. Water Based Drilling mud is pumped through the string which returns to annulus, this cools the drill bit while cutting and removes the cuttings from the well. The drilling mud is reused as much as possible. At the end of drilling operations, the residual unusable mud is collected in lined pits and solar evaporated.

xi. The domestic sewage will be treated in septic tanks followed by soak pit system. xii. The solid waste generation is limited to spent drill bits, packaging waste and used containers, drill cuttings and waste oil. The spent oil will be collected, stored and disposed as per the MoEFCC guidelines and in compliance to the hazardous waste (handling and management) rules.

xiii. PP has proposed all DG sets will be installed with adequate stack heights to ensure wider dispersion. Emission standards stipulated by CPCB and SPCB would be complied with. The noise level will not exceed 85 dB beyond the boundary of drill site. Personal protective equipment will be provided and their proper use will be ensured for the protection of workers.

xiv. PP has proposed following physical targets based activities under Corporate Environment Responsibility (CER) with budgetary provision

	1.	Saplings of native fruit bearing species will be distributed to nearby villagers (1000 Saplings)	Rs. 40,000.00
	2.	Wedical camps 2 Nos will be organized	110
	3.	Supplementing Infrastructure in Govt. Schools (05 Nos.)	Rs. 8,00,000.00 Rs.15,00,000.00
L	4.	Solar Street Lighting (100 No.)	
L		Total	Rs.15,00,000.00 Rs.38,40,000.00

Based on the information submitted at Para i to xiv above and others, the State Level Environment Impact Assessment Authority (SEIAA) considered the case in its 713rd meeting held on 23.03.2022 and decided to accept the recommendations of 557th and SEAC meeting held on dated 03.03.22.

Hence, Prior Environmental Clearance is accorded under the provisions of EIA Notification dtd. 14th September 2006 & its amendments to the proposed Exploratory Drilling (5 wells) in OALP-IV Block VNONHP-2019/2, Suon Valley, Vindhyan Basin at Village - Gunnor and Amanganj, Tehsil - Gunnor, Dist. Panna (MP) by M/s Oil and Natural Gas Corporation Ltd, through Chief General Manager, I/C HSE, Frontier Basins, ONGC, Ganga Building, IDT Campus, Kaulagarh Road, Dist. Dehradun, Uttrakhand- 248195 subject to the compliance of the Standard Conditions and the following additional Specific Conditions as recommended by SEIAA & SEAC in its meetings.

A. Specific Conditions as recommended by SEIAA

- (1)The present EC is for Exploratory Drilling only. In case development drilling to be done in future prior environmental clearance must be obtained.
- (2)Drilling waste water including drill cuttings wash water shall be collected in disposal pit lined with HDPE lining evaporated or treated and shall comply with the notified standards

for onshore disposal. The membership of Common TSDF shall be obtained for the disposal of drill cuttings and hazardous waste.

- (3)PP should ensure to provide crop compensation to the land owners as per the rates of the State Governmentif land involved in the project area.
- (4)After completion of the project the land should be restored properly to its original state as much as possible to the satisfaction of the land owners.
- (5)PP should ensure zero waste water discharge from the process.
- (6)No lead acid batteries shall be utilized in the project site.
- (7)PP should obtain NOC for fire and approval for onsite offsite emergency plan, health and safety plan from the Competent Authorities.
- (8)PP should ensure to implement the activities proposed under CER to the extent of Rs. 38.40 Lakh.The specific activities to be undertaken under CER to be carried out in consultation with District collector or village panchayat.
- (9)PP should ensure to submit half yearly compliance report with photographs of plantation in MP-SEIAA. If PP is failed to upload or submit two consecutive half yearly compliance reports of EC conditions to concerned authority (SEIAA and Regional Office, MoEF&CC, Gol, Bhopal) than prior environmental clearance issued to PP will automatically be treated as cancelled/ revoked as per OM No. 930/SEIAA/2019 dated 30.05.2019 issued by MPSEIAA.

B. Specific Conditions as recommended by SEAC

I Statutory Compliance

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project. (If applicable)
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable. (If applicable)
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area).
- iv. 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.
- v. 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.

Il Air quality monitoring and preservation 5 11

- 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. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines
- iii. 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.
- iv. 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 PM o, PM2.5, SO2, NOX, CO, CH4. HC, Non-methane HC etc

- v. During exploration, production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- vi. The project proponent also to ensure trapping/storing of the CO2 generated, if any, during the process and handling.
- vii. 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. Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- iv. 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.
- v. 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 th August, 2005.
- vi. ONGC in the process of having a mobile ETP coupled with R.O. on contract basis. The treated 06 KL water used for preparation of mud and water shall be re-cycled and re-used and any excess volume of water left in the waste pits shall be solar evaporated.

IV Noise monitoring and prevention

- i. 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.
- 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 shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time). IS IT

V Energy Conservation Measures

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

VI Waste management

- i. Barite waste containing mercury and cadmium shall be analyzed for its hazardous constituents and if exceeds the permissible limits, shall be disposed off in CTSDF or as decided by M. P. Pollution Control Board.
- ii. 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.
- iii. Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Regional Office of MoEF&CC, Govt. of India as a part of six monthly compliance reports.

iv. The generated Spent / burnt oil which shall be collected in barrels and sent to ONGC's stores regularly for disposal to authorized re-cyclers through Metal and Scrap Trading Corporation.

