



**NORTH KARANPURA CBM PROJECT**  
(CONSORTIUM OF ONGC, IOCL AND PEPL)

PEPL/NKCBM/HSE/MOEFCC/2023/02

13<sup>th</sup> April 2023

To,  
The Ministry of Environment, Forest and Climate Change,  
Integrated Regional Office,  
(New Building of Jharkhand Rajya Awaas Board),  
Harmu, Ranchi-834002  
Jharkhand

**Subject: Six Monthly Compliance Report of "Development of North Karanpura CBM Block NK-CBM-2001/1 in Jharkhand" for the period ending 31<sup>st</sup> March 2023.**

**Ref: MoEF F.No. J-11011/228/2012-IAII (I) dated 12<sup>th</sup> May 2015**

Dear Sir,

Kindly find attached here with the six monthly compliance report with respect to the above EC for favor of your kind information.

Thanking you.

Yours truly,

For Prabha Energy Private Limited

(Dr S.K. Singh)

(Sr. VP-Operations)

**Enclosure:** Six Monthly Compliance Report (Period ending 31<sup>st</sup> March 2023) along with

- 1) Annexure 1- Ambient Air Quality report
- 2) Annexure 2- Noise report
- 3) Annexure 3- Ground water report
- 4) Annexure 4- Effluent water report
- 5) Annexure 5- Copy of Environment Clearance
- 6) Annexure 6- Environmental Statement for 31.03.2023

**CC:**

1. The Member Secretary, Jharkhand State Pollution Control Board, T.A Division Building, HEC Complex, Dhurva, Ranchi - 834004
2. Scientist 'E' & Incharge, Zonal Office Kolkata, Central Pollution Control Board, Southern Enclave, Block 502, 5<sup>th</sup> & 6<sup>th</sup> Floor, 1582 - Rajdanga Main Road, Kolkata - 700107

**EC Compliance Report - Development of North Karanpura Coalbed Methane (CBM) Block (NK-CBM-2001/1) of ONGC/PEPL/IOCL Located in Hazaribagh District of Jharkhand State**

**Name of the Project:** Development of North Karanpura Coalbed Methane (CBM) Block NK-CBM-2001/1

**Environmental Clearance Letter :** J-11011/228/2012-IAII (I) Dated 12th May 2015 from MoEFCC

**Period of Compliance Report:** Six monthly compliance report for the period October 2022 to March 2023

SNo.	Conditions/ Guide lines	Status of Compliance
<b>Specific Conditions</b>		
1	Compensation for the land acquisition to the land owners, if any, and also for standing crop shall be paid as per the National Resettlement and Rehabilitation Policy (NRRP) 2007 or State Government norms. It may be ensured that compensation provided shall not be less than the norms of the NRRP, 2007.	Page - 1 Land is being acquired through proper procedure and applicable laws through district administration. Since only small patches of land are required, the land acquisition process does not cause any displacement and therefore no RR is required.
2	The surface facilities shall be installed as per the applicable codes and standards, international practices and applicable local regulations.	Surface facilities are under installation as per the OMR 2017 and OISD codes and standards and international practices.
3	Ambient air quality shall be monitored near the closest human settlements as per the National Ambient Air Quality Emission Standards (NAAQES) issued by the ministry vide GSR NO 826(E) dated 16 <sup>th</sup> November 2009 for PM10, PM2.5, SO2, NOX, CO, CH4, VOCs, HC, Non-Methane HC etc. Efforts shall be made to improve the ambient air quality of the area.	<ul style="list-style-type: none"> <li>• Air quality monitoring has been carried out at 3 locations for Six Monthly Compliance. Previous reports were also shared with JSPCB and MoEFCC. Reports of AAQ for this period is enclosed as Annexure-1.</li> <li>• All efforts shall be made to improve the ambient air quality of the NK Block area. All installed DGs and GGS are Environmental Friendly in NK Block.</li> </ul>
4	The flare shall be designed as per good oilfield practices and Oil Industry Safety Directorate (OISD) guidelines. The company shall take necessary measures to prevent fire hazards and soil remediation as needed. At the place of ground flaring, the fire pit shall be lined with refractory bricks and efficient burning system. In case of overhead flare stacks, the stack height shall be provided as per the regulatory requirements and emission from stacks shall meet the MoEF/CPCB guidelines.	<ul style="list-style-type: none"> <li>As Production Phase is yet to commence, overhead flare will be designed as per oilfield practices and OISD guidelines in central gas facility i.e. Gas Collection Stations (GCS). GCS will be constructed in coming time after completion of Development Drilling Phase.</li> <li>• Fire-fighting equipments are provided at the site as per the provisions of OISD-189 and OMR 2017.</li> <li>• Soil remediation is not required as there is no oil spillages associated with CBM gas extraction.</li> </ul>



SNo.	Conditions/ Guide lines	Status of Compliance
<b>Specific Conditions (Contd.)</b>		
5	<p>The company shall make the arrangement for control of noise from drilling activity and DG/GG sets by providing necessary mitigation measures such as proper acoustic enclosures to DG/GG sets and meet the norms notified by the MOEFCC. Height of all the stacks/vents shall be as per the CPCB guidelines.</p>	<ul style="list-style-type: none"> <li>• M/S Noida Testing Laboratory, a NABL accredited laboratory, has been engaged for periodic/quarterly noise monitoring. Results of noise monitoring for this quarter are given in Annexure-2.</li> <li>• All DG/GG sets have proper acoustic enclosures and meet the norms notified by MOEFCC.</li> <li>• Height of all the stacks/vents is kept as per the CPCB guidelines.</li> <li>• Ambient noise data show that day and night levels are within the permissible limits as per Noise Rules and Regulations.</li> </ul>
6	<p>The company shall comply with the guidelines for disposal for solid waste, drill cuttings and drilling fluids for onshore drilling operation notified vide GSR, 546(E) dated 30th August 2005.</p>	<ul style="list-style-type: none"> <li>• CBM drill cuttings do not carry any oil traces and they are non-hazardous. Infact, No hazardous chemical is used in drilling operation.</li> <li>• The drill cuttings are inert material and are being used for construction activities like back filling of low lying areas, construction of well pads, road filling etc.</li> <li>• The drilling fluid after solid-liquid separation is recycled or evaporated in HDPE lined pits.</li> </ul>
7	<p>Total fresh water requirement shall not exceed (25 cum/day) for each well during drilling phase and prior permission shall be obtained from the competent authority and a copy submitted to the Ministry's Regional office at Bhubaneswar/Ranchi.</p>	<p>As per the permission of Environmental Clearance (EC), requirement of total fresh water does not exceed 25 cum/day for each well during drilling phase.</p>
8	<p>During well drilling waste water shall be segregated into waste drilling fluid and drill cuttings. Drill cuttings shall be stored onsite impervious HDPE lined pit for solar evaporation and drying. Effluent shall be properly treated and treated effluent shall conform to CPCB standards. The produced water shall be stored onsite HDPE lined pit for solar evaporation and reuse in drilling of new wells and fire hydrant system. Domestic effluent shall be disposed off through septic tank followed by soak pit.</p>	<ul style="list-style-type: none"> <li>• Drill cuttings are stored onsite in impervious HDPE lined pits for solar evaporation and drying.</li> <li>• The produced water conforms to CPCB norms and is stored onsite in HDPE lined pits for solar evaporation and reuse in drilling of new wells.</li> <li>• Effluents if any, will be treated, as per the CPCB standards.</li> <li>• Domestic effluents are disposed off through septic tanks followed by soak pit.</li> </ul>



SNo.	Conditions/ Guide lines	Status of Compliance
<b>Specific Conditions (Contd.)</b>		
9	Ground water monitoring shall be done to assess if produced water storage or disposal has any effect.	Ground water is being regularly monitored by NABL accredited laboratory to ensure that the produced water storage or disposal has no effect on it. Reports of Ground Water are attached as Annexure-3.
10	Drilling waste water including drill cuttings, wash water shall be collected in disposal pits lined with HDPE lining, evaporated or treated and shall comply with the notified standards for onshore disposal on land. Proper toxicological analysis shall be done to ensure there is no hazardous material. Copy of toxicological analysis shall be submitted to Ministry's Regional Office at Bhubaneswar.	<ul style="list-style-type: none"> <li>• Drilling waste water including drill cuttings, wash water are always collected in disposal pits lined with HDPE lining and naturally evaporated.</li> <li>• However, operations in North Karanpura CBM Block had been suspended from October 2022 to March 2023 due to future planning and preparations.</li> </ul> Effluent water analysis reports are given in Annexure-4. <ul style="list-style-type: none"> <li>• The analysis report shows that the drill cuttings and waste water complies with the standards set forth in "Standards for Onland Disposal"</li> </ul>
11	Only water based drilling mud shall be used. The drilling mud shall be recycled. Hazardous waste shall be disposed of as per Hazardous waste (Management, Handling and Transboundary Movement) Rules, 2008. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers/re-processors.	In CBM drilling process, only water based drilling mud (WBM) is used. The used mud is recycled for further drilling operations. No Hazardous wastes are generated in the process as no hazardous chemical is being used in CBM drilling process. However, water is recycled for drilling process.
12	The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At places of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.	<ul style="list-style-type: none"> <li>• Fire fighting equipments are provided in NK CBM Block as per the provision of OISD-189 and OMR 2017.</li> <li>• Soil remediation is not required as there is no oil spillages associated with CBM gas extraction.</li> <li>• Overhead flaring of sufficient height will be provided at central facility station i.e. GCS when where GCS will be constructed.</li> </ul>
13	To prevent underground coal fire, preventive measures shall be taken for ingress of ambient air during withdrawal inside the coal seams by adopting technologies including vacuum suction. Gas detectors for the detection of CH <sub>4</sub> and H <sub>2</sub> S shall be provided.	There is no possibility of ingress of air into coal seams during CBM operations. Proper Risk analysis is always done with Gas Detectors for detection of CH <sub>4</sub> and H <sub>2</sub> S. However in CBM, there is absolutely no chance of H <sub>2</sub> S emission as it is not present in coal seams.



