



Ref: BPRL/CB-ONN/2010/8/EIA/10

22/02/2021

To

Ministry of Environment, Forest and Climate Change,  
Regional Office, (Western Zone),  
Kendriya Paryavaran Bhawan, Link Road-3,  
E-5, Ravishankar Nagar, Bhopal – 462016.  
Tel. No. 0755- 2465054, 2465496, 2466525

**Sub: EC Compliance report from July' 2020 to December' 2020 for Onshore Oil & Gas Exploration Block CB-ONN-2010/8 of M/s Bharat PetroResources Ltd (BPRL)**

Ref : Environmental Clearance (EC) vide F.No.J-11011/324/2013-IA-II (I) dated 22.06.2015

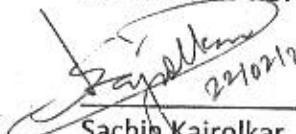
Ministry of Environment, Forest & Climate Change has granted Environmental Clearance vide letter Ref: J-11011/324/2013-IA-II dated 22.06.2015 for onshore oil & gas exploration in the block CB-ONN-2010/8.

Six monthly Compliance report for the period of July' 2020 to December' 2020 is attached for your kind perusal. Also, the compliance Report is being uploaded on BPRL website.

Thanking You,

Your faithfully,

For BHARAT PETRORESOURCES LIMITED

  
Sachin Kajrolkar

Assistant Vice President (ASSETS)

Encl: As above.

Copy to:

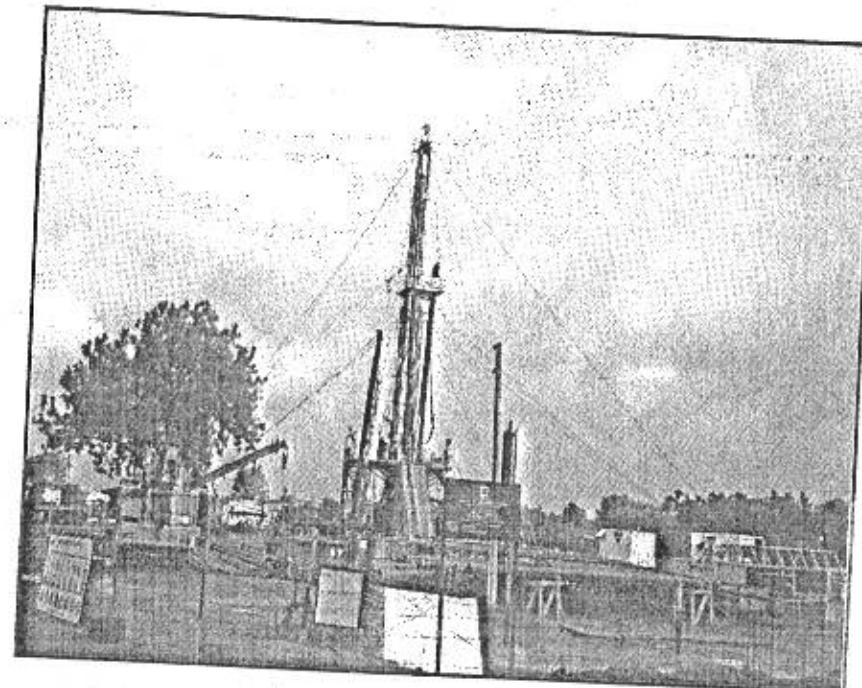
- I. The Chairman, Central Pollution Control Board
- II. The Chairman, Gujarat State Pollution Control Board

मेकर टावर्स, 'ई' विंग, 9 वी मंजिला, काफ परेश, मुंबई - 400 005, फोन : 91-22-2217 5600, फैक्स : 91-22-2215 4364  
टेलिस्टर्ड ऑफिस : भारत भवन, 4 & 6, करीमभाऊ शेठ, बेलाइ ड्रेट, पी. ओ. बॉर्ड 688, मुंबई - 400 001. फोन : 91-22-2271 3000, फैक्स : 91-22-2271 3889

# **Bharat PetroResource Limited**

## **Compliance Report:**

**Environmental Clearance (J-11011/324/2013-IA-II-(I)) for  
Block-CB-ONN-2010/8.**



  
(Bibhuranjan)

Asst. manager (Assets)  
BPRL, Mumbai



Sachin R. Kajrekar  
Asst. V.P. (Assets),  
BPRL, Mumbai

# Bharat Petro Resource Limited

## Compliance Report: Environmental Clearance (J-11011/324/2013-IA-II-(I)) in Block CB-ONN-2010/8

(July' 2020 – December' 2020)

### Quality Control

Project for Block CB-ONN-2010/8

Release Date: 22/02/2021

Report No.: 11

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Prepared By : Bibhor Ranjan,

Assistant Manager ( Assets)

Reviewed By : Sachin Kajrolkar,

Assistant Vice President ( Assets)

### For BHARAT PETRORESOURCES LIMITED

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## **1.0 SALIENT FEATURES OF THE PROJECT**

### **1.1 General Information**

Bharat Petroleum Corporation Ltd (BPCL) entered the upstream sector in 2003 with the aim of providing partial supply security of crude and hedging of price risks and to become a vertically integrated oil company adding company's bottom line.

Considering the need for a focused approach for E&P activities and implementation of investment plans of Bharat Petroleum Corporation Ltd. at a quicker pace, a wholly owned subsidiary company Bharat PetroResources Ltd. (BPRL) was incorporated in October 2006, with the objective of carrying out Exploration and Production activities.

Under NELP-IX bid round, BPRL led consortium has been awarded one on-land block CB-ONN-2010/8, in Cambay basin, Gujarat. BPRL is the Lead Operator with 25% Participating Interest (PI) and the other consortium partners are GAIL- 25% PI, EIL- 20% PI, BF Infrastructure Ltd - 20% PI and Monnet Ispat & Energy Ltd - 10% PI.

Currently, implementation of Field Development Plan (FDP) has been proposed as exclusive operation by consenting partners consisting of BPRL (PI 50%), GAIL (27.78%) and EIL (22.22%) as per Joint Operating Agreement.

### **1.2 Location of the Block**

Block CB-ONN -2010/8 is located in common boundary of three districts Kheda, Ahmedabad and Gandhinagar and is divided in two part Part A and Part B. The area covered under part A is 14 km<sup>2</sup> and in Part B is 28 km<sup>2</sup>.

Production Sharing Contract (PSC) with GoI was signed on 30.08.2012. Petroleum Exploratory license (PEL) was granted on 01.03.2013.

Block CB-ONN-2010/8 geographically located in Ahmedabad, Gandhinagar and Kheda districts of Gujarat.

Location details of the block are as follows:

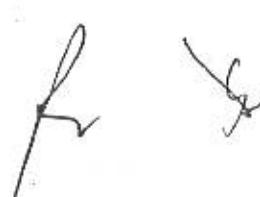
Taluka: Dehgam, Daskroi, Mehdavad

District: Gandhinagar, Ahmedabad and Kheda

State: Gujarat

The geographical Coördinates detail of the block is presented in Table-1

Longitude and Latitude of CB-ONN-2010/8 Block



Point	Latitude			Longitude		
	Deg.	Min.	Sec.	Deg.	Min.	Sec.
Part A						
A	23	0	54	72	50	10
B	23	0	54	72	48	6
C	23	3	0	72	48	6
D	23	3	0	72	50	11
A	23	0	54	72	50	10
Part B						
A	23	0	0	72	46	38
B	23	0	0	72	50	10
C	22	57	26	72	50	8
D	22	57	26	72	46	38
E	23	0	0	72	46	38

### 1.3 Current status of the Block:

Ministry of Environment, Forest and Climate Change (MOEF&CC), Govt. of India had granted Environmental Clearance (EC) vide F.No.J-11011/324/2013-IA-II (I) dated 22.06.2015 to carry out exploration activities in the block, including drilling of 8 exploratory wells. Necessary public hearing was conducted in the block area covering three districts of Ahmedabad, Gandhinagar and Kheda in the state of Gujarat.

As Lead Operator of the block, BPRL has conducted Petroleum Operations in the Contract Area in accordance with modern oil field and petroleum industry practices to discover commercial accumulations of Petroleum. In line with the Minimum Work Programme (MWP) commitment, consortium has completed acquisition, processing, interpretation of 2D/3D seismic data, drilling of six exploratory wells Pasunia#01 (PA#01), Pasunia (PA#02), Vadod (VA#01), Demaliya#01 (DE#01), Chandiyal#01(CH#01) & Bhavda#01 (BH#01).

There were two oil discoveries in the block from PA#01 & PA#02 wells. These discoveries were planned to put in production as per the approved field development plan (FDP). Other four wells – VA#01, DE#01, CH#01 & BH#01 were devoid of any producible hydrocarbons. Hence, wells VA#01, CH#01 & BH#01 have been permanent plugged and abandoned as per relevant statutory guidelines. Permanent plugging and abandonment of DC#01 well is planned in FY 2021-22.



Well site BH#01 has been handed over to respective land owners after completion of waste disposal and site restoration job. Presently, waste disposal job at PA#02, VA#01, CH#01 and DE#01 well sites are in progress. Site restoration activities at these well sites will be completed after completing the waste disposal activities.

MOEF&CC granted the EC for the Onshore developmental and production activities in the Block CB-ONN-2010/8 vide letter F. No. No.J-11011/324/2013-IA-II (I) dated 30.07.2019. Also, Govt. of Gujarat has granted petroleum Mining Lease (PML) for 15 years vide ref. PML-14-2018-2038 E dated 26.02.2019 to carryout developmental activities. However, due to delay in implementation of FDP due to various reasons like non-availability of work over rig and further, lockdown conditions due to COVID-19 pandemic, project economics of the block was revised. Based on the same, BPRL management has approved the relinquishment of block. Accordingly, the process of surrender of block to DGH is being initiated and well sites of PA#01 & PA#02 are also planned to be restored to original conditions to hand over to respective landowners after completion of permanent plugging and abandonment of these wells.

**Status Summary of all six wells are as follows:**

SL. NO	WELL NAME	CURRENT STATUS	STATUS & FUTURE PLANS
1	Bhavda#01 (BH#01)	Well is permanently plugged and abandoned as per statutory norms and site has been restored and handed over to landowners.	Future Plan – Nil. (Site has been handed over to landowners and CTE closure application ref. BPRL/CB-ONN-2010/8/STAT/GPCB dated 26.06.2020 submitted to GPCB)
2	Chandiyal#01 (CH#01)	Well is permanently plugged and abandoned as per statutory norms of OISD and DGMS..	1. Waste management activities and site restoration activities 2. Handing over the land to Landowners.
3	Vadod#01 (VA#01)	Currently well is permanently plugged and abandoned as per statutory norms of OISD and DGMS.	1. Waste management activities and site restoration activities 2. Handing over the land to Landowners.
4	Demaliya#01 (DE#01)	Currently well is temporarily plugged and abandoned as per statutory norms of OISD and DGMS.	1. Permanent plugging & abandonment of the well. 2. Waste management activities and site restoration activities 3. Handing over the land to Landowners.
5	Pasunia#01 (PA#01)	Discovery well. Currently well is temporarily plugged and abandoned as per statutory norms of OISD and DGMS.	1. Permanent plugging & abandonment of the well. 2. Waste management activities and site restoration activities 3. Handing over the land to landowners.
6	Pasunia#02 (PA#02)	Discovery well. Currently well is temporarily plugged and abandoned as per statutory norms of OISD and DGMS.	1. Permanent plugging & abandonment of the well. 2. Waste management activities and site restoration activities 3. Handing over the land to landowners.

## 2.0 COMPLIANCE TO CONDITIONS OF ENVIRONMENTAL CLEARANCE

The Ministry of Environment and Forests had issued Environment Clearance (EC) for carrying out onshore Exploration activities in the Block CB-ONN-2010/8, Cambay, and Gujarat, vide its letter J-11011-324/2013 IA II (I) dated 22<sup>nd</sup> June 2015. Copy of EC is attached vide **Annexure 01**.

### **Compliance to Conditions Mentioned in EC**

S No	Condition	Specific Condition	compliance
1	The present EC is for Exploratory Drilling only. In case Development Drilling to be done in future, prior environmental clearance must be obtained from Ministry.	BPRL had completed exploration activities as per minimum work program (MWP) commitment given to Govt. of India, In IA-II (I) dated 22.06.2015.	For developmental activities, BPRL had obtained fresh EC from MOEF&CC vide F. No. letter no. F NO. J 11011/324/2013-Attached in <b>Annexure-02</b> .
2	Ambient air quality shall be monitored near the closest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 for PM10, PM2.5, SO <sub>2</sub> , NOX, CO, methane & non methane HC etc	Periodic monitoring of Ambient air quality was carried out during drilling and Work over activities in the Block during year 2016-2018, near the closest human settlement and found all parameters are within the prescribed limit. No drilling activities have been further carried out after this campaign at site.	Since, no drilling and testing operations were carried out during the period of July 2020 – December 2020 and the mine is temporarily closed, ambient air monitoring not carried out during this period.

S No	Condition	compliance
3	Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period	Mercury was analyzed in air, water and drill cuttings twice during drilling operations in year 2016-2018 in the Block. Well wise results of mercury were shared along with previous EC compliance reports. No drilling activities have been further carried out after this campaign at site.
4	Approach road shall be made pucca to minimize generation of suspended dust.	Since, no drilling & testing operation are carried out during the period of July 2020 – December 2020 and the mine is temporarily closed, mercury level was not analyzed during this period.
5	The company shall make the arrangement for control of noise from the drilling activity, Acoustic enclosure shall be provided to DG sets and proper stack height shall be provided as per CPCB guidelines.	Approach roads were made pucca at drill sites, which consist of rubble soiling of 230 mm, quarry waste of 150mm, WMB 75 mm also grit layering is provided. Periodical watering was done to minimize generation of suspended dust during drilling activities. Acoustic enclosure was provided to the DG sets having capacity of 250 KVA/125 KVA for control of noise from drilling activities. Noise Monitoring was carried out at all drill sites during drilling and testing operations, which indicate noise levels are within the limits. Results of Noise monitoring were shared with previous EC compliance reports. No drilling activities have been further carried out after this campaign at site.
6	Total water requirement shall not exceed 35 m <sup>3</sup> /day and prior permission shall be obtained from the concerned agency.	Since, no drilling & testing operation are carried out during the period of July 2020 – December 2020 and the mine is temporarily closed, noise monitoring at stack monitoring not carried out during this period.
7	The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be	No drilling activities have been further carried out after this campaign at site.  No water consumption during the period of July 2020 – December 2020 as no drilling and testing operations are carried out during this period.  It will be ensured that water requirement shall not exceed beyond the permissible limit once operations re-starts in the Block.
		Garland drain was constructed all around drilling site of wells to prevent runoff of any oil containing waste into nearby water bodies. Separate drainage system are constructed for oil contaminated and non-oil contaminated. Drilling wastewater including drill cuttings wash water are collected in disposal pit lined with HDPE lining evaporation pit for solar evaporation. Effluents are treated either in Mobile Effluent Treatment Plant (METP) or Common Effluent Treatment Plant (CETP). Further after treatment at CETP, effluents are disposed at CETP only. During the year 2016-17, BPRL had disposed total 13495 bbl waste water/drill fluid effluents generated in PA#01, PA#02, & VA#01 wells through GRCB authorized common effluent plant (CETP) at Odhav Enviro Project Ltd.