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 blow outs 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 H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with persona) H2S 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, creche 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 to the Regional Office of MoEF&CC, Govt. of India as a part of six monthly compliance.

VIII EMP & Corporate Environment Responsibility

- i. A budgetary provision of Rs. 6.50 crores is made for Environmental Management Plan as capital cost and Rs 0.5240 crores as recurring cost.
- The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-1 A.III dated 1s May 2018, as applicable, regarding Corporate Environment Responsibility.
- iii. 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.

- iv. A separate Environmental Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization,
- v. 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 of implementation of action plan shall be reported to the MoEF&CC, Govt. of India along with the Six-Monthly Compliance Report.
- vi. Self-environmental audit shall be conducted annually. Every three years third party

IX. Miscellaneous

- 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.
- ii. The project proponent shall inform Regional Office as well as MoEF&CC, Govt. of India 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.
- iii. Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Regional Office of MoEF&CC, Govt. of India.
- iv. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- v. The project proponent shall abide by all the commitments and recommendations made in the PFR report and also that during their presentation to the State Level Expert Appraisal Committee.
- vi. The MoEF&CC reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
 vii. The Regional Office of the MEEP Conductions.
- vii. The Regional Office of the MoEF&CC, Govt. of India 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.
- viii. 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 and Other Wastes (Management along with their amendments and Rules, 2016 and the Public Liability Insurance Act, 1991 Supreme Court of India / High Courts and any other Court of Law relating to the subject

Standard Conditions:

- 1. During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixings of accidental spillages with domestic waste and storm drains.
- 2. Industry should get the Emergency Disaster Management Plan approved by DTHS and should also comply with the provisions made in Public Liability Insurance Act, 1991.

- 3. All parameters listed in Environmental Monitoring Plan approved by SEAC must be monitored at approved locations and frequencies.
- 4. The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to the Regional office of the Ministry of Environment and Forest, Bhopal and MP PCB.
- 5. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained (as and when applicable), by the project proponent from the respective competent authorities.
- 6. The Regional Office, MoEF, GoI, Bhopal and MP PCB shall monitor compliance of the stipulated conditions. A complete set of documents including Environment Impact Assessment Report, Environmental Management Plan, should be given to Regional Office, MoEF, GoI, Bhopal and MP PCB.
- 7. A copy of the environmental clearance shall be submitted by the Project Proponent to the Heads of the Local Bodies, Panchayat and Municipal Bodies as applicable in addition to the concerned Government Departments / organization responsible for controlling the proposed projects who in turn has to display the same for 30 days from the date of receipt.
- 8. The project proponent has to strictly follow directions/guideline issued by the MoEF, Gol, CPCB and other Govt. agencies from time to time.
- 9. The Project Proponent shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the State Level Environment Impact Assessment Authority (SEIAA) website at www.mpseiaa.nic.in and a copy of the same shall be forwarded to the Regional Office, MoEF, Gol, Bhopal and MP PCB.
- 10. The Project Proponent has to upload soft copy of half yearly compliance report of the stipulated prior environmental clearance terms and conditions on 1st June and 1st December of each calendar year on MoEF& CC web portal http://www.environmentclearance.nic.in/ orhttp://www.efclearance.nic.in/ and submit hard copy of compliance report of the stipulated prior environmental clearance terms and conditions to the Regulatory Authority also
- 11. The SEIAA of M.P. reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- 12. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
- 13. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- 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 prior environmental clearance shall lie with the Green Tribunal, if necessary, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- 16. The prior Environmental Clearance granted for the project is valid for a period of seven years as per EIA notification dtd. 14.09.2006 & its amendments.
- 17. The proponent shall upload the status of compliance of the stipulated EC 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 MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- 18. 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 along with the status of compliance of EC conditions and shall also be sent to the Regional Office of MoEF.

Copy to:-

- (1). Principal Secretary, Department of Environment. Government MP. of MantralayaVallabhBhawan, Bhopal.
- Member Secretary, SEAC, Research and Development Wing Madhya Pradesh Pollution (2). Control Board, ParyavaranParisar, E-5, Arera Colony Bhopal-462016.
- Member Secretary, Madhya Pradesh Pollution Control Board, ParyavaranParisar, E-5, (3).Arera Colony, Bhopal-462016.
- The Collector, Distt-Panna (M.P.). (4).
- Director, I.A. Division, Monitoring Cell, MoEF, Gol, Ministry of Environment & Forest (5). Indira ParyavaranBhawan, JorBagh Road, New Delhi - 110 003
- Director (S), Regional office of the MOEF, (Western Region), Kendriya Paryavaran (6). Bhawan, Link Road No. 3, Ravi Shankar Nagar, Bhopal-462016.
- Guard file. (7).

(Shriman Shukla) **Member Secretary**

(Alok Nayak) Officer-in-Charge