

HSE Department

Oil India Limited

Duliajan, Dibrugarh, 786602, Assam

Phone: 0374-2800542 Email: safety@oilindia.in

दिनांक/Date: 11.01.2024

Email: safety@offindia

संदर्भ सं./Ref. No.: S&E/E/43C-1/52

From	:	Chief General Manager (HSE) I/C				
То	Deputy Director General of Forests (Central), Sub Office, Guwahati (under Regional Office, Shillong), 4th Floor, Housefed Building, Rukminigaon, Guwahati-781022. (Email: iro.guwahati-mefcc@gov.in, iro.moefcc.ghy@gmail.com)					
Subject	:	Submission of Half-yearly (April 2023 to September 2023) compliance reports of the conditions stipulated in the Environment Clearance (EC) granted to Oil India Limited.				

Sir,

Reference to above subject, please find enclosed herewith the Half-yearly (April 2023 to September 2023) compliance reports of the conditions stipulated in the Environment Clearance (EC) granted to Oil India Limited. List of the EC are tabulated below:

S.No	EC Identification No/File No.	Name of the EC proposal		
1.	F. No. J-11011/413/2008-IA II (I) dated 24.01.2011	OCS Bhogpara.		
2.	F. No. J-11011/1251/2007-IA II (I)	Exploratory Drilling of 01 (One) well at		
000	dated 01.11.2011	Doomdooma-Pengry Area, District Tinsukia, Assam.		
3.	F. No. J-11011/682/2008-IA II (I) dated 17.06.2013	Expansion of Gas field Development Tengakhat-Naharkatia-Jorajan area ar Doomdooma Pengry area, Assam by M/s C India Ltd.		
4.	F. No. J-11011/116/2018-IA II (I) dated 07.01.2020	Onshore Oil & Gas Exploration & Development Drilling and Production in		
ig.		Ningru Oil & Gas Field in Districts Changlang and Namsai for Ningru PML Block (Arunachal Pradesh)		
5.	F. No. J-11011/1260/2007-IA II (I) dated 09.04.2020	Onshore Oil & Gas Development Drilling and Production in Mechaki Area covering Mechaki, Mechaki Extension, Baghjan and Tinsukia Extension PMLs on District Tinsukia (Assam).		
6.	F. No. J-11011/150/2016- IA II (I) dated 11.05.2020	Extension Drilling & Testing of Hydrocarbons at 7 (seven) Locations under Dibru-Saikhowa National Park Area, North-West of Baghjan PML, District Tinsukia, Assam.		
7	F. No. J-11011/1253/2007-IA II (I)	Onshore Oil & Gas development drilling and		
	dated 28.12.2020	production by M/S Oil India Ltd in Dibrugarh		
50		district under Dibrugarh, Chabua, Higrijan and Tinsukia PMLs. (Dibrugarh- Bhogpara)		
8.	F. No. J-11011/375/2016-IA II (I)	Onshore Oil & Gas Development Drilling and		