EC COMPLIANCE REPORT FOR  
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S No	Condition	compliance
	properly treated and treated wastewater shall conform to CPCB standards.	BPRL had disposed total 818.32 MT ~ 5177 bbl liquid effluent from Chandiyal#01 (CH#01) well site to Common Effluent treatment plant at M/s Odhav Enviro Project Ltd. till date.  Sample Manifest copy for Liquid disposed at GPCB authorized CETP is attached as <b>Annexure 3</b> .
8	Drilling wastewater including drill cuttings wash water shall be collected in disposal pit lined with HDPE lining evaporated or treated and shall comply with the notified standards for on-shore disposal. The membership of common TSDF shall be obtained for the disposal of drill cuttings and hazardous waste. Otherwise, secured land fill shall be created at the site as per the design approved by the CPCB and obtain authorization from the SPCB. Copy of authorization or membership of TSDF shall be submitted to Ministry's Regional Office at Bhopal.	After obtaining Environment Clearances (EC) from MOEF&CC, BPRL had carried out Exploration activities. Accordingly, BPRL had started drilling & testing activities from January 2016 onwards. As on date, BPRL had completed drilling of 6 wells (PA#01, PA#02, VA#01, CH#01, DE#01 & BH#01) and tested 5 wells. The drilling liquid effluent and drill cuttings (solid waste) generated from water based mud during drilling and testing operations were securely stored in disposal pit at sites lined with HDPE lining for solar evaporation.  During the year 2016-17, BPRL had disposed total 13495 bbl the waste water/drill fluid effluents generated in PA#01, PA#02, & VA#01 wells through GPCB authorized common effluent Plant ( CETP) at Odhav Enviro Project Ltd. Similarly, total 2498 MT drill cutting waste ( solid waste) generated in PA#01, PA#02 & VA#01 were disposed from GPCB approved TSDF i.e. M/s Saurashtra Enviro Project Pvt. Ltd (SEPPPL). A provisional membership was obtained from TSDF towards disposal of solid waste and copy of the said membership was earlier submitted to MOEF&CC regional office v/d/e our previous EC compliance report of letter ref. – BPRL/CB-ONN-2010/8/EIA dated 05.04.2017.  Presently, BPRL has awarded contract to M/s PMP Infratech Pvt. Ltd. for waste disposal services. Copy of TSDF membership certificate of M/s PMP Infratech Pvt. Ltd. with M/s Eco Care Infrastructure pvt. Ltd. (GPCB approved TSDF) is attached as <b>Annexure 4</b>

A total 912.27 MT drilling solid waste has been disposed off from Bhavda#01 well site to GPCB approved TSDF M/s ECO CARE Infrastructure Pvt. Ltd. In Jan 2020 through M/s M/s PMP Infratech Pvt Ltd, Ahmdeabd and Bhavda#01 well site has been handed over to land owners after completion of site restoration job.

Disposal of drilling wastes (liquid effluent and solid waste) from Pasunia#02, Demaliya#01, Chandiyal#01, and Vadod#01 well sites are presently in progress by M/s PMP Infratech Pvt Ltd, Ahmdeabd.

Hence, as on date BPRL had disposed a cumulative total 3410.27 MT of Drill cutting solid waste to the GPCB authorized TSDF.

Sample Manifest Copy of Solid waste disposed is attached as **Annexure 5**.

S No	Condition	compliance
9	Good sanitation facility should be provided at the drilling site. Domestic sewage shall be disposed off through septic tank/soak Pit	Porta cabin with all good sanitation facilities were provided for drilling staff and Domestic sewage is disposed off through septic tank/soak pit at site during drilling and testing campaign in year 2016-2018.
10	Oil spillage prevention and mitigation scheme shall be prepared.  In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers	Oil Spill Contingency plan mentioning prevention and mitigation plan has been prepared and already submitted vide earlier compliance report Ref: BPR/L/CB-ONN/2010/8/EIA dated 16.08.2016. In case of Oil spillage/ contamination, action plan, Roles and responsibilities, Important telephone Nos., etc. are provided in the Emergency response plan. At the time of drilling and testing operations, no oil sludge and spent oil produced and hence not disposed.
11	The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546 (E) dated 30th August, 2005.	BPR/L has complied with guidelines for disposal of solid waste, drill cutting and drilling fluid effluents for onshore drilling operation notified vide GSR.546 (E) dated 30th August, 2005. After obtaining Environment Clearances (EC) from MoEF&CC, BPR/L carried out Exploration activities. Accordingly, BPR/L started drilling & testing activities from January 2016 onwards. As on date, BPR/L completed drilling of 6 wells (PA#01, PA#02, VA#01, DE#01 & BH#01) and tested 5 wells. The drilling waste water (Liquid effluent) and drill cuttings (solid waste) generated from water based mud during drilling and testing operations were securely stored in disposal pit at sites lined with HDPE lining for solar evaporation. During the year 2016-17, BPR/L disposed the waste water/drill fluid effluents generated in PA#01, PA#02, & VA#01 wells through GPCB authorized common effluent Plant (CETP) at Odhav Enviro Project Ltd. Similarly, the drill cutting waste (solid waste) generated in PA#01, PA#02 & VA#01 were disposed from GPCB approved TSDF i.e. M/s Saurashtra Enviro Project Pvt. Ltd (SEPPPL). BPR/L disposed total 13495 bbl of liquid effluent and 2498MT of Drill cutting solid waste to the GPCB authorized CETP and TSDF respectively.

A total 912.27 MT drilling solid waste has been disposed off from Bhavda#01 well site to GPCB approved TSDF M/s ECO CARE Infrastructure Pvt. Ltd in Jan 2020 through M/s M/s PMP Infratech Pvt Ltd, Ahmedabad. Further, liquid effluent of total quantity 818 MT ~ 5177 bbl has been disposed off from Chandiyal#01 well site to GPCB approved Common Effluent treatment plant at M/s Odhav Enviro Project Ltd through M/s M/s PMP Infratech Pvt Ltd, Ahmedabad.

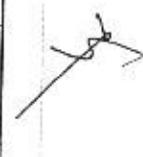
Disposal of drilling wastes (liquid effluent and solid waste) from Pasunla#02, Demaliya#01, Chandiyal#01, and Vadod#01 well sites are presently in progress by M/s PMP Infratech Pvt Ltd, Ahmedabd.

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S No	Condition	compliance
12	The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground Flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed.	Hence, as on date BPRL disposed total 2992 MT ~ 18672 bbl of liquid effluent and 3410.27 MT of Drill cutting solid waste to the GPCB authorized CFTP and TSDF respectively.  Drill sites prepared by BPRL were declared no smoking zone. Fire water storage facilities, Fire engines, Fire Hydrant line, Fire hoses, Portable Fire extinguishers etc. were provided at site to take care of any fire incident. Garland drain was constructed all around drilling site to prevent runoff of any oil containing waste into nearby water bodies. Separate drainage system are constructed for oil contaminated and non-oil contaminated. Unauthorized entry not allowed inside the premises.
13	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	BPRL used horizontal ground flaring facility during testing operation at PA#01, PA#02, DE#01 wells. However, DGMS vide Letter no. AR/VL-OI/2016 dated 15.11.2016 instructed that flare line of 9m high is to be provided with remote controlled electrical Ignition device. Accordingly, Vertical flaring with Knockout drums was installed to minimize gaseous emissions during testing operation at CH#01 and VA#01 wells during testing campaign in the month of January 18 –February 18. Emergency Response Plan prepared for drill site covers contingency plan for H <sub>2</sub> S release was already submitted to Bhopal regional office of MOEF&CC vide the compliance report. Ref: BPRL/CB-ONN/2010/8/EIA dated 16.08.2016. Contingency plan for H <sub>2</sub> S includes Properties of H <sub>2</sub> S, Health effects of H <sub>2</sub> S, Protection against H <sub>2</sub> S, Training, Detection and monitoring, PPE's, Emergency response, Action taken, Roles and responsibility, Control Operations etc. Workers were provided with H <sub>2</sub> S detectors and Breathing apparatus in the location of high risk exposure of H <sub>2</sub> S during drilling operations. However, during actual drilling operation, no H <sub>2</sub> S was observed.
14	On completion of drilling, the company have to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority	BPRL has completed drilling of 6 wells in the Block. Out of 6 drilled wells, there are two discoveries in the block from Pasunia #01 (PA#01) & Pasunia #02 (PA#02). Notice of closure of mine provided to DGMS in FORM 1 as per OMR guideline for all these 6 wells. Certificate from GPCB will be obtained after waste disposal and site restoration work is completed for all sites.
Brief status of all wells are given below:		
Wells	Status	Remarks
PA#01	This well was drilled upto a depth of 2043 m. BPRL initially planned to convert this well into development well. However, based on revised project economics, it is found to be non-economical. Hence, BPRL plans	Presently well is temporary plugged & abandoned putting bridge plug and cement plug at the following depths: Cement Plug #1 from 2001 to 1851 and tested @ 2300psi with 11.8ppg mud Cement Plug #2 from 1853 to 1653 and tested @ 2300psi with 11.8ppg mud

S No	Condition	compliance
PA#02	to permanently plug and abandon this well. After completion of site restoration activities well will be handed over to landowners.	Bridge Plug at 1280m and Cement Plug#3 at 1244m tested @ 3500psi with 10.5ppg mud Bridge Plug at 1228m and Cement Plug#4 upto 1178m Cement Plug #5 from 1128m to 1058m and tested @1000psi with 10.5ppg mud)
VA#01	This well was drilled upto a depth of 2130 m. BPRL initially planned to convert this well into development well. However, based on revised cost economics, it is found to be non-economical. Hence, BPRL plans to permanent plug and abandon this well. After completion of waste management activities and site restoration activities well will be handed over to landowners.	Presently well is temporary plugged & abandoned putting bridge plug and cement plug at the following depths: Bridge Plug at 1368m and Cement Plug#1 from 1368m to 1275m tested @ 1600 psi with 10.5 ppg mud. Bridge plug at 1250m and Cement Plug#2 from 1250m to 1218m tested @ 1000 psi with 10.0 ppg mud. Cement Plug#3 from 1218 to 1160m tested @ 1000 psi with 10.0 ppg mud. X-Mas tree is installed and pressure tested at 4000 psi.
		Since no hydrocarbon was found, well is permanently plugged & abandoned putting bridge plug and cement plug at the following depths:  1. Bridge plug was placed as a base support at 1280 m & tested. 2. Cement Plug#1 placed from 1280 m to 1153 m (against the perforation), & tested @1000 psi & 8 ton weight as per OMR guidelines. 3. Cement Plug#2 placed from 1110 m to 10 m from surface. 4. A brine solution of 9.3 bpg was placed between the both the plug. 5. Well mouth capped with 10 mm thick MS plate on 13 3/8" casing top.

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S No	Condition	compliance
	CH#01	<p>Permanently plugged &amp; abandoned. Site shall be handed over to land owners after completion of site restoration works. Currently waste disposal activities are in progress at Chandiyaal#01 well site.</p> <p>The well Chandiyaal #01 (CH#01) has been permanently plugged &amp; abandoned after completion of testing operation: Since no hydrocarbon was found, isolation was done with the following plugs:</p> <ol style="list-style-type: none"> <li>1. Bridge plug was placed at 1304 m.</li> <li>2. Cement Plug#1 placed from 1304 m to 1184 m tested @1000psi against the perforation, as per OMR guidelines.</li> <li>3. Cement Plug#2 placed from 112 m to 12 m from surface.</li> <li>4. Well mouth capped with 10mm thick MS plate on 13 3/8" casing top.</li> </ol>
DE#01		<p>Temporary plugged &amp; abandoned. BPRL is planning for permanent plugging and abandonment of well. Site shall be handed over to land owners after completion of waste disposal and site restoration works. Currently waste disposal activities are in progress at Chanc"ai#01 well site.</p> <p>BPRL plans to permanently abandon this well too. Temporary closure of well Demaliya#01. Isolation was done with following barriers:</p> <ol style="list-style-type: none"> <li>1. Bridge plug set at 1941m, tested @1500 psi with 11.3 ppg brine.</li> <li>2. Cement plug#01 from 1941 m TO 1841 m.</li> <li>3. Cement Plug#02, from 1430 m to 1280 m ( tagged at 1299 m) tested @1000psi with 11.3 ppg brine.</li> <li>4. Cement plug#03 from 1105 m to 1005 m.</li> <li>5. Cement plug#04 from 600 m to 500 m ( tagged at 507 m), tested @1000psi with 10 ppg brine</li> </ol>
BH#01		<p>Permanently plugged&amp; abandoned. Site has been handed over to land owners after completion of waste disposal and site restoration work. BPRL has communicated to GPCB for surrendering of CTE vide letter ref. BPRL/CB-ONN-2010/8/STAT/GPCB dated 26.06.2020.</p> <p>Bhavda#01 well was found dry (No presence of hydrocarbon) hence, the well was permanently plugged and abandoned putting bridge plug and cement plug at the following depths:</p> <ol style="list-style-type: none"> <li>1. Cement Plug#01 from 1820 m to 1720 m</li> <li>2. Cement Plug#02 from 1304 m to 1154 m</li> <li>3. Cement Plug#03 from 63 m to Surface</li> <li>4. Well mouth capped with 10mm thick MS plate on top of casing.</li> </ol>  

## EC COMPLIANCE REPORT FOR

BLOCK

CB-ONN-2010/8 FOR THE PERIOD OF JULY 2020 – DECEMBER 2020

S No	Condition	compliance
15	Blow Out Preventor (BOP) system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre -well planning and drilling fluid logging etc.	Blow out Preventer (BOP) of 5000 PSI, was installed at drill site to prevent well blow outs. Periodic pressure testing of BOP Primary well control was done with hydrostatic pressure provided by drilling fluid more than formation pressure but less than fracture gradient while drilling. Drilling fluid properties such as Pressure, Temperature, weight etc. used to be monitored through mud logging unit.
16	Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India	Emergency Response Plan prepared based on Guidelines of OISD, DGMS and Govt. of India and copy of the same was submitted to MOEF&CC regional Office vide 2 <sup>nd</sup> EC compliance report Ref: BPR/CB-ONN/2010/8/EIA dated 16.08.2016.
17	The company shall take measures after completion of drilling process by well plugging and secured enclosures, Decommissioning of rig upon abandonment of the well and drilling site shall be restored to the original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations	After obtaining Environment Clearance (EC) for exploration activities from MOEF&CC vide F NO. J 11011/324/2013-JA-II (I) dated 22.06.2015, BPR completed exploration activities as per minimum work program (MWP) commitment to Govt. of India in the block.  For developmental activities, BPR obtained a separate fresh EC from MOEF&CC vide F. No. letter no. F NO. J 11011/324/2013-JA-II (I) dated 30.07.2019 to carry out developmental activities in the Block, Attached in Annexure-02.  Notice of closure of mines provided to DGMS In FORM 1 as per OMR guideline. All the well sites are properly secured by barbed wire fencing and security guards are positioned round the clock. After completion of waste disposal and site restoration works for well sites, Certificate from GPCB will be obtained before surrender of EC.