SNo.	Conditions/ Guide lines	Status of Compliance
<b>Specific Conditions (Contd.)</b>		
14	The design, material of construction, assembly, inspection, testing and safety aspect of operation and maintenance of pipeline and transporting the natural gas/oil shall be governed by ASME/ANSI B 31.8/B 31.4 and OISD standard 141. Pipeline wall thickness and minimum depth of burial at river crossing and casing at rails, major road crossing should be in conformity with ANSI/ASME requirement.	At present, All operations in North Karanpura CBM Block have been suspended from 1st October 2022 to 31st March 2023 and Production Phase is yet to commence. All suggested specifications have been included in the tender document and company shall ensure that all the standards will be followed when production operations start.
15	The company should develop a contingency plan for H <sub>2</sub> S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H <sub>2</sub> S detectors in locations of high risk of exposure along with self containing breathing apparatus.	CBM gas is free from H <sub>2</sub> S gas and there is absolutely no chance of H <sub>2</sub> S emission while performing operations.
16	Adequate well protection system shall be provided like blow out preventer (BOP) or diverter systems as required based on the geological formation of the blocks.	Blow Out Preventer (BOP) is always installed while performing drilling or well completion operations as per OMR-2017 and OISD-174.
17	The top soil removed shall be stacked separately for reuse during restoration process.	<ul style="list-style-type: none"> <li>• Top soil is not removed during any activity of CBM exploration in North Karanpura CBM block.</li> <li>• However in future, whenever laying of pipelines in ROU will be carried out, the top soil (if available) will be preserved and re-used after pipeline laying work is completed.</li> </ul>
18	Emergency Response Plan shall be based on the guidelines prepared by OISD, DGMS and Govt of India. Recommendations mentioned in the Risk Assessment & Consequence Analysis and Disaster Management Plan shall be strictly followed.	Emergency Response Plan of NK Block has been prepared on the basis of guidelines given by OMR-2017, OISD-227 and Govt of India.
19	Project proponent shall comply with the environment protection measures and safeguards recommendation in the EIA/EMP/risk analysis report/disaster management plan.	The environmental protection and risk mitigation measures and safeguards recommended in the various studies viz. EIA/EMP/Disaster Management Plan/Crisis Management Plan are implemented during the Project and Operations stages. Recommendations mentioned in these plans are followed and practiced through periodic drills.



SNo.	Conditions/ Guide lines	Status of Compliance
<b>Specific Conditions (Contd.)</b>		
20	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 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.	Shall be followed as suggested
21	Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.	Occupational health surveillance of the workers in NK CBM Block is being carried out periodically as per prevailing Acts and Rules.
22	All the commitments made to the public during the public hearing / public Consultation meeting held on 25.02.2014 for Chatra District and on 26.02.2014 for Hazaribagh District shall be satisfactorily implemented.	The commitments made during public hearing are being implemented by- 1) Providing jobs to local villagers. 2) Given Civil work to Local Contractors. 3) Repairing of roads and culverts for Locals.
23	At least 5% of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's regional Office at Bhubaneswar. Implementation of such program should be ensured accordingly in a time bound manner.	5% of the total cost of the project shall be spent on CSR activities over the life of the project. CSR plans in NK CBM Block always covers the promotion of education, medical facilities, road development, skill development of local people



General Conditions		General Conditions	
SL.N	Conditions/ Guide lines	Status of Compliance	
1	The project authorities must strictly adhere to stipulation made by the Jharkhand State Pollution Control Board (JSPCB), State Government and any other statutory authority.	In NK CBM Block, all stipulations made by JSPCB and other statutory authorities are strictly adhered to.	
2	No further expansion or modification in the plant shall be carried out without prior approval of the ministry of Environment and Forests. In case of deviation 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 condition imposed and to add additional environmental protection measures required, if any.	So far, no expansion or modification is carried out for NK Block. Prior approval will be obtained in case of any modification in the project proposal.	
3	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 station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	All operations in North Karanpura CBM Block have been suspended from 1st October 2022 to 31st March 2023 and Production phase is yet to commence, GCS is planned to be set up in this phase. After setting up of Gas Collection Stations, the locations of ambient air quality monitoring stations will be made/decided in consultation with the State Pollution Control Board (SPCB). It is ensured that at least one station will be installed in the upwind & down- wind direction as well as where maximum ground level concentration will anticipate.	
4	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 Environment ( Protection) Act, 1986; Rules, 1969 viz. 75 dBA(day time) and 70 dBA (night time).	The overall noise levels in and around the plant area are kept well within the standards. The Monitoring of Noise is carried out on quarterly basis by NABL accredited laboratory and reports are enclosed as Annexure-2.	
5	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling chemicals shall be imparted.	Training programs are integral part of our project execution plan. Training like fire drill, safety meetings & MVT are properly held on site on monthly/quarterly basis.	
6	The company shall also comply with all the environment protection measures and safeguards proposed in the documents submitted to the ministry. All the recommendations made in the EIA/EMP in respect of environment management, risk mitigation measures and public hearing relating to the project shall be implemented.	The company is complying with all the environment protection measures and safeguards proposed in the documents submitted to the ministry. All the recommendations made in the EIA/EMP in respect of environment management, risk mitigation measures and public hearing relating to the project are being implemented. NK Project specific HSE Manual, Disaster Management Plan, Crisis Management Plan, Contingency Plan and Emergency Response Plan is prepared and available at site. Recommendations made therein are usually practiced through mock drills.	



SNo.	Conditions/ Guide lines	Status of Compliance
<b>General Conditions (Contd.)</b>		
7	The company shall undertake all relevant measures for improving the socio-economic condition of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.	<ul style="list-style-type: none"> <li>• Separate fund is fixed for CSR activities</li> <li>• CSR activities was undertaken by involving local villages and administration.</li> </ul>
8	The company shall undertake eco-development measures including community welfare measures in the project area for the overall improvement of the environment.	Proper Plantation and waste disposal techniques are implementing in project so that eco-development can be done.
9	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring function.	<ul style="list-style-type: none"> <li>• A separate Environment Management Cell has been set up to carry out the EMP and Monitoring functions when the Gas Collection Stations (GCS) will be established.</li> <li>• A reputed NABL laboratory has been hired to carry out periodic monitoring of all environmental parameters.</li> </ul>
10	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environmental and Forests as well as the state Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environmental management/pollution control measures shall not be diverted for any other purpose.	<ul style="list-style-type: none"> <li>• Sufficient fund is earmarked to implement the MoEFCC as well as State Government stipulated conditions and it will be available whenever required.</li> </ul>
11	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad/Municipal Corporation, urban local body and the local NGO, if any, from whom suggestions/ representation, if any, were received while processing the proposal.	Copy of the clearance letter has been given to all concerned and provided in Annexure-5.





SNo.	Conditions/ Guide lines	Status of Compliance
<b>General Conditions (Contd.)</b>		
12	<p>The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated Environmental clearance conditions including results of the monitored data(both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and JSPCB. A copy of Environmental clearance and six monthly compliance status report shall be posted on the website of the company.</p>	<ul style="list-style-type: none"> <li>• Six Monthly Compliances of Environmental clearance is being submitted to JSPCB and MoEFCC on regular basis.</li> <li>• Copies of the EC and six monthly compliance reports are uploaded on the web site of PEPL at <a href="http://www.prabhaenergy.com">www. prabhaenergy.com</a></li> </ul>
13	<p>The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted 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 clearance conditions and shall also be sent to the respective regional offices of MoEF by e-mail.</p>	<p>Form - V for financial year ending 31st March 2023 was submitted to the JSPCB and Regional office of MoEFCC at Ranchi. Copy is enclosed in Annexure-6.</p> <p>The earlier Environmental Statements have been uploaded on the web site of PEPL, which can be accessed at <a href="http://www.prabhaenergy.com">www. prabhaenergy.com</a></p>
14	<p>The project proponent shall inform the public that the project has been accorded environmental clearance by the ministry and the copy of the clearance by the ministry and the copies of the clearance letter are available with the SPCB/Committees and may also be seen at website of the Ministry at <a href="http://envfor.nic.in">http://envfor.nic.in</a>. 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 concerned Regional Office of Ministry.</p>	<ul style="list-style-type: none"> <li>• Local people were informed that the project has been accorded environmental clearance by the Ministry by advertising in local papers.</li> <li>• The EC order is available on the website of the Ministry, ONGC and PEPL.</li> </ul>
15	<p>The 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 start of the project.</p>	<ul style="list-style-type: none"> <li>• The project Field Development Plan was approved by DGH Steering Committee, MOPNG w.e.f. 25-09-2012</li> <li>• The Development Drilling of NK CBM Project started on 7th June 2018 and presently all operations in NK Block have been suspended from 1st October 2022 to 31st March 2023. Production Phase is yet to commence.</li> </ul>



