

PRABHA ENERGY PRIVATE LIMITED ^{o/c}

Regd. Office: 12A, Abhishree Corporate Park, Opp. Swagat BRTS Bus Stop, Ambli-Bopal Road, Ahmedabad-380058
Tel: (02717) 298510, 9909009898 Fax: (02717) 298520, Email: info@prabhaenergy.com
CIN: U 40102 GJ 2009 PTC 057716

PEPL/NKCBM/HSE/MOEF/2018/1

3rd April 2018

The Ministry of Environment, Forest and Climate Change
Regional Office, Ranchi;
Bungalow No. A-2, Shyamali Colony;
Doronda, Ranchi - 834002

Subject: Six Monthly Compliance Report of "Development of North Karanpura CBM Block NK-CBM-2001/1 in Jharkhand" for the period ending 31st March 2018

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

Dear Sir,

Kindly find attached here with the six monthly compliance report with respect to the above EC as on 31.03.2018.

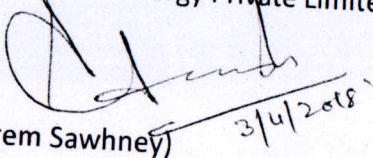
During the period reported, Consent to Establish was obtained from the Jharkhand State Pollution Control Board on 26th December 2017 with a validity of six months. Preparatory arrangements are being carried out in the block area. Application for CTO has been filed with the JSPCB on 26th March 2018.

It is planned to start the development operations by the second quarter of this year 2018-19.

Thanking you.

Yours truly,

For Prabha Energy Private Limited


3/4/2018

(Prem Sawhney)

CEO

Enclosure: 1. Six Monthly compliance report (Period ending 31st March 2018)

2. Monitoring report of effluent water samples from two CBM wells

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, 5th & 6th Floor, 1582 - Rajdanga Main Road, Kolkata - 700107

Six Monthly Compliance Report to the conditions of Environmental Clearance For The Period Ending 31.03.2018

North Karanpura CBM Project (NK-CBM-2001/1)

REFERENCE: F. No. J-11011/228/2012-IAII(I) Dated 12th May 2015

SL.NO.	Conditions/ Guide lines	Status of Compliance
Specific Conditions		
1	Compensation for the land acquisition to the land ousters, 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.	Land is acquired through proper procedure and applicable laws (through district administration). RR is not applicable as only small patches of land are required.
2	The surface facilities shall be installed as per the applicable codes and standards, international practices and applicable local regulations.	Surface facilities will be constructed as per the applicable codes and standards.
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 th 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.	Agency for monitoring of ambient air quality has been identified. It shall monitor near the human settlements as per the norms. All efforts shall be made to improve the ambient air quality of the area.
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"> • The flare shall be designed as per good oilfield practices and OISD guidelines • Firefightin equipment shall be provided at the site as per the provisions of OISD-189 • Soil remediation is not required as there is no oil spillages associated with CBM gas extraction • There is no flaring of gas / ground flaring
5	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 MoEF. Height of all the stacks/vents shall be as per the CPCB guidelines.	<ul style="list-style-type: none"> • All DG/GG sets being procured will have acoustic enclosures and will meet the norms notified by MOEF. • Height of all the stacks/vents shall be as per the CPCB guidelines.
6	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.	<ul style="list-style-type: none"> • CBM drill cuttings do not carry any oil traces and are non-hazardous • Cuttings shall be used for road filling. • Application to obtain authorisation for disposal of hazardous waste will be submitted to JSPCB after CTE is granted
7	Total freshwater 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.	Total freshwater 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 submitter to the Ministry's Regional office at Ranchi.
8	During well drilling wastewater 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 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.	Shall be done as suggested, when the project drilling commences.

SL.NO.	Conditions/ Guide lines	Status of Compliance
Specific Conditions (Contd.)		
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	Shall be done once the field level project activities get started
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 will be attended
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.	<ul style="list-style-type: none"> • 5% of the total cost of the project shall be spent on CSR activities over the life of the project • CSR plan covering promotion of education, medical facilities, road development, skill development of local people is under preparation
General Conditions		
1	The project authorities must strictly adhere to stipulation made by the Jharkhand State Pollution Control Board (JSPCB), State Government and any other statutory	All stipulations made by JSPCB and other statutory authorities will be 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.	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 stations is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	The locations of ambient air quality monitoring stations shall be decided in consultation with the state pollution control board (SPCB).It shall be ensured that at least one stations is installed in the upwind & down- wind direction as well as where maximum ground level concentrations are anticipated.
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).	Shall be done as suggested
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 programmes are integral part of our project execution plan
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.	Shall be done as suggested



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Email ID – iem2012@Rediffmail.com, Mob. No. – 8407804251, 8407804252, 8407804254.