However, due to various reasons like non-availability of work over rig and further, lockdown conditions due to COVID-19 pandemic, project economics of the block was revised. Based on the same, BPR, management has approved the relinquishment of block. Accordingly, the process of surrender of block to DGH is being initiated and well sites of PA#01 & PA#02 are also planned to be restored to original conditions to hand over to respective landowners after completion of permanent plugging and abandonment of these wells.

Brief status of all wells are given below:

Wells	Status	Remarks

EC COMPLIANCE REPORT FOR  
BLOCK

CB-ONN-2010/8 FOR THE PERIOD OF JULY 2020 – DECEMBER 2020

S No	Condition	compliance
PA#01	This well was drilled upto a depth of 2043 m. BPRL Initially planned to convert this well into development well. However, based on revised project economics, it is found to be non-economical. Hence, BPRL plans to permanently plug and abandon this well. After completion of site restoration activities well will be handed over to landowners.	Presently well is temporary plugged & abandoned putting bridge plug and cement plug at the following depths: Cement Plug #1 from 2001 to 1851 and tested @ 2300psi with 11.8ppg mud Cement Plug #2 from 1853 to 1653 and tested @ 2300psi with 11.8ppg mud Bridge Plug at 1280m and Cement Plug#3 at 1244m tested @ 3500psi with 10.5ppg mud Bridge Plug at 1228m and Cement Plug#4 upto 1178m Cement Plug #5 from 1128m to 1058m and tested @1000psi with 10.5ppg mud)
PA#02	This well was drilled upto a depth of 2130 m. BPRL Initially planned to convert this well into development well. However, based on revised cost economics, it is found to be non-economical. Hence, BPRL plans to permanent plug and abandon this well. After completion of waste management activities and site restoration activities well will be handed over to landowners.	Presently well is temporary plugged & abandoned putting bridge plug and cement plug at the following depths: Bridge Plug at 1368m and Cement Plug#1 from 1368m to 1275m tested @ 1600 psi with 10.5 ppg mud. Bridge plug at 1250m and Cement Plug#2 from 1250m to 1218m tested @ 1000 psi with 10.0 ppg mud. Cement Plug #3 from 1218 to 1160m tested @ 1000 psi with 10.0 ppg mud. X-Mas tree is installed and pressure tested at 4000 psi.
VA#01	Permanently plugged & abandoned. Site shall be handed over to land owners after completion of waste disposal and site restoration works.	Since no hydrocarbon was found, well is permanently plugged & abandoned putting bridge plug and cement plug at the following depths: 1. Bridge plug was placed as a base support at 1280 m & tested. 2. Cement Plug#1 placed from 1280 m to 1153 m (against the perforation), & tested @1000 psi & 8 ton weight as per OMR guidelines.

EC COMPLIANCE REPORT FOR  
BLOCK  
CB-ONN-2010/8 FOR THE PERIOD OF JULY 2020 - DECEMBER 2020

S No	Condition	compliance
CH#01	Permanently plugged & abandoned. Site shall be handed over to land owners after completion of site restoration works. Currently Waste disposal activities are in progress at Chandiyal#01 well site.	<p>3. Cement Plug#2 placed from 110 m to 10 m from surface.</p> <p>4. A brine solution of 9.3 ppg was placed between the both the plug.</p> <p>5. Well mouth capped with 10 mm thick MS plate on 13 3/8" casing top.</p> <p>The well Chandiyal #01 (CH#01) has been permanently plugged &amp; abandoned after completion of testing operation. Since no hydrocarbon was found, isolation was done with the following plugs:</p> <ol style="list-style-type: none"> <li>1. Bridge plug was placed at 1304 m.</li> <li>2. Cement Plug#1 placed from 1304 m to 1184 m tested @1000psi against the perforation, as per OMR guidelines.</li> <li>3. Cement Plug#2 placed from 112 m to 12 m from surface.</li> <li>4. Well mouth capped with 10mm thick MS plate on 13 3/8" casing top.</li> </ol>
DE#01	Temporary plugged & abandoned. BPRL is planning for permanent plugging and abandonment of well. Site shall be handed over to land owners after completion of waste disposal and site restoration works. Currently waste disposal activities are in progress at Chandiyal#01 well site.	<p>BPRL plans to permanently abandon this well too. Temporary closure of well Demaliya#01. Isolation was done with following barriers:</p> <ol style="list-style-type: none"> <li>6. Bridge plug set at 1941m, tested @1500 psi with 11.3 ppg brine.</li> <li>7. Cement plug#01 from 1941 m TO 1841 m.</li> <li>8. Cement Plug#02 from 1430 m to 1280 m ( tagged at 1299 m) tested @1000psi with 11.3 ppg brine.</li> <li>9. Cement plug#03 from 1105 m to 1005 m.</li> <li>10. Cement plug#04 from 600 m to 500 m ( tagged at 507 m), tested @1000psi with 10 ppg brine</li> </ol>
BH#01	Permanently plugged& abandoned. Site has been handed over to land owners after completion of waste disposal and site restoration work. BPRL has	<p>Bhawda#01 well was found dry (No presence of hydrocarbon) hence, the well was permanently plugged and abandoned putting bridge plug and cement plug at the following depths:</p> <ol style="list-style-type: none"> <li>5. Cement Plug#01 from 1820 m to 1720 m</li> <li>6. Cement Plug#02 from 1304 m to 1154 m</li> </ol> <p style="text-align: right;"><i>[Signature]</i></p>

S No	Condition	compliance	
		communicated to GPCB for surrendering of CTE vide letter ref. BPRL/CB-ONN-2010/8/STAT/GPCB dated 26.06.2020	7. Cement Plug#03 from 63 m to Surface 8. Well mouth capped with 10mm thick MS plate on top of casing.
18	Abandoned well inventory and remediation plan shall be submitted within six months from the date of issue of letter.	BPRL had drilled total 6 exploratory wells and last testing was concluded during February 2018. Out of total 6 drilled wells there are two discovery wells (PA#01 and PA#02). However, due to various reasons like non-availability of work over rig and further, lockdown conditions due to COVID-19 pandemic, project economics of the block was revised. Based on the same, BPRL management has approved the relinquishment of block. Accordingly, the process of surrender of block to DGH is being initiated and well sites of PA#01 & PA#02 are also planned to be restored to original conditions to hand over to respective landowners after completion of permanent plugging and abandonment of these wells.	Out of six exploratory wells, Waste management activities and Site restoration activities have been completed in BH#01 well site and handed over to landowners. Well abandonment report for Bhavada#01 is attached as <b>Annexure 6</b> . Well abandonment report will also be submitted to GPCB and obtain certificate for site restoration and closure of site.

Status Summary of all six wells are as follows:

Sl. No	Well name	Current Status	Future Plan
1	Bhavada#01 (BH#01)	Well is permanently plugged and abandoned as per statutory norms and site has been handed over to landowners.	Nil. (Site Has been handed over to landowners and CTE closure application submitted to GPCB)
2	Chandiyal#01 (CH#01)	Well is permanently plugged and abandoned as per statutory norms.	1. Waste management activities and site restoration activities 2. Handing over the land to Landowners.
3	Vadod#01 (VA#01)	Currently well is permanently plugged and abandoned as per statutory norms of OISD and DGMS.	1. Waste management activities and site restoration activities 2. Handing over the land to Landowners.
4	Demaliya#01 (DE#01)	Currently well is temporarily plugged and abandoned.	1. Permanent plugging of the well.

EC COMPLIANCE REPORT FOR  
BLOCK

CB-ONN-2010/8 FOR THE PERIOD OF JULY 2020 – DECEMBER 2020

S No	Condition	compliance
5	Pasunia#01 (PA#01)	Discovery well. Currently well is temporarily plugged and abandoned.  2. Waste management activities and site restoration activities 3. Handing over the land to landowners.
6	Pasunia#02 (PA#02)	Discovery well. Currently well is temporarily plugged and abandoned.  2. Waste management activities and site restoration activities 3. Handing over the land to landowners.
19	Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.	Since, there is no drilling and testing operation are carried out during July 2020- December 2020, no occupational Health surveillance of workers has been carried out during this period.
20	In case the commercial viability of the project (for exploratory drilling) is established, the Company shall prepare a detailed plan for development of oil and gas fields and obtain fresh environmental clearance from the Ministry	After obtaining Environment Clearance (EC) for exploration activities from MOEF&CC vide F NO. J 11011/324/2013-IA-II (I) dated 22.06.2015, BPRL completed exploration activities as per minimum work program (MWP) commitment to Govt. of India in the block.  For developmental activities, BPRL had obtained fresh EC from MOEF&CC vide F. No. letter no. F NO. J 11011/324/2013-IA-II (I) dated 30.07.2019 to carry out developmental activities in the Block. Attached in Annexure-02.  However, due to various reasons like non-availability of work over rig and further, lockdown conditions due to COVID-19 pandemic, project economics of the block was revised. Based on the same, BPRL management has approved the relinquishment of block. Accordingly, the process of surrender of block to DGH is being initiated and well sites of PA#01 & PA#02 are also planned to be restored to original conditions to hand over to respective landowners after completion of permanent plugging and abandonment of these wells.
21	Restoration of the project site after completion of drilling shall be carried out	BPRL had drilled total 6 exploratory wells and last testing was concluded during February 2018. Out of total 6 drilled wells there are two discovery wells (PA#01 and PA#02). However, due to various reasons like non-availability of work over rig and further, lockdown conditions due to COVID-19 pandemic, project economics of the block was revised. Based on the same, BPRL management has approved the relinquishment of block. Accordingly, the process of surrender of block to DGH

EC COMPLIANCE REPORT FOR  
BLOCK  
CB-ONN-2010/8 FOR THE PERIOD OF JULY 2020 – DECEMBER 2020

S No	Condition	compliance						
		PA#01	PA#02	CH#01	VA#01	DE#01	Wells	BH#01
22	satisfactorily and report shall be sent to the Ministry's Regional Office at Bhopal	is being initiated and well sites of PA#01 & PA#02 are also planned to be restored to original conditions to hand over to respective landowners after completion of permanent plugging and abandonment of those wells. Out of six exploratory wells, Waste management activities and Site restoration activities have been completed in BH#01 well site and has been handed over to landowners. Well abandonment report for Bhawada#01 is attached as Annexure 6. Well abandonment report has been submitted to GPCB vide letter ref. BPR/L/CB-ONN-2010/8/STAT/GPCB dated 26.06.2020.						
22	Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office at Bhopal.	Sample analysis of Drill cutting generated during drilling operation from January 2016 to March 2018 are carried out by NABET accredited agency M/s Envirocare Technocrats Pvt Ltd. Drill cutting wastes are currently present at Pasunia#02 (PA#02), Vadod (VA#01), Chandayal (CH#01), Vadod (VA#01) and securely stored in HDPE lined pit. Reports for the same was sent to Ministry's Regional Office at Bhopal vide letter no. BPR/L/CB-ONN-2010/8/STAT/MOEF&CC dated 07.06.2018. Results of Oil content in drill cuttings are given as under:						
23	At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.. Implementation of such program shall be ensured accordingly in a time bound manner.	BPR/L vide letter ref. BPR/L/CB-ONN-2010/8/EIA dated 03/07/2015, 04/09/2015, 31/03/2016 & 16/06/2016 requested MoEF&CC to amend this clause. At present the project is in exploratory nature and there is no revenue generation. However, BPR/L had constructed road for Kuhia & Demaloya villages during drill site preparation activities 2015-16 and 2016-17. Total expenditure of about Rs. 45 Lakh was spent for road construction, details provided along with previous compliance reports. Details of Expenditures were submitted to MoEF&CC along with 7th EC compliance report dated 24.04.2019.	N.D	N.D	N.D	N.D		
24	An audit shall be done to ensure that environment management plan is implemented in totality and report shall be submitted to Ministry's Regional office.	BPR/L periodically checks and ensures that EMP plan is implemented in totality as per the stipulated conditions given in Environment Clearance. Monitoring of air, water, stack, solid waste etc. are done through NABET accredited consultants. Six monthly Environment clearance compliance reports are periodically submitted to MoEF vide Letter ref. BPR/L/CB-ONN-2010/8/EIA. Date of submission of Environment clearance compliance report as given below:						

EC COMPLIANCE REPORT FOR  
BLOCK  
CB-ONN-2010/8 FOR THE PERIOD OF JULY 2020 – DECEMBER 2020

S No	Condition	compliance		
		EC compliance Report	Period	Date of Submission
1st Compliance report	Ist Compliance	July 15- December 15	21.12.2015	
2nd Compliance Report	2nd Compliance Report	January 16-June 16	16.08.2016	
3rd Compliance Report	3rd Compliance Report	July 16-December16	05 .04.2017	
4th Compliance Report	4th Compliance Report	January 17 - June 17	29.11.2017	
5th Compliance Report	5th Compliance Report	July 17 – December17	25.05.2018	
6th Compliance Report	6th Compliance Report	January 18 – June 18	13.11.2018	
7th Compliance report	7th Compliance report	July 18 – December 18	24.04.2019	
8th Compliance report	8th Compliance report	January 19- June 19	01.10.2019	
9th Compliance report	9th Compliance report	July 19- December 19	13.05.2020	
10th Compliance report	10th EC Compliance report	January 20-June 20	17.08.2020	

An EMP audit also conducted by NABET Accredited EIA consultant for the EMP plan is implemented in totality. Report for EMP audit has been submitted to MOEF&CC along with 8th EC compliance report dated 01.10.2019.