# Annexure-1



# NOIDA TESTING LABORATORIES

(A Government of India Approved Testing Laboratory)

(An ISO : 9001 : 2015, ISO 45001 : 2018 (OH&S) Certified & NABL Accredited Laboratory)

MoEF & CC (Ministry of Environment, Forest & Climate Change), UPPCH Recognized Laboratory

+91-9313611642, 8510081921, 7503031145, 8527870572, 7503031146, 9099794369

## TEST CERTIFICATE

**Issued To:** M/s Prabha Energy Private Limited

**Address:** 4th Floor, Rishabh Complex,  
Opposite to Gate No. 4 Ashok Nagar  
(Above Bank of India), Rauchi,  
Jharkhand - 834002

**Report Code** : AAQ-200323-01  
**ULR No.** : TC6814230000005251 F  
**Test Report of** : Ambient Air Quality  
**Service Request No** : NTL/SRF/03/23-015  
**Service Request Date** : 16/03/2023  
**Report Issue Date** : 27/03/2023

### SAMPLING & ANALYSIS DATA

Sample Drawn On : 18/03/2023 to 19/03/2023  
Sample Drawn By : NTL Representative  
Sample description : Ambient Air  
Sampling Location : Near Main Gate NK#6  
Sampling Plan & Procedure : SOP-AAQ/08  
Analysis Duration : 20/03/2023 to 27/03/2023  
Average Flow Rate of SPM (m<sup>3</sup>/min.) : 1.12  
Average Flow Rate of Gases (lpm) : 1.0  
Sampling Instrument Used : Respirable Dust Sampler (PM<sub>10</sub>), Fine Particulate (PM<sub>2.5</sub>) Sampler  
Weather Condition : Clear  
Remarks (if any) : Normal

### TEST RESULT

S.No	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	85.40	µg/m <sup>3</sup>	100.0
2.	Particulate Matter (PM <sub>2.5</sub> )	IS:5182 Part-XXIV	46.08	µg/m <sup>3</sup>	60.0
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	12.16	µg/m <sup>3</sup>	80.0
4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	24.50	µg/m <sup>3</sup>	80.0
5.	Carbon monoxide (as CO)	IS:5182 Part-X	<1.15	mg/m <sup>3</sup>	4.0
6.	Lead (as Pb)	IS:5182 Part-XXII	<0.10	µg/m <sup>3</sup>	1.0
7.	Ozone (as O <sub>3</sub> )	IS:5182 Part-IX	32.0	µg/m <sup>3</sup>	180.0
8.	Benzene (as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	µg/m <sup>3</sup>	5.0
9.	Benzo (a) Pyrene	IS:5182 Part-XI	ND	ng/m <sup>3</sup>	1.0
10.	Ammonia (as NH <sub>3</sub> )	IS:5182 Part-XXV	<50.0	µg/m <sup>3</sup>	400.0
11.	Nickel (as Ni)	APHA-AIR420	ND	ng/m <sup>3</sup>	20.0
12.	Arsenic (as As)	APHA-AIR302	ND	ng/m <sup>3</sup>	6.0

#### Notes:

- The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
- Responsibility of the Laboratory is limited to the invoiced amount only.
- This test report will not be generated again, either wholly or in part, without prior written permission of the laboratory.
- The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.

Checked by  
**CHECKED BY**

Authorized Signatory  
**AUTHORIZED SIGNATORY**

Laboratory : GT-20, Sector-117, NOIDA, Gautam Budh Nagar - 201301

Branch Office :

HARIDWAR | RUDRAPUR | CHANDIGARH | DEHRADUN | PUNE

E : noida.laboratory@gmail.com, info@noidalabs.com | W : www.noidalabs.com



# NOIDA TESTING LABORATORIES

(A Government of India Approved Testing Laboratory)

(An ISO : 9001 : 2015, ISO 45001 : 2018 (OHS) Certified & NABL Accredited Laboratory)

MoEF & CC (Ministry of Environment, Forest & Climate Change), UPPCB Recognized Laboratory

+91-9313611642, 8510081921, 7503031145, 8327870572, 7503031146, 9999794369

Analyzing for an Assured  
Future

## TEST CERTIFICATE

Issued To: M/s Prabha Energy Private Limited

Address: 4th Floor, Rishabh Complex,  
Opposite to Gate No. 4 Ashok Nagar  
(Above Bank of India), Ranchi,  
Jharkhand - 834002

Report Code : AAQ-200323-02  
ULR No. : TC6814230000005252 F  
Test Report of : Ambient Air Quality  
Service Request No : NTL/SRF/03/23-015  
Service Request Date : 16/03/2023  
Report Issue Date : 27/03/2023

### SAMPLING & ANALYSIS DATA

Sample Drawn On : 18/03/2023 to 19/03/2023  
Sample Drawn By : NTL Representative  
Sample description : Ambient Air  
Sampling Location : Near Bunkhouse NK#6  
Sampling Plan & Procedure : SOP-AAQ/08  
Analysis Duration : 20/03/2023 to 27/03/2023  
Average Flow Rate of SPM (m<sup>3</sup>/min.) : 1.12  
Average Flow Rate of Gases (lpm) : 1.0  
Sampling Instrument Used : Respirable Dust Sampler (PM<sub>10</sub>), Fine Particulate (PM<sub>2.5</sub>) Sampler  
Weather Condition : Clear  
Remarks (if any) : Normal

### TEST RESULT

S.No	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	82.50	µg /m <sup>3</sup>	100.0
2.	Particulate Matter (PM <sub>2.5</sub> )	IS:5182 Part-XXIV	42.16	µg /m <sup>3</sup>	60.0
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	10.23	µg /m <sup>3</sup>	80.0
4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-V1	18.40	µg /m <sup>3</sup>	80.0
5.	Carbon monoxide (as CO)	IS:5182 Part-X	1.16	mg/m <sup>3</sup>	4.0
6.	Lead (as Pb)	IS:5182 Part-XXII	<0.10	µg /m <sup>3</sup>	1.0
7.	Ozone (as O <sub>3</sub> )	IS:5182 Part-IX	28.0	µg /m <sup>3</sup>	180.0
8.	Benzene (as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	µg /m <sup>3</sup>	5.0
9.	Benzo (a) Pyrene	IS:5182 Part-XI	ND	ng /m <sup>3</sup>	1.0
10.	Ammonia (as NH <sub>3</sub> )	IS:5182 Part-XXV	<50.0	µg /m <sup>3</sup>	400.0
11.	Nickel (as Ni)	APHA-AIR420	ND	ng /m <sup>3</sup>	20.0
12.	Arsenic (as As)	APHA-AIR302	ND	ng /m <sup>3</sup>	6.0

#### Notes:

- The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
- Responsibility of the Laboratory is limited to the invoiced amount only.
- This test report will not be generated again, either wholly or in part, without prior written permission of the laboratory.
- The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.

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AUTHORIZED SIGNATORY

Laboratory : GT-26, Sector-117, NOIDA, Gautam Budh Nagar - 201301

Branch Office :

HARIDWAR | RUDRAPUR | CHANDIGARH | DEHRADUN | PUNE

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# NOIDA TESTING LABORATORIES

(A Government of India Approved Testing Laboratory)

(An ISO : 9001 : 2015, ISO 45001 : 2018 (OH&S) Certified & NAHL Accredited Laboratory)

MoEF & CC (Ministry of Environment, Forest & Climate Change), UPPCB Recognized Laboratory

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Analyzing for an Assured Future

## TEST CERTIFICATE

Issued To: M/s Prabha Energy Private Limited

Address: 4th Floor, Rishabh Complex,  
Opposite to Gate No. 4 Ashok Nagar  
(Above Bank of India), Ranchi,  
Jharkhand - 834002

Report Code : AAQ-200323-03  
ULR No. : TC6814230000005253 F  
Test Report of : Ambient Air Quality  
Service Request No : NTL/SRF/03/23-015  
Service Request Date : 16/03/2023  
Report Issue Date : 27/03/2023

### SAMPLING & ANALYSIS DATA

Sample Drawn On : 18/03/2023 to 19/03/2023  
Sample Drawn By : NTL Representative  
Sample description : Ambient Air  
Sampling Location : Near Self-Flow Well NK#6  
Sampling Plan & Procedure : SOP-AAQ/08  
Analysis Duration : 20/03/2023 to 27/03/2023  
Average Flow Rate of SPM (m<sup>3</sup>/min.) : 1.12  
Average Flow Rate of Gases (lpm) : 1.0  
Sampling Instrument Used : Respirable Dust Sampler (PM<sub>10</sub>), Fine Particulate (PM<sub>2.5</sub>) Sampler  
Weather Condition : Clear  
Remarks (if any) : Normal

### TEST RESULT

S.No	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	85.10	µg /m <sup>3</sup>	100.0
2.	Particulate Matter (PM <sub>2.5</sub> )	IS:5182 Part-XXIV	43.60	µg /m <sup>3</sup>	60.0
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	11.38	µg /m <sup>3</sup>	80.0
4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	24.50	µg /m <sup>3</sup>	80.0
5.	Carbon monoxide (as CO)	IS:5182 Part-X	1.19	mg/m <sup>3</sup>	4.0
6.	Lead (as Pb)	IS:5182 Part-XXII	<0.10	µg /m <sup>3</sup>	1.0
7.	Ozone (as O <sub>3</sub> )	IS:5182 Part-IX	32.2	µg /m <sup>3</sup>	180.0
8.	Benzene (as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	µg /m <sup>3</sup>	5.0
9.	Benzo (a) Pyrene	IS:5182 Part-XI	ND	ng /m <sup>3</sup>	1.0
10.	Ammonia (as NH <sub>3</sub> )	IS:5182 Part-XXV	<50.0	µg /m <sup>3</sup>	400.0
11.	Nickel (as Ni)	APHA-AIR420	ND	ng /m <sup>3</sup>	20.0
12.	Arsenic (as As)	APHA-AIR302	ND	ng /m <sup>3</sup>	6.0

#### Notes:

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- The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.

