



**OFFICE OF BASIN MANAGER
KG-PG BASIN, ONGC**

4th Floor, Diligent Building, Opposite ONGC Base Complex
Rajahmundry, Andhra Pradesh, India-533106
Phone: 0883-2494780, Email: bm_kg@ongc.co.in

No: ONGC/KG-PG/EC-COMPL-ONSHORE/2025-26/H1

Date: 28.11.2025

To:

Shri Balaji Kari IFS
Asst Inspector General of Forests
Ministry of Environment, Forest and Climate Change,
Sub-Office Vijayawada Green House,
Gopala Reddy Road, Vijayawada – 520010, Andhra Pradesh

Sub: Half yearly compliance report for the period 01.04.2025 to 30.09.2025

Dear Sir,

Please find enclosed herewith the six-monthly EC compliance report for the exploratory wells drilled in KG Basin during the period from 01.04.2025 to 30.09.2025, Andhra Pradesh. Following are the details of the exploratory wells drilled in onland KG-PG Basin:

Sl. No	BLOCK NAME	WELL NAME	EC No.
1	West Godavari PML	MSAE	J-11011/68/2011-IAII(I) dt.23.03.2015
2	Godavari onland PML	PSAV, MDAX, GMAH and MDAY	EC22B002AP162571 dt.06.12.2022

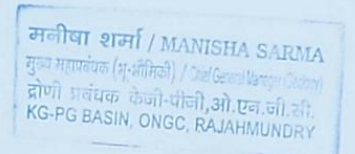
With Regards,

Manisha Sarma

for **Basin Manager
KG-PG Basin**

Enclosures:

1. EC Condition Compliance Report
2. Copies of the Environmental clearances
3. Environment Monitoring Reports.
4. Final Report on 'Land subsidence' studies of KG-PG Basin



Half Yearly Compliance Report**2025****01 Dec(01 Apr - 30 Sep)****Acknowledgement**

Proposal Name	Additional Exploratory Drilling (28 Wells) in KG (On-land) PML Acreages of Krishna District, Additional Exploratory Drilling (24 Wells) in KG Basin on land PML of West Godavari District and Additional Exploratory Drilling (13 Wells) on land PML Acreages of East Godavari District, Andhra Pradesh by M/s Oil and Natural Gas Corporation Limited (ONGCL)		
Name of Entity / Corporate Office	ONGC LTD		
Village(s)	ADAVIKOLANU		
District	KONASEEMA		
Proposal No.	IA/AP/IND2/247823/2021	Category	Industrial Projects - 2
Plot / Survey / Khasra No.		Sub-District	Nidamaruru
State	ANDHRA PRADESH	Entity's PAN	*****1598A
MoEF File No.	J-11011/68/2011-IA II(I)	Entity name as per PAN	OIL AND NATURAL GAS CORPORATION LIMITED

Compliance Reporting Details

Reporting Year	2025
Remarks (if any)	exploratory well MSAE drilled during 1st April 2025 and 30th September 2025. Environmental monitoring report attached.
Reporting Period	01 Dec(01 Apr - 30 Sep)

Details of Production and Project Area**Name of Entity / Corporate Office** ONGC LTD

	Project Area as per EC Granted	Actual Project Area in Possession
Private	298925	298925
Revenue Land	0	0
Forest	0	0
Others	0	0
Total	298925	298925

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
--------	--------------	-------	------------	----------	----------------------	---------------------

Conditions		
Specific Conditions		
Sr.No.	Condition Type	Condition Details
1	Statutory compliance	The present EC is for Exploratory drilling only. In case Development drilling to be done in future, prior environmental clearance must be obtained from the Ministry.
PPs Submission: Complied Noted for compliance		Date: 28/11/2025
2	Human Health Environment	Approach road shall be made pucca to minimize generation of suspended dust.
PPs Submission: Complied Pucca approach road made to minimize generation of suspended dust.		Date: 28/11/2025
3	Statutory compliance	The Company shall make the arrangement for control of noise from the drilling activity. Acoustic enclosures shall be provided to DG sets and proper stack height shall be provided as per CPCB guidelines.
PPs Submission: Complied DG sets are housed on the deck with acoustic enclosures and are placed at adequate stack height as per norms. People working near the sets are provided with earmuffs.		Date: 28/11/2025
4	WATER QUALITY MONITORING AND PRESERVATION	Total fresh water requirement shall not exceed 20m3/day and prior permission shall be obtained from the concerned agency.
PPs Submission: Complied Total freshwater requirement of exceed 20m3/day is being met by hired tanker supply.		Date: 28/11/2025
5	Statutory compliance	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 waste water shall conform to CPCB standards
PPs Submission: Complied Constructed garland drains around the drilling site. Effluent water is being re-used/re-cycled after treatment with mobile ETP.		Date: 28/11/2025
6	WASTE MANAGEMENT	Drilling wastewater 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 on-shore disposal. The membership of common TSDF shall be obtained for the disposal of drill cuttings and hazardous waste. Otherwise, secured land fill shall be created at the site as per the design approved by the CPCB and obtain authorization from the SPCB. Copy of the authorization or membership of TSDF shall be submitted to Ministrys Regional Office at Bangalore.
PPs Submission: Complied Drilling wastewater and drill cuttings wash water is collected in HDPE lined waste pit and left for solar evaporation. The disposal of drill cuttings and hazardous waste shall be routed through		Date: 28/11/2025

M/sAPEMCL to pre-processing as utilizable waste / TSDF.		
7	Human Health Environment	Good sanitation facility shall be provided at the drilling site. Domestic sewage shall be disposed-off through septic tank/ soak pit.
PPs Submission: Complied Appropriate sanitation facility provided at the drill site. Domestic sewage is disposed of through provision of adequate septic tanks and soak pits.		Date: 28/11/2025
8	WASTE MANAGEMENT	Oil spillage prevention scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adapting proven technology. The recyclable waste (oil sludge) and spent oil shall be disposed of to the authorized recyclers.
PPs Submission: Complied Oil spill contingency plan is in place. In case of any oil spill/contamination, proven bio-remediation method will be adopted for cleanup. Spent oil will be disposed through the authorized recyclers. The disposal shall be routed through M/s. APEMCL/TSDF.		Date: 28/11/2025
9	Statutory compliance	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.
PPs Submission: Complied Compliance details are given in GSR 546(E) as attached.		Date: 28/11/2025
10	Human Health Environment	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.
PPs Submission: Complied First aid, firefighting equipment provided as per OISD-189. Flaring is done through flare stack during testing through test separator for a brief period of 1 or 2 days. Garland drain is provided.		Date: 28/11/2025
11	Human Health Environment	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 personal H2S detectors in locations of high risk of exposure along with self-containing breathing apparatus.
PPs Submission: Complied Emergency response plan for H2S release is available. Portable H2S detectors are available at drilling rigs. However, it is pertinent to mention that H2S is usually not encountered during drilling operations in oil fields of Rajahmundry Asset.		Date: 28/11/2025
12	MISCELLANEOUS	On completion of drilling, the company have to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority. Photograph of the plugging to be submitted to respective regional office.
PPs Submission: Complied Dry wells are abandoned with plugs as per OMR-2017. Sites shall be restored back to original condition before handing over to the owner. Restoration and remediation of abandoned well sites are being carried out as per ONGC's SOP issued by Corporate HSE, New Delhi.		Date: 28/11/2025
13	Risk Mitigation and Disaster Management	Emergency Response plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India

PPs Submission: Complied ONGC ERP is in accordance with the guidelines of OISD, DGMS and Govt. of India.		Date: 28/11/2025
14	Statutory compliance	Blow Out Preventer (BOP) system shall be installed to prevent well blowouts during drilling operations. Blow Out Prevention measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.
PPs Submission: Complied Blow Out Preventer (BOP) system is mandatorily installed to prevent well blowouts during drilling operations. Hydrostatic pressure in the well bore is taken care during drilling, logging and other well operations by maintaining requisite mud weight.		Date: 28/11/2025
15	Statutory compliance	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 applicable Indian Petroleum Regulations.
PPs Submission: Complied Dry wells are abandoned with plugs as per OMR-2017. Sites shall be restored back to original condition before handing over to the owner.		Date: 28/11/2025
16	MISCELLANEOUS	Abandoned well inventory and remediation plan shall be submitted within six months from the date of issue of letter.
PPs Submission: Complied Restoration and remediation of abandoned well sites are being carried out as per ONGC's SOP issued by Corporate HSE, New Delhi.		Date: 28/11/2025
17	Human Health Environment	Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.
PPs Submission: Complied Periodic medical examination (PME) is done in authorized hospitals as per company policy and guidelines issued by DGMS.		Date: 28/11/2025
18	Statutory compliance	In case the commercial viability of the project is established, the company shall prepare a detailed plan for development of oil and gas fields for the above block and obtain fresh clearance from the Ministry.
PPs Submission: Complied In case of commercial viability of the project is established, company will prepare development plan and submit for fresh clearance from Ministry.		Date: 28/11/2025
19	LAND RECLAMATION	Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministries Regional Office at Bangalore
PPs Submission: Complied Well site restoration shall be carried out satisfactorily and reports shall be sent to IRO Vijayawada. During this period no restoration of the project site is undertaken.		Date: 28/11/2025
20	PUBLIC HEARING	At least 5 percent of the total cost of the project shall be earmarked towards the Enterprise social commitment based on public hearing issues and item-wise details along with the time bound action plan shall be prepared and submitted to the Ministries RO. Implementation

