

EC Compliance Report for the Bengal Onshore Block: WB-ONN-2005/4 (NELP-VII)
(EC letter nos. EC22B002WB170058 dated 26.09.2022 under B-2 Category issued for 10 Expl. Wells)

A. SPECIFIC CONDITIONS:

Sl.No.	I. Statutory Compliance	Compliance Status
i	No drilling shall be carried out in Protected Areas/forest area.	Agreed with. Prior Forest clearance to be taken wherever applicable.
ii	Approach road shall be made pucca to minimize generation of suspended dust.	Being Complied All the approach roads have been made pucca to minimize generation of suspended dust.
iii	Total water requirement shall not exceed 22 KLD/well proposed to be met through tankers. 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 whole 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.	Being complied as per condition. Only surface water has been used during exploratory drilling activities outsourced and supplied by local tankers
iv	No lead acid batteries shall be utilized in the project/site.	Complied as per condition. No lead acid batteries are used at site. Only Alkaline cells are used.

B. General Condition

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.	Noted, Agreed with.
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 State pollution Control Board.	Complied. NOC for Consent to Establish already obtained vide NOC No. 172036, dt-16.02.2023
iii.	Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-	Being Complied . ONGC prepares Waste Management Plan as per guideline and

	Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.	follows strictly. ONGC disposes solid, water, drill cutting and drilling fluids as per notified guideline (GSR.546(E) dated 30th August,2005). ONGC did not use any Hazardous Chemicals for drilling . Water based Mud was used of non-hazardous nature. Used Lube oil from DG set, was collected and transported to store which was subsequently disposed through authorized recyclers (ie. M/S. MSTC)
iv.	The project proponent shall obtain and adhere to statutory clearance under the Coastal Regulation Zone Notification, 2011, if applicable.	Noted, Agreed with.

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.	complied. Ambient Air Quality Monitoring has been conducted during exploratory drilling at a quarterly frequency during peak-drilling period done by NABL & WBPCB authorized lab as per guideline/ standard Engine Emmission testing also carried out. All the results indicated that all the parameters were within permissible limit. (Lab test report enclosed)
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	Complied Tested ambient air quality in the upwind and downwind direction at maximum ground level concentrations . Testing was carried out during peak-drilling period by NABL & WBPCB authorised Lab as per guideline/standard. All results were within permissible limit. The locations of ambient air quality monitoring stations decided after consultation with the State Pollution Control Board (WBPCB)
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 16111 November, 2009 for PM-10, PM-2.5, SO2, NOX, CO, CH4, HC, Non methane HC etc.	Complied Regular noise monitoring has been carried out by authorized agency. Ambient Air Quality Monitoring has been conducted during exploratory drilling site closest near the habitant area at a quarterly frequency during peak-drilling period done by NABL & WBPCB authorized lab as per guideline/ standard and the results indicated that all the parameters were within permissible limit. (Lab test report enclosed)

iv.	During exploration, production, storage and handling, the fugitive emission of methane, if any, shall be monitored.	Complied The criteria pollutant level namely;PM10,SO2, NOX,HC(Methane&non Methane),VOCs(ambient levels) or critical sectoral parameters monitored. All the parameters were within permissible limit.
v.	The project proponent also to ensure trapping/storing of the CO2 generated, if any, during the process and handling.	Insignificant amount of CO2 is generated from engine exhaust.
vi.	Approach road shall be made pucca to minimize generation of suspended dust.	Being Complied All the approach roads have been 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 of through septic tank/soak pit.	Being Complied Garland drain all around the sites, were constructed, as standard practice of ONGC, prior to exploratory drilling activities to prevent runoff of any oil containing waste into the nearby water bodies. Mobile ETP was used for waste water treatment Effluent was properly treated by Mobile ETP and the treated wastewater was confirmed to CPCB standards and after treatment reused it. Water based drilling fluid, used for exploratory drilling, is non- hazardous and re used it after treatment. Good sanitation facility was provided at the drilling site during exploratory drilling works. Domestic sewage was disposed 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 Consent under the Air/Water Act, - whichever is more stringent.	Complied Tested the effluent discharge as per specified guideline/ the standard of Environment (Protection) Rules, 1986 by NABL/ WBPCB approved lab . The test results are within permissible limit.
iii.	The project proponent shall construct the garland-drain all around the	Complied.