Checked BY

AUTHORIZED SIGNATORY

Laboratory : GT-20, Sector-147, NOIDA, Gautam Budh Nagar - 201301

Branch Office

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# Annexure-2



# NOIDA TESTING LABORATORIES

(A Government of India Approved Testing Laboratory)

(An ISO : 9001 : 2015, ISO 45001 : 2018 (OH&S) Certified & NABL Accredited Laboratory)

MoEF & CC (Ministry of Environment, Forest & Climate Change), IITPCB Recognized Laboratory

+91-9313611642, 8510081821, 7503031145, 8527870572, 7503031146, 9990704369

## TEST CERTIFICATE

**Issued To:** M/s Prabha Energy Private Limited

**Address:** 4th Floor, Rishabh Complex,  
Opposite to Gate No. 4 Ashok Nagar  
(Above Bank of India), Ranchi,  
Jharkhand - 834002

**Report Code** : N -200323-06

**ULR No.** : TC6814230000005256 F

**Test Report of** : G. G. Noise

**Service Request No** : NTL/SRF/03/23-015

**Service Request Date** : 16/03/2023

**Report Issue Date** : 27/03/2023

### SAMPLING & ANALYSIS DATA

Sample Drawn On	:	18/03/2023
Sample Drawn By	:	NTL Representative
Sample Received On	:	20/03/2023
Sample description/ Job No.	:	GG Noise (62.5 KVA) /1193
Sampling Location	:	NK#6
Sampling Time	:	Short Term Monitoring

### TEST RESULT

Location	Noise Level Cum, Leg db(A)	Protocol Followed	Limit as per CPCB Norms	
<b>A. When G.G. Set was in operation</b>				
<b>1. Open G.G. window</b>				
a. 0.5 m Distance away from the GG set engine	95.4	IS:4758/IS:11446	75 db (A) at 1.0 meter distance from close GG set	
b. 1.0 m Distance away from the GG set engine	93.8			
<b>2. Close G.G. window</b>				
a. 0.5 m Distance away from the GG set engine	72.5			
b. 1.0 m Distance away from the GG set engine	71.6			

#### Notes:

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
2. Responsibility of the Laboratory is limited to the invoiced amount only.
3. This test report will not be generated again, either wholly or in part, without prior written permission of the laboratory.
4. The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.

Ayooj  
CHECKED BY

Ayooj  
AUTHORIZED SIGNATORY

Laboratory : GT-20, Sector-117, NOIDA, Gautam Budh Nagar - 201301

Branch Office :

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# NOIDA TESTING LABORATORIES

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MoEF & CC (Ministry of Environment, Forest & Climate Change), UPPCB Recognized Laboratory

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## TEST CERTIFICATE

**Issued To:** M/s Prabha Energy Private Limited

**Address:** 4th Floor, Rishabh Complex,  
Opposite to Gate No. 4 Ashok Nagar  
(Above Bank of India), Ranchi,  
Jharkhand - 834002

**Report Code** : N -200323-07  
**ULR No.** : TC681423000005257 F  
**Test Report of** : G. G. Noise  
**Service Request No** : NTL/SRF/03/23-015  
**Service Request Date** : 16/03/2023  
**Report Issue Date** : 27/03/2023

### SAMPLING & ANALYSIS DATA

Sample Drawn On : 18/03/2023  
Sample Drawn By : NTL Representative  
Sample Received On : 20/03/2023  
Sample description/ Job No. : GG Noise (63 KVA) / 1187  
Sampling Location : NK#6  
Sampling Time : Short Term Monitoring

### TEST RESULT

Location	Noise Level Cum, Leq db(A)	Protocol Followed	Limit as per CPCB Norms		
<b>A. When G.G. Set was in operation</b>					
<b>1. Open G.G. window</b>					
a. 0.5 m Distance away from the GG set engine	96.6	IS:4758/IS:11446	75 db (A) at 1.0 meter distance from close GG set		
b. 1.0 m Distance away from the GG set engine	95.2				
<b>2. Close G.G. window</b>					
a. 0.5 m Distance away from the GG set engine	73.1				
b. 1.0 m Distance away from the GG set engine	72.0				

#### Notes:

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
2. Responsibility of the Laboratory is limited to the invoiced amount only.
3. This test report will not be generated again, either wholly or in part, without prior written permission of the laboratory.
4. The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.

Checked by  
**CHECKED BY**

Authorized Signatory  
**AUTHORIZED SIGNATORY**

Laboratory : GT-20, Sector-117, NOIDA, Gautam Budh Nagar - 201301

Branch Office :

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# Annexure-3



Insuring for an Assured Future

# NOIDA TESTING LABORATORIES

(A Government of India Approved Testing Laboratory)

(As ISO - 9001 : 2015, ISO 45001 : 2018 (OH&S) Certified & NABL Accredited Laboratory)

MoEF & CC (Ministry of Environment, Forest & Climate Change), UPPCB Recognized Laboratory

+91-9313611642, 8510081921, 7503031145, 8527870572, 7503031146, 9999794369

## TEST CERTIFICATE

**Issued To:** M/s Prabha Energy Private Limited

**Address:** 4th Floor, Rishabh Complex,  
Opposite to Gate No. 4 Ashok Nagar  
(Above Bank of India), Ranchi,  
Jharkhand - 834002

**Report Code** : W -200323-09  
**ULR No.** : TC6814230000005259 F  
**Test Report of** : Ground Water  
**Service Request No** : NTL/SRF/03/23-015  
**Service Request Date** : 16/03/2023  
**Report Issue Date** : 27/03/2023

### SAMPLING & ANALYSIS DATA

Sample Drawn By : NTL Representative  
Sample Drawn On : 18/03/2023  
Sample Quantity : 2.0 lit. + 500 ml.  
Sample packing Details : PVC Cane  
Analysis Duration : 20/03/2023 to 27/03/2023  
Location : Near NK # 6  
Sample Description : Ground Water  
Required Test Standard : IS 10500: 2012

### MICROBIOLOGICAL REQUIREMENT RESULT

S.No.	Parameter	Test Method	Results	Requirements as per IS-10500:2012
1.	<i>Escherichia coli</i>	IS-15185	Absent	Absent/100ml
2.	<i>Coliform Bacteria</i>	IS-15185	Absent	Absent/100ml

### ORGANOLEPTIC & PHYSICAL PARAMETERS

S.No.	Parameter	Test Method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Colour	IS-3025(P-04)	<1.00	Hazen Unit	5	15
2.	Odour	IS-3025(P-05)	Agreeable	-	Agreeable	Agreeable
3.	Taste	IS-3025(P-07 & 08)	Agreeable	-	Agreeable	-
4.	Turbidity	IS-3025(P-10)	<1.00	NTU	1	5
5.	pH value	IS-3025(P-11)	7.48	-	6.5 - 8.5	-
6.	Total dissolve solid (TDS)	IS-3025(P-16)	560.0	mg/l	500	2000

### GENERAL PARAMETERS CONCERNING SUBSTANCES UNDESIRABLE IN EXCESSIVE AMOUNTS

S.No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Aluminium (as Al)	IS: 3025 (P- 55)	<0.01	mg/l	0.03	0.2
2.	Total Ammonia	IS: 3025 (P- 34)	<0.10	mg/l	0.5	No Relaxation
3.	Anionic Detergents (as MBAS)	Annex K of IS- 13428	<0.10	mg/l	0.2	1.0
4.	Barium (as Ba)	IS: 15302	<0.10	mg/l	0.7	No Relaxation
5.	Boron (as B)	IS: 3025 (P- 57)	<0.10	mg/l	0.5	2.4
6.	Calcium (as Ca)	IS: 3025 (P- 40)	56.40	mg/l	75	200
7.	Chloramines (as Cl <sub>2</sub> )	IS: 3025 (P- 26)	<1.00	mg/l	4.0	No Relaxation
8.	Chloride (as Cl)	IS: 3025 (P- 32)	189.0	mg/l	250	1000

Laboratory : GT-20, Sector-117, NOIDA, Gaudam Budh Nagar - 201301

Branch Office :

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# NOIDA TESTING LABORATORIES

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(An ISO : 9001 : 2015, ISO 45001 : 2018 (OH&S) Certified & NABL Accredited Laboratory)

MoEF & CC (Ministry of Environment, Forest & Climate Change), UPPCB Recognized Laboratory