GROUND WATER QUALITY TEST REPORT

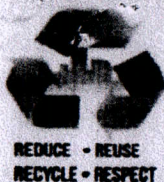
Test Report No : IEM/EEL/RAN/2017/0123 Report Issue Date : 09/02/2018 Work order No. : PWORD/1718/0030 Protocol : IS Method	Type of Industry : Oil & Gas Sample Description : Ground Water Sampling Date : 29/01/2018 Sampling Location : NK-1 Sample Registration Date : 30/01/2018
Client Name : M/s Prabha Energy Pvt. Ltd. Address : 12A, Abhishree Corporate Park, Ambali Bopal Road, Ambli, Ahmedabad-380058.	Sample Marked as : IEM/EEL/Sample-B Sample Quantity : Sealed Plastic Container – 2 litre Customer Rept. : Mr. Sheetal Bharadwaj Sample Drawn By : Client Representative

REPORT

SL. NO.	PARAMETERS/TESTS	PROTOCOL	RESULTS	UNITS
1	pH	IS 3025 (Part-11) : 1983; Reaffirmed 2006	6.78	---
2	Temperature	IS 3025 (Part-9) : 1984	20.8	°C
3	Colour	IS 3025 (Part-4) : 1983	<5	Hazen
4	Total Suspended Solids	IS 3025 (Part-17) : 1984; Reaffirmed 1996	82	mg/L
5	Total Dissolved Solids	IS 3025 (Part-16) : 1984; Reaffirmed 2006	662	mg/L
6	Conductivity	IS 3025 (Part-14) : 1984; Reaffirmed 2002	1079	µS/Cm
7	Chloride	IS 3025 (Part-32) : 1988; Reaffirmed 2007	38.82	mg/L
8	COD	IS 3025 (Part-58) : 2006	59.4	mg/L
9	BOD [5 days at 20°C temp.]	IS 3025 (Part-44) : 1993; Reaffirmed 2003	5.6	mg/L
10	Phenolic Compounds (as C ₆ H ₅ OH)	IS 3025 (Part-43) : 1992; Reaffirmed 2003	BDL	mg/L
11	Sulphate (as SO ₄ ²⁻)	IS 3025 (Part-24) : 1986; Reaffirmed 2009	42.8	mg/L
12	Total Alkalinity (as CaCO ₃)	IS 3025 (Part-23) : 1986; Reaffirmed 2003	160	mg/L

NOTE: 1) This certificate refers to the values obtained at the time of testing and results related to the items tested.
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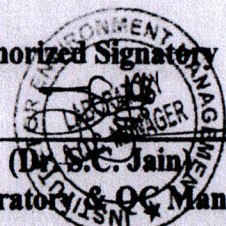
SL. NO.	PARAMETERS/TESTS	PROTOCOL	RESULTS	UNITS
13	Fluoride (as F)	IS 3025 (Part-60) : 2008;	BDL	mg/L
14	DO	IS 3025 (Part-38) : 1989; Reaffirmed 2003	4.2	mg/L
15	Sodium (as Na)	IS 3025 (Part-45) : 1993; Reaffirmed 2003	8.2	mg/L
16	SAR	-----	1.92	---
17	Cyanide (as CN)	IS 3025 (Part-27) : 1986; Reaffirmed 2003	BDL	mg/L
18	Hexavalent Chromium (as Cr ⁺⁶)	IS 3025 (Part-52) : 2003	BDL	mg/L
19	Total Chromium (as Cr)	IS 3025 (Part-52) : 2003	BDL	mg/L
20	Calcium (as Ca)	IS 3025 (Part-40) : 1991	26.1	mg/L
21	Magnesium (as Mg)	IS 3025 (Part-46) : 1994	10.3	mg/L
22	Iron (as Fe)	IS 3025 (Part-53) : 2003	0.67	mg/L
23	Arsenic (as As)	IS 3025 (Part-37) : 1988	BDL	mg/L
24	Zinc (as Zn)	IS 3025 (Part-49) : 1994	BDL	mg/L
25	Copper (as Cu)	IS 3025 (Part-42) : 1992	BDL	mg/L
26	Lead (as Pb)	IS 3025 (Part-47) : 1994	BDL	mg/L
27	Mercury (as Hg)	IS 3025 (Part-48) : 1994	BDL	mg/L
28	Manganese (as Mn)	IS 3025 (Part-59) : 2006	BDL	mg/L
29	Nickel (as Ni)	IS 3025 (Part-54) : 2003	BDL	mg/L
30	Vanadium (as V)	IS 3025 (Part-65) : 2014	BDL	mg/L

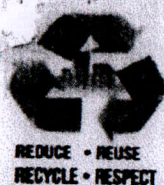
Note: BDL = Below Detection Limits;