	<p>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</p>	<p>Garland drain was constructed all round the drilling sites to prevent runoff of any oil containing waste into the nearby water bodies .ETP has been installed. Effluent was properly treated by mobile ETP and the treated wastewater has been confirmed to CPCB standard.</p>
iv	<p>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 project proponent 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.</p>	<p>Complied as per condition</p> <p>During exploratory drilling activities, drilling wastewater including drill cutting wash was collected in HDPE lined disposal pit at site for evaporation and was complied with the notified standards for onshore disposal. Mobile ETP was used for waste water treatment. Water based drilling fluid, used for exploratory drilling, is non- hazardous. ONGC disposes solid, water, drill cutting and drilling fluids as per notified guideline (GSR.546(E) dated 30th August,2005).</p>
	<p>IV. Noise monitoring and prevention</p>	
i.	<p>Acoustic enclosure shall be provided to DG set for controlling the noise pollution.</p>	<p>Complied as per condition.</p> <p>All DG sets are housed well inside acoustic enclosure to control noise during drilling activities</p> <p>(Lab test report enclosed)</p>
ii.	<p>The overall noise levels in and around the drilling location areas shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.</p>	<p>Complied</p> <p>All DG sets are housed well inside acoustic enclosure and all the stack height were 8.736 m as per CPCB guide line.Regular noise monitoring has been carried out by authorized agency and results found within permissible limit.</p> <p>(Lab test report enclosed)</p>

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.	Complied Regular noise monitoring was carried out by ONGC as well as by NABL/WBPCB authorized agency. Ambient noise levels were within specified value (75 dB (A) during day time and 70 dB (A) during night time). (Lab test report enclosed)
	V. Energy Conservation measures	
i.	The energy sources for lighting purposes shall preferably be LED based.	Complied . Only LED lights are used at rig for lighting purposes.
	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	ONGC has Oil spillage prevention and mitigation plan but Well drilled (K-WB-J) is Exploratory well and not development. No oil produced during drilling and hence the point of oil spillage is irrelevant . Used Lube oil from DG set was collected and transported to store which was subsequently disposed through authorized recyclers (i.e., M/s. MSTC).
ii.	Oil content in the drill cuttings shall be monitored by Authorized agency and report shall be sent to the State Environment Impact Assessment Authority	Oil content in drill cutting at target zone is being tested by Authorized agency (NABL & WBPCB Authorised Lab) as per guideline/standard. All results are within permissible limits. (Lab test report enclosed)
	VII. Safety and Human Health issues	
i.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented	Prepared and implemented Emergency plan based Risk Assessment and Hazard Identification and DMP.
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.	BOP was installed to control kicks and to prevent Well Blow Out as per OISD standards during drilling operations. Pre-well plan (GTO) was prepared and drilled as per GTO.
iii.	The project proponent shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and	Copy of Environment Management Plan was kept at site. SOP/Operational Manual, Safe work practice was made available at Rigs during exploratory drilling activities. Data regarding Environmental

	<p>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.</p>	<p>Monitoring was also kept at site office. Operation and safety continuously monitored from base office.</p>
iv.	<p>On completion of drilling, the project proponent should plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.</p>	<p>As per norms the wells will be plugged after drilling activities. ONGC plugs and abandons the dry wells and restores the site as per regulations. Intimation of well closing is sent to DGMS.</p>
v.	<p>The project proponent 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.</p>	<p>If declared abandoned, dry wells will be plugged and Restoration will be done as per prevailing abandonment and restoration plan of ONGC in accordance with the applicable regulations. Report will be sent to the Ministry's Regional office after completion of work.</p>
vi.	<p>The project proponent 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.</p>	<p>Oil spill CRP not required and not relevant for this EC as ONGC will drill Exploratory wells.</p> <p>However, ONGC has Fire response plan and oil spillage CRP and also Fixed fire fighting system and other types of fire extinguishers are in place in all Drilling rig locations to prevent any kind of fire hazard.</p>
vii.	<p>Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-</p>	<p>All persons including contractors are well trained and fully aware of the hazards, risks and controls in place.</p>