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## TEST CERTIFICATE

9.	Fluoride (as F)	IS: 3025 (P-60)	0.62	mg/l	1.0	1.5
10.	Free Residual Chlorine	IS: 3025 (P-26)	BDL	mg/l	0.2	1.0
11.	Iron (as Fe)	IS: 3025(P-53)	0.136	mg/l	1.0	No Relaxation
12.	Magnesium (as Mg)	IS: 3025 (P-46)	38.40	mg/l	30	100
13.	Manganese (as Mn)	Clause 35 of IS 3025	BDL	mg/l	0.1	0.3
14.	Nitrate (as NO <sub>3</sub> )	IS: 3025 (P- 34)	5.80	mg/l	45	No Relaxation
15.	Selenium (as Se)	IS: 3025 (P- 56)	BDL	mg/l	0.01	No Relaxation
16.	Silver (as Ag)	Annex J IS: 13428	BDL	mg/l	0.1	No Relaxation
17.	Sulphate (as SO <sub>4</sub> )	IS: 3025 (P- 24)	82.60	mg/l	200	400
18.	Sulphide (as H <sub>2</sub> S)	IS-3025 (P-29)	BDL	mg/l	0.05	No Relaxation
19.	Alkalinity (as Ca CO <sub>3</sub> )	IS: 3025 (P- 23)	280.0	mg/l	200	600
20.	Total Hardness (as CaCO <sub>3</sub> )	IS: 3025 (P- 23)	299.0	mg/l	200	600
21.	Zinc (as Zn)	IS: 3025 (P- 49)	0.142	mg/l	5.0	15
22.	Salinity	APHA- 23 <sup>rd</sup> Edit.	0.341	ppt	-	-
23.	Phenolic Compound as (C <sub>6</sub> H <sub>5</sub> OH)	IS: 3025 (P- 43)	BDL	mg/l	0.001	0.002

S.No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Cadmium (as Cd)	IS-3025(P-41)	<0.001	mg/l	0.003	No Relaxation
2.	Cyanide (as CN)	IS-3025(P-27)	<0.01	mg/l	0.05	No Relaxation
3.	Lead (as Pb)	IS-3025(P-47)	<0.01	mg/l	0.01	No Relaxation
4.	Mercury (as Hg)	IS-3025(P-48)	<0.001	mg/l	0.001	No Relaxation
5.	Molybdenum (Mo)	IS-3025(P-2)	<0.05	mg/l	0.07	No Relaxation
6.	Nickel (as Ni)	IS-3025(P-54)	<0.01	mg/l	0.02	No Relaxation
7.	Poly nuclear Aromatic Hydro Carbons	APHA 6440	<0.0001	mg/l	0.0001	No Relaxation
8.	Poly chlorinated biphenyl	APHA 6630	<0.0001	mg/l	0.0005	No Relaxation
9.	Total Arsenic (as As)	IS-3025(P-37)	<0.01	mg/l	0.01	No Relaxation
10.	Total Chromium (as Cr)	IS-3025(P-52)	<0.05	mg/l	0.05	No Relaxation

BDL: Below Detection limit.

### Notes:

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
2. Responsibility of the Laboratory is limited to the invoiced amount only.
3. This test report will not be generated again, either wholly or in part, without prior written permission of the laboratory.
4. The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.

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AUTHORIZED SIGNATORY



Laboratory : GT-20, Sector-117, NOIDA, Gautam Budh Nagar - 201301

Branch Office :

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# NOIDA TESTING LABORATORIES

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Ashok Nagar  
Rauchhi

## TEST CERTIFICATE

Issued To: M/s Prabha Energy Private Limited

Address: 4th Floor, Rishabh Complex,  
Opposite to Gate No. 4 Ashok Nagar  
(Above Bank of India), Rauchhi,  
Jharkhand - 834002

Report Code : W -200323-010  
ULR No. : TC6814230000005260 F  
Test Report of : Ground Water  
Service Request No : NTL/SRF/03/23-015  
Service Request Date : 16/03/2023  
Report Issue Date : 27/03/2023

### SAMPLING & ANALYSIS DATA

Sample Drawn By : NTL Representative  
Sample Drawn On : 18/03/2023  
Sample Quantity : 2.0 lit. + 500 ml.  
Sample packing Details : PVC Cane  
Analysis Duration : 20/03/2023 to 27/03/2023  
Location : Near NK # 3  
Sample Description : Ground Water  
Required Test Standard : IS 10500: 2012

### MICROBIOLOGICAL REQUIREMENT RESULT

S.No.	Parameter	Test Method	Results	Requirements as per IS-10500:2012
1.	<i>Escherichia coli</i>	IS-15185	Absent	Absent/100ml
2.	<i>Coliform Bacteria</i>	IS-15185	Absent	Absent/100ml

### ORGANOLEPTIC & PHYSICAL PARAMETERS

S.No.	Parameter	Test Method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Colour	IS-3025(P-04)	<1.00	Hazen Unit	5	15
2.	Odour	IS-3025(P-05)	Agreeable	-	Agreeable	Agreeable
3.	Taste	IS-3025(P-07 & 08)	Agreeable	-	Agreeable	-
4.	Turbidity	IS-3025(P-10)	<1.00	NTU	1	5
5.	pH value	IS-3025(P-11)	7.48	-	6.5 - 8.5	-
6.	Total dissolve solid (TDS)	IS-3025(P-16)	512.0	mg/l	500	2000

### GENERAL PARAMETERS CONCERNING SUBSTANCES UNDESIRABLE IN EXCESSIVE AMOUNTS

S.No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Aluminium (as Al)	IS: 3025 (P- 35)	<0.01	mg/l	0.03	0.2
2.	Total Ammonia	IS: 3025 (P- 34)	<0.10	mg/l	0.5	No Relaxation
3.	Anionic Detergents (as MBAS)	Annex K of IS- 13428	<0.10	mg/l	0.2	1.0
4.	Barium (as Ba)	IS: 15302	<0.10	mg/l	0.7	No Relaxation
5.	Boron (as B)	IS: 3025 (P- 57)	<0.10	mg/l	0.5	2.4
6.	Calcium (as Ca)	IS: 3025 (P- 40)	58.20	mg/l	75	200
7.	Chloramines (as Cl <sub>2</sub> )	IS: 3025 (P- 26)	<1.00	mg/l	4.0	No Relaxation
8.	Chloride (as Cl)	IS: 3025 (P- 32)	146.0	mg/l	250	1000

Laboratory : GT-20, Sector-117, NOIDA, Gautam Budh Nagar - 201301

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# NOIDA TESTING LABORATORIES

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MoEF & CC (Ministry of Environment, Forest & Climate Change), UPPCR Recognized Laboratory

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Each mg for an Assay of 1 liter

## TEST CERTIFICATE

9.	Fluoride (as F)	IS: 3025 (P-60)	0.60	mg/l	1.0	1.5
10.	Free Residual Chlorine	IS: 3025 (P-26)	BDL	mg/l	0.2	1.0
11.	Iron (as Fe)	IS: 3025(P-53)	0.148	mg/l	1.0	No Relaxation
12.	Magnesium (as Mg)	IS: 3025 (P-46)	26.50	mg/l	30	100
13.	Manganese (as Mn)	Clause 35 of IS 3025	BDL	mg/l	0.1	0.3
14.	Nitrate (as NO <sub>3</sub> )	IS: 3025 (P- 34)	5.60	mg/l	45	No Relaxation
15.	Selenium (as Se)	IS: 3025 (P- 56)	BDL	mg/l	0.01	No Relaxation
16.	Silver (as Ag)	Annex J IS: 13428	BDL	mg/l	0.1	No Relaxation
17.	Sulphate (as SO <sub>4</sub> )	IS: 3025 (P- 24)	72.40	mg/l	200	400
18.	Sulphide (as H <sub>2</sub> S)	IS-3025 (P-29)	BDL	mg/l	0.05	No Relaxation
19.	Alkalinity (as Ca CO <sub>3</sub> )	IS: 3025 (P- 23)	216.0	mg/l	200	600
20.	Total Hardness (as CaCO <sub>3</sub> )	IS: 3025 (P- 23)	255.0	mg/l	200	600
21.	Zinc (as Zn)	IS: 3025 (P- 49)	0.140	mg/l	5.0	15
22.	Salinity	APHA- 23 <sup>rd</sup> Edit.	0.263	ppt	-	-
23.	Phenolic Compound as (C <sub>6</sub> H <sub>5</sub> OH)	IS: 3025 (P- 43)	BDL	mg/l	0.001	0.002

S.No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Cadmium (as Cd)	IS-3025(P-41)	<0.001	mg/l	0.003	No Relaxation
2.	Cyanide (as CN)	IS-3025(P-27)	<0.01	mg/l	0.05	No Relaxation
3.	Lead (as Pb)	IS-3025(P-47)	<0.01	mg/l	0.01	No Relaxation
4.	Mercury (as Hg)	IS-3025(P-48)	<0.001	mg/l	0.001	No Relaxation
5.	Molybdenum (Mo)	IS-3025(P-2)	<0.05	mg/l	0.07	No Relaxation
6.	Nickel (as Ni)	IS-3025(P-54)	<0.01	mg/l	0.02	No Relaxation
7.	Poly nuclear Aromatic Hydro Carbons	APHA 6440	<0.0001	mg/l	0.0001	No Relaxation
8.	Poly chlorinated biphenyl	APHA 6630	<0.0001	mg/l	0.0005	No Relaxation
9.	Total Arsenic (as As)	IS-3025(P-37)	<0.01	mg/l	0.01	No Relaxation
10.	Total Chromium (as Cr)	IS-3025(P-52)	<0.05	mg/l	0.05	No Relaxation

BDL: Below Detection limit.