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	dated 28.12.2020	Production (179 wells and 9 Production Installations) in North Hapjan – Tinsukia – Dhola area under Tinsukia district, Assam.
9.	F. No. J-11011/35/2018-IA II (I) dated 26.02.2021	Onshore Oil & Gas development drilling and production by M/S Oil India Ltd. Located in Khagorijan Oil & Gas Field in Dibrugarh & Tinsukia District under Tinsukia PML, Tinsukia Extension PML and Chabua PML District: Dibrugarh, Assam
10.	F. No. J-11011/186/2016-IA II (I) dated 03.03.2021	Onshore Oil & Gas development drilling and production in Borhat-Titlagarh area, Dibrugarh, Sibsagar and Charaideo Districts under Sapkaintb, Borhat, Moran Extension and Doomdooma PMLs.
11.	EC22A002AS110311 F. No. J-11011/156/2017-IA II (I) dated 28.11.2022	Oil & Gas development drilling and production (16 exploratory, 73 developmental drilling wells and 9 Production Installations) in Moran Area under Dibrugarh, Sibsagar and Charaideo districts, Assam.
12.	EC23A002AS125690 F. No. J-11011/1254/2007-IA II (I) dated 13.01.2023	Oil & Gas development drilling and production (68 developmental drilling wells and 9 Production Installations) in Khowang
		Shalmari Area under Dibrugarh, Sibsagar districts, Assam.
13.	EC23A002AS188131 F.No J-11011/1257/2007- IA II (I) dated 17.04.2023	Onshore Oil & Gas development drilling and production (167 wells and 7 production Installations) in Tengakhat-Kathaloni-Dikom (TKD) under Dibrugarh district, Assam.
14.	EC23A002AS198872 F. No. J-11011/388/2016-IA II (I) dated 31.07.2023	Onshore Oil & Gas development drilling (67 wells) in Jorajan Area under Dibrugarh, Charaideo and Tinsukia districts, Assam.
15.	EC23A002AS146942 F.No. J-11011/546/2017-IA(I) dated 20.09.2023	Onshore Oil & Gas development drilling and production (294 wells and 2 Production Installations) in Naharkatiya-Deohal-Bogapani-Nagajan (NDBN) area under Dibrugarh & Tinsukia districts, Assam.

This is for your kind information please.

Thanking you.

(Rajendra Singh Garbyal)
Chief General Manager (HSE) Nodal Officer (EC, FC, NBWL) **For Resident Chief Executive**



HSE Department

Oil India Limited

Duliajan, Dibrugarh, 786602, Assam Phone: 0374-2800542

Email: safety@oilindia.in

Encl: As above

Copy:

1. Director, Monitoring Cell, MoEF, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi-110003.

2. Zonal Office, Central Pollution Control Board, "TUM-SIR", Lower Motinagar, Near Fire Brigade Headquarter, Shillong-793014.

3. Chairman, Assam Pollution Control Board, Bamunimaidan, Guwahati-781021, Assam.

4. Chairman, Arunachal Pradesh State Pollution Control Board, Office of the Principal Chief and Secretary (E&F) Conservator of Forests, Govt. of Arunachal Pradesh, Itanagar-791111, Arunachal Pradesh.



- Name of the Project: Onshore Oil & Gas development drilling and production (167 wells and 7 production Installations) in Tengakhat-Kathaloni-Dikom (TKD) under Dibrugarh district, Assam.
- **EC Identification No., File No and date:** EC23A002AS188131, J-11011/1257/2007- IA II (I) dated 17.04.2023.
- Period of Compliance Report: April 2023 to September 2023.
- Status of the Project: *No drilling activity* was carried out during the above period.

Specific Conditions:

S. No.	CONDITION	COMPLIANCE STATUS
I.	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, and risk mitigation measures relating to the project shall be implemented (Annexure – I).	Will be complied All the environmental protection measures proposed in the EIA – EMP will be implemented.
II.	No pipelines or its part shall be laid in the Forest land/Protected Area without prior permission/approval from the Competent Authority.	Will be complied No pipelines will be laid in Forest land/ Protected Area without prior permission/ approval from the concerned department.
III.	PP shall ensure that safe distance is maintained between proposed drilling well location and HFL of river.	Will be complied Safe distance will be maintained between proposed drilling location and HFL of river.
IV.	PP shall conduct third party audit of compliance of EC condition at an interval one year and its report shall be submitted to IRO, MoEF&CC.	Will be complied Third party audit of compliance of EC condition will be carried out.
V.	Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project Proponent shall undertake all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing.	Being Complied Details of the CER expenditure incurred by OIL is enclosed as Annexure – I.
VI.	The project proponent will treat and reuse the treated water within the drilling site location including at processing location and no waste or treated water shall be discharged outside the premises under any condition. Mobile ETP coupled with RO and mobile STP shall be installed to treat the waste water and sewage waste respectively.	Will be complied Zero Liquid Discharge will be maintained at the drilling locations. Mobile ETP coupled with RO will be installed. Storm water will not be allowed to mix with wastewater.
VII.	During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.	Will be complied Portable Multi-gas detector & Explosimeter will be used to detect fugitive emissions of Methane (if any).
VIII.	The project proponent also to ensure trapping/storing of the CO ₂ generated, if any, during the process and handling.	
IX.	Approach road shall be made pucca to minimize generation of suspended dust.	Will be complied Approach road to the drilling locations and Production Installations