EC COMPLIANCE REPORT FOR  
BLOCK  
CB-ONN-2010/8 FOR THE PERIOD OF JULY 2020 – DECEMBER 2020

S No	Condition	compliance												
25	All personnel Including those of contractors shall be trained and made fully aware of the hazards, risks and controls in place	Since, no drilling and testing operations are carried out during the period of July 2020- December 2020, training activities were not conducted during this period.												
26	Company shall have own Environment Management Cell having qualified persons with proper background	BPRl has formed its own Environment Management cell, which is headed by Director (Ops. & BD) and attached as Annexure 7.												
27	Company shall prepare operating manual in respect of all activities. It shall cover all safety & environment related issues and system. Measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/project site. Awareness shall be created at each level of management. All the schedules and results of environmental monitoring shall be available at project site office	Drilling Operation Manual, Blow Out Prevention Manual, Health, Safety & Environment Management System Manual, Emergency Response Plan including well control Manual were prepared and kept at each drill site during operations. The Results of environment monitoring of all site were available at project site office and displayed on the Main gate during drilling operations. At present no operations are in progress at the site since February 2018.												
<b>General Condition</b>														
1	The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any other statutory authority	BPRl has obtained Consent to Establish (CTE) from GPCB for all drill sites. CTE no. for all six sites are given below:												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Name</th> <th>CTE No.</th> <th>Dated of Issue</th> <th>Valid Till</th> </tr> </thead> <tbody> <tr> <td>PA#01</td> <td>73234</td> <td>06.10.2015</td> <td>11.10.2027 (BPRl has obtained EC for development activities in the Block. BPRl has also obtained Fresh Consent from GPCB for PA#01 for carrying developmental activities,</td> </tr> <tr> <td>PA#02</td> <td>73128</td> <td>17.10.2015</td> <td>23.11.2027 (BPRl has obtained EC for development activities in the Block. BPRl has also</td> </tr> </tbody> </table>			Well Name	CTE No.	Dated of Issue	Valid Till	PA#01	73234	06.10.2015	11.10.2027 (BPRl has obtained EC for development activities in the Block. BPRl has also obtained Fresh Consent from GPCB for PA#01 for carrying developmental activities,	PA#02	73128	17.10.2015	23.11.2027 (BPRl has obtained EC for development activities in the Block. BPRl has also
Well Name	CTE No.	Dated of Issue	Valid Till											
PA#01	73234	06.10.2015	11.10.2027 (BPRl has obtained EC for development activities in the Block. BPRl has also obtained Fresh Consent from GPCB for PA#01 for carrying developmental activities,											
PA#02	73128	17.10.2015	23.11.2027 (BPRl has obtained EC for development activities in the Block. BPRl has also											

EC COMPLIANCE REPORT FOR  
BLOCK  
CB-ONN-2010/B FOR THE PERIOD OF JULY 2020 – DECEMBER 2020

S No	Condition	compliance		
VA#01	78088	08.06.2016	obtained PA#01 for activities).	Fresh Consent from GPCB for carrying developmental
DE#01	82829	22.12.2016	CTE application has been submitted to GPCB on 02.02.2021 for renewal of CTE for two more years. Accordingly, CTE application has been submitted to GPCB vide inward no. 191592 dated 19.02.2021.	
CH#01	83398	06.01.2017	However, BPRL is not planning any further drilling or testing activities in the well. Only waste disposal and site restoration activities are planned at well site.	09.10.2023
BH#01	84947	24.03.2017	12.02.2024 (Site has been handed over to land owners. BPRL has sent a letter ref. BPRL/CB-ONN-2010/8/STAT/GPCB dated 26.06.2020 to GPCB for surrendering the CTE along with well abandonment report).	12.12.2023
2	No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & of India in the block.	<p>Drilling &amp; testing operations were carried out only after obtaining the CTE from GPCB. BPRL strictly adhere to all conditions provided in the CTE by GPCB and submits Annual Environment Statements in 'Form V' annually. 'Form V' for the year 2015-16, 2016-17, 2017-18, 2018-19 are sent with previous EC compliance reports. Environmental statement in Form V dated 13.05.2020 has also been sent to MOEF&amp;CC Bhopal regional office through Email dated 10.08.2020 for FY year 2019-20.</p> <p>After obtaining Environment Clearance (EC) for exploration activities from MoEF&amp;CC vide F NO. J 11011/324/2013-IA-II (1) dated 22.06.2015, BPRL completed exploration activities as per minimum work program (Mwp) commitment given to Govt.</p>  		

EC COMPLIANCE REPORT FOR  
BLOCK

CB-ONN-2010/8 FOR THE PERIOD OF JULY 2020 – DECEMBER 2020

S No	Condition	compliance
	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.	For developmental activities, BPRL obtained fresh EC from MoEF&CC vide F. No. letter no. F NO. J 11011/324/2013-JA-II (I) dated 30.07.2019 to carry out developmental activities in the Block. Attached in Annexure-02. However, due to various reasons like non-availability of work over rig and further, lockdown conditions due to COVID-19 pandemic, project economics of the block was revised. Based on the same, BPRL management has approved the relinquishment of block. Accordingly, the process of surrender of block to DGH is being initiated and well sites of PA#01 & PA#02 are also planned to be restored to original conditions to hand over to respective landowners after completion of permanent plugging and abandonment of these wells.
3	The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 2000 as amended subsequently. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained, wherever applicable.	BPRL strictly comply with rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 2000 as amended subsequently. Material safety Data Sheet (MSDS) for all chemicals were made available in English & Local Language and information towards Toxicity, Permissible exposure limits, Physical Data, Reactivity data, Incompatibility data, Thermal and Chemical stability data, Incompatibility data, Treatment procedure in case of body contact etc. were displaced at prominent places at drill site.  Prior approvals obtained from Chief Controller of Explosives for storing HSD at drill site during drilling period.
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 EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).	Acoustic enclosure was provided to the DG set having capacity of 250 KVA/125 KVA for control of noise from drilling activities. Noise Monitoring was carried out at all drill sites during drilling and testing operations, which indicate noise levels are within the limits. Results of Noise monitoring were shared with previous EC compliance reports. Since, no drilling & testing operation are carried out during the period of July 2020 to December 2020 and the mine is being temporarily closed, noise monitoring and stack monitoring not carried out during this period.
5	A separate Environmental Management Cell equipped with full-fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.	Environmental Monitoring at well site is being carried out through NABET accredited Consulting Organizations with full-fledged lab facilities as per site requirement. BPRL has formed its own Environment Management cell, which is headed by Director (Ops. &BD) and attached as Annexure 7. BPRL has engaged/outsourced NABET/NABL accredited laboratory to carry out environment management and monitoring in the block.

S No	Condition	compliance
6	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent	Information regarding EC accorded for the project was published in newspapers in English as well as Vernacular languages on 04.07.2015. Attached as <b>Annexure-8</b> .  The clearance letter has been also uploaded in BPRL website. The link of EC uploaded is given here. <a href="http://bharatpetroresources.com/sustainability/sustainability.aspx#EnvironmentalClearance">http://bharatpetroresources.com/sustainability/sustainability.aspx#EnvironmentalClearance</a>
7	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the GPCB. The criteria pollutant levels namely, PM10, SO <sub>2</sub> , NO <sub>x</sub> , HC (Methane & Non-methane), VOCs (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain	Six monthly Environment clearance compliance reports are periodically submitted to MOEF&CC vide letter of even ref. BPRL/CB-ONN-2010/8/EIA. Dates of submission of Environment clearance compliance report are given below:

EC compliance Report	Period	Date of Submission
1st Compliance report	July 15- December 15	21.12.2015
2 <sup>nd</sup> Compliance Report	January 15-June 16	16.08.2016
3 <sup>rd</sup> Compliance Report	July 16-December 16	05 .04.2017
4 <sup>th</sup> Compliance Report	January 17 – June 17	29.11.2017
5 <sup>th</sup> Compliance Report	July 17 – December 17	25.05.2018
6 <sup>th</sup> Compliance Report	January 18 – June 18	14.11.2018
7 <sup>th</sup> Compliance report	July 18- December18	24.04.2019
8 <sup>th</sup> Compliance report	January 19- June 19	01.10.2019
9 <sup>th</sup> Compliance report	July 19- December 19	13.05.2020
10 <sup>th</sup> EC compliance report	January 20-June 20	17.08.2020

The criteria pollutant levels namely PM10, SO<sub>2</sub>, NO<sub>x</sub>, HC (Methane & Non-methane), VOCs (ambient levels as well as stack emissions) or critical sectorial parameters, indicated for the projects were monitored and displayed at a convenient location near the main gate during drilling operations.

S No	Condition	compliance		
		EC compliance Report	Period	Date of Submission
8	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the GPCB. The Regional Office of this Ministry /CPCB / GPCB shall monitor the stipulated conditions. Environmental Clearance and six monthly compliance status reports shall be posted on the website of the company.	1st Compliance report	July 15- December15	21.12.2015
		2nd Compliance Report	January 16-June 16	16.08.2016
		3rd Compliance Report	July 16-December16	05 .04.2017
		4th Compliance Report	January 17 – June 17	29.11.2017
		5th Compliance Report	July 17 – December17	25.05.2018
		6th Compliance Report	January 18 – June 18	14.11.2018
		7th Compliance Report	July 18-December 18	24.04.2019
		8th Compliance report	January 19- June 19	01.10.2019
		9th Compliance report	July 19- December 19	13.05.2020
		10th Compliance report	January 2020- June 2020	17.08.2020
		Six monthly compliance report posted on following website: <a href="http://bharatpetroresources.com/sustainability/sustainability.aspx#EnvironmentalClearance">http://bharatpetroresources.com/sustainability/sustainability.aspx#EnvironmentalClearance</a>		
9	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the	Environment statement in 'Form V' has been submitted to GPCB for the year 2019-20 vide letter no. BPRL/CB-ONN-2010/STAT/GPCB dated 13.05.2020. The same has also been provided to MOEF&CC vide Email dated 10.08.2020, Previous years' Form 'V' have also been submitted to Bhopal Regional Office of MOEF&CC along with the six monthly EC compliance reports ref. BPRL/CB-ONN/2010/8/EIA dated 16.08.2016, 29.11.2017, 20.06.2018 & 01.10.2019. Six monthly compliance report posted on following website: <a href="http://bharatpetroresources.com/sustainability/sustainability.aspx#EnvironmentalClearance">http://bharatpetroresources.com/sustainability/sustainability.aspx#EnvironmentalClearance</a>		

EC COMPLIANCE REPORT FOR  
BLOCK  
CB-ONN-2010/8 FOR THE PERIOD OF JULY 2020 – DECEMBER 2020

S No	Condition	compliance
10	<p>status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.</p> <p>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 GPCB and may also be seen at Website of the Ministry of Environment and Forests 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 Regional office.</p>	<p>Information regarding EC accorded for the project was published in newspapers in English as well as Vernacular languages on 04.07.2015. A copy of same was also sent to MOEF&amp;CC vide previous compliance reports.</p> <p>The clearance letter has also been uploaded on BPRL website. The link of EC uploaded is given here:</p> <p><a href="http://bharatpetroresources.com/sustainability/sustainability.aspx#EnvironmentalClearance">http://bharatpetroresources.com/sustainability/sustainability.aspx#EnvironmentalClearance</a></p>
11	<p>Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.</p>	<p>Petroleum exploration License (PEL) was granted for the project on 01.03.2013 for the period of seven years, MOEF&amp;CC granted Environmental Clearance (EC) vide F.No.J-11011/324/2013-JA-II (T) dated 22.06.2015 to carry out exploration activities in the block. During initial exploration period, total 6 wells were drilled in the block. There were two discoveries in the Block from well Pasunia#01 &amp; Pasunia#02. The field Development Plan (FDP) of Pasunia discoveries was approved by Director General of Hydrocarbon (DGH) on 11.06.2018. Subsequently, Govt. of Gujarat has granted petroleum Mining Lease (PML) for 15 years vide ref. PML-14-2018-2038 E dated 26.02.2019 (<b>Annexure 09</b>) to carryout developmental activities. EC for developmental activities has been granted by MOEF&amp;CC on 30.07.2019.</p> <p style="text-align: right;"><i>[Signature]</i></p> <p style="text-align: right;"><i>[Signature]</i></p>

F. No. J-11011/324/2013-IA-II (I)

Government of India

Ministry of Environment, Forest and Climate Change  
(I.A. Division)Indira Paryavaran Bhawan  
Aliganj, Jorbagh Road,  
New Delhi -110003E-mail : lk.bokolia@nic.in  
Telefax : 011-24695313  
Dated 22<sup>nd</sup> June, 2015

To,

Shri N. K. Jothieswaran  
 Senior Manager  
 Bharat Petro Resources Ltd.  
 Ranganathan Garden Office,  
 11<sup>th</sup> Main Road Post Box No.1212&1213,  
 Anna Nagar, Chennai 600040—India

E-mail: [jothieswaran.nk@bharatpetroresources.in](mailto:jothieswaran.nk@bharatpetroresources.in); Phone: 044-26142127

**Subject:** Onshore Oil and Gas Exploration in Block CB-ONN-2010/8 at NELP, Cambay Basin, located in the common boundary of Ahmedabd, Kheda, and Gandhinagar Districts, Gujarat by M/s Bharat Petro Resources Ltd. -Environmental Clearance

**Ref.:** Your letter no. BPRL/CHE/CB-ONN-2010/EIA dated 04.03.2015.

Sir,

This has reference to your letter dated 4<sup>th</sup> March, 2015 alongwith Form-1, Prefeasibility Report, EIA/EMP report, Public hearing report regarding above mentioned project.

