

PRABHA ENERGY PRIVATE LIMITED

PEPL/NKCBM/HSE/MOEF/2020/8

09th October 2020

To,
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 30th September 2020.

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 for favor of your kind information.

Thanking you.

Yours truly,
For Prabha Energy Private Limited


(Dr S.K. Singh)
Project Manager



Enclosure: Six Monthly Compliance Report (Period ending 30th September 2020) along with Annexures.

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

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 - Environment Clearance

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

Period of Compliance Report: Progressive : Six monthly compliance report for the period April 2020 to September 2020

| SL.NO. | Conditions/ Guide lines | Status of Compliance |
|----------------------------|--|--|
| Specific Conditions | | Page - 1 |
| 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 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 under installation are 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 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. | <ul style="list-style-type: none"> • NABL accredited lab for monitoring of ambient air quality has been commissioned for periodic monitoring. • Air quality monitoring has been carried out at 3 locations. Previously reports were shared with JSPCB and reports of the same is enclosed as Annexure-1. • 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 is designed as per good oilfield practices and OISD guidelines • Fire-fighting equipment are 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 • The overhead flare stacks are installed as per the MOEF/CPCB guidelines. |

Singh

| SL.NO. | Conditions/ Guide lines | Status of Compliance |
|-------------------------------------|--|--|
| Specific Conditions (Contd.) | | |
| 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"> • M/S NETEL India, a NABL accredited laboratory has been commissioned for periodic noise monitoring. Results of noise monitoring are given in Annexure - 2. • All DG/GG sets have proper acoustic enclosures and meet the norms notified by MOEFCC. • Height of all the stacks/vents is are kept as per the CPCB guidelines. • Ambient noise data shows that day and night levels are within the permissible limits as per Noise Rules and Regulations. |
| 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. • 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. • The drilling fluid after solid-liquid separation is recycled or evaporated in HDPE lined pits. |
| 7 | 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. | Total fresh water requirement does not exceed 25 cum/day for each well during drilling phase. |
| 8 | 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. | <ul style="list-style-type: none"> • Drill cuttings are stored onsite in impervious HDPE lined pits for solar evaporation and drying. • The produced water conforms to CPCB norms and is either stored onsite in HDPE lined pits for solar evaporation and reuse in drilling of new wells and fire hydrant systems or discharged in nearby nallas/rivulets following natural topography. • Effluents shall be properly treated, if required, as per the CPCB standards. • Domestic effluents are disposed off through septic tanks followed by soak pit. |

Singh

| SL.NO. | Conditions/ Guide lines | Status of Compliance |
|-------------------------------------|--|---|
| Specific Conditions (Contd.) | | |
| 9 | Ground water monitoring shall be done to assess if produced water storage or disposal has any effect. | Ground water is being regularly monitored to ensure that the produced water storage or disposal has no effect. Reports attached in 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"> • Drilling waste water including drill cuttings, wash water are collected in disposal pits lined with HDPE lining and naturally evaporated. • Drill cuttings are analysed and the taxological analysis report is attached as Annexure 4. • Produced water analysis is given in Annexure 5. • The analysis report shows that the drill cuttings and waste water complies with the standards set forth in " Standards for Onland Disposal" |
| 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 mud so used is recycled for further drilling. No Hazardous wastes are generated in the process However, water is recycled for drilling. |
| 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"> • Fire fighting equipments are provided as per the provision of OISD-189 • Soil remediation is not required as there is no oil spillages associated with CBM gas extraction • Overhead flaring of sufficient height is provided at well sites where required. |
| 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 ₄ and H ₂ S shall be provided. | There is no possibility of ingress of air into coal seams during CBM operations |

Singh

| EC COMPLIANCES - NK-CBM-2001/I | | Page - 4 |
|-------------------------------------|--|---|
| SL.NO. | Conditions/ Guide lines | Status of Compliance |
| Specific Conditions (Contd.) | | |
| 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. | All suggested specifications have been included in the tender document and company shall ensure it is followed. |
| 15 | The company should develop a contingency plan for H ₂ S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H ₂ S detectors in locations of high risk of exposure along with self containing breathing apparatus. | There is absolutely no chance of H ₂ S emission in CBM 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. | CBM wells are sub-hydrostatic and there are no chances of blow out of gas. However, BOP is used during drilling operations as per OMR-2017 |
| 17 | The top soil removed shall be stacked separately for reuse during restoration process. | <ul style="list-style-type: none"> • Top soil will not be removed during any activity of CBM exploration in North Karanpura CBM block • However, whenever laying of pipeline in ROU will be carried out, the top soil (if available) will be preserved and re-used after pipeline laying work is completed. |
| 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 is based as per the guidelines given by OMR 2017, OISD and Govt of India. |
| 19 | Project proponent shall comply the 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 reports are followed and practised through periodic drills. |

Amph

| 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. | Occupational health surveillance of the workers is being carried out 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. |
| 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 is to cover the promotion of education, medical facilities, road development, skill development of local people is under way. • Recently CSR activity was done at project site. |
| 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 authority. | All stipulations made by JSPCB and other statutory authorities are strictly adhered to. |

A Singh

| EC COMPLIANCES - NK-CBM-2001/I | | Page - 6 |
|------------------------------------|--|---|
| SL.NO. | Conditions/ Guide lines | Status of Compliance |
| General Conditions (Contd.) | | |
| 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 is made/ decided in consultation with the state pollution control board (SPCB).It is ensured that at least one stations is installed in the upwind & downwind 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). | Third Party is hired for monitoring the Noise level in the area. On Quarterly basis, the Monitoring of Noise is done 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 programmes are integral part of our project execution plan. Training like fire drill, safety meetings are properly held on site on monthly 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 has complied 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 implemented. 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 practised through mock drills |

A Singh

| SL.NO. | Conditions/ Guide lines | Status of Compliance |
|------------------------------------|---|--|
| General Conditions (Contd.) | | |
| 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"> • Separate fund is fixed for CSR activities and recently CSR activity was done at project site for the welfare of nearby areas. • CSR activities was undertaken by involving local villages and administration. |
| 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"> • A separate Environment Management Cell is set up to carry out the EMP and Monitoring functions. • A reputed NABL laboratory is hired to carry out periodic monitoring of all environmental parameters. |
| 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"> • Sufficient fund is fixed to implement the MoEFCC as well as State Government conditions and it will be available whenever required. |
| 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 is given to all concerned. |

dingh

| SL.NO. | Conditions/ Guide lines | Status of Compliance |
|------------------------------------|---|---|
| General Conditions (Contd.) | | |
| 12 | 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. | <ul style="list-style-type: none"> • Six Monthly Compliances of Environmental clearance were submitted to JSPCB and MoEFCC on regular basis. • Copies of the EC and six monthly compliance reports are posted on the web site of PEPL at www.prabhaenergy.com |
| 13 | 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. | Form - V for financial year ending 31st March 2020 was submitted. In future too it shall be submitted to the JSPCB and Regional office of MoEF at Ranchi for each financial year ending 31st March. The earlier statements have been put on the web site of PEPL, which can be accessed at www.prabhaenergy.com |
| 14 | 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 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 Ministry. | <ul style="list-style-type: none"> • Local people were informed that the project has been accorded environmental clearance by the Ministry by advertising in local papers. • The EC order is available on the website of the Ministry and ONGC. |
| 15 | 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. | <ul style="list-style-type: none"> • The project has the approval of MOPNG • 31st March of every year is the date of financial closure. |

Airgh