END OF REPORT

Authorized Signatory

(Dr. S.C. Jain)
(Laboratory & QC Manager)





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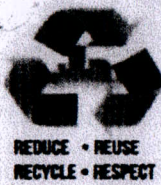
GROUND WATER QUALITY TEST REPORT

Test Report No : IEM/EEL/RAN/2017/0122	Type of Industry : Oil & Gas
Report Issue Date : 09/02/2018	Sample Description : Ground Water
Work order No. : PWORD/1718/0030	Sampling Date : 29/01/2018
Protocol : IS Method	Sampling Location : NK-6
	Sample Registration Date : 30/01/2018
Client Name : M/s Prabha Energy Pvt. Ltd.	Sample Marked as : IEM/EEL/Sample-A
Address : 12A, Abhishree Corporate Park, Ambali Bopal Road, Ambli, Ahmedabad-380058.	Sample Quantity : Sealed Plastic Container – 2 litre
	Customer Rept. : Mr. Sheetal Bharadwaj
	Sample Drawn By : Client Representative

REPORT

SL. NO.	PARAMETERS/TESTS	PROTOCOL	RESULTS	UNITS
1	pH	IS 3025 (Part-11) : 1983; Reaffirmed 2006	6.61	----
2	Temperature	IS 3025 (Part-9) : 1984	20.6	°C
3	Colour	IS 3025 (Part-4) : 1983	<5	Hazen
4	Total Suspended Solids	IS 3025 (Part-17) : 1984; Reaffirmed 1996	56	mg/L
5	Total Dissolved Solids	IS 3025 (Part-16) : 1984; Reaffirmed 2006	1580	mg/L
6	Conductivity	IS 3025 (Part-14) : 1984; Reaffirmed 2002	2344	µS/Cm
7	Chloride	IS 3025 (Part-32) : 1988; Reaffirmed 2007	21.35	mg/L
8	COD	IS 3025 (Part-58) : 2006	73.5	mg/L
9	BOD [5 days at 20°C temp.]	IS 3025 (Part-44) : 1993; Reaffirmed 2003	8.8	mg/L
10	Phenolic Compounds (as C ₆ H ₅ OH)	IS 3025 (Part-43) : 1992; Reaffirmed 2003	BDL	mg/L
11	Sulphate (as SO ₄ ⁻²)	IS 3025 (Part-24) : 1986; Reaffirmed 2009	55.6	mg/L
12	Total Alkalinity (as CaCO ₃)	IS 3025 (Part-23) : 1986; Reaffirmed 2003	192	mg/L

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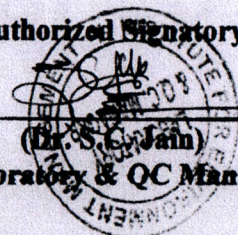
SL. NO.	PARAMETERS/TESTS	PROTOCOL	RESULTS	UNITS
13	Fluoride (as F)	IS 3025 (Part-60) : 2008;	BDL	mg/L
14	DO	IS 3025 (Part-38) : 1989; Reaffirmed 2003	4.6	mg/L
15	Sodium (as Na)	IS 3025 (Part-45) : 1993; Reaffirmed 2003	11.5	mg/L
16	SAR	-----	2.27	---
17	Cyanide (as CN)	IS 3025 (Part-27) : 1986; Reaffirmed 2003	BDL	mg/L
18	Hexavalent Chromium (as Cr ⁺⁶)	IS 3025 (Part-52) : 2003	BDL	mg/L
19	Total Chromium (as Cr)	IS 3025 (Part-52) : 2003	BDL	mg/L
20	Calcium (as Ca)	IS 3025 (Part-40) : 1991	33.8	mg/L
21	Magnesium (as Mg)	IS 3025 (Part-46) : 1994	17.5	mg/L
22	Iron (as Fe)	IS 3025 (Part-53) : 2003	0.92	mg/L
23	Arsenic (as As)	IS 3025 (Part-37) : 1988	BDL	mg/L
24	Zinc (as Zn)	IS 3025 (Part-49) : 1994	BDL	mg/L
25	Copper (as Cu)	IS 3025 (Part-42) : 1992	BDL	mg/L
26	Lead (as Pb)	IS 3025 (Part-47) : 1994	BDL	mg/L
27	Mercury (as Hg)	IS 3025 (Part-48) : 1994	BDL	mg/L
28	Manganese (as Mn)	IS 3025 (Part-59) : 2006	BDL	mg/L
29	Nickel (as Ni)	IS 3025 (Part-54) : 2003	BDL	mg/L
30	Vanadium (as V)	IS 3025 (Part-65) : 2014	BDL	mg/L

Note: BDL = Below Detection Limits;

END OF REPORT

Authorized Signatory

(Dr. S. C. Jain)
(Laboratory & QC Manager)



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