2.0 The Ministry of Environment, Forest and Climate Change has examined the application. It is noted that proposal is for Onshore Oil and Gas Exploration (8 nos. Well) in Block CB-ONN-2010/8 in Gujarat. The NELP IX block CB-ONN-2010/8 is located in common boundary of 3 districts namely Ahmedabad, Kheda and Gandhinagar. The area covered under part A of the block is 14 sq. km and under part B is 28 sq. km. Meshwa River is flowing within the block. It is reported that no protect area notified under Wildlife (Protection) Act, 1972 and Notified Eco-Sensitive Area is located within 10 km distance. Cost of project is US Dollar 26 Million. M/s BPRL intends to drill wells to depth ranging between 1800 m to 3500 m. Following are the coordinates of the blocks: Geographical coordinates of Block 'A'

	Latitude			Longitude		
A	23	0	54	72	50	10
B	23	0	54	72	48	6
C	23	3	0	72	48	6
D	23	3	0	72	50	11
A	23	0	54	72	50	10

Geographical coordinates of Block 'B'

	Latitude			Longitude		
A	23	0	0	72	46	38
B	23	0	0	72	50	10
C	22	57	26	72	50	8
D	22	57	26	72	46	38
E	23	0	0	72	46	38

Details of each proposed exploratory wells are as given below:

Well Locations	Villages	Village Distance	Distance of Road from Well Location
Well -1	Karoli	1.53 Km	0.12 Km (Village Road of Pasunj – Karoli)
Well-2	Kodrali	0.48 Km	1.76 Km ( Village Road of Pasunj-Karoli)
Well - 3	Kuha	2.12 Km	0.80 Km (Village road of Kuha – Pasunj)
Well-4	Demaliya	0.97 Km	1.05 Km (Village Raod)
Well-5	Chandial	0.41 Km	900 meter ( Ahmedabad Zalod Highway)
Well-6	Bhavda	1.79 Km	200 meters ( Village Road) 1.85 Km (Ahmedabad – Zalo Road)
Well-7	Vadod	1 Km	1.85 Km (Village Road to Chandial)
Well-8	Ranodra	1.35 Km	0.14 Km (Village Road)

3.0 Air emissions from D.G. sets will be dispersed by providing adequate stack height. Flare stack of 30 m height will be provided. Water based mud will be used. Water requirement from tanker supply will be 35 m<sup>3</sup>/day. Wastewater generation will be 5 m<sup>3</sup>/day. Drill cutting (DC) will be separated from water based mud (WBM) and washed properly and unusable drilling fluids (DF) will be disposed off in well designed lined pit with impervious liner for solar drying. Disposal of drill cuttings and drill mud will be carried out in accordance with the GSR 546 (E) dated 30<sup>th</sup> August, 2005. Used oil will be sent to authorized recyclers. D.G. sets (4x500 KVA + 1 x 100 KVA) will be installed to meet the emergency requirement of exploratory drilling operations. Blow out preventers (BOP) will be installed to control fluid from the formation gushing to the surface. In the event the well is unsuccessful, the well bore will be cement plugged.

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 meeting conducted on 3<sup>rd</sup> November, 2014 for Gandhinagar District, 5<sup>th</sup> November, 2014 for Ahmedabad District and 31<sup>st</sup> December, 2014 for Kheda District as per EIA Notification, 2006.

6.0 The proposal was considered by the Expert Appraisal Committee (Industry) in its 9<sup>th</sup> meeting held during 29<sup>th</sup>– 30<sup>th</sup> January, 2014 and Expert Appraisal Committee (Industry-2) in its 38<sup>th</sup> meeting held during 20<sup>th</sup>-21<sup>st</sup> April, 2015 respectively. Project Proponent and the EIA Consultant namely M/s Detox Corporation Pvt. 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 information submitted by you, the Ministry of Environment and Forest hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006 subject to strict compliance of the following specific and general conditions:

**A. SPECIFIC CONDITIONS :**

- i. The present EC is for Exploratory Drilling only. In case Development drilling to be done in future, prior environmental clearance must be obtained from the Ministry.
- ii. Ambient air quality shall be monitored near the closest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 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, methane & Non-methane HC etc.
- iii. Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.
- iv. Approach road shall be made pucca to minimize generation of suspended dust.
- v. The company shall make the arrangement for control of noise from the drilling activity. Acoustic enclosure shall be provided to DG sets and proper stack height shall be provided as per CPCB guidelines.
- vi. Total water requirement shall not exceed 35 m<sup>3</sup>/day and prior permission shall be obtained from the concerned agency.
- vii. The company shall construct the gullane drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.
- viii. Drilling wastewater including drill cuttings wash water shall be collected in disposal pit lined with HDPE lining evaporated or treated and shall comply with the notified standards for on-shore disposal. The membership of common TSDF shall be obtained for the disposal of drill cuttings and hazardous waste. Otherwise, secured land fill shall be created at the site as per the design approved by the CPCB and obtain authorization from the SPCB. Copy of authorization or membership of TSDF shall be submitted to Ministry's Regional Office at Bhopal.
- ix. Good sanitation facility shall be provided at the drilling site. Domestic sewage shall be disposed off through septic tank/ soak pit.
- x. Oil spillage prevention scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- xi. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30<sup>th</sup> August, 2005.
- xii. The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- xiii. The company shall develop a contingency plan for 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.
- xiv. On completion of drilling, the company have to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.

- xv. Blow Out Preventer (BOP) system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.
- xvi. Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.
- xvii. The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored to the original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.
- xviii. Abandoned well inventory and remediation plan shall be submitted within six months from the date of issue of letter.
- xix. Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.
- xx. In case the commercial viability of the project is established, the Company shall prepare a detailed plan for development of oil and gas fields and obtain fresh environmental clearance from the Ministry.
- xxi. Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office at Bhopal.
- xxii. Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office at Bhopal.
- xxiii. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.
- xxiv. An audit shall be done to ensure that the Environment Management Plan is implemented in totality and report shall be submitted to the Ministry's Regional Office.
- xxv. All personnel including those of contractors shall be trained and made fully aware of the hazards, risks and controls in place.
- xxvi. Company shall have own Environment Management Cell having qualified persons with proper background.
- xxvii. Company shall prepare operating manual in respect of all activities. It shall cover all safety & environment related issues and system. Measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office.

#### **B. GENERAL CONDITIONS:**

- i. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any other statutory authority.

- ii. No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & Forest. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- iii. The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 2000 as amended subsequently. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained, wherever applicable.
- iv. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- v. A separate Environmental Management Cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.
- vi. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.
- vii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the GPCB. The criteria pollutant levels namely; PM<sub>10</sub>, SO<sub>2</sub>, NOx, HC (Methane & Non-methane), VOCs (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- viii. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the GPCB. The Regional Office of this Ministry / CPCB / GPCB shall monitor the stipulated conditions. Environmental Clearance and six monthly compliance status reports shall be posted on the website of the company.
- ix. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.
- x. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the GPCB and may also be seen at Website of the Ministry of Environment and Forest at <http://envfor.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular

language of the locality concerned and a copy of the same shall be forwarded to the Regional office.

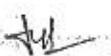
xii. Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

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 shall 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 Environmental Clearance is issued to M/s Bharat Petro Resources Ltd for onshore oil and gas exploration in Block CB-ONN-2010/8., in NELP, Cambay Basin, located in the common boundary of Ahmedabad, Kheda, and Gandhinagar Districts, Gujarat.

  
(Lalit Bokolia)  
Additional Director

Copy to:

1. The Principal Secretary, Forest & Environment Department, Government of Gujarat, Sachivalaya, 8<sup>th</sup> Floor, Gandhi Nagar - 382 010, Gujarat.
2. The Chief Conservator of Forest (Western Zone), Ministry of Environment, Forest and Climate Change, Regional Office, E-5, Arera-Colony, Link Road -3, Bhopal -462 016, M.P.
3. The Chairman, Central Pollution Control Board PariveshBhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Gujarat State Pollution Control Board, ParyavaranBhawan, Sector 10 A, Gandhi Nagar -382 043, Gujarat.
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhavan, Jor Bagh, New Delhi.
6. Guard File/Monitoring File/Record File.

  
(Lalit Bokolia)  
Additional Director

F.No.J-11011/324/2013-IA-II (I)

Government of India

Ministry of Environment, Forest and Climate Change  
IA DivisionIndira Paryavaran Bhawan  
Jor bagh Road, New Delhi - 3  
Dated: 30<sup>th</sup> July, 2019

To,

**M/s Bharat PetroResources Ltd (BPRL),**  
**Bharat Bhawan, 4&6 Currimbhoy Road,**  
**Ballard Estate, P.O. Box 688,**  
**Mumbai - 400001 (Maharashtra)**

**Sub: Onshore development and production of oil & gas by M/s Bharat PetroResources Ltd in the Block CB-ONN-2010/8 in Pasunia field in Cambay Basin covering Districts Gandhinagar, Ahmedabad and Kheda (Gujarat) - Environmental Clearance - reg.**

Sir,

This has reference to your online proposal No.IA/GJ/IND2/75954/2018 dated 4th March, 2019 along with the EIA/EMP report for the above mentioned project.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for onshore development and production of oil & gas from ten wells (Two existing and 8 new development wells) by M/s Bharat PetroResources Ltd (BPRL) in an area of 42 sq km in Block CB-ONN-2010/8 in Pasunia Field in Cambay Basin, covering Districts Gandhinagar, Ahmedabad and Kheda (Gujarat).
3. Existing Block area is 42 sq km. Greenbelt is proposed to be developed in an area of 33% of total area of the QPF Facility. The estimated project cost is Rs.43 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs.43 lakhs and the Recurring cost (operation and maintenance) will be about Rs.25 lakhs per annum.
4. There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wild life Corridors etc within 10 km from the project site.
5. Total fresh water requirement is 35 m<sup>3</sup>/day proposed to be met from tanker supply. Effluent of 5 m<sup>3</sup>/day quantity will be treated through mobile ETP system. The plant will be based on Zero Liquid discharge system.
6. The project/activity is covered under category A of item 1(b) 'Offshore and onshore oil and gas exploration, development & production' of the schedule to the EIA Notification, 2006, and requires appraisal/approval at central level in the Ministry.
7. The standard ToR for the project was granted on 2<sup>nd</sup> September, 2018. Public hearing for the project was conducted by SPCB on 29<sup>th</sup> January 2019 at District Gandhinagar and 2<sup>nd</sup> February, 2019 at District Ahmedabad.
8. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meeting held on 6-8 May, 2019, wherein the project proponent and their accredited consultant presented the EIA/EMP report. The Committee found the EIA/EMP report complying with the ToR and recommended the project for grant of environmental clearance.

*SB*

9. Based on the proposal submitted by the project proponent and recommendations of EAC (Industry-2), Ministry of Environment, Forest and Climate change hereby accords environmental clearance to the project for **onshore development and production of oil & gas from ten wells (Two existing and 8 new development wells)** by M/s Bharat PetroResources Ltd (BPRL) in the Block CB-ONN-2010/8 in Pasunia Field in Cambay Basin, covering Districts Gandhinagar, Ahmedabad and Kheda (Gujarat), under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as below:-

- (a) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- (b) Effluent shall be treated in mobile ETP, as proposed by the project proponent. Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged to any surface water body, sea and/or on land.
- (c) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (d) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (e) Ambient air quality shall be monitored at the nearest human settlements to ensure conformity with the National Ambient Air Quality Emission Standards issued by the Ministry vide GSR 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>, HC, Non-methane HC etc.
- (f) During exploration, production, storage and handling, the fugitive emissions of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- (g) The project proponent also to ensure trapping/storing of the CO<sub>2</sub> generated, if any, during the process and handling.
- (h) Approach road shall be made pucca to minimize generation of suspended dust.
- (i) The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with adequate stack height as per CPCB guidelines.
- (j) Total fresh water requirement shall not exceed 35 cum/day to be met through tankers.
- (k) The company shall construct the gully drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.
- (l) Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies. The 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.

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(m) Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.

(n) The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.

(o) 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.

(p) The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and Regional Office.

(q) Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.

(r) Emergency Response Plan shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.

(s) After completion of drilling process, suitable measures shall be taken for well plugging and secured enclosures, and drilling site shall be restored to the original condition. In case of the hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.

(t) All the commitments made to the public during public consultation/hearing shall be satisfactorily implemented.

(u) At least 2% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.

(v) Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.

(w) Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office.

(x) An audit shall be done to ensure that the Environment Management Plan is implemented in totality and report shall be submitted to the Ministry's Regional Office.

(y) Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

SKJ

(z) Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken accordingly.

**9.1** The grant of Environmental Clearance is further subject to compliance of other generic conditions as under:-

(i) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board, State Government and/ or 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, Forest and Climate Change. 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 and it shall be ensured that at least one stations each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.

(iv) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No.826(E) dated 16<sup>th</sup> November, 2009 shall be complied with.

(v) 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 the Environment (Protection) Act, 1986 and the Rules made there under.

(vi) 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.

(vii) The company shall 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 shall be implemented.

(viii) The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental measures shall be undertaken for 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, Forest and Climate Change 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.

*SH*

(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 submit six monthly reports on the status of compliance of the Environmental Clearance conditions to the respective Regional Office of MoEF&CC, the respective Zonal office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on 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&CC by e-mail.

(xiv) The project proponent shall inform the public about receipt of the environmental clearance, available with the SPCB/Committee and may also be seen at Website of the Ministry at <http://moef.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.