		will be made pucca to minimise	
		generation of suspended dust.	
X.	The project proponent shall make all arrangements for	Will be complied	
Α.	control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.	Regular maintenance of equipment/ machinery will be carried out to minimize noise generation. DG sets will be provided with acoustic enclosures and adequate Stack Height	
	8	as per CPCB guidelines.	
XI.	Total fresh water requirement shall be 39 KLPD which will be met from groundwater. Extraction of ground water shall not be done without obtaining prior permission of CGWA/concerned authority.	Will be complied Total freshwater water requirement will not exceed the permitted limit and will be met through water tankers after obtaining prior permission from the concerned regulatory authority.	
XII.	Formation/produced water shall be treated in the production installation through Mobile ETP(s)/ Central ETP of capacity 5000 KLD at Tengakhat/ ETP of capacity 7200 KLD at Madhuban to meet the parameters as per MoEF&CC standards for Effluent disposal and the treated formation/ produced water will be disposed off in disposal wells located in the vicinity of the production installation.	Will be complied No new Production Installations are constructed. Formation water generated (if any) in the Production Installation will be treated through Mobile ETP(s)/ Central ETP of capacity 5000 KLD at Tengakhat/ETP of capacity 7200 KLD at Madhuban before disposal in water disposal wells.	
XIII.	The company shall construct the garland drain 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.	Will be complied Garland drains will be constructed around the periphery of the drilling location/ production installation to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system will be created for oil contaminated and non-oil contaminated.	
XIV.	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 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 th August, 2005.	e Will be complied t. Drill cuttings separated from drilli s fluid will be adequately washed a disposed in HDPE lined pit. I effluent/ drilling mud will discharged/disposed off into near surface water bodies. OIL w g comply with the guidelines in	
XV.	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.	Will be complied Oil Spill Contingency Plan is in place In case of Oil spillage/ contamination, action will be taken as per the Oil spill contingency plan prepared by OIL. Recyclable waste (oily sludge) and spent oil will be sent to Pollution Control Board, Assam authorized	





	2	recyclers.	
XVI.	The project proponent shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At fixed installations or plants use of 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.	Will be complied Fixed firefighting system will be installed at drilling locations and in case of any oil spillage necessary remediation actions will be taken as per the Oil Spill Contingency Plan.	
XVII.	The project proponent shall develop a contingency plan for H ₂ S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H ₂ S detectors in locations of high risk of exposure along with self-containing breathing apparatus.	Complied Contingency Plan for H ₂ S release is in place. OIL never encountered H ₂ S and no such evidence exists in our field of operation. However, multigas detector and Self Containing Breathing Apparatus (SCBA) will be kept available to meet the emergency situation, if any.	
XVIII.	Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations.	Will be complied Blow Out Preventer (BOP) system will be installed to prevent blowouts during drilling operations.	
XIX.	On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable DGH/ Indian Petroleum Regulations.	Will be complied On completion of the drilling activity, plugging of abandoned wells will be carried out as per the OIL's Well Abandonment, Site Restoration and Reclamation policy.	
XX.	PP shall obtain approval from the Chief Wildlife Warden on conservation plan for Schedule-I Species and recommendations shall be complied. Compliance report shall be submitted to IRO.	d OIL has submitted Site - Speci	
XXI.	As proposed, PP shall allocate funds for extended EMP (CER) as per plan submitted in Annexure-II.	Being Complied Details of the CER expenditure incurred by OIL is enclosed as Annexure – I.	
XXII.	No lead acid batteries shall be utilized in the project/site.	Will be complied No lead acid batteries will be utilized in the drilling location/production installations.	
XXIII.	Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. All workers & employees shall be provided with required safety kits/mask for personal protection.	Will be complied Occupational Health Surveillance of workers engaged in drilling operation will be carried out on regular basis. All workers & employees engaged in	