### Notes:

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
2. Responsibility of the Laboratory is limited to the invoiced amount only.
3. This test report will not be generated again, either wholly or in part, without prior written permission of the laboratory.
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Checked by  
**CHECKED BY**

**AUTHORIZED SIGNATORY**

Laboratory : GT-20, Sector-117, NOIDA, Gautam Budh Nagar - 201301

Branch Office :

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E.: noida.laboratory@gmail.com, info@noidalabs.com W.: www.noidalabs.com

# Annexure-4



# NOIDA TESTING LABORATORIES

(A Government of India Approved Testing Laboratory)

(An ISO : 9001 : 2015, ISO 45001 : 2018 (OH&S) Certified & NAHL Accredited Laboratory)

MoEF & CC (Ministry of Environment, Forest & Climate Change), UPPCB Recognized Laboratory

+91-9313611642, 8510081921, 7503031145, 8527870572, 7503031146, 9999794369

Analyzing for a Better  
Future

## TEST CERTIFICATE

Issued To: M/s Prabha Energy Private Limited

Address: 4th Floor, Rishabh Complex,  
Opposite to Gate No. 4 Ashok Nagar  
(Above Bank of India), Ranchi,  
Jharkhand - 834002

Report Code : WW -200323-013  
ULR No. : TC6814230000005263 F  
Test Report of : Waste Water  
Service Request No : NTL/SRF/03/23-015  
Service Request Date : 16/03/2023  
Report Issue Date : 27/03/2023

### SAMPLING & ANALYSIS DATA

Sample Drawn On : 18/03/2023  
Sample Collected By : NTL Representative  
Sample Description : Effluent Water (NK#6)  
Sample Quantity/Packing detail : 1 lt/Plastic Cane  
Weather Conditions : Normal  
Analysis Duration : 20/03/2023 to 27/03/2023

### TEST RESULTS

S. No.	Parameter	Test Method	Results	Units	Limits as per CPCB norms
1.	pH	IS:3025(Part-11):1983	7.42	-	5.5-9.0
2.	Total Dissolved Solid (TDS)	IS:3025(Part-16):1984	860.0	mg/l	No limit Specified
3.	Total Suspended Solid	IS:3025(Part-17):1984	236.0	mg/l	100.0
4.	Chemical Oxygen Demand (as O <sub>2</sub> )	APHA 5220 B:2005	125.0	mg/l	250
5.	Biological Oxygen Demand (as O <sub>2</sub> ) (3 days at 27°C)	IS:3025(Part-44):1993	26.0	mg/l	30
6.	Oil & grease	IS:3025(Part-39):1984	<1.0	mg/l	10
7.	Temperature, °C	IS:3025(Part-9)	20		Shall not be exceed more than 5 °C
8.	Total Solid	IS:3025(Part-17):1984	1096	mg/l	-
9.	Chlorides (as Cl)	IS: 3025 (Part - 32)	250	mg/l	1000
10.	Fluoride (as F)	IS: 3025 (Part - 60)	0.32	mg/l	2
11.	Flow	APHA 23'd Edition	2.6	LPM	-
12.	Sulphides, (as S)	IS: 3025 (Part - 29)	BDL	mg/l	2
13.	Phenolic compound (as C <sub>6</sub> H <sub>5</sub> OH)	IS: 3025 (Part - 43)	BDL	mg/l	1
14.	Zinc (as Zn)	IS: 3025 (Part - 49)	0.89	mg/l	5
15.	Copper (as Cu)	IS: 3025 (Part - 42)	BDL	mg/l	3

Laboratory : GT-20, Sector-117, NOIDA, Gautam Budh Nagar - 201301

Branch Office :

HARIDWAR | RUDRAPUR | CHANDIGARH | DEHRADUN | PUNE

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+91-9313611642, 8510081921, 7503031145, 8527870572, 7503031146, 9999794369

## TEST CERTIFICATE

16.	Hexavalent Chromium (as Cr <sup>6+</sup> )	IS: 3025 (Part - 52)	BDL	mg/l	0.1
17.	Total Chromium (as Cr)	IS: 3025 (Part - 52)	BDL	mg/l	-
18.	Cyanide, (as CN)	IS: 3025 (Part - 27)	BDL	mg/l	0.2
19.	Nickel (as Ni)	IS: 3025 (Part - 54)	BDL	mg/l	3
20.	Sodium	IS-3025(P-45)	0.0041	%	-
21.	Lead (as Pb)	IS: 3025 (Part - 47)	BDL	mg/l	0.1
22.	Mercury (as Hg)	IS: 3025 (Part - 48)	BDL	mg/l	0.01
23.	Salinity	APHA- 23 <sup>rd</sup> Edit.	0.45	ppt	-

Remarks: Test parameters coming in under limit, prescribe limits are given by MoEF/Central Pollution Control Board.

BDL- Below Detection Limit

### Notes:

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
2. Responsibility of the Laboratory is limited to the invoiced amount only.
3. This test report will not be generated again, either wholly or in part, without prior written permission of the laboratory.
4. The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.

Checked BY

AUTHORIZED SIGNATORY



Laboratory : GT-29, Sector-117, NOIDA, Gautam Budh Nagar - 201301

Branch Office :

HARIDWAR | RUDRAPUR | CHANDIGARH | DEHRADUN | PUNE

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MoEF & CC (Ministry of Environment, Forest & Climate Change), UPPCB Recognized Laboratory

+91-9313631642, 8510081921, 7503031145, 8527870572, 7503031146, 9999794369

## TEST CERTIFICATE

Issued To: M/s Prabha Energy Private Limited

Address: 4th Floor, Rishabh Complex,  
Opposite to Gate No. 4 Ashok Nagar  
(Above Bank of India), Ranchi,  
Jharkhand - 834002

Report Code : WW -200323-014  
ULR No. : TC6814230000005264 F  
Test Report of : Waste Water  
Service Request No : NTL/SRF/03/23-015  
Service Request Date : 16/03/2023  
Report Issue Date : 27/03/2023

### SAMPLING & ANALYSIS DATA

Sample Drawn On : 18/03/2023  
Sample Collected By : NTL Representative  
Sample Description : Effluent Water (NK#34)  
Sample Quantity/Packing detail : 1 lt/Plastic Cane  
Weather Conditions : Normal  
Analysis Duration : 20/03/2023 to 27/03/2023

### TEST RESULTS

S. No.	Parameter	Test Method	Results	Units	Limits as per CPCB norms
1.	pH	IS:3025(Part-11):1983	7.80	-	5.5-9.0
2.	Total Dissolved Solid (TDS)	IS:3025(Part-16):1984	655.0	mg/l	No limit Specified
3.	Total Suspended Solid	IS:3025(Part-17):1984	180.0	mg/l	100.0
4.	Chemical Oxygen Demand (as O <sub>2</sub> )	APHA 5220 B:2005	110.0	mg/l	250
5.	Biological Oxygen Demand (as O <sub>2</sub> ) (3 days at 27°C)	IS:3025(Part-44):1993	23.0	mg/l	30
6.	Oil & grease	IS:3025(Part-39):1984	<1.0	mg/l	10
7.	Temperature, °C	IS:3025(Part-9)	18		Shall not be exceed more than 5 °C
8.	Total Solid	IS:3025(Part-17):1984	835.0	mg/l	-
9.	Chlorides (as Cl)	IS: 3025 (Part - 32)	216	mg/l	1000
10.	Fluoride (as F)	IS: 3025 (Part - 60)	0.27	mg/l	2
11.	Flow	APHA 23'd Edition	2.2	LPM	-
12.	Sulphides, (as S)	IS: 3025 (Part - 29)	BDL	mg/l	2
13.	Phenolic compound (as C <sub>6</sub> H <sub>5</sub> OH)	IS: 3025 (Part - 43)	BDL	mg/l	1
14.	Zinc (as Zn)	IS: 3025 (Part - 49)	0.56	mg/l	5
15.	Copper (as Cu)	IS: 3025 (Part - 42)	BDL	mg/l	3

Laboratory : GT-20, Sector-117, NOIDA, Gautam Budh Nagar - 201301

Branch Office :

HARIDWAR | RUDRAPUR | CHANDIGARH | DEHRADUN | PUNE

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MoEF & CC (Ministry of Environment, Forest & Climate Change), UPPCB Recognized Laboratory

+91-9313611642, 8510081921, 7503031145, 8527870872, 7503031146, 9999794369

## TEST CERTIFICATE

16.	Hexavalent Chromium (as Cr <sup>6+</sup> )	IS: 3025 (Part - 52)	BDL	mg/l	0.1
17.	Total Chromium (as Cr)	IS: 3025 (Part - 52)	BDL	mg/l	-
18.	Cyanide, (as CN)	IS: 3025 (Part - 27)	BDL	mg/l	0.2
19.	Nickel (as Ni)	IS: 3025 (Part - 54)	BDL	mg/l	3
20.	Sodium	IS-3025(P-45)	0.0032	%	-
21.	Lead (as Pb)	IS: 3025 (Part - 47)	BDL	mg/l	0.1
22.	Mercury (as Hg)	IS: 3025 (Part - 48)	BDL	mg/l	0.01
23.	Salinity	APHA- 23 <sup>rd</sup> Edit.	0.39	ppt	-

Remarks: Test parameters coming in under limit, prescribe limits are given by MoEF/Central Pollution Control Board.

BDL- Below Detection Limit

### Notes:

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
2. Responsibility of the Laboratory is limited to the invoiced amount only.
3. This test report will not be generated again, either wholly or in part, without prior written permission of the laboratory.
4. The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.