**10.** The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

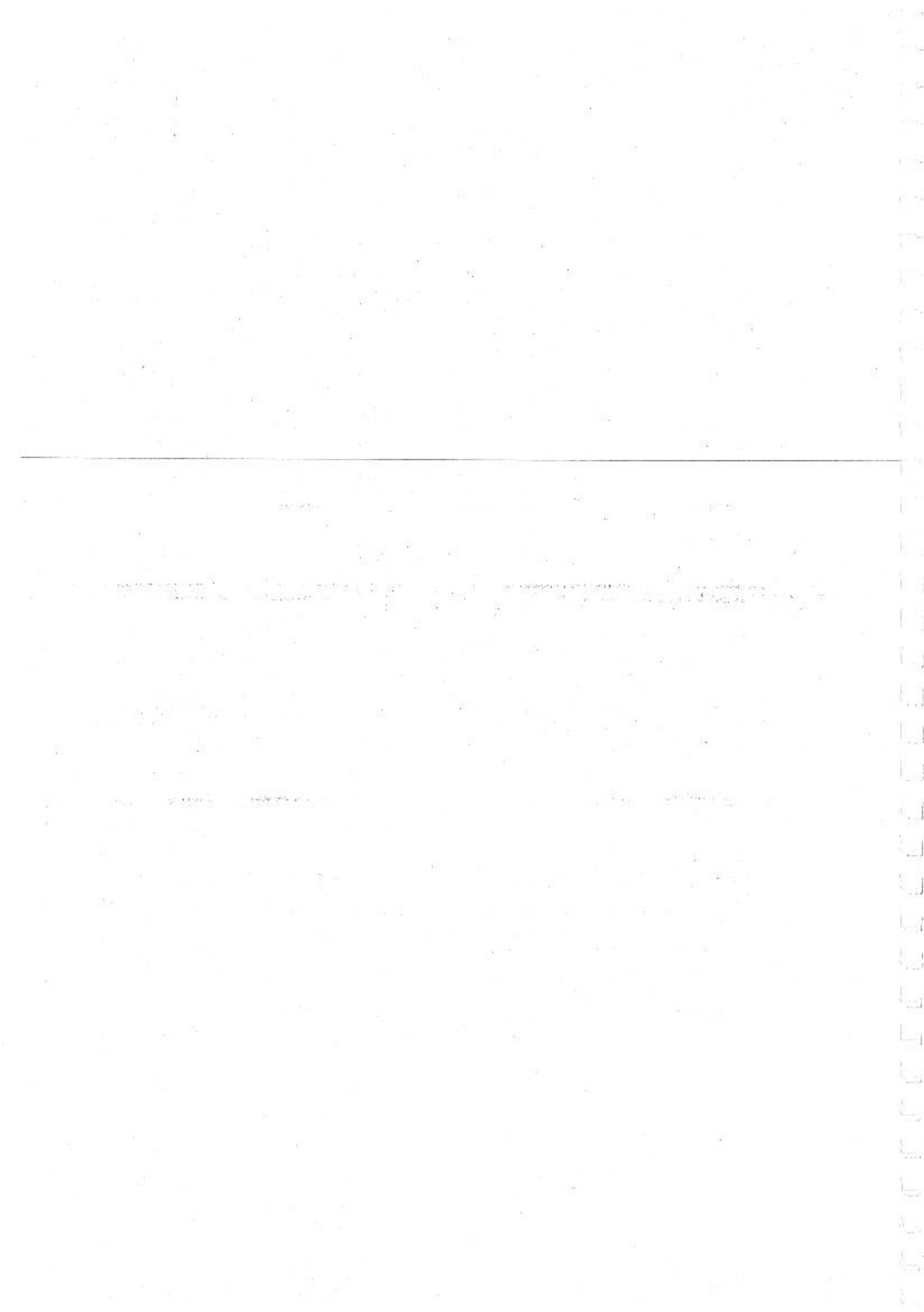
**11.** The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991, read with subsequent amendments therein.

*SK*  
30/7/2019  
(S. K. Srivastava)  
Scientist E

**Copy to:** -

1. The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8<sup>th</sup> Floor, Gandhi Nagar - 382 010 (Gujarat)
2. The Chief Conservator of Forests (Western Zone), Ministry of Environment & Forests, Regional Office, E-5, Arera Colony, Link Road -3, Bhopal - 462 016 (M P)
3. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32
4. The Member Secretary, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043 (Gujarat)
5. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhawan, Jor bagh road, New Delhi
6. Guard File/Monitoring File/Record File

*SK*  
30/7/2019  
(S. K. Srivastava)  
Scientist E



**FORM 10**  
(See Rule 10 (1))

Third Copy

**MANIFEST FOR HAZARDOUS AND OTHER WASTE**

Sender's Name & Mailing Address (including Phone No. & E-mail)	PPPL (Bharat Petro Process Ltd) c/o PMP Vehotech Pvt Ltd.			
Sender's Authorization No.:	—			
Manifest Document No.:	W-2000			
Transporter's Name & Address: (including Phone No. & E-mail)	PMP Vehotech Pvt Ltd,			
Type of Vehicle:	<input type="checkbox"/> Truck <input checked="" type="checkbox"/> Tanker <input type="checkbox"/> Special Vehicle			
Transporter's Registration No.:	—			
Vehicle Registration No.:	GJ-18-DT-5513			
Receiver's Name & Mailing Address (including Phone No. & E-mail)	Udyog Bhawan, Sector 1, Udaipur, Rajasthan - 313001 Plot No. 43, 47/6, Gurdwara Avenue, Udaipur, Rajasthan			
Receiver's Authorization No.:	Ranil - 89761			
Waste Description:	Dustings (Lead + Zinc) liquid waste			
Total Quantity No. of Containers:	26.250 Litres Nos.			
Physical form:	(Solid form - Liquid Sludge/Oily/Tarry Slurry/Liquid)			
Special Handling Instructions and Additional Information:	Well protected & safe (C H E M I C A L)			
Sender's Certificate:	I hereby declare that the contents the consignment are fully and accurately described above by proper shipping name and are transported, packed, marked and labeled properly in all respects in proper condition for transport by road according to applicable national government regulations.			
Name & Stamp:	Signature	Month	Day	Year
		02	15	2016
Transporter's Acknowledgment of Receipt of Waste:				
Name & Stamp:	Signature	Month	Day	Year
		02	15	2016
Receiver's Certification for Receipt of Consignment and other details:				
Name & Stamp:	Signature	Month	Day	Year
		02	15	2016
For Sender:	F. D. S.			
	For Receiver:			
Signature:	Signature:			

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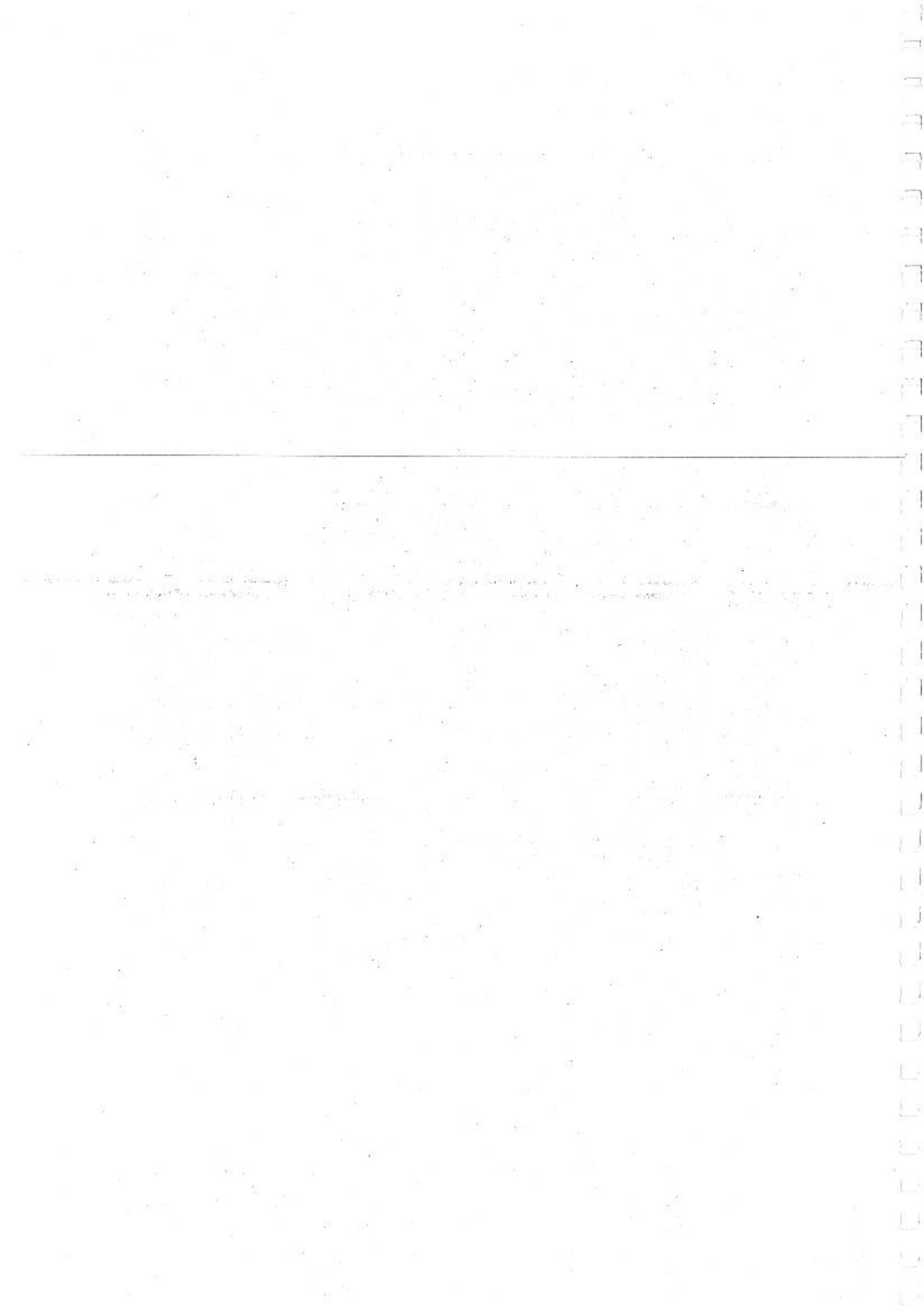
## FORM 10

Form Rule 10 (1)(i)

Third Copy

## MANIFEST FOR HAZARDOUS AND OTHER WASTE

1. Sender's Name & Mailing Address (including Phone No. & E-mail)	DVRX CLASSIC RECYCLING INC. 101 FARNHAM DR. BETHESDA MD 20814			
2. Sender's Authorization No.:				
3. Mandate Document No.:	N - 031			
4. Transporter's Name & Address: (including Phone No. & E-mail)	DPRP INSTITUTE FOR WEL			
5. Type of Vehicle:	<input type="checkbox"/> Truck <input checked="" type="checkbox"/> Tanker <input type="checkbox"/> Special Vehicle			
6. Transporter's Registration No.:				
7. Vehicle Registration No.:	US-18-H1-9041			
8. Receiver's Name & Mailing Address (including Phone No. & E-mail)	DVRX CLASSIC RECYCLING INC. 101 FARNHAM DR. BETHESDA MD 20814 TODAY PLEASE CALL			
9. Receiver's Authorization No.:	N-031-5974			
10. Waste Description:	370000 L TONNE STELLA (LITER) LIQUID			
11. Total Quantity: No. of Containers:	370000 L TONNE STELLA 1000 MT 1000			
12. Transport Term:	IMMEDIATE			
13. Special Handling Instructions and Additional Information:	NO. 1. GENERAL = NO (UNQUOTE)			
14. Sender's Certificate:	I hereby declare that the information provided in this manifest is true and accurate to the best of my knowledge and belief. I further declare that no other manifest has been issued for transported by me concerning this particular shipment or its components.			
15. Name & Stamp:	Signature	Month	Day	Year
16. Transporter's Authorization No. of Record:		02	15	2010
17. Name & Stamp:	Signature	Month	Day	Year
18. Receiver's Authorization No. Requested: RECORDED AND RETURNED		02	15	2010
19. Name & Stamp:	Signature	Month	Day	Year
20. Remarks:				
21. File Number:				
22. File Date:				





501, Fifth Floor, Mansarovar Avenue, Opp. TulsiShyam Flats, BhimjiPura, Nava Vadaj, Ahmedabad - 380 013, Gujarat, INDIA.  
M. : 7283889988 E-mail : ecocare@ecocareinfra.com Website : www.ecocareinfra.com

## TO WHOM IT MAY CONCERN

This is to certify that, PMP INFRATECH PRIVATE LIMITED situated at A-104, Ganesh Meridian, Opp. Kargil Petrol Pump, Nr. Gujarat High Court, S. G. Highway, Sola, Ahmedabad-380060. is provisional member of M/s. EcoCare Infrastructures Pvt. Ltd. for Hazardous Solid Waste Disposal Site situated at Survey No. 127, Village: Ghaspur, Tal: Dasada, Dist: Surendranagar.

Date of Registration : 29-08-2017

Provisional Reg. No. : ECIPL-601

FOR, ECOCARE INFRASTRUCTURES PVT. LTD.