	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.	MVT(mines Vocational Training) had been imparted to ONGC employees and contractors working at ONGC site , as per ONGC policy and DGMS guidelines for training of the personnel working at site. Copy of the same is sent to DGMS for keeping record.
viii.	The project proponent 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 personal H2S detectors in locations of high risk of exposure along with self-containing breathing apparatus	Complied As per survey H2S was not found. Also in drilling stages it was not found. However, H2S sensor was installed at appropriate location for detection of H2S. Also SCBA (self containing breathing apparatus were available at site.
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.	Complied During construction and operational phases of the project skilled, semi-skilled and unskilled labourers are involved hence existing employment scenario of the region is improved. ONGC makes temporary structure within the site for the labour and securities with all type of facilities such as Good sanitation facility, provision for fuel/electricity for cooking, packaged drinking water and medical health care facilities. The structures are made on temporary basis and removed after 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.	Complied Doctor is present at ONGC site (24 X 7). In office also 2-3 ONGC doctors are always available. In ONGC there is established definite PME(preventive medical examination) checkup Plan for all ONGC employees. All are to undergo PME at regular frequency (1-3 Yrs as per age). Regular checking(weekly) of all crews are done at site. During induction of new employee(before joining) Medical Health check-up surveillance is done. Health check-up camps are arranged at nearby village of drill site and awareness camps arranged in office also.
xi.	The project proponent shall carry out long term subsidence study by	Complied.

	collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry of Environment, Forests & Climate Change State Environment Impact Assessment Authority State Pollution Control Board.	Long term subsidence study of the near by areas was conducted during generation of EMP and Environment quality Information (Baseline data monitoring) by NABET accredited consultant/organization before project started and submitted to SEIAA, WBPCB during EC clearance.
	VIII. Environmental Management Plan	
i.	The project proponent should submit the proposed EMP on a six monthly basis. The Office Memorandum issued by the MoEF & CC vide F. No. 22-65/2017-IA.III dated 30.09.2020 should be strictly followed	Being Complied. comprehensive Environmental Management Plan (EMP) of the Block was generated and submitted at the time of Environmental clearance.
ii.	Need based activities for local people is part of the EMP.	Agreed with, Being complied
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 Ministry of Environment, Forests & Climate Change State Environment Impact Assessment Authority State Pollution Control Board as a part of six monthly report.	Already Complied. ONGC has approved environmental policy & SOP. ONGC conducts audits both internal as well as through external agency to check for any violation of environmental issues/norms. Such deviation/s, if any, are reported and mitigated.
iv.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall	A well established Environmental Cell is situated at ONGC head quarter with qualified persons and apart of that ONGC MBA Basin has separate Environment cell, sub cell of HSE dept. comprising of qualified

	be set up under the control of Senior Executive, who will directly report to the head of the organization.	persons. Environment cell is now headed by I/C HSE.
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 kept in separate account and not to be diverted for any other purpose	Complied. ONGC has approved EMP with responsibility matrix and strict adherence to EMP and Environmental conditions. Sufficient amount allotted and spent every year for environmental protection measures.
vi.	Year wise progress of implementation of action plan shall be reported to the Ministry of Environment, Forests & Climate Change State Environment Impact Assessment Authority State Pollution Control Board along with the Six-Monthly Compliance Report.	Will be complied
vii.	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Environmental audit is conducted by HSE section every year. ISO Certification Audit (EMS 14001:2015) conforming EMP (Environment Management Plan) was done by Lead Auditor from external agency M/S Vexil. All observations/suggestions raised by the auditor were complied .
	IX. Additional condition	
i.	Short term need-based activities to be identified and implemented. Name of the beneficiary should be displayed at site.	Being Complied
	X. Miscellaneous	
i.	The environmental clearance accorded shall be valid for a period of 10 years for the proposed projector till the exploration period whichever is earlier.	Noted Will comply and maintain.
ii.	This EC is issued for exploratory wells only and those wells shall not	Noted