Checked by  
CHECKED BY

AUTHORIZED SIGNATORY

Laboratory : GT-20, Sector-117, NOIDA, Gautam Budh Nagar - 201301

Branch Office :

HARIDWAR | RUDRAPUR | CHANDIGARH | DEHRADUN | PUNE

E.: noida.laboratory@gmail.com, info@noidalabs.com W.: www.noidalabs.com

# Annexure-5

F. No. J-11011/228/2012- IA II (I)  
Government of India  
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](mailto:lk.bokolia@nic.in)  
Telefax : 011: 24695313  
Date: 12<sup>th</sup> May, 2015

To,

Shri G S Datta (CE (D), In-charge HSE)  
M/s Oil & Natural Gas Corporation Ltd  
1<sup>st</sup> Floor, HSCL Building,  
Nayamore Bokaro- 82700, Jharkhand

E-mail: [gourisankar.datta@yahoo.co.in](mailto:gourisankar.datta@yahoo.co.in) ; [datta\\_gouri@ongc.co.in](mailto:datta_gouri@ongc.co.in) ; Fax No. :06542-226666.

**Subject: Development of North Karanpura CBM Block NK-CBM-2001/1 in Jharkhand by M/s ONGC Ltd. - Environmental Clearance reg.**

**Ref. : Your letter no. ONGC/CHSE/EC/2014 dated 28<sup>th</sup> June, 2014.**

Sir,

This has reference to your letter dated 28<sup>th</sup> June, 2014 on the above mentioned subject alongwith project documents including Prefeasibility Report, Draft Terms of References, EIA/EMP, Public Hearing Report and subsequent submission of additional information vide letter dated 17<sup>th</sup> January, 2015 regarding above mentioned project.

2.0 The Ministry of Environment, Forests & Climate Change has examined your application. It is noted that the proposal is for development of North Karanpura CBM Block NK-CBM-2001/1 in Jharkhand by M/s ONGC Ltd. The block falls in the districts of Hazaribagh and Chatra of Jharkhand State with block area (271.8 sq. km). It is reported that no sensitive zone and bio-reserves are located within 10 Km distance and no forest land is involved. The block is bounded by latitude 23°46'56" & 23°54'57" and longitudes 85°00'36" & 85°20'44". In the said block ONGC proposed to drill 74 wells (68 Development Wells & 6 assessment wells). The present proposal is in 3<sup>rd</sup> phase of development. Average depth of drilling will be 1000 m and Maximum upto 1500 m. There will be 3 mini Gas Collection Stations (GCS) in Sector -C, one located in subsector -1 and other two in Sub-sector -2. Total capacity of gas processing is 0.15 MMSCMD. Produced water handling capacity will be 1500 m<sup>3</sup>/day. Cost of project is Rs. 684 Crore.

3.0 Elevated flaring will be done only during process upset. Adequate stack height will be provided to DG set/GG sets. Fresh water requirement from surface water source/tanker supply/CBM produced water will be 25m<sup>3</sup>/day. Wastewater generated during drilling operations will be 5-10 m<sup>3</sup>/day or 150-200 m<sup>3</sup> per well. The effluent generated during drilling operations are recommended to be collected in lined waste pits to avoid groundwater contamination. The wastewater is solar evaporated and residual material on completion of well is removed and disposed in accordance with prevailing rules. Drill cuttings will be generated and separate in a solid control system and conveyed to a specially designed pit (lined with HDPE) for temporary storage and disposed in accordance with CPCB regulations specified for on-shore oil and gas industry or will be used for road making. Generation of produce

CR

water from CBM wells will be 3-5 m<sup>3</sup>/day. The produced water during production testing is allowed to evaporate naturally from the evaporation pit. Produced water based on water quality will be reused for beneficial purposes. Waste oil/used oil will be sent to authorized re-processors.

4.0 All the projects related to offshore and onshore Oil and Gas exploration, development and production are listed in para 1(b) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at Central level.

5.0 Public hearing/public consultation meetings were held for Chatra District on 25.02.2014 and for Hazaribagh District on 26.02.2014.

6.0 The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 3<sup>rd</sup>, 24<sup>th</sup> and 34<sup>th</sup> Meetings held during 3<sup>rd</sup>-5<sup>th</sup> December, 2012, 29<sup>th</sup>-30<sup>th</sup> September, 2014 and 17<sup>th</sup>-19<sup>th</sup> February, 2015 respectively. Project Proponent as well as EIA Consultant namely M/s ONGC Ltd., have presented EIA / EMP report as per the TOR. EAC has found the EIA / EMP Report and additional information to be satisfactory and in full consonance with the presented TORs. The Committee recommended the proposal for environmental clearance.

7.0 Based on the information submitted by the project proponent, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September 2006, subject to the compliance of the following Specific and General Conditions:

#### A. SPECIFIC CONDITIONS :

- i. Compensation for the land acquisition to the land owners, if any, and also for standing crop shall be paid as per the National Resettlement and Rehabilitation Policy (NRRP) 2007 or State Government norms. It may be ensured that compensation provided shall not be less than the norms of the NRRP, 2007.
- ii. The surface facilities shall be installed as per the applicable codes and standards, international practices and applicable local regulations.
- iii. Ambient air quality shall be monitored near the closest human settlements as per the National Ambient Air Quality Emission Standards (NAAQES) issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, CH<sub>4</sub>, VOCs, HC, Non-methane HC etc. Efforts shall be made to improve the ambient air quality of the area.
- iv. The flare system shall be designed as per good oil field practices and Oil Industry Safety Directorate (OISD) guidelines. The company shall take necessary measures to prevent fire hazards and soil remediation as needed. At the place of ground flaring, the flare pit shall be lined with refractory bricks and efficient burning system. In case of overhead flare stacks, the stack height shall be provided as per the regulatory requirements and emissions from stacks shall meet the MOEF/CPCB guidelines.
- v. The company shall make the arrangement for control of noise from the drilling activity and DG/GG sets by providing necessary mitigation measures such as proper acoustic enclosures to DG/GG sets and meet the norms notified by the MoEF. Height of all the stacks/vents shall be as per the CPCB guidelines.

- vi. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR. 546(E) dated 30<sup>th</sup> August, 2005.
- vii. Total fresh water requirement shall not exceed (25m<sup>3</sup>/day) for each well during drilling phase and prior permission shall be obtained from the Competent Authority and a copy submitted to the Ministry's Regional Office at Bhubaneswar.
- viii. During well drilling, wastewater shall be segregated into waste drilling fluid and drill cuttings. Drill cutting shall be stored onsite impervious HDPE lined pit for solar evaporation and drying. Effluent shall be properly treated and treated effluent shall conform to CPCB standards. The produced water shall be stored onsite HDPE lined pit for solar evaporation and reuse in drilling of new wells and fire hydrant system. Domestic effluent shall be disposed off through septic tank followed by soak pit.
- ix. Ground water quality monitoring shall be done to assess if produced water storage or disposal has any effect.
- x. 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 on land. Proper toxicological analysis shall be done to ensure there is no hazardous material. Copy of toxicological analysis shall be submitted to Ministry's Regional Office at Bhubaneswar.
- xi. Only water based drilling mud shall be used. The drilling mud shall be recycled. Hazardous waste shall be disposed of as per Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers/re-processors.
- xii. The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- xiii. To prevent underground coal fire, preventive measures shall be taken for ingress of ambient air during withdrawal inside the coal seams by adopting technologies including vacuum suction. Gas detectors for the detection of CH<sub>4</sub> and H<sub>2</sub>S shall be provided.
- xiv. The design, material of construction, assembly, inspection, testing and safety aspects of operation and maintenance of pipeline and transporting the natural gas/oil shall be governed by ASME/ANSI B 31.8/B31.4 and OISD standard 141. Pipeline wall thickness and minimum depth of burial at river crossing and casings at rails, major road crossings should be in conformity with ANSI/ASME requirements.
- xv. The company shall develop a contingency plan for H<sub>2</sub>S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H<sub>2</sub>S detectors in locations of high risk of exposure along with self containing breathing apparatus.
- xvi. Adequate well protection system shall be provided like Blow Out Preventer (BOP) or diverter systems as required based on the geological formation of the blocks.

- xvii. The top soil removed shall be stacked separately for reuse during restoration process.
- xviii. Emergency Response Plan shall be based on the guidelines prepared by OISD, DGMS and Govt. of India. Recommendations mentioned in the Risk Assessment & Consequence Analysis and Disaster Management Plan shall be strictly followed.
- xix. Project proponent shall comply with the environment protection measures and safeguards recommended in the EIA/EMP/risk analysis report/disaster management plan.
- xx. 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 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.
- xxi. Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.
- xxii. All the commitments made to the public during the Public Hearing / Public Consultation meetings held on 25.02.2014 for Chatra District and on 26.02.2014 for Hazaribagh District shall be satisfactorily implemented.
- xxiii. At least 5 % of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhubaneswar. Implementation of such program should be ensured accordingly in a time bound manner.

**B. GENERAL CONDITIONS:**

- i. The project authorities must strictly adhere to the stipulations made by the Jharkhand State Pollution Control Board (JSPCB), State Government and any other statutory authority.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and 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 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 is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- 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 Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- v. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall

- be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- vi. The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.
  - vii. The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.
  - viii. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
  - ix. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
  - x. The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
  - xi. A copy of the clearance letter shall be sent by the project 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.
  - xii. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and JSPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
  - xiii. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated shall be submitted 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 clearance conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.
  - xiv. 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 SPCB/Committee and may also be seen at Website of the Ministry 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 concerned Regional Office of the Ministry.
  - xv. The 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 start of the project.