		of such program shall be ensured accordingly in a time bound manner.
PPs Submission: Complied ONGC provide adequate funds for CSR projects as directed by GOI		Date: 28/11/2025
21	Human Health Environment	An audit shall be done to ensure that the Environment Management Plan is implemented in totality and report shall be submitted to the Ministry's Regional office.
PPs Submission: Complied HSE audits are being carried out regularly.		Date: 28/11/2025
22	MISCELLANEOUS	All personnel including those of contractors shall be trained and made fully aware of the hazards, risks and controls in place.
PPs Submission: Complied All personnel including those of contractors are being trained in MVT (mining vocation training) as per the guidelines of DGMS.		Date: 28/11/2025
23	Human Health Environment	Company shall have own Environment Management Cell having qualified persons with proper background.
PPs Submission: Complied HSE setup is functional in the company to carry out these functions		Date: 28/11/2025
24	Human Health Environment	Company shall prepare operating manual in respect of all activities. It shall cover all safety and environment related issues and system. Measures to be taken for protection. One set of environmental manual shall be made available at the drill 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.
PPs Submission: Complied SOPs for drilling operations covering safety and environmental aspects of operations and management thereof have been given to supervisors and concerned persons at all drill sites. Regular safety and environment training is being provided to the employees by our various in-house training institutes like IPSHEM Goa, IDT and ONGC Academy etc. QHSE management system procedures are in place with regular internal and external audits. Environmental monitoring reports are made available at drill sites.		Date: 28/11/2025
25	AIR QUALITY MONITORING AND PRESERVATION	Ambient air quality shall be monitored near the closest human settlements as per the NAAQ emission standards issued by the Ministry vide GSR No. 826(E) dated 16th November, 2009 for PM10, PM2.5, SO2, NO2, CO, CH4 HC and non-methane HC etc.
PPs Submission: Complied Ambient air quality of the nearest village monitored through a third party as per NAAQ emission standards. Environment monitoring reports attached in additional attachments		Date: 28/11/2025
26	AIR QUALITY MONITORING AND PRESERVATION	Mercury shall be analyzed in air, water and drill cuttings twice during drilling period.
PPs Submission: Complied Mercury levels are analyzed in air, water and drill cuttings twice during drilling period		Date: 28/11/2025

27	WASTE MANAGEMENT	Oil content in the drill cuttings shall be monitored by some authorized agency and report shall be sent to the Ministry's Regional Office at Bangalore
PPs Submission: Complied Oil content in the drill cuttings is analyzed by CPCB authorized agency. Monitoring reports attached at additional attachment.		Date: 28/11/2025
General Conditions		
Sr.No.	Condition Type	Condition Details
1	Statutory compliance	The project authorities must strictly adhere to the stipulations made by Andhra Pradesh State Pollution Control Board (APPCB), State Government and any other statutory authority
PPs Submission: Complied The stipulations made by APPCB and other statutory authorities are complied		Date: 28/11/2025
2	Statutory compliance	No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alternations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
PPs Submission: Complied Exploratory drilling activities are conducted as per the approval received from MoEFCC		Date: 28/11/2025
3	Statutory compliance	The project authorities must strictly comply with the rules and regulations under Manufacture, storage and import of hazardous chemicals Rules, 2000 as amended subsequently. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc., must be obtained, wherever applicable.
PPs Submission: Complied Exploratory drilling operations are carried out as per DGMS OMR-2017 and OISD standards. Prior approvals are obtained before handling of the explosives.		Date: 28/11/2025
4	Noise Monitoring & Prevention	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 prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
PPs Submission: Complied Acoustic enclosures are provided for the DG sets to minimize the noise levels. Earmuffs are provided for the persons working near the DG sets. The ambient noise levels are being monitored regularly. Reports are attached at additional attachments.		Date: 28/11/2025
5	Human Health Environment	A separate Environmental Management Cell equipped with full-fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.
PPs Submission: Complied		Date:

HSE setup is functional in the company to out these functions. Regional Geoscience Lab, ONGC Rajahmundry is equipped to carry out the environmental management and monitoring functions.		28/11/2025
6	MISCELLANEOUS	A copy of clearance letter shall be sent by the proponent to the concerned panchayat, Zila Parishad/ Municipal Corporation, Urban Local Body and the local NGO, if any from whom suggestions/representations, if any, were received while processing the proposal. The clearance shall also be put on the web site of the company by the proponent.
PPs Submission: Complied Copy of clearance letter sent to the concerned panchayat, Zila Parishad/ Municipal Corporation, Urban Local Body and the local NGO.		Date: 28/11/2025
7	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall upload the status of compliance of stipulated environment clearance conditions, including results of the monitored data on their web site and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the APPCB. The criteria pollutant levels namely SPM, RSPM, SO ₂ , NO _x HC (Methane and non methane), VOCs (ambient levels as well as stack emissions) or critical sectorial parameters indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
PPs Submission: Complied Exploratory drilling activity is of short duration for 3 to 4 months at a particular site. Ambient air, stack emission and noise levels were monitored through third party. Six monthly compliance reports submitted to IRO MoEFCC Vijayawada, APPCB on regular basis.		Date: 28/11/2025
8	Statutory compliance	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of the monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective zonal of CPCB and the APPCB. The Regional Office of this Ministry at Bangalore/Central Pollution Control Board/State Pollution Control Board will monitor the stipulated conditions.
PPs Submission: Complied Submitted six monthly reports on the status of compliance of stipulated conditions along with monitoring reports are sent to IRO Vijayawada, APPCB and respective zone of APPCB via email.		Date: 28/11/2025
9	Statutory compliance	The environmental statement for each financial year ending 31st March in the form-V 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 environmental conditions and shall also be sent to the respective regional offices of the MOEF by e-mail..
PPs Submission: Complied Exploratory drilling is temporary activity for a period of 3 to 5 months at site. The environmental statement for each financial year in Form-V.		Date: 28/11/2025
10	Statutory compliance	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 APPCB and may also be seen at Website of the Ministry and Forests at http://www.envfor.nic.in . This shall be advertised within seven days

		of the issue of this letter at least 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 Regional office.
PPs Submission: Complied Company policy and other relevant information being displayed at the entry of each drill site. Details of the environmental clearance are published in the local newspapers.		Date: 28/11/2025
11	Statutory compliance	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 commencing the land development work.
PPs Submission: Complied All the project details are provided to the statutory authorities.		Date: 28/11/2025
Visit Remarks		
Last Site Visit Report Date:		N/A
Additional Remarks:		exploratory well MSAE drilled during 1st April 2025 and 30th September 2025. Environmental monitoring report attached.
Note: This acknowledgement is as per the details submitted by project proponent. In no way is this document to be considered as conclusion on any action on the compliance of the project. This is strictly for the project proponent's reference purpose.		

Compliance as per 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

Installations: Onshore

a	Drill Cuttings (DC) originating from on-shore or locations close to shore line and separated from Water Base Mud (WBM) should be properly washed and unusable drilling fluids (DF) such as WBM, Oil Base Mud (OBM), and Synthetic Base Mud (SBM) should be disposed off in a well-designed pit lined with impervious liner located off-site or on-site. The disposal pit should be provided additionally with leachate collection system. Design aspects of the impervious waste disposal pit; capping of disposal pit should be informed by the oil industry to State Pollution Control Board (SPCB) at the time of obtaining consent.	Water Based Mud is recycled and reused. Cuttings and un-used mud are washed and collected in impervious HDPE lined pit in the drill site designed as per specifications. Disposal of SOBM Drill cuttings shall be routed through M/s APEMCL to pre-processors/authorized cement industries for co-processing as utilizable waste/TSDF under Drill cutting waste (Schedule-1 Cat. No. 2.1). Synthetic oil is recycled & reused.
b	Use of diesel base mud is prohibited. Only WBM should be used for on-shore oil drilling operations.	Due to downhole complications the facility used synthetic oil-based mud.
c	In case of any problem due to geological formation for drilling, low toxicity OBM having aromatic content < 1% should be used. If the operators intend to use such OBM to mitigate specific hole problem/ SBM it should be intimated to Ministry of Environment and Forests/State Pollution Control Board.	Water based is being used. In case of specific down hole problem SOBM is being used with intimation to the APPCB.
d	The chemical additives used for the preparation of DF should have low toxicity i.e. 96 hr. LC50 > 30,000 mg/l as per mysid toxicity or toxicity test conducted on locally available sensitive sea species. The chemicals used (mainly organic constituents) should be biodegradable.	All additives used in the mud have 96 hrs. LC ₅₀ value > 30000 mg/l.
e	DC separated from OBM after washing should have oil content at < 10 gm/kg for disposal into disposal pit.	Water based mud is used, DC's after washing have very low (<10gm/kg) oil content
f	The waste pit after it is filled up shall be covered with impervious liner, over which, a thick layer of native soil with proper top slope is provided.	After evaporation waste pit is covered with thick layer of native soil.
g	Low toxicity OBM should be made available at installation during drilling operation.	SOBM of LC ₅₀ value > 30000 mg/l. is used due to downhole problems
h	Drilling wastewater including DC wash water should be collected in the disposal pit evaporated or treated and should comply with the notified standards for on-shore disposal.	Waste pit lined with HDPE sheets to contain waste residual muds and drill cuttings for solar drying.
i	Barite used in preparation of DF shall not contain Hg > 1 mg/kg & Cd > 3mg/kg.	Barites used contains Cd < 3mg/l and Hg < 1mg/l (Copy of the test reports enclosed)
j	Total material acquired for preparation of drill site must be restored after completion of drilling operation leaving no waste material at site. SPCB should be informed about the restoration work.	After completion of drilling all the material is removed from the site and is restored back.
k	In case, environmentally acceptable methods for disposal of drill waste such as (a) injection to a formation through casing annulars, if conditions allow (b) land farming at suitable location (c) bio-remediation (d) incineration or (e) solidification can be considered, in such cases oil industry is required to submit proposal to Ministry of Environment and Forests/State Pollution Control Board (MoEF/SPCB) for approval.	Noted for compliance.