*geet Patel*  
(MANAGING DIRECTOR)



Format for Hazardous and Other Waste			
Sender's Name & Mailing Address (including Phone No. & E-mail)		License No. / Registration No.	
Sender's Authorization No. 1		1094	
Magnet ID number No. 1		GJ-A-1094	
Transporter's Name & Address (including Phone No. & E-mail)		U.P. Transporters Pvt. Ltd.	
Type of Vehicle		Lorry L1000 L1000	
Transporter's Registration No.		GJ-A-1094	
Vehicle Registration No. 1		GJ-A-1094	
Receiver's Name & Mailing Address (including Phone No. & E-mail)		Hazardous Waste Treatment Facility Sector 10, Noida, UP - 201301	
Receiver's Authorization No.		1094	
Waste Description		Hazardous Waste (Hazardous Waste Treatment Facility)	
Total Quantity No. of Containers		12.500 Kgs	
Physical Form		(Solid/Hazardous)	
Special Handling Instructions and Additional Information		Prohibited (Waste No. 0x401)	
Sender's Certificate		I hereby declare that the contents of this document are true and accurate. I declare that no other dangerous wastes have been carried, packed, marked and stored in this document or otherwise in proper condition for transport by road or rail. I am fully aware of government regulations.	
Name & Stamp		Signature	Month Day Year
		<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	July 15 2021
Transporter's Acknowledgment of Receipt of Waste		Name & Stamp	Signature
			<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Receiver's Certification for Receipt of hazardous and other waste		Name & Stamp	Signature
			<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Transporter U.P. Transporters Pvt. Ltd.		<i>Transporter New Delhi</i>	
		<i>Transporter New Delhi</i>	



## Well Abandonment Report-Bhavada#01

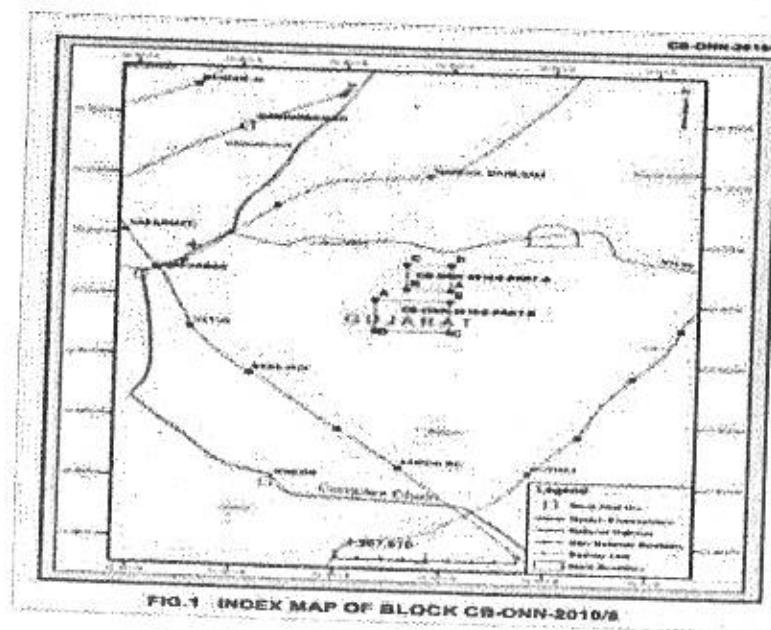
After completion of drilling and testing of wells, the wells which are devoid of any Hydrocarbon presence (dry wells) and no longer economic for the operator for production are permanently Plugged and Abandoned (P&A).

The objective of all P&A operations is to achieve the following:

- isolate and protect all fresh and near fresh water zones
- isolate and protect all future commercial zones
- prevent leaks in perpetuity from or into the well
- remove surface equipment and cut pipe to a mandated level below the surface

### I. Background of block:

The block CB-ONN-2010/8 was awarded to the consortium of BPRL, Gas Authority of India Limited (GAIL), Engineers India Limited (EIL), B F Infrastructure Pvt. Limited (BFIL) and Monnet Ispat and Energy (MIEL) by Government of India (GoI) under ninth round of New Exploration License Policy (NELP) bidding. The Block CB-ONN-2010/8 lies in the Ahmedabad- Mehsana Tectonic block of the Cambay Basin and falling under Ahmedabad, Gandhinagar & Kheda district in Gujarat. It covers an area of 42 km<sup>2</sup> comprising of two parts namely 'Part A', Area: 14 km<sup>2</sup> and 'Part B', Area: 28 km<sup>2</sup>.





The block CB-ONN-2010/8 is located to the South-South East of Gandhinagar city and approximately 35 kms far from Ahmedabad city. The Ahmedabad-Delhi National Highway No. 8 passes near Gandhinagar city. The National Highway No. 8, 59, NH 47, NH 48 & NE 1 passes in the vicinity of the block. The nearest international and domestic airports are located at Ahmedabad & Baroda situated in the proximity of the block.

The exploration activities as per Minimum work Programme (MWP) committed to Govt. of India has been completed in the block. As per MWP, 6 exploratory wells were drilled in the block. During drilling & testing operation of these wells, few wells were found devoid of any producible hydrocarbons. These wells were required to be plugged and abandoned.

The well abandonment was done inline with requirements of OISD 175. The abandonment done was encompassed two forms of plugging:

1. Open Hole downhole abandonment
2. Surface abandon plug

## **II. Abandonment of well Bhavda#01:**

As mentioned above that BPRL led consortium had drilled 6 wells in block CB-ONN-2010/8, in which one well Bhavda#01 was declared dry while drilling as there was no presence of Oil & Gas. Based on the evaluation of logs (including MDT log), BPRL had decided to plug and abandon the well.

### **A. Open Hole Downhole abandonment:**

#### **i. Open Hole Downhole Abandonment-Cement Plug-1 Job (1820m – 1720m):**

The open hole starting from 1244.14 m was found devoid of hydrocarbon shows. Hence Open hole plug was planned for the section.

As per the OISD 175, for open hole plug, in case there is no oil & gas or fresh water zones, the open hole shall be isolated by placing one cement plug of minimum of 60 meters. Accordingly a 100m plug which exceeds the requirement of OISD 175 was placed successfully. The details of plug is as follows:



<b>Cement Plug details</b>	1820m to 1720m			
<b>Cement slurry pumped</b>	25.4 bbls of 15.8 slurry			
<b>Pumping Schedule</b>	<b>Fluids Pumped</b>	<b>Pumped by</b>	<b>Density (ppg)</b>	<b>Volume pumped (bbl)</b>
	Spacer	Schlumberger	12.0	20.0
	Cement slurry	Schlumberger	15.8	25.4
	Spacer	Schlumberger	12.0	5.2
	Mud	Schlumberger	10.6	83

ii. Open Hole Downhole Abandonment-Cement Plug-1 Job (1820m – 1720m):

As per the OISD 175, for open hole plug, in case there is no oil & gas or fresh water zones, the open hole shall be isolated by placing one cement plug of minimum of 60 meters. Accordingly a 100m plug which exceeds the requirement of OISD 175 was planned and successfully carried out. The details of plug is as follows:

A cement plug was placed partially in open hole and partially inside 9-5/8" casing. The details of the middle cement plug are as follows:

<b>Cement Plug details</b>	1304m to 1154m			
<b>Cement slurry pumped</b>	38.8 bbls of 15.8 slurry			
<b>Pumping Schedule</b>	<b>Fluids Pumped</b>	<b>Pumped by</b>	<b>Density (ppg)</b>	<b>Volume pumped (bbl)</b>
	Spacer	Schlumberger	12.0	20.0
	Cement slurry	Schlumberger	15.8	38.8
	Spacer	Schlumberger	12.0	5.2
	Mud	Schlumberger	10.6	49.5



As per OISD, the plug in the hole shall be tagged by applying a weight of atleast 8MT on the plug. It should also be pressure tested by applying pump pressure of 500psi or 80% of LOT value of previous casing shoe, whichever is less. Accordingly weight test was done and cement plug was also tested successfully to 1000 psi with 10.6 ppg of mud.

**B. Surface abandon plug-Cement Plug-3 Job (63m – Surface):**

As per OISD 175, surface cement plug of atleast 60m length shall be placed in such a manner that the top of the plug is within 60m below the mean ground level in the smallest level. Accordingly a plug of 63m was planned and carried out.

The details of the surface cement plug are as follows:

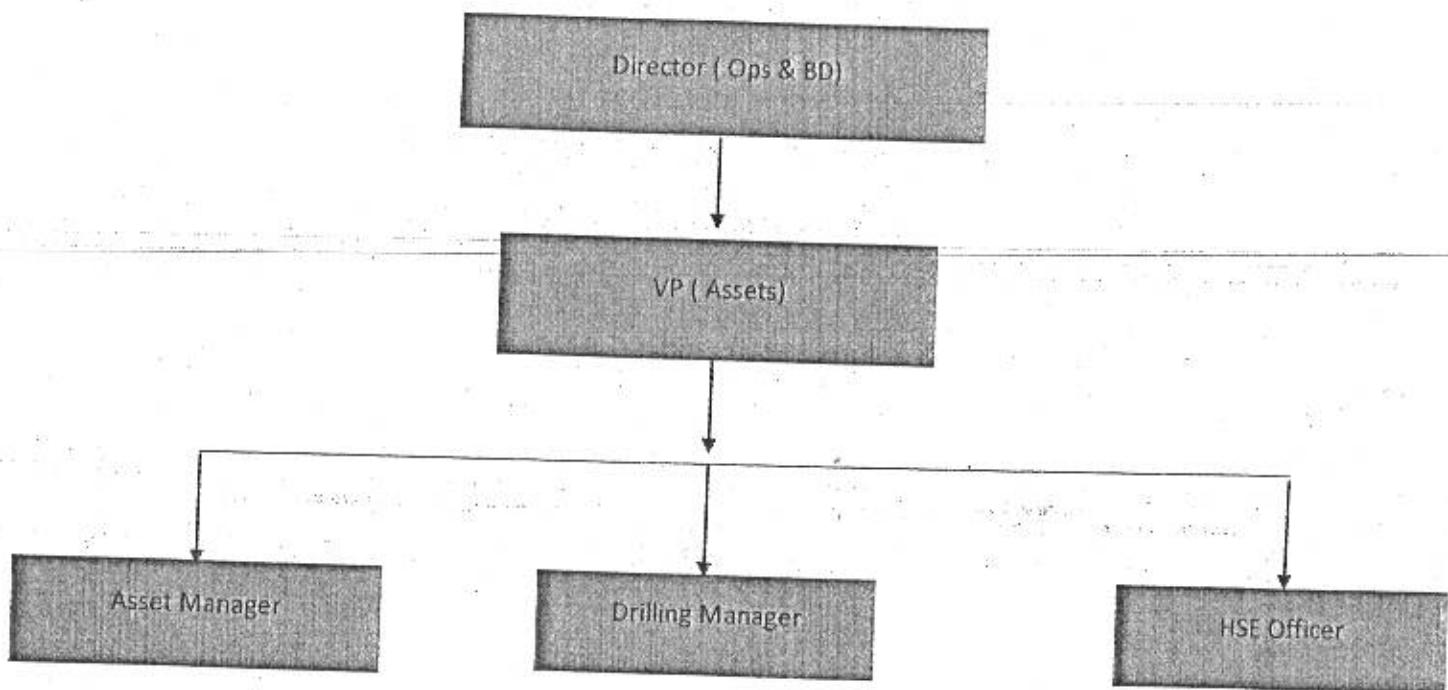
Cement Plug details	63m to Surface			
Cement slurry pumped	13 bbls of 15.8 slurry			
Pumping Schedule	Fluids Pumped	Pumped by	Density (ppg)	Volume pumped (bbl)
	Cement slurry	Schlumberger	15.8	13.0

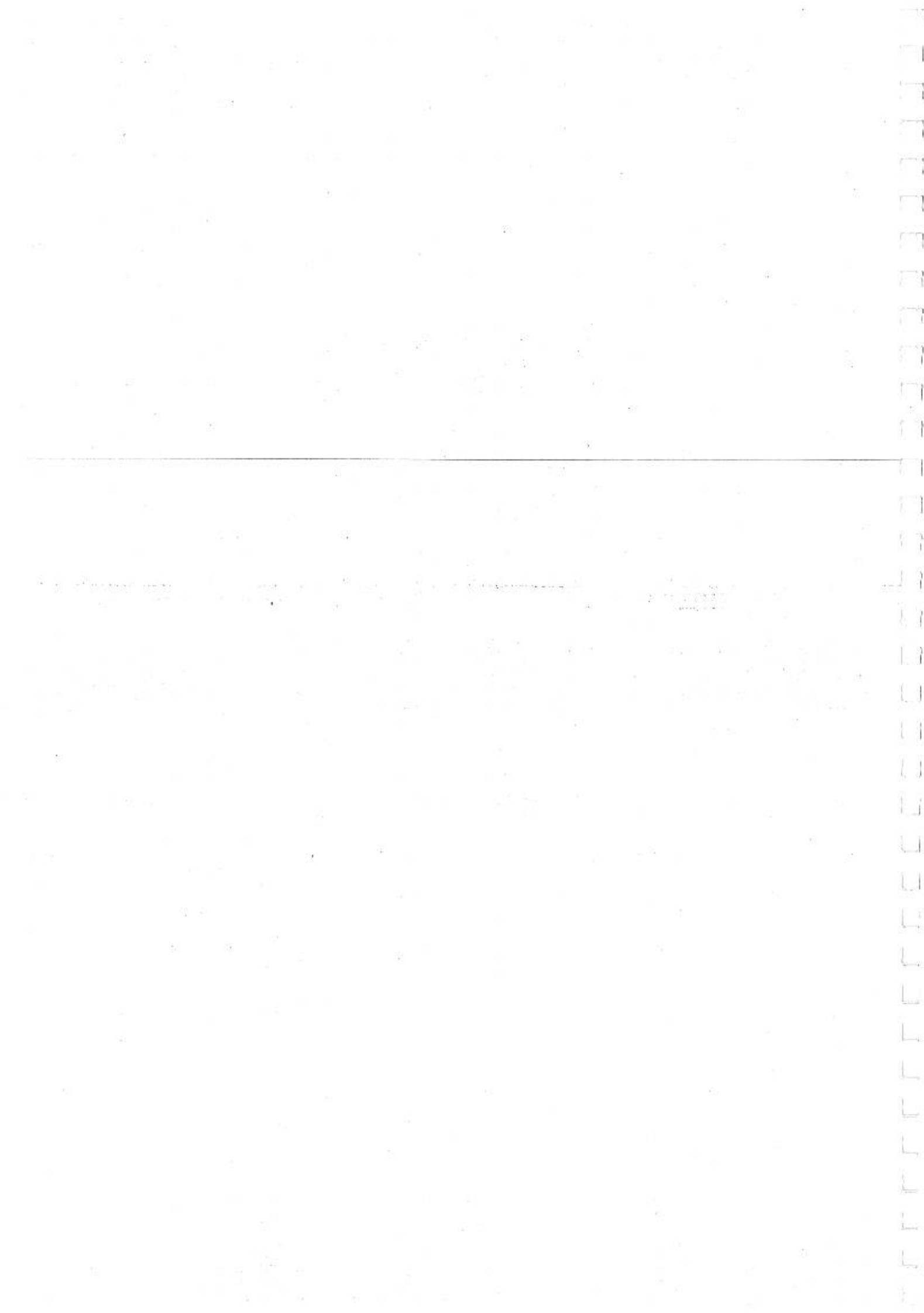
A MS plate was welded on top of 13 3/8" casing and cellar was cleaned.

Using three plug to abandon the well which was devoid of hydrocarbon, BPRL has successfully carried out abandonment operations of Bhavda#01 well, which exceeds the requirements of OISD 175.