An PAGE	drilling operation will be provided with Personal Protective Equipment (PPE).
XXIV. Oil content in the drill cuttings shall be monitored if oil-based mud is used and report & shall sent to the Ministry's Regional Office.	Will be complied Water-based Mud will be used for drilling operations.
The project proponent 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.	SOPs for all the operations covering safety and environment related issues are prepared. OIL has prepared Environmental manual which is made

General Conditions:

S. No.	CONDITION	COMPLIANCE STATUS	
I.	No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. 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/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Will be complied No further expansion or modifications will be carried out other than the activities mentioned in the Environment Clearance without the prior approval of MoEF&CC.	
II.	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.	Will be complied LED lights will be utilised for lighting purpose in drilling locations and Production Installations.	
III.	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 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Will be complied Noise level in the drilling sites and Production Installations will be kept within the permissible limits by providing acoustic enclosures around DG sets.	
IV.	The company shall undertake all relevant measures for improving the socioeconomic conditions of the		



	surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	incurred by OIL is enclosed as Annexure - I.
V.	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.	Complied OIL has earmarked funds for environment management/ pollution control measures.
VI.	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal.	Complied OIL has submitted a copy of the Environment Clearance to local Panchayat, Municipality Board/Municipal Corporation.
VII.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by email) 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 the website of the company.	Complied. EC compliance report for the period October 2022 to March 2023 was submitted to IRO - Guwahati, Zonal Office CPCB, Shillong and, Chairman - Pollution Control Board Assam vide L.No. S&E/E/43C-1/561 dated 29.05.2023. Also, copy of the EC and Six-monthly compliance report are uploaded to OIL website under the link https://www.oilindia.com/Environmental.aspx
VIII.	The environmental statement for each financial year ending 31 st 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.	Complied. Environment Statement (Form – V) for the F.Y. 2022-23 was submitted to Pollution Control Board, Assam vide No. S&E/E/21(B)/940 dated 20.09.2023. Copy of the same is enclosed as Annexure – C.
IX.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.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.	Advertisement regarding the issuance of the Environment Clearance was published in two newspapers i.e., Dainik Janambhumi and Assam Tribune dated 19.04.2023. Copies of the same are enclosed as Annexure – III.

ſ	X.	The project authorities shall inform the Regional Office	
		as well as the Ministry, the date of financial closure and	
		final approval of the project by the concerned authorities	
		and the date of start of the project.	<u>.</u>
1	XI.	This Environmental clearance is granted subject to final	Agreed.
		outcome of Hon'ble Supreme Court of India, Hon'ble	
1		High Court, Hon'ble NGT and any other Court of Law,	
1		if any, as may be applicable to this project.	





Annexure - I

	CER	expenditure i	n Crores dur	ing F.Y. 2022-23	3 to F.Y. 2023	3-24 (upto 3	30 th September 2023)	
District	Health Care	Education	Plantation	Skill development of women	Industrial Training for students	Sports & Cultural events	Social Development/Infrastructure (Drinking Water, Toilets, Road repair, Flood Protection/Erosion control etc.,)	Total
Dibrugarh (Assam)	5.04	4.89	:=: :	4.72	0.26	0.54	16.97	32.42

& Q

WILDLIFE CONSERVATION
PLAN FOR SCHEDULE-I SPECIES
FOR ONSHORE OIL & GAS
DEVELOPMENT DRILLING AND
PRODUCTION IN TENGAKHATKATHALONI-DIKOM AREA IN
DIBRUGARH DISTRICT