**Environmental Monitoring Report for
Exploratory drilling of well MSAE by
drilling rig HP-2000-2
Andhra Pradesh
(Period 31.07.2025 to 01.08.2025)
REPORT**



**Sponsor
Oil and Natural Gas Corporation Limited
Rajamundry Asset, Second Floor, Godavari
Bhavan, Base Complex, Rajamundry,
Andhrapradesh-533106**



Hubert Enviro Care Systems (P) Ltd

**(An ISO 9001, 14001 & 45001 Company) (Accredited by NABL, Recognized by MoEF)
A21, behind Lions Club School, 3rd Phase, Thiru Vi
Ka Industrial Estate, SIDCO Industrial Estate,
Guindy, Chennai, Tamil Nadu 600032.
Phone: (044) 43635555
Email: lab@hecs.in**

Environmental Monitoring Report for ONGC Ltd., Well:MSAE; RIG:HP 2000-2

CONTENTS

S.NO.	DESCRIPTION	PAGENO.
I	Foreword	1
1.0	Introduction	2
2.0	Scope and Methodology	3
3.0	Micrometeorological Data	8
4.0	Ambient Air Quality Status	11
5.0	Stack Emission	14
6.0	Water QualityStatus	16
7.0	Drill Cuttings	19
8.0	Noise Level Status	21

Environmental Monitoring Report for ONGC Ltd., Well:MSAE; RIG:HP 2000-2

FOREWORD

Oil and Natural Gas Corporation Limited desired to monitor environmental status at its Project site. The work of environmental quality monitoring was entrusted to **M/s. Hubert Enviro Care Systems (P)Ltd.,Chennai**. Which is MoEF recognized and NABL accredited laboratory,vide ONGC work order No. **ONG/RA/HSE/Env/EQM/2024-25; Dated on:01.01.2025 (RJYASSET/SUPPORT/MM/20222ENVIRONM/926474/9010035115 dated on: 12/08/2022).**

A comprehensive environmental monitoring network had been planned to monitor data for the month of **July'2025**.The monitored data on Ambient Air Quality,Stack monitoring,Water Quality,Effluent Quality,Noise data are collected and presented in this report.

Our sincere thanks are due to Oil and Natural Gas Corporation Limited,Rajamundry for awarding this work and ONGC Ltd.,**RIG: HP-2000-2, Andhra Pradesh** for their kindco-operation during the study period.

Date: 01/09/2025
Place:Chennai-32.


Dr. Rajkumar Samuel
Director Technical



Environmental Monitoring Report for ONGC Ltd., Well:MSAE; RIG:HP 2000-2

1.0 INTRODUCTION

1.1 Background

The work of environmental quality monitoring was entrusted to **M/s.Hubert Enviro Care Systems(P)Ltd.,Chennai**, which is MoEF recognized and NABL accredited laboratory; vide ONGC work order No. **ONG/RA/HSE/Env/EQM/2024-25; Dated on:01.01.2025 (RJYASSET/SUPPORT/MM/20222ENVIRONM/926474/9010035115 dated on: 12/08/2022).**

A comprehensive environmental monitoring network had been planned to monitoring date o from **31.07.2025 to 01.08.2025** The monitored data on Ambient Air Quality, Stack monitoring, Water Quality, Effluent Quality, Noise data are collected and presented in this report.

1.2 ProjectSetting

Oil and Natural Gas Corporation Limited is having Exploratory drilling of well MSAE by drilling rig HP-2000-2

1.3 Environmental Management Plan

Being concerned towards Environmental Protection, Oil and Natural Gas Corporation Limited has prepared an extensive Environmental Management Plan for Site operations.

Oil and Natural Gas Corporation Limited, Rajamahendravaram has entrusted the Environmental data monitoring work to **M/s.Hubert Enviro Care Systems Pvt Ltd.,Chennai**, vide your Work Order No. **ONG/RA/HSE/Env/EQM/2024-25; Dated on:01.01.2025 (RJYASSET/SUPPORT/MM/20222ENVIRONM/926474/9010035115 dated on: 12/08/2022).**

The field monitoring studies were carried out from **31.07.2025 to 01.08.2025** for Ambient Air Quality, Stack monitoring, Water Quality, Effluent Quality, Drilling Effluent, Drill Cutting and Noise levels are presented in this report.



A handwritten signature in blue ink, appearing to be "S. S. S." or similar.

2.0 SCOPE AND METHODOLOGY

2.0 Scope & Methodology

The scope of the study and the present report covers the detailed characterization of the existing environmental status in the Project area for major environmental components viz. Ambient Air Quality, Stack monitoring, Micrometeorological Condition and Noise Quality.

2.1 Micrometeorology

As a part of this study, micrometeorology and microclimatic parameters were recorded by installing a meteorological station at the site. Data of wind velocity, wind direction, ambient temperature and relative humidity were recorded at 30 minutes intervals for 24 hours throughout the monitoring period.

Wind velocity, wind direction, ambient temperature, relative humidity, cloud cover and atmospheric pressure were recorded using Vantage Vue Wireless Weather Monitoring Kit (Model 6351).

2.2 Ambient Air Quality

Locations in the upwind and downwind for Ambient Air quality monitoring stations were identified on the basis of sectional scenario of the project site to be representative of the site. Parameters chosen for assessment of air quality were Particulate Matter (PM₁₀), Particulate Matter (PM_{2.5}), Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂) and Carbon Monoxide (CO). Calibrated Respirable Dust Sampler (with an average flow of 1.2-1.4 m³/min) were used for monitoring of PM₁₀, a tapping provided in the hopper of the same sampler was utilized for sampling of SO₂ and NO₂ with proper flow controller (1l/m). Calibrated APM 550 Fine particle sampler was used for monitoring of PM_{2.5}.



A handwritten signature in blue ink, likely belonging to a representative of Hubert Enviro Care Systems (P) Ltd.

Environmental Monitoring Report for ONGCLtd., Well: MSAE; RIG:HP 2000-2

2.2.1 PM₁₀

Calibrated RDS (Respirable Dust Sample) used for the determination of PM₁₀. PM₁₀ is a measure of particulate matter having size <10 microns. Air is sampled isokinetically through a cyclone where particles greater than 10 microns are separated and then it passes through a glass microfiber filter 10" x 8". The difference in weight before and after sampling is determined and divided by volume of air.

2.2.2 PM_{2.5}

PM_{2.5} is a measure of particulate matter having size < 2.5 microns. APM 550 Fine particles sampler is based on Wins Impactor design standardized by USEPA for ambient air quality monitoring. Calibrated APM 550 Fine particle sampler with PTFE 47mm diameter filter media was used for the determination of fine particulate matter PM_{2.5}.

2.2.3 SO₂: Modified West-Geake Spectrophotometric Method

Sulphur dioxide was absorbed in a scrubbing solution of potassium tetrachloro-mercurate and was allowed to react with HCHO and then with para-rosaniline hydrochloride. The absorbance of the product, red-violet dye was measured using Digital Spectrophotometer at a wavelength of 560 nm.

2.2.4 NO_x: Jacob and Hochheiser Modified Method

Nitrogen oxides as NO₂ (Nitrogen dioxide) were collected by bubbling air through sodium arsenate solution to form a stable solution of sodium nitrite. The nitrite ion produced during sampling is converted into a color complex and by reacting the exposed absorbing reagent with phosphoric acid, sulfanilamide and N (1-naphthyl) ethylamine dihydrochloride and nitrogen dioxide concentration is determined using digital spectrophotometer at a wavelength of 540 nm.

2.2.5 Carbon monoxide (CO)

Carbon monoxide is collected in a Teddler bag and CO was determined using Serinus 30 NDIR CO analyzer.



A handwritten signature in blue ink, appearing to be "H. S. S.", located to the right of the circular stamp.

Environmental Monitoring Report for ONGCLtd., Well: MSAE; RIG:HP 2000-2

2.2.6 Particulate Lead

The exposed EPM 2000 filter papers were cut into small pieces put into a glass beaker, poured 100 ml distilled water 10 ml nitric acid were added and digested on a hot plate in simmering heat. The clear solutions obtained after digestion was filtered and made up to 25ml and were analyzed by AAS for lead and arsenic. Concentration of lead was calculated by taking the result obtained from the analysis and dividing it with the volume of air sampled.

2.2.7 Nickel

The Inductively coupled plasma mass spectrometry (ICP-MS) technique is used to assess the concentration of an analyte in the sample. The method is based on active sampling using RDS (Respirable Dust Sample) Sampler and then sample analysis is done by ICP-MS.

2.2.8 Benzene

Ambient air is sucked through charcoal tube using low flow sampler. Benzene is adsorbed by activated charcoal in the charcoal tube. Desorption of the adsorbed Benzene is done using Carbon Disulphide. The substance desorbed in CS₂ is analyzed by capillary Gas Chromatography using a flame ionization Detector.