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

9.0 The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.

10.0 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.

11.0 Environment Clearance is issued to M/s ONGC Ltd. for Development of North Karanpura CBM Block NK-CBM-2001/1 in Jharkhand.

(Lalit Bokolia)  
Additional Director

Copy to:-

1. The Secretary, Department of Environment, Govt. of Jharkhand, Jharkhand.
2. The Chief Conservator of Forests, Regional Office (EZ), A/3, Chandrashekharpur, Bhubaneswar, 751023. Orissa.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Jharkhand Pollution Control Board, Town Administrative Building, HEC, Dhuwa, Ranchi- 824004.
5. Monitoring Cell, Environment, Forests & Climate Change, Indira Paryavaran Bhavan, Jor Bagh, New Delhi.
6. Guard File/Monitoring File/Record File.

(Lalit Bokolia)  
Additional Director

F. No. J-11011/228/2012-IA-II(I)  
Government of India  
Ministry of Environment, Forest and Climate Change  
(IA- II Section)

Indira Paryavaran Bhawan  
Jorbagh Road, New Delhi - 3

Dated: 1<sup>st</sup> May, 2018

To


M/s Prabha Energy Private Limited  
12A, Abhishree Corporate Park  
Ambli-Bopal Road  
Ahmedabad (Gujarat) - 380 058

**Sub: Development of North Karanpura CBM Block NK-CBM-2001/1 in Jharkhand- Transfer of Environmental Clearance from M/s ONGC Ltd to M/s Prabha Energy Private Limited - reg.**

Sir,

This has reference to your proposal No. IA/JH/IND2/71896/2014 dated 28<sup>th</sup> December, 2017 regarding transfer of environmental clearance from M/s ONGC Ltd to M/s Prabha Energy Private Limited.

2. The Ministry had earlier granted environmental clearance vide letter dated 12<sup>th</sup> May, 2015 for the project 'Development of North Karanpura CBM Block NK-CBM-2001/1' in Jharkhand in favour of M/s ONGC Ltd.
3. As per the amendment to the CBM contract and joint operating agreement, there has been change in the operatorship of the block w.e.f 28<sup>th</sup> December, 2015 and M/s Prabha Energy Private Limited has been assigned 25% participating interest (PI), and thus necessitating transfer of all requisite approvals in the new name of the company.
4. M/s ONGC Ltd has submitted a letter dated 4<sup>th</sup> July, 2017 stating no objection to the transfer of environmental clearance dated 12<sup>th</sup> May, 2015 in favour of M/s Prabha Energy Private Limited.
5. M/s Prabha Energy Private Limited has submitted an affidavit to abide by the terms and conditions stipulated in the environmental clearance dated 12<sup>th</sup> May, 2015 issued in the name of M/s ONGC Ltd.
6. As per the relevant provisions of the EIA Notification, 2006, the environmental clearance to the project 'Development of North Karanpura CBM Block NK-CBM-2001/1' in Jharkhand granted by the Ministry vide letter dated 12<sup>th</sup> May, 2015 is hereby transferred from M/s ONGC Ltd to M/s Prabha Energy Private Limited, on the same terms and conditions under which prior environmental clearance was initially granted and for the same validity period.
7. This issues with approval of the competent authority.

  
11/5/2018  
(S. K. Srivastava)  
Scientist E

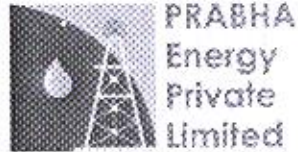
Copy to:-

1. The Additional PCCF (C), MoEF&CC Regional Office (ECZ), Bungalow No. A-2, Shyamali Colony, Ranchi - 2

2. The Secretary, Forest, Environment and Climate Change Department, Government of Jharkhand, Ranchi (Jharkhand)
3. The Member Secretary, Central Pollution Control Board, Parvesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Jharkhand State Pollution Control Board, T A Building, HEC Complex, Ranchi (Jharkhand)
5. Guard File/Monitoring File/Website/Record File

*SK*  
1/5/2018  
(S. K. Srivastava)  
Scientist E

# Annexure-6



**NORTH KARANPURA CBM PROJECT**  
(CONSORTIUM OF ONGC, IOCL AND PEPL)

PEPL/NKCBM/HSE/MOEFCC/2023/01

Date: 08<sup>th</sup> April 2023

To,  
The Member Secretary  
Jharkhand State Pollution Control Board  
Township Building, HEC Complex, Dhurva  
Ranchi - 834004  
Jharkhand

**Subject: Environmental Statement for the financial year ending 31<sup>st</sup> March 2023 in FORM V for "Development of North Karanpura CBM Block NK-CBM-2001/1 in Jharkhand State".**

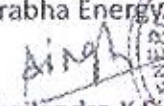
Dear Sir,

Kindly find attached herein the Environmental Statement for the financial year ending 31<sup>st</sup> March 2023 in FORM V as mandated vide General Conditions of the environmental clearance granted by MoEFCC vide Ministry's letter no. J - 11011/228/2012 - IA. II (i) dated 12th May 2015.

Thanking you,

Yours truly,

For Prabha Energy Private Limited

  
Dr. Shailendra K Singh  
Sr. Vice President (Operations)



CC:

- 1) The Ministry of Environment, Forest and Climate Change, Integrated Regional Office, (New Building of Jharkhand Rajya Awaas Board), Harmu, Ranchi-834002, Jharkhand

**Enclosure: Environmental Statement for the financial year ending 31<sup>st</sup> March 2023**

# ENVIRONMENTAL STATEMENT FORM-V

(See rule 14)

Environmental Statement for the financial year ending with 31<sup>st</sup> March 2023

## PART-A

- a) Name and address of the owner/  
Occupier of the industry  
Operation or process : Prabha Energy Private Limited,  
12A, Abhishree Corporate Park  
Opposite Swagat Bunglows BRTS Bus Stop,  
Ambli - Bopal Road, Ambli, Ahmedabad,  
Gujarat- 380058
- b) Industry category Primary-  
(STC Code) Secondary- (SIC Code) : Red
- c) Production category-Units. : Not Applicable
- d) Year of establishment : 2017 (Preparatory arrangements  
commenced)
- e) Date of the last Environmental  
Statement submitted. : 26<sup>th</sup> April 2022



## PART -B

- a) Water and Raw Material Consumption : Fresh Water required for Cementing,  
Effluent Water required for Drilling and  
Hydro-fracturing operation.

*(However, all operations in North Karanpura CBM Block have been suspended from 1st April 2022 to 31<sup>st</sup> March 2023 due to future planning and preparatory measures)*

- b) Water consumption in m<sup>3</sup>/d : 3m<sup>3</sup>/day
- Process :  
Cooling :  
Domestic : 3m<sup>3</sup>/day

Name of Products	Process water consumption per unit of products	
	During the previous financial year	During the current financial year
Coal-bed Methane (CBM) Gas	Not Applicable	Not Applicable

- c) Raw material consumption

Name of raw materials	Name of Products	Consumption of raw material per unit of output	
		During the previous financial year	During the current financial year
There are no raw materials involved in the production of CBM gas. Naturally occurring CBM Gas is extracted from the coal seams at well pads.		Nil	Nil



### PART-C

a) Pollution discharged to environment/  
Unit of output : No pollution is discharged to  
environment

(Parameter as specified in the consent is used)

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentration of Pollutants discharged (mass/volume)	Percentage of variation from prescribed standards with reasons.
(a)Water	42.23 m <sup>3</sup> /day water has been discharged through CBM production.	The discharged water is analyzed periodically and meets the standards set by CPCB	There are no variations
(b)Air	Not Applicable	Not Applicable	Not Applicable

### PART-D

a) Hazardous Wastes : No Hazardous Waste is discharged to environment

As specified under Hazardous Wastes (Management & Handling Rules, 1989).

Hazardous Wastes	Total Quantity (Kg)	
	During the previous financial year	During the current financial year
i. From Process	Not Applicable	Not Applicable
ii. From Pollution Control Facilities		





## PART – E

a) Solid Waste : Drill cuttings are Solid Waste

Solid Wastes	Total Quantity(m3)	
	During the previous financial year	During the current financial year
i. From process	1278.98 m <sup>3</sup>	0 m <sup>3</sup>
ii. From Pollution Control Facility	Not Applicable	Not Applicable
iii. Quantity recycled or reutilized within the unit.	Not Applicable	Not Applicable

*(Drilling Operation in North Karanpura CBM Block has been suspended from 1<sup>st</sup> April 2022 to 31<sup>st</sup> March 2023 due to future planning and preparatory measures, so no solid waste generated in the year)*

## PART - F

Please specify the characteristics (in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

- Hazardous Waste: Presently no hazardous waste is generated.
- Non-Hazardous Waste: Drill cuttings are non-hazardous inert material and are being used for construction activities like back filling of low lying areas, construction of well pads, road filling etc.

*However, Drilling Operation in North Karanpura CBM Block has been suspended from 1<sup>st</sup> April 2022 to 31<sup>st</sup> March 2023, so no drill cuttings were generated during the year."*



## **PART-G**

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.

**Not Applicable**

## **PART - H**

Additional measures / investment proposal for environmental protection including abatement of pollution.

**No pollution is generated from drilling Process**

## **PART -I**

Any other particulars for improving the quality of environment.

**Tree plantation taken up along existing well sites.**