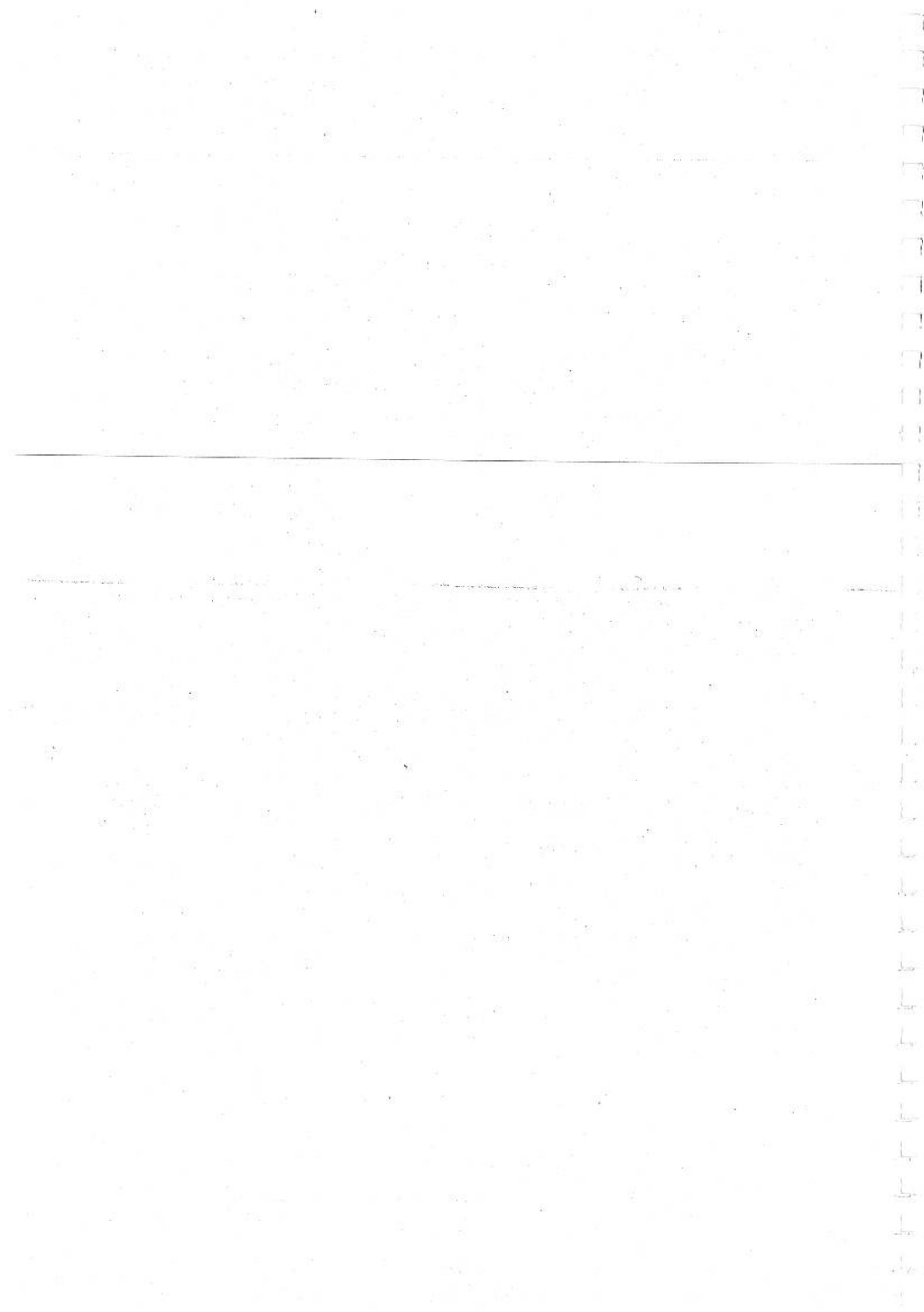


**Environment Management Cell Of BPRL**









Government of Gujarat  
 Energy & Petrochemicals Department  
 No. PML-14-2018-2038-E.  
 Sachivalaya, Gandhinagar.

Date: - 26/02/2019

ORDER:-

In exercise of the powers conferred by Rule 5(1) (ii) of the Petroleum and Natural Gas Rules, 1959, the Government of Gujarat is pleased to grant a Mining Lease for Crude Oil and Natural Gas as per following:

Name of Mining Lease	:	PASUNIA
Area of Mining Lease (Sqkm)	:	42.00 Sq.km. (Part A - 14.00 sq.km. and Part B - 28 sq.km.)
Effective date	:	From the Date of Order.
Term of Mining Lease	:	15 (Fifteen) years
Name of Lessee	:	M/s Bharat PetroResources Limited (BPRL)
District / (s)	:	Ahmedabad, Gandhinagar and Kheda
MoPNG Approval Order No & Date	:	O-12012/11/2012-ONG-III/IV dated 15/01/2019

Details of statutory payments in accordance with the Rule 13(1) of PNG Rule 1959 (as amended from time to time) are as follows:

Sr.	Nature of Payment	Challan Date	Amount Rs.	Head of Account	Name of the Treasury
1.	Security Deposit	29/06/2018	Rs. 8,00,000/-	8443 - Civil Deposit	Gandhinagar
2.	Application fee & Preliminary Expenses	23/07/2018	Rs. 3,20,000/-	0853-00-102-03	Gandhinagar

The grant of the lease is subject to the terms and conditions mentioned below:

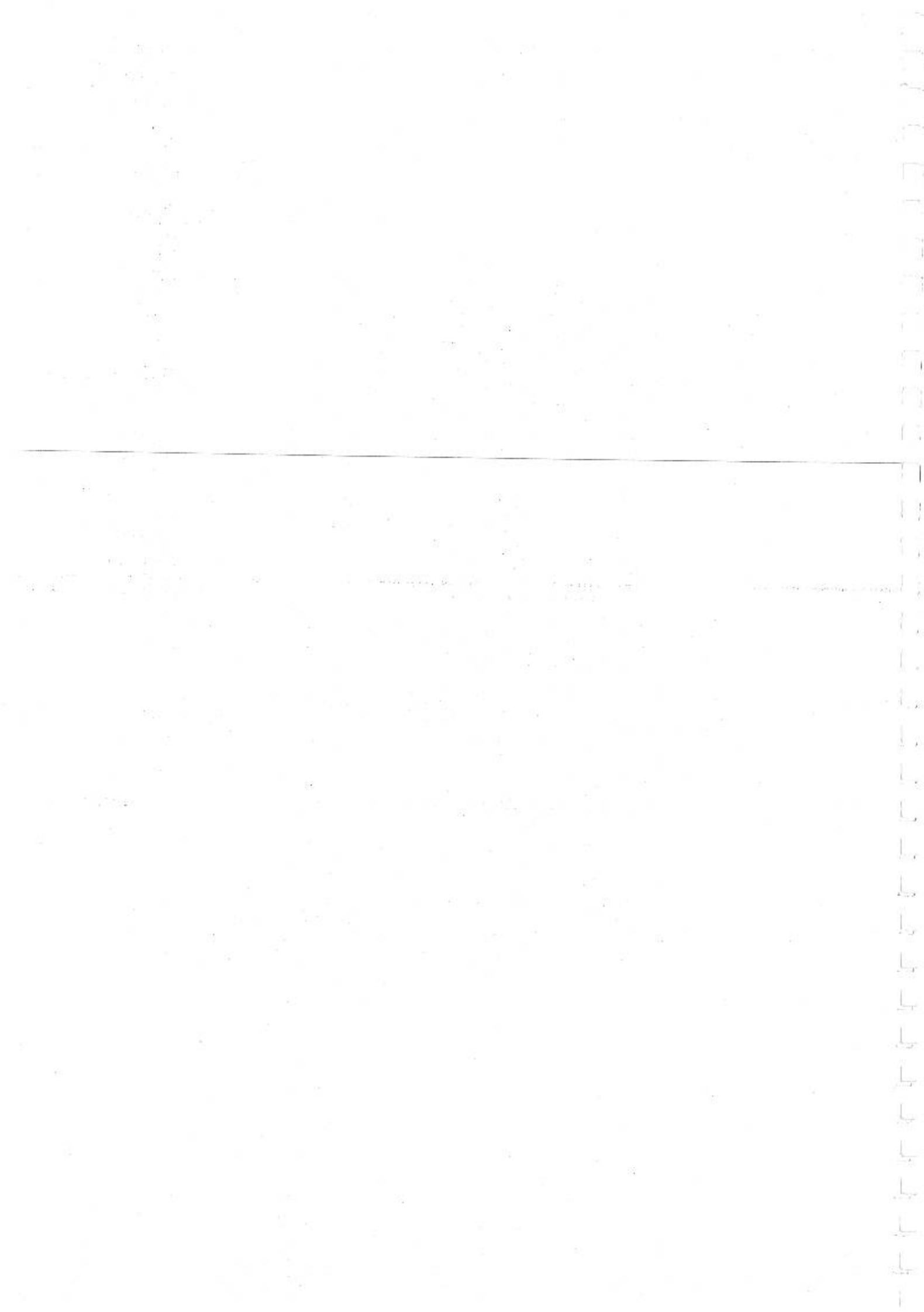
- A. The Mining Lease shall be in respect of Crude oil and Natural Gas.
- B. The lease shall be valid for a period of 15 (Fifteen) years from the date of issue.
- C. The lease shall be subject to the provision of Oil Field (Regulations and Development) Act, 1948, (S3 of 1948) and the Petroleum & Natural Gas Rules, 1959 made there under as amended from time to time.
- D. The BPRL shall within the first seven days of every month furnish to the Director of Petroleum and the State Government a full and proper return showing the quantity and gross value of all crude oil, casing head condensate and natural gas obtained during the preceding month in pursuance of the lease.
- E. Royalty on Crude Oil, Condensate and Natural Gas shall be payable by the lessee as per such rates as may be fixed, from time to time, by the Central Government in consultation with the State Government. The royalty shall be payable on monthly basis and shall be payable by the last day of the month succeeding the period in respect of which it is payable.



- F. The royalty and other payment under PNG Rules shall be paid through cyber treasury to the State Government.
- G. The BPRL shall have to pay every year advanced dead rent in respect of lease, calculated at the rates as amended from time to time under PNG Rules.
- H. The BPRL shall also pay every year surface rent in respect of the lease for the surface area or the land actually used by them for the purpose of the operation conducted under the lease at the rate as fixed by the Government from time to time.
- I. The BPRL shall take preventive measures against the hazard of fire under ground and/or on the surface and shall take every required measure to prevent any other accidents / mishaps. For this, the company shall keep required equipments, supplies and means at all times and shall pay such compensation to the third party and/or Government as may be determined in case of damage due to fire/accidents etc.
- J. The lease shall commence production as early as possible and shall inform in advance to the Directorate of Petroleum before commencement of production.
- K. The Lessee shall intimation well in advance (at least 10 days) about the commencement of any exploratory/development activities in the Mining Lease to the Directorates of Petroleum and the State Government.
- L. The Lessee shall display notices at all conspicuous points on the area covered by the lessee to indicate its boundaries along with properly secured wells and vital installations. Further a sign board should also be displayed at exploration/development/production site to the satisfaction of the DoP/State Government.
- M. In case if there is no production from ML, then lessee shall immediately inform to DoP/State Government with the reason for the same.
- N. The DGH approved post well head cost (PWHC) in accordance with the August 2007 notification of MoPNG is ZERO.
- O. The State Government and the Director of Petroleum's officials may undertake field visit to ascertain the activities carried out by lessee, as per the provision of relevant acts and Rules.
- P. Lessee shall execute a separate lease deed in respect of such other covenants, terms and conditions as per the prescribed format at the earliest.

#### OTHER TERMS AND CONDITIONS

1. Upon determination or relinquishment of any area covered by this lease, the lessee shall furnish all the data to the State Government.
2. Necessary approval from the Competent Authority should be obtained for the Reserve Forest Area (if any) falling in the leased area.
3. If international companies or foreigners are entrusted with the task, the lessee may get security vetting of these companies through the appropriate Government agencies with help of MoPNG. The lessee shall also seek prior clearance from the Ministry of Home Affairs and Ministry of Defense with the full particulars of the foreigner employees under intimation to MoPNG.
4. The lessee shall issue identity card to each of the employees. The system of checking identity cards of personnel will have to be strictly enforced.



5. Security to its employees both at the project sites and en-route in insurgency-affected areas will be the responsibility of the lessee.
6. The lessee shall allow Government authorities to enter and inspect area for security check-up, if necessary.
7. Lessee shall not employ any foreign national surreptitiously in the area along the border.
8. No ground / aerial survey of the Defense VAs /VPs is permitted. Aerial survey, if any would be governed by the provisions of Ministry of Defense Letter No. 18(8)/B2-D (GS.111) dated January 31, 1989.
9. Air Force area falling within the zones earmarked for delineation should be avoided.
10. For works in close vicinity of Indian Air Force units / installations and visit to these installations, if any, specific permission of Air Hdqrs. should be obtained.
11. Any work within 500m of the perimeter of Air Force Station should be intimated to Air Force authority at least 10 days before commencement of the activities.
12. No obstruction shall be erected higher than 15 mtrs. within 5 kms. radius of Air Force, Air Fields and construction of any high mast / towers shall be carried out in consultation with the Air Force Authority.
13. In case the production of oil/gas ceases permanently from the field, the DGH and the State Government may be informed immediately.

By order and in the name of the Governor of Gujarat,

  
(Hitesh Patel)  
Under Secretary  
Energy & Petrochemicals Department

To:-

- Shri Tushar Datta, Vice President (Assets), Bharti PetroResources Limited, Makers Towers, 'E' Wing, 9<sup>th</sup> Floor, Cuffe Parade, Mumbai - 400 005.

Copy to:-

- The District Collector, Ahmedabad / Gandhinagar / Kheda.
- The Director of Petroleum, Gandhinagar.
- The Accountant General, Ahmedabad.
- The Addl. Accountant General, Rajkot.
- The Superintendent of Stamps, Gandhinagar.
- Shri D. K. Ghosh, Under Secretary to Government of India, Ministry of Petroleum & Natural Gas, Shashi Bhavan, New Delhi.
- Select file - 2019.