2.2.9 Benzo (a) pyrene

Particulate phase Poly Aromatic Hydrocarbons in ambient air and fugitive emission is collected by a RDS (Respirable Dust Sample) range (~1.2 m³/min) on a glass fiber filter and subsequent analysis by Gas Chromatograph using a Flame Ionisation Detector. It is capable of detecting sub nanogram concentration of PAH (Poly Aromatic Hydrocarbon) with a total sample of ~480 m³ of air over a period of 8 hrs.

2.2.10 Arsenic

The Inductively Coupled Plasma Mass Spectrometry (ICP-MS) technique is used to assess the concentration of an analyte in the sample. The method is based on active sampling using RDS (Respirable Dust Sample) Sampler and then sample analysis is done by ICP-MS.



A handwritten signature in blue ink, likely of a representative of Hubert EnviroCare Systems (P) Ltd.

2.2.11 Ammonia

Ammonia is collected in dilute Sulphuric acid solution in midjet impingers to form Ammonium Sulphate. The solution is treated with Nessler's reagent to produce a yellow brown complex. The Ammonia concentration is determined by reading the absorption of the complex at 440 nm and comparing with a standard curve.

2.2.12 Ozone

Micro-amounts of ozone and the oxidants liberate iodine when absorbed in a 1% solution of potassium Iodide buffered at pH 6.8 ± 0.2 . The iodine is determined spectrophotometrically by measuring the absorption of tri-iodide ion at 352 nm.

2.2.13 Mercury

The Inductively Coupled Plasma Mass Spectrometry (ICP-MS) technique is used to assess the concentration of an analysis in the sample. The method is based on active sampling using RDS (Respirable Dust Sample) Sampler and then sample analysis is done by ICP-MS.

2.2.14 Hydrogen Sulphide

Ambient air is collected in 0.01 N Cadmium Sulphate in an impinger. Then it is reacted with sulphamic acid, N, N dimethyl-p-phenylene diamine Sulphate solution, Ferric Sulphate solution and is measured in a spectrophotometer at 670 nm.

2.2.15 Hydrocarbons & Non Methane Hydrocarbons

Ambient air is collected in an inflatable toddler bag and is analyzed by gas chromatography using Flame Ionization Detector.



A handwritten signature in blue ink.

2.3 Stack Monitoring

All the stacks are monitored using standard stack monitoring kit, Voyubhodhan VSS1. The principle of operation is to take ISO KINETIC samples of the pollutants. The scope of monitoring consist of determination of the following parameters in gaseous emission. Particulate matter is collected using probe by doing iso-kinetic sampling across the cross sectional area of the stack by gravimetric method. Sulphur dioxide is measure by barium thorin titration method by extracting the gas in the hydrogen peroxide in the impinger. Oxides of Nitrogen are measure calorimetrically by phenol disulphonic acid method by collecting the sample in dilute sulphuric acid and hydrogen peroxide method.

2.4 Water Quality

Water samples were collected and analysed as per procedures outlined in IS: 3025/APHA. Sterilized bottles were used for collection of water sample for bacteriological analysis, stored in an ice box and transported to the laboratory for the analysis. Parameters like pH, Temperature, Total Suspended Solids, Total Dissolved Solids, Total Hardness, Sulphate, Chloride, COD, Sulphide, Phenols, Oil and Grease, Cyanide, Fluoride, Sodium, Hexavalent Chromium, Total Chromium, Copper, Nickel, Lead, Mercury, Zinc and Cadmium were measured.

2.5 Noise Levels

Ambient Noise level measurements in four cardinal directions were carried out using an Extech sound level meter (Lutron Model SL4035 SD), with windscreen during daytime as well as night-time based on standard procedure given in CPCB guidelines.

In order to reduce the disturbances from standing waves, the noise levels measured were averaged over + 0.5 m each of at least three positions. The mean values were taken for reporting.



A handwritten signature in blue ink.

Environmental Monitoring Report for ONGCLtd., Well: MSAE; RIG:HP 2000-2

3.0 MICROMETEOROLOGICAL STATUS

3.1 Rationale behind Sampling

Meteorological parameters are important factors in the study of Air pollution. The transport and diffusion of the pollutants in the atmosphere are governed by meteorological factors. Factors like wind velocity; wind direction and atmospheric stability are known as primary/basic meteorological parameters since the dispersion and diffusion of pollutants depend mainly on these factors. Factors like ambient temperature, humidity, rainfall, atmospheric pressure, etc., are known as secondary meteorological parameters as these factors control the dispersion of the pollutants indirectly by affecting the primary factors. Thus, to assess the air pollution impact it becomes essential to collect the above-mentioned meteorological parameters in the project area.

Micrometeorological and microclimatic parameters were recorded by installing a meteorology station at site. During the study period, half hourly readings of wind velocity, wind direction, temperature, humidity, cloud cover, atmospheric pressure and rainfall data were recorded and reported.

3.2 Methodology & Procedure adopted for Analysis

Wind velocity, Wind direction, Ambient temperature, Relative humidity, Cloud cover and Atmospheric pressure were recorded using Vantage Vue Wireless Weather Monitoring Kit (Model 6351).

3.3 Data Presentation

Collected meteorological parameters for 1 day from are data is given in Table.

The seasonal wind roses are given.



A handwritten signature in blue ink.

Environmental Monitoring Report for ONGCLtd., Well: MSAE; RIG:HP 2000-2

TEST REPORT

Sample Description : Micro Meteorology
Sample Drawn by : Hubert Enviro Care Systems Private Limited
Sampling Date : 31.07.2025 to 01.08.2025
Sample Location : On top of the MIC office
Ambient Temperature : 30.9 °C

HOURS	WIND SPEED (m/s)	WIND SPEED (mph)	WIND DIRECTION	TEMPERATRE °C	CLOUD COVER	RELATIVE HUMIDITY %	PRESSURE mmHg
11:00 AM	4.61	10.30	E	33.4	Clear sky	62.3	750
12:00 PM	3.50	7.83	NE	33.1	Clear sky	62.1	748
13:00 PM	4.64	10.37	ENE	32.7	Clear sky	63.6	748
14:00 PM	3.61	8.08	SE	30.8	Clear sky	63.9	746
15:00 PM	3.71	8.31	ESE	28.6	Partly Cloudy	64.2	748
16:00 PM	3.54	7.92	E	28.2	Partly Cloudy	66.2	752
17:00 PM	4.73	10.57	NE	28.0	Partly Cloudy	68.3	754
18:00 PM	3.53	7.90	NE	27.6	Partly Cloudy	67.5	755
19:00 PM	3.62	8.10	E	27.5	Partly Cloudy	69.4	752
20:00 PM	3.74	8.37	E	27.3	Partly Cloudy	72.3	753
21:00 PM	3.57	7.98	SE	27.1	Partly Cloudy	74.6	750
22:00 PM	4.76	10.65	ESE	27.1	Partly Cloudy	75.2	748
23:00 PM	3.67	8.20	S	26.9	Partly Cloudy	77.9	747
12:00 AM	4.62	10.32	SSE	26.7	Partly Cloudy	80.2	750
1:00 AM	3.66	8.19	NE	26.8	Partly Cloudy	81.2	752
2:00 AM	3.40	7.60	ENE	27.1	Partly Cloudy	79.6	750
3:00 AM	4.74	10.60	E	27.6	Partly Cloudy	79.2	748
4:00 AM	4.84	10.83	ESE	27.5	Partly Cloudy	78.6	754
5:00 AM	4.13	9.24	NE	28.3	Partly Cloudy	77.5	752
6:00 AM	4.69	10.50	SE	28.7	Partly Cloudy	76.3	750
7:00 AM	3.58	8.01	ESE	28.9	Partly Cloudy	72.4	748
8:00 AM	4.66	10.42	SE	29.3	Clear sky	68.6	752
9:00 AM	3.50	7.83	E	29.8	Clear sky	65.7	754
10:00 AM	4.78	10.69	NE	30.8	Clear sky	63.2	750