	be converted to production wells without prior permission from State Environment Impact Assessment Authority.	Will comply and maintain. ONGC has now applied for separate EC for 15 Development and Production wells and QPS system vide ToR Letter No. IA-J-11011/55/2020-IA-II(I) dated 18th April 2020.
iii.	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.	Being complied ONGC publishes in two local newspapers and copy is submitted to WBPCB at the time of CTE.
iv.	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.	Complied A copy of Environmental Clearance (EC) has been circulated to the local administration.
v.	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	Compliance reports are being uploaded on company's website.
vi.	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions to Ministry of Environment, Forests & Climate Change, State Environment Impact Assessment Authority & State Pollution Control Board.	Complied Compliance report sent to MoEF&CC, SEIAA and WBPCB.
vii.	The project proponent shall submit the environmental statement for each financial year in Form-V to the State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website	Environmental statement in Form-V along with compliance had been uploaded in ONGC website and submitted to WBPCB, MoEF. The same will be followed in future.

	of the company.	
viii.	The project proponent shall inform the State Environment Impact Assessment Authority, 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.	Will be complied (Closure dt , start of production dt will be intimated). EC No. EC22B002WB170058 (B 2 Category) against NELP-VII Block WB-ONN-2005/4dtd 26.09.2022 CTE No.172036 , dt-06.02.2023 { for well EC-3(K-WB-J),Vilage-Malikbaria }
ix.	Restoration of the project site shall be carried out satisfactorily and report shall be sent to the State Environment Impact Assessment Authority.	Noted Will comply and maintain. If declared abandoned, dry wells will be plugged and Restoration will be done as per prevailing abandonment and restoration plan of ONGC in accordance with the applicable regulations. Report will be sent to State Environment Impact Assessment Authority after completion of work.
x.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government	ONGC adheres strictly to the stipulations of statutory authorities like West Bengal Pollution Control Board (WBPCB), State Government and statutory bodies and comply if any observation is raised.
xi.	The project proponent shall abide by all the commitments and recommendations made in the EMP report and also that during their presentation to the State Expert Appraisal Committee.	All Commitments and recommendation of EMP report & presentation are being followed accordingly.
xii.	No further expansion or modifications in the project shall be carried out without prior approval of the State Environment Impact Assessment Authority	Agreed with. Will comply and maintain
xiii.	The State Environment Impact Assessment Authority I State Pollution Control Board shall monitor compliance of the stipulated conditions,	Agreed with.

xiv.	The project authorities should extend full cooperation to the officer(s) of the State Environment Impact Assessment Authority of State Pollution Control Board by furnishing the requisite data & information/monitoring reports.	Agreed with ONGC will cooperate always to the State Environment Impact Assessment Authority of WBPCB and will comply if any observation is raised.
xv.	The State Environment Impact Assessment Authority 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 State Environment Impact Assessment Authority may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.	Noted, Agreed with.
xvi.	Concealing factual data or submission of false/fabricated data and failure to comply with any of the condition; mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted and will be complied with.
xvii.	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.	Noted.
xviii.	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 Trans boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.	Noted.
xix	The contact details of the proponent and the name of consultant are given below.	Name of contact person with Designation (ONGC)- Pradip Kumar Chakrabarti, General Manager. Address: 4 th Floor, ONGC, Technopolis Building, Block BP-4,

		Sector -v, Salt Lake, Kolkata-700091.
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