*** End of Report ***



Authorized Signatory

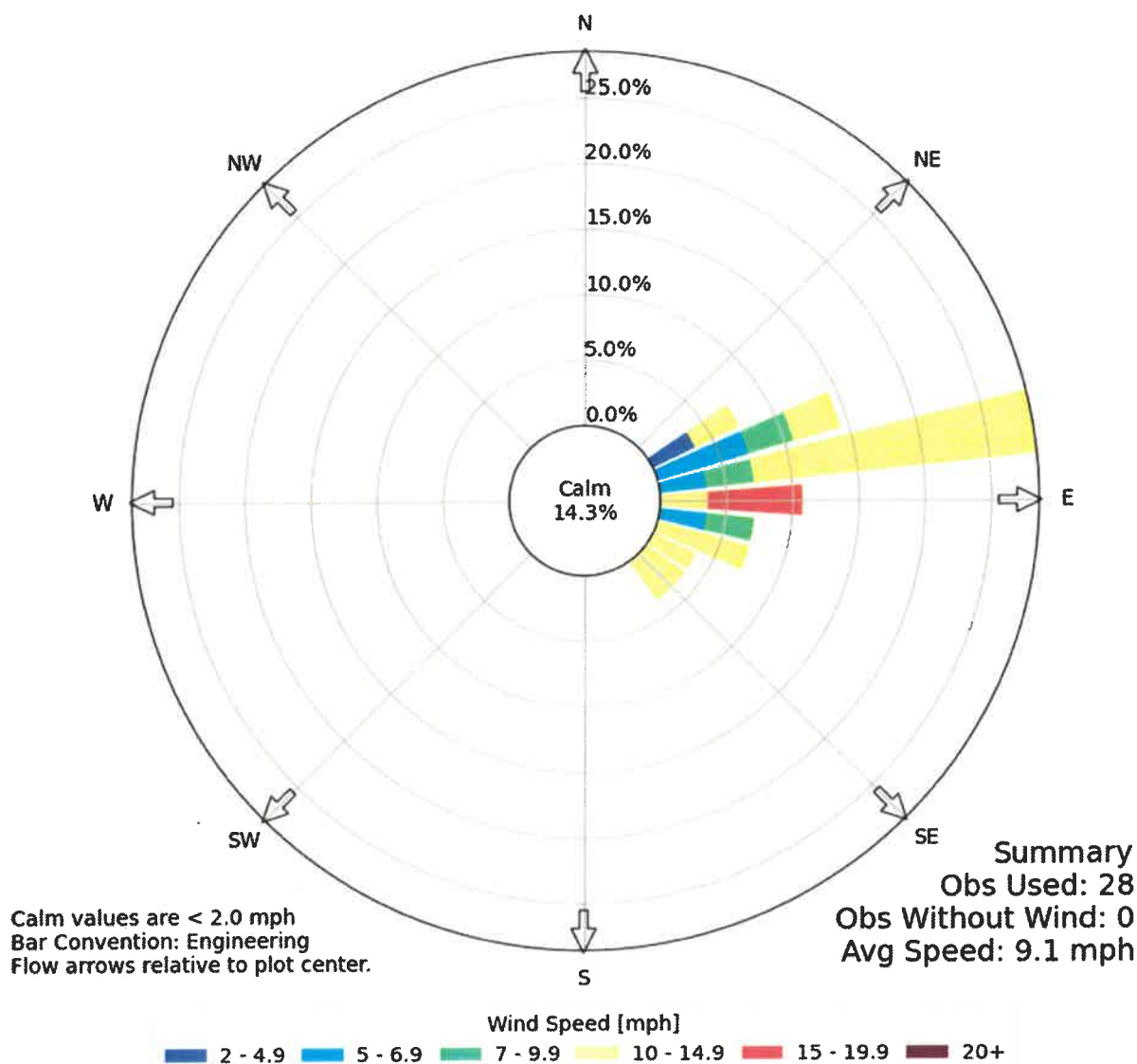
HubertEnviroCareSystems(P)Ltd.

Environmental Monitoring Report for ONGCLtd., Well: MSAE; RIG:HP 2000-2

Sample Description : WindRose
Sample Drawn by : Hubert Enviro Care Systems Private Limited
Sampling Date : 31.07.2025 to 01.08.2025
Sample Location : On top of the MIC office



Windrose Plot for [VORY] Rajahmundry
Obs Between: 31 Jul 2025 11:30 AM - 01 Aug 2025 09:30 PM Asia/Kolkata



Pic: 1 - Wind rose diagram



HubertEnviroCareSystems(P)Ltd.

4.0 AMBIENT AIR QUALITY STATUS

4.1 Preamble

The objective of the Ambient Air Quality monitoring is to assess the existing levels of air pollutants as well as the regional background concentration in the Project area. Air pollution forms an important and critical factor to study the environmental issues in the project areas. Air qualities have to be frequently monitored to know the extent of pollution due to mining and allied activities. Thus, ambient air quality monitoring was carried out at 2 locations. The ambient air quality monitoring stations are given.

AMBIENT AIR MONITORING STATIONS

Sl.No.	Location Name	Location Code
1	Near Main Gate- Upstream	AAQ-01
2	Near DG Area – Downstream	AAQ-02

4.2 Data Presentation

The Ambient Air Quality data in terms of PM, PM₁₀, PM_{2.5}, SO₂, NO₂ and CO are given in Table.



A handwritten signature in blue ink.

Environmental Monitoring Report for ONGCLtd., Well: MSAE; RIG:HP 2000-2

TEST REPORT

Name of the Client : M/s.Oil and Natural Gas Corporation Limited., Report No : HECS/AP/006/020825
Address of the Client : Rajamundry Asset, Second Floor, Godavari Report Date : 06.08.2025
Bhavan, Base-Complex, Rajamundry,
Andhrapradesh-533106.

Sample Description : Ambient Air Quality – Well : MSAE; Rig-HP 2000-2
Sampled Location : Near Main Area- Upstream
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd
Sampling/Received Date : 31.07.2025 to 01.08.2025 / 02.08.2025
Analysis Commenced on : 02.08.2025 Completed on : 06.08.2025

S.No.	Parameters	Units	Results	NAAQ Standards: 2009	
1	Sulphur Dioxide	$\mu\text{g}/\text{m}^3$	9.2	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	$\mu\text{g}/\text{m}^3$	22.37	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than $10\ \mu\text{m}$	$\mu\text{g}/\text{m}^3$	54.61	100(24 hours)	60 (Annual)
4	Particulate Matter Size Less than $2.5\ \mu\text{m}$	$\mu\text{g}/\text{m}^3$	24.05	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m^3	BLQ(LOQ 0.05)	4(1 hours)	2 (8 hours)
6	Lead	$\mu\text{g}/\text{m}^3$	BLQ(LOQ 0.002)	1(24 hours)	0.5 (Annual)
7	Ozone	$\mu\text{g}/\text{m}^3$	13.80	180(1 hours)	100 (8 hours)
8	Ammonia	$\mu\text{g}/\text{m}^3$	7.4	400(24 hours)	100 Annual)
9	Benzene	$\mu\text{g}/\text{m}^3$	BLQ(LOQ 0.1)	5(Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m^3	BLQ(LOQ 0.1)	1(Annual)	1 (Annual)
11	Arsenic	ng/m^3	BLQ(LOQ 2)	6(Annual)	6 (Annual)
12	Nickel	ng/m^3	BLQ(LOQ 2)	20 (Annual)	20 (Annual)
13	Hydrocarbons	$\mu\text{g}/\text{m}^3$	BLQ(LOQ 1)	NA	NA
14	Non Methane Hydrocarbons	mg/m^3	BLQ(LOQ 0.2)	NA	NA
15	Hydrogen Sulphide	$\mu\text{g}/\text{m}^3$	BLQ(LOQ 6)	NA	NA
16	Mercury	$\mu\text{g}/\text{m}^3$	BLQ(LOQ 0.002)	NA	NA

Note:-BLQ- Below the limit of Quantification, LOQ- Limits of Quantification, $\mu\text{g}/\text{m}^3$ - Micrograms per cubic meter, mg/m^3 - Milligrams per cubic meter, ng/m^3 - Nanograms per cubic meter, Parts per billion (ppb). Method of Testing – As per IS: 5182; HECS/AIR/Ambient/SOP and NIOSH.

Remarks: The Tested Parameters as above are within the Limits of NAAQ Standards 2009.

*** End of Report ***

Authorized Signatory



Environmental Monitoring Report for ONGCLtd., Well: MSAE; RIG:HP 2000-2

TESTREPORT

Name of the Client : M/s.Oil and Natural Gas Corporation Limited., Report No : HECS/AP/007/020825
Address of the Client : Rajamundry Asset, Second Floor, Godavari Report Date : 06.08.2025
Bhavan, Base-Complex, Rajamundry,
Andhrapradesh-533106.

Sample Description : Ambient Air Quality - Well : MSAE; Rig-HP 2000-2
Sampled Location : Near DG Area -Downstream
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd
Sampling/Received Date : 31.07.2025 to 01.08.2025 / 02.08.2025
Analysis Commenced on : 02.08.2025 Completed on : 06.08.2025

S.No.	Parameters	Units	Results	NAAQ Standards: 2009	
1	Sulphur Dioxide	$\mu\text{g}/\text{m}^3$	11.6	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	$\mu\text{g}/\text{m}^3$	23.44	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than $10\mu\text{m}$	$\mu\text{g}/\text{m}^3$	57.29	100(24 hours)	60 (Annual)
4	Particulate Matter Size Less than $2.5\mu\text{m}$	$\mu\text{g}/\text{m}^3$	23.32	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m^3	BLQ(LOQ 0.05)	4(1 hours)	2 (8 hours)
6	Lead	$\mu\text{g}/\text{m}^3$	BLQ(LOQ 0.002)	1(24 hours)	0.5 (Annual)
7	Ozone	$\mu\text{g}/\text{m}^3$	10.33	180(1 hours)	100 (8 hours)
8	Ammonia	$\mu\text{g}/\text{m}^3$	BLQ(LOQ 5)	400(24 hours)	100 Annual)
9	Benzene	$\mu\text{g}/\text{m}^3$	BLQ(LOQ 0.1)	5(Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m^3	BLQ(LOQ 0.1)	1(Annual)	1 (Annual)
11	Arsenic	ng/m^3	BLQ(LOQ 2)	6(Annual)	6 (Annual)
12	Nickel	ng/m^3	BLQ(LOQ 2)	20 (Annual)	20 (Annual)
13	Hydrocarbons	$\mu\text{g}/\text{m}^3$	BLQ(LOQ 1)	NA	NA
14	Non Methane Hydrocarbons	mg/m^3	BLQ(LOQ 0.2)	NA	NA
15	Hydrogen Sulphide	$\mu\text{g}/\text{m}^3$	BLQ(LOQ 6)	NA	NA
16	Mercury	$\mu\text{g}/\text{m}^3$	BLQ(LOQ 0.002)	NA	NA

Note:-BLQ- Below the limit of Quantification, LOQ- Limits of Quantification, $\mu\text{g}/\text{m}^3$ - Micrograms per cubic meter, mg/m^3 - Milligrams per cubic meter, ng/m^3 - Nanograms per cubic meter, Parts per billion (ppb). Method of Testing – As per IS: 5182; HECS/AIR/Ambient/SOP and NIOSH.

Remarks: The Tested Parameters as above are within the Limits of NAAQ Standards 2009.

*** End of Report ***



Authorized Signatory

5.0 STACK EMISSION

All the stacks are monitored using standard stack monitoring kit, Voyubhodhan VSS1. The principle of operation is to take ISO KINETIC samples of the pollutants. Stack monitoring was carried out at 1 location. The Stack monitoring station is given below.

STACK MONITORING STATION

SI.No.	Location Name	Location Code
1	DG 4 - 1430 KVA	ST-01

5.1 Data Presentation

The Stack Emission data in terms of PM, SO₂, NO₂ and CO are given in Table.



A handwritten signature in blue ink.

Environmental Monitoring Report for ONGCLtd., Well: MSAE; RIG:HP 2000-2

TEST REPORT

Name of the Client : M/s.Oil and Natural Gas Corporation Limited., Report No : HECS/AP/010/020825
Address of the Client : Rajamundry Asset, Second Floor, Godavari Report Date : 06.08.2025
Bhavan, Base-Complex, Rajamundry,
Andhrapradesh-533106.

Sample Description : DG Stack Emission - Well : MSAE; Rig-HP 2000-2
Sampled Location : DG 4 -1430 KVA
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd.
Sampling/ Received Date : 01.08.2025 / 02.08.2025
Analysis Commenced on : 02.08.2025 Completed on : 06.08.2025

S.No.	Parameters	Units	Results	CPCB Standards
1	Stack Height	Meter	5.0	-
2	Stack Diameter	Meter	0.3	-
3	Temperature	°C	153.0	-
4	Velocity	m/sec	15.5	-
5	Flow rate	Nm ³ /hr	2503.0	-
6	Particulate Matter	mg/ Nm ³	47.0	75
7	Sulphur Dioxide	mg/Nm ³	BLQ(LOQ 2)	-
8	Nitrogen Dioxide	ppmv	231.0	710
9	Carbon monoxide	mg/ Nm ³	84.0	150
10	Carbon dioxide	%V/V	2.66	-
11	Total Volatile Organic Compound (TVOC)	ppmv	-	-
12	Total Hydrocarbon	µg /Nm ³	BLQ(LOQ 0.1)	-
13	Moisture	%	0.33	-
14	Mercury	mg/Nm ³	BLQ(LOQ 0.1)	-
15	Ambient Temperature	°C	31.0	-

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/Nm³- Milligrams per Normal cubic meter. *- Parts per million by Volume, m/s- Meter per second, Nm³/hr - Normal cubic meter per hour,

NA - Not Applicable. Remarks :-Standards are given as per CPCB PCLS / 02/ 2010 Sixth Edition (Engine Rating more than 0.8 M W (800 KW); The Tested Parameters are found within acceptable Limit.

Method of Testing – *As per IS 11255;

1. CO and CO₂. as per PID Gas Detector - As per IS 13270 method
2. TVOC. as per NDIR technique –
3. Total Hydrocarbon. as per USEPA method 29 - Mercury.

*** End of Report ***



Authorized Signatory

6.0 WATER QUALITY STATUS

6.1 Rationale behind Sampling

Any adverse impact or pollution water will have serious effect on the environment. Hence, it becomes important to monitor the water quality periodically in the project area.

In order to assess the quality of Waste Water in Project area samples were collected for testing chemical parameters as per IS: 3025. Waste water samples were collected at 2 locations. Locations are given below.

WATER QUALITY STATION

Sl.No.	Sample Name	Sample Code
1	Ground Water	WT-01
2	Drilling Effluent(Pit Water)	WT-02

6.2 Data Presentation

The abstract of Water Quality data are given in Table.



A handwritten signature in blue ink.

Environmental Monitoring Report for ONGCLtd., Well: MSAE; RIG:HP 2000-2

TEST REPORT

Name of the Client : M/s.Oil and Natural Gas Corporation Limited., Report No : HECS/WT/001/020825
Address of the Client : Rajamundry Asset, Second Floor, Godavari Bhavan, Base-Complex, Rajamundry, Andhrapradesh-533106. Report Date : 06.08.2025
Sample Description : Ground Water
Sampled Location : Well : MSAE; Rig-HP 2000-2
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd
Sampling/ Received Date : 01.08.2025 / 02.08.2025
Analysis Commenced on : 02.08.2025 Completed on : 06.08.2025

S.No.	Parameters	Units	Results	Test Method
1	Total suspended Solids	mg/l	BLQ(LOQ 2.0)	IS 3025 (Part 17) 1984
2	pH @ 25°C	-	7.42	IS 3025(Part 11) : 2022 (Electrometric method)
3	Total Dissolved Solids	mg/l	596.0	IS 3025 (Part 16) 1984
4	Temperature	°C	27.1	IS 3025 (Part 9):1983
5	Oil & Grease	mg/l	BLQ(LOQ 4.0)	IS 3025 (Part 39) 1991
6	Chemical Oxygen Demand as O2	mg/l	BLQ(LOQ 4.0)	IS 3025 (Part 58) 2006
7	Lead as Pb	mg/l	BLQ(LOQ 0.005)	IS:3025 (Part 47)1994
8	Chromium (Hexavalent) as Cr6+	mg/l	BLQ(LOQ 0.01)	IS 3025 Part 52: 2003 (Diphenyl Carbazide method)
9	Total Chromium as Cr	mg/l	BLQ(LOQ 0.01)	USEPA 200.8 : 1994
10	Copper as Cu	mg/l	BLQ(LOQ 0.01)	USEPA 200.8 : 1994
11	Zinc as Zn	mg/l	BLQ(LOQ 0.01)	USEPA 200.8 : 1994
12	Nickel as Ni	mg/l	BLQ(LOQ 0.01)	USEPA 200.8 : 1994
13	Chloride as Cl	mg/l	128.67	IS 3025 (Part 32) 1988
14	Fluoride as F	mg/l	0.41	APHA 23rd edition (Method 4500F- B , D): 2017
15	Sulphate as SO4	mg/l	95.67	IS 3025 (Part 24) 1986
16	Sulphide as S2	mg/l	BLQ(LOQ 0.04)	IS:3025 (Part 29)1986
17	Mercury as Hg	mg/l	BLQ(LOQ 0.0005)	USEPA 200.8 : 1994
18	Cadmium as Cd	mg/l	BLQ(LOQ 0.001)	USEPA 200.8 : 1994
19	Cyanide as CN	mg/l	BLQ(LOQ 0.01)	IS:3025 (Part 27)1986
20	Sodium as Na	mg/l	70.0	IS 3025 (Part 45) :1993
21	Phenols as C6H5OH	mg/l	BLQ(LOQ 0.001)	IS 3025 (Part 43) :1992
22	Toxicity Factor	-	98.0	IS 6582 Part 2 : 2001
23	BOD, 3 days @ 27°C as O2	mg/l	BLQ(LOQ 2.0)	IS:3025 (Part 44)1993
24	Electric Conductivity@25°C	µS/cm	1123.0	IS 3025 (Part-14) 2013
25	Aluminium as Al	mg/l	BLQ(LOQ 0.02)	IS 3025(Part 55) 2003

Note: - BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/l- Milligrams per litre.

*** End of Report ***



Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.

Environmental Monitoring Report for ONGCLtd., Well: MSAE; RIG:HP 2000-2

TEST REPORT

Name of the Client : M/s. Oil and Natural Gas Corporation Limited., Report No : HECS/WT/002/020825
Address of the Client : Rajamundry Asset, Second Floor, Godavari Report Date : 06.08.2025
Bhavan, Base-Complex, Rajamundry,
Andhrapradesh – 533106.

Sample Description : Drilling Effluent (PIT Water)
Sampled Location : Well : MSAE; Rig-HP 2000-2
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd
Sampling/Received Date : 01.08.2025 / 02.08.2025
Analysis Commenced on : 02.08.2025 Completed on : 06.08.2025

S.No.	Parameters	Units	Results	Test Method
1	pH @ 25°C	-	7.42	IS 3025 (Part 11) Clause 2 2022
2	Temperature	°C	27.6	IS:3025 (Part 09) 1984
3	Oil & Grease	mg/l	8.0	IS : 3025 (Part 39) Clause 5 2021
4	Chemical Oxygen Demand as O ₂	mg/l	158.0	IS 3025 (Part 58) 2006
5	Lead as Pb	mg/l	BLQ(LOQ 0.1)	USEPA 200.8 Revision 5.4: 1994
6	Chromium (Hexavalent) as Cr ⁶⁺	mg/l	BLQ(LOQ 0.05)	IS 3025 (Part 52) Clause 6 2003
7	Total Chromium as Cr	mg/l	BLQ(LOQ 0.01)	USEPA 200.8 Revision 5.4: 1994
8	Copper as Cu	mg/l	BLQ(LOQ 0.1)	USEPA 200.8 Revision 5.4: 1994
9	Zinc as Zn	mg/l	BLQ(LOQ 0.1)	USEPA 200.8 Revision 5.4: 1994
10	Nickel as Ni	mg/l	BLQ(LOQ 0.1)	USEPA 200.8 Revision 5.4: 1994
11	Chloride as Cl	mg/l	546.7	IS 3025 (Part 32) Clause 2 1988
12	Fluoride as F	mg/l	BLQ(LOQ 0.1)	APHA 23 rd Edn. 4500 D-F Spadns method: 2017
13	Sulphate as SO ₄	mg/l	448.72	IS:3025 (Part 24) Clause 4 1986
14	Sulphide as S ₂	mg/l	BLQ(LOQ 1.0)	IS 3025 (Part 29) Clause 2 1986
15	Mercury as Hg	mg/l	BLQ(LOQ 0.1)	USEPA 200.8 Revision 5.4: 1994
16	Cadmium as Cd	mg/l	BLQ(LOQ 0.01)	USEPA 200.8 Revision 5.4: 1994
17	Cyanide as CN	mg/l	BLQ(LOQ 0.01)	IS : 3025 (Part 39) Clause 5 2021
18	Total Hardness as CaCO ₃	mg/l	460.0	IS 3025 (Part 21) Clause 5 2009
19	Sodium as Na	mg/l	340.0	IS: 3025 (Part 45) Clause 5 1993
20	Phenols as C ₆ H ₅ OH	mg/l	BLQ(LOQ 0.01)	IS 3025 (Part 43) Clause 5 1992
21	Bio assay	%	40.0	IS 6582 (Part 2) 2001
22	BOD, 3 days @ 27°C as O ₂	mg/l	26.0	IS 3025 (Part 44) 1993
23	Electric Conductivity@25°C	µS/cm	6438.0	IS 3025 (Part-14) 2013
24	Alumimium as Al	mg/l	BLQ(LOQ 0.1)	IS 3025 (Part 55) Clause 5 2003

Note :- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/l- Milligrams per litre.

*** End of Report ***



Authorized Signatory

7.0 DRILL CUTTING STATUS

7.1 Drill Cutting

Drill Cutting samples were collected and analyzed as per procedures outlined in EPA/APHA. Collected samples are transported to the laboratory for the analysis. Parameters like Zinc, Manganese, Lead, Cadmium, Copper, Iron, Mercury, Nickel, Oil & Grease, Alkalinity, Total Chromium, Hexavalent Chromium, Arsenic, Acidity, Vanadium, Cobalt, Inorganic Solids, Barium, Thallium and Selenium were measured.

WATER QUALITY STATION

SI.No.	Sample Name	Sample Code
1	Drill Cutting (500 gms)	PE-01

7.2 Data Presentation

The abstract of Water Quality data are given in Table.



A handwritten signature in blue ink.

Environmental Monitoring Report for ONGCLtd., Well: MSAE; RIG:HP 2000-2

TEST REPORT

Name of the Client : M/s. Oil and Natural Gas Corporation Limited., Report No : HECS/PE/001/020825
Address of the Client : Rajamundry Asset, Second Floor, Godavari Report Date : 06.08.2025
Bhavan, Base-Complex, Rajamundry,
Andhrapradesh – 533106.
Sample Description : Drill Cutting(500 gm) – Depth-3250 to 3260
Sampled Location : Well : MSAE; Rig-HP 2000-2
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd
Sampling/Received Date : 01.08.2025 / 02.08.2025
Analysis Commenced on : 02.08.2025 Completed on : 06.08.2025

S.No.	Parameters	Units	Results
1	Lead	mg/kg	BLQ(LOQ 0.1)
2	Cadmium	mg/kg	BLQ(LOQ 0.1)
3	Mercury	mg/kg	BLQ(LOQ 0.1)
4	Nickel	mg/kg	BLQ(LOQ 0.1)
5	Oil & Grease	mg/kg	BLQ(LOQ 4.0)
6	Alkalinity	mg/kg	360.0
7	Total Chromium	mg/kg	BLQ(LOQ 0.1)
8	Arsenic	mg/kg	BLQ(LOQ 0.1)
9	Hexavalent Chromium	mg/kg	BLQ(LOQ 0.5)
10	Acidity	mg/kg	99.62
11	Thallium as Tl	mg/kg	BLQ(LOQ 0.1)
12	Inorganic Solids	%	96.28
13	Zinc	mg/kg	BLQ(LOQ 0.1)
14	Manganese	mg/kg	BLQ(LOQ 0.1)
15	Copper as Cu	mg/kg	BLQ(LOQ 0.1)
16	Iron	mg/kg	12.16
17	Electric Conductivity@25°C	µS/cm	2120.0
18	Alumimium as Al	mg/l	BLQ(LOQ 0.1)

Note :- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/l- Milligrams per litre.

*** End of Report ***



Authorized Signatory

HubertEnviroCareSystems(P)Ltd.

8.0 NOISE LEVEL STATUS

8.1 Rationale behind Sampling

As part of the occupational health and safety measures certain safe guards have been in corporated to mitigate noise pollution in working environments.

8.2 Data Presentation

The abstract of Noise level data are given in Table.



A handwritten signature in blue ink, appearing to be "JH".

Environmental Monitoring Report for ONGCLtd., Well: MSAE; RIG:HP 2000-2

TEST REPORT

Name of the Client : M/s.Oil and Natural Gas Corporation Limited., Report No : HECS/AP/008/020825
Address of the Client : Rajamundry Asset, Second Floor, Godavari Bhavan, Base-Complex, Rajamundry, Andhrapradesh-533106. Report Date : 06.08.2025
Sample Description : Ambient Noise Level
Sampled Location : Well : MSAE; Rig-HP 2000-2
Sample Drawn By : Hubert Enviro Care Systems Pvt Ltd
Sampling/Received Date : 31.07.2025 / 02.08.2025
Analysis Commenced on : 02.08.2025 Completed on : 06.08.2025

S.No.	Location	Day Time Noise level in dB(A)	Night Time Noise level in dB(A)
1	DG-1 area	72.4	67.8
2	DG-2 area	72.7	67.4
3	DG-3 area	72.8	68.9
4	DG-4 area	72.3	67.7
5	DG-5 area	74.1	69.2
6	Mud Pumb Area	73.6	68.7
7	Air Compressor Area	74.2	68.3
8	Mud Tanks Area	72.9	67.8
9	Diesel tank area	61.7	57.5
10	Bop Accumulator	62.3	57.9
11	Fire Pumb	73.2	68.6
12	Shall shaker	68.7	63.4
13	Hopper Pumb Area	70.9	66.7
14	Derrick floor	73.2	68.4
15	Draw Works	71.2	68.2
16	Chemistry lab	57.3	52.7
17	Main Gate	55.4	50.7
18	Chemical Shed	60.4	56.1
19	Office Area	55.9	52.8
20	Ground Area	64.7	60.1

Remarks: CPCB Limit for Noise Level

1. Industrial Area-75 dB (A) day Time and 70 dB (A) Night Time.
2. Commercial Area- 65 dB (A) day Time and 55 dB (A) Night Time.

*** End of Report ***



Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.

F. No. J-11011/68/2011- IA II (I)
Ministry of Environment, Forests and Climate Change
(I.A. Division)

Indira Paryavaran Bhawan
Aliganj, Jorbagh Road,
New Delhi -110003

E-mail : lk.bokolia@nic.in
Telefax : 011: 2436 95313
Dated: March 23rd 2015

To,

The Chairman-Cum- Managing Director
M/s Oil and Natural Gas Corporation Limited (ONGCL),
8th Floor, Scope Minar, Laxmi Nagar, Delhi-110092.

E-mail :sharma js@ongc.co.in; sharmajswarup@hotmail.com;
Fax No.: 011-22406681/044-28542527

Subject : Additional Exploratory Drilling (28 Wells) in KG (On-land) PML acreages of Krishna District, Additional Exploratory Drilling (24 Wells) in KG Basin on land PML of West Godavari District and Additional Exploratory Drilling (13 Wells) on land PML acreages of East Godavari District, Andhra Pradesh by M/s Oil and Natural Gas Corporation Limited (ONGCL) – Amendment in Environmental Clearance reg.

Ref. : (i) Ministry's letter of even no. dated 14th June, 2013.
(ii) Your letter no. ONGC/CHSE/TOR-EC/2014-15 dated 8th December, 2014 and letter no. ONGC/CHSE/Env/CBM/HSE/TOR dated 15th December, 2014.

Sir,

This has reference to your proposals dated 08.12.2014 and 15.12.2014 alongwith project documents including Form I, Terms of References and Pre-feasibility Report on the above mentioned subject.

2.0 The Ministry of Environment, Forests and Climate Chnage has examined the application. It is noted that the proposal is for additional exploratory drilling (28 Wells) in KG (On-land) PML acreages of Krishna District, additional exploratory drilling (24 Wells) in KG Basin on land PML of West Godavari District and additional exploratory drilling (13 Wells) on land PML acreages of East Godavari District, Andhra Pradesh by M/s Oil and Natural Gas Corporation Limited (ONGCL). Details of the projects are as given below:

	PML Acreges (PEL IB Block in East Godavari,	PML Acreages of West Godavari	PML Acreages of Krishna District
Additional Exploratory Wells to be drilled	13 Wells	24 wells	28 wells
Block Area	1807 Km ²	2041 Km ²	1615 Km ²
Drilling Depth	3000-4000 m	3000-5000 m	3000-5000 m
Cost of project	Rs. 325 Crore	Rs. 600 Crore	Rs. 700 Crore
Type of Drilling Fluid/Well	WBM/SOBM	WBM/SOBM	WBM/SOBM
Water Consumption	20 m3/day/ well	20 m3/day/ well	20 m3/day/ well
Wastewater generation	10 m3/day/Well	10 m3/day/Well	10 m3/day/Well

Ek guem 25/5/15

for

Ifc Hse

3.0 The proposal was considered by the Reconstituted Expert Appraisal Committee (Industry) in its 30th and 32nd meetings held during 22nd-23rd December, 2014 and 20th-21st January, 2015 respectively and the committee recommended the proposal for amendment in the existing EC. The Committee exempted the project proposal from EIA report preparation/public hearing as per para 7 (ii) of EIA Notification, 2006.

4.0 The Ministry accepts the recommendation of the Expert Appraisal Committee (Industry) for amendment of existing environmental clearance by adding 65 exploratory drilling wells, subject to compliance of following specific conditions:

A. SPECIFIC CONDITIONS :

- i. The present EC is for Exploratory Drilling only. In case Development drilling to be done in future, prior environmental clearance must be obtained from the Ministry.
- ii. Ambient air quality shall be monitored near the closest 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, PM_{2.5}, SO₂, NO_x, CO, methane & Non-methane HC etc.
- iii. Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.
- iv. Approach road shall be made pucca to minimize generation of suspended dust.
- v. The company shall make the arrangement for control of noise from the drilling activity. Acoustic enclosure shall be provided to DG sets and proper stack height shall be provided as per CPCB guidelines.
- vi. Total water requirement shall not exceed 20 m³/day and prior permission shall be obtained from the concerned agency.
- vii. 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.
- viii. Drilling wastewater 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 on-shore disposal. The membership of common TSDF shall be obtained for the disposal of drill cuttings and hazardous waste. Otherwise, secured land fill shall be created at the site as per the design approved by the CPCB and obtain authorization from the SPCB. Copy of authorization or membership of TSDF shall be submitted to Ministry's Regional Office at Bangalore.
- ix. Good sanitation facility shall be provided at the drilling site. Domestic sewage shall be disposed off through septic tank/ soak pit.
- x. Oil spillage prevention 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.
- xi. 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.

- xii. 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.
- xiii. 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 personal H₂S detectors in locations of high risk of exposure along with self containing breathing apparatus.
- xiv. On completion of drilling, the company have to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority. Photograph of plugging to be submitted to respective Regional Office.
- xv. Blow Out Preventer (BOP) 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.
- xvi. Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.
- xvii. 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 to the 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.
- xviii. Abandoned well inventory and remediation plan shall be submitted within six months from the date of issue of letter.
- xix. Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.
- xx. In case the commercial viability of the project is established, the Company shall prepare a detailed plan for development of oil and gas fields and obtain fresh environmental clearance from the Ministry.
- xxi. Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office at Bangalore.
- xxii. Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office at Bangalore.
- xxiii. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.
- xxiv. An audit shall be done to ensure that the Environment Management Plan is implemented in totality and report shall be submitted to the Ministry's Regional Office.
- xxv. All personnel including those of contractors shall be trained and made fully aware of the hazards, risks and controls in place.
- xxvi. Company shall have own Environment Management Cell having qualified persons with proper background.

- xxvii. Company shall prepare operating manual in respect of all activities. It shall cover all safety & environment related issues and system. 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.

B. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the Andhra Pradesh Pollution Control Board (APPCB), State Government and any other statutory authority.
- ii. No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & Forests. 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 to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- iii. The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 2000 as amended subsequently. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained, wherever applicable.
- iv. 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 prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
- v. A separate Environmental Management Cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.
- vi. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.
- vii. The project proponent shall upload the status of compliance of the stipulated environment clearance 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 the MOEF, the respective Zonal Office of CPCB and the APPCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x, HC (Methane & Non-methane), VOCs (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- viii. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the APPCB. The Regional Office of this Ministry / CPCB / APPCB shall monitor the stipulated conditions.
- ix. 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 alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.

x. 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 APPCB and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.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 Regional office.

xi. 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 commencing the land development work.

5.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

6.0 The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

7.0 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 Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.


(Lalit Bokolia)
Additional Director

Copy to :

1. The Principal Secretary, Department of Environment, Forest, Science & Technology, Government of Andhra Pradesh, Hyderabad, A.P.
2. The Chief Conservator of Forests, Regional Office (Southern Zone, Bangalore) Kendriya Sadan, 4th Floor, E&F Wing, II Block Koramangala, Bangalore-560034.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Andhra Pradesh Pollution Control Board, Paryavaran Bhawan, A-III, Industrial Estate, Sanath Nagar, Hyderabad - A.P.
5. Monitoring Cell, Ministry of Environment, Forests and Climate Change, Indira Paryavaran Bhavan, Complex, New Delhi.
6. Guard File/Monitoring File/Record File.


(Lalit Bokolia)
Additional Director



F. No. J-11011/68/2011- IA II (I)
Government of India
Ministry of Environment, Forest & Climate Change
Impact Assessment Division

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

Dated: 15th February, 2022

To,

Chief General Manager
M/S Oil and Natural Gas Corporation Limited,
Deendayal Urja Bhavan,
5, Nelson Mandela Marg,
Vasant Kunj, New Delhi-110070

Sub: Additional Exploratory Drilling (28 Wells) in KG (On-land) PML acreages of Krishna District, Additional Exploratory Drilling (24 Wells) in KG Basin on land PML of West Godavari District and Additional Exploratory Drilling (13 Wells) on land PML acreages of East Godavari District, Andhra Pradesh by M/s OIL AND NATURAL GAS CORPORATION LIMITED- Extension in Environment Clearance reg.

Sir,

This refers to your online proposal No. IA/AP/IND2/247823/2021 dated 30th December, 2021 for extension in the environmental clearance to the above mentioned project.

2. The Ministry of Environment, Forest and Climate Change has considered the above proposal for amendment in Environmental Clearance(EC) granted by the Ministry vide letter No J-11011/ 68/2011-IA II(I) dated 23rd March, 2015 for the project additional Exploratory Drilling (28 Wells) in KG (On-land) PML acreages of Krishna District, Additional Exploratory Drilling (24 Wells) in KG Basin on land PML of West Godavari District and Additional Exploratory Drilling (13 Wells) on land PML acreages of East Godavari District, Andhra Pradesh by M/s Oil and Natural Gas Corporation Limited.

3. The project proponent has requested for extension in the EC with the details as under:

S.no	EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification / reasons
1	Environmental Clearance issued earlier via F. No J-11011/68/2011- IA II(I) dated 23 rd March, 2015.	As per Ministry's S.O. 1141(E) dated 29th April 2015, validity of Environment Clearance shall be 7 years from the date of issue. Further, Ministry vide its S.O 221(E) dated 18th January 2021 notified that the period from the 1st April, 2020 to the 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of prior Environmental Clearances granted due to outbreak of COVID-19. Hence the validity of the EC shall be 22nd March, 2023.	Request for extension of the validity of the EC for there (03) years.	EC was granted 65 exploratory wells out of which 28 wells were successfully drilled. The remaining 37 wells could not be taken up as the G&G studies are under progress to analyse the prospectivity of the area. In addition, studies are in progress to understand the subsurface conditions as the identified exploratory locations are of deeper depths with High Pressure and High temperature conditions.

4. The proposal was appraised by the Expert Appraisal Committee (Industry-2) in its 48th meeting held during 06th- 07th January, 2022. The Expert Appraisal Committee, after detailed deliberations **recommended** for extension of the validity of EC vide letter J-11011/ 68/2011- IA II(I)

8-2

dated 23rd March, 2015 till 22nd March, 2026 in view of COVID with all other terms and conditions remain unchanged.

5. Based on recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords approval to the proposed extension in the EC vide letter No J-11011/ 68/2011- IA II(I) dated 23rd March, 2015 for the project additional Exploratory Drilling (28 Wells) in KG (On-land) PML acreages of Krishna District, Additional Exploratory Drilling (24 Wells) in KG Basin on land PML of West Godavari District and Additional Exploratory Drilling (13 Wells) on land PML acreages of East Godavari District, Andhra Pradesh by M/s Oil and Natural Gas Corporation Limited.

6. All other terms and conditions stipulated in the EC vide letter J-11011/ 68/2011- IA II(I) dated 23rd March, 2015 shall remain unchanged.

7. This issues with approval of the competent authority.

Ashok Kumar Pateshwary
15/04/2022

(Ashok Kumar Pateshwary)
Director

Copy to: -

1. The Principal Secretary, Department of Environment, Forest, Science & Technology, Government of Andhra Pradesh, Hyderabad (Andhra Pradesh)
2. The Regional Officer, Integrated Regional Office (IRO), Vijayawada, Ministry of Environment, Forest and Climate Change, Green House Complex, Gopalreddy Road, Vijayawada - 520010, Andhra Pradesh.
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Andhra Pradesh Pollution Control Board, Paryavaran Bhawan, A-III, Industrial Estate, Sanath Nagar, Hyderabad (AP)
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi
6. The District Collector, Krishna, Andhra Pradesh
7. Guard File/Monitoring File/ Parivesh Portal /Record File

Ashok Kumar Pateshwary
15/04/2022

(Ashok Kumar Pateshwary)
Director

E-mail: ak.pateshwary@gov.in
Tel. No. 20819326