July 2020

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ABBREVIATIONS

CC	Community Consultation
CPCB *	Central Pollution Control Board
DG	Diesel Generator
EIA	Environmental Impact Assessment
EPS	Early Production System
EN	Endangered
ETP	Effluent Treatment Plant
FD	Discussion with Forest Department
FGGS -	Field Group Gathering Station
FSI	Forest Survey of India
GBH	Girth at Breast Height
GCS	Gas Compressor Station
GG	Gas Generator
HDPE	High-density polyethylene
HSD	High Speed Diesel
IUCN	International Union for the Conservation of Nature
IVI	Important Value Index
KLD	Kilo Liter per Day
KW	Kilo Watt
LC	Least Concern
MMT	million metric ton
MoEF&CC	Ministry of Environment, Forest and Climate Change
NH	National Highway
NT	Near Threatened
OCS	Oil Collection System
OIL	Oil India Limited
OWS	Oil Water Separator
PML	Petroleum Mining Lease
PS	Primary survey
RCC a	Reinforced Cement Concrete
RD	Relative Density
RF	Reserved Forest
TKD	Tengakhat Kathaloni Dikom
VU	Vulnerable
WPA	Wildlife Protection Act
WWF	World Wide Fund





1 INTRODUCTION

1.1 BACKGROUND

Oil India Limited (OIL), a Government of India Navaratna Enterprise, is currently engaged in carrying out exploration, development and production activities for hydrocarbon in its operational areas of Upper Assam, Arunachal Pradesh and Mizoram in the North Eastern part of India. OIL has significant presence in pan-India and overseas. Oil India Ltd. (OIL) is currently planning for drilling of 167 onshore exploratory & developmental wells, 7 nos. of production installations and laying of pipeline at Tengakhat Kathaloni Dikom (TKD) area at Dibrugarh, Chabua, Tinsukia, Hugrijan, Naharkatiya Extn, Dholiya and Dumduma PMLs including adjoining areas of Dibrugarh district of Assam.

The project area within Dibrugarh district is home to few Schedule- I species and OIL is preparing this Wildlife Conservation Plan for management of project related impacts to the Schedule-I species from oil and gas drilling and production activities.

1.2 OVERVIEW OF THE PROJECT

Oil India Limited is presently producing crude oil and gas from the Tengakhat-Kathaloni-Dikom (TKD) area which is included under Dibrugarh district of Assam. In order to further enhance production activities in the said area OIL proposes to drill additional 167 wells along with construction of production facilities covering Dibrugarh, Chabua, Tinsukia, Hugrijan, Naharkatiya Etxtn, Dholiya and Dumduma PMLs under Dibrugarh district of Assam. Total area of the TKD area is 828 sq. km. In the event of successful completion of drilling of the additional wells, it is expected to further augment the production of crude oil from the area by around 0.50 million metric ton (MMT) per year.

1.3 OBJECTIVES OF WILDLIFE CONSERVATION PLAN FOR SCHEDULE-I SPECIES

- Carryout baseline ecological study of the TKD area with respect to Schedule-I species.
- To evaluate the impacts of project activities on Schedule-I species in the Block.
- To suggest mitigation measures to minimize impacts of project activities on Schedule-I species.
- To provide the local Forest Department officials / staff with required resources to help implement this plan.

1.4 AREA LOCATION AND ACCESSIBILITY

1.4.1 Area Location

The TKD area is defined by the geographical co-ordinates 94°58'0.00" - 95°15'0.00" N Longitude and 27°15'25.961" - 27°32'34.114" E Latitude and spreads over 828 sq. km and is located in Dibrugarh district of Assam. Geomorphologically most of the area is within

Brahmaputra river plain between the two large river systems *viz.*, the Burhi Dihing towards centre and Brahmaputra River at the North.

Regional Setting map of the TKD Area is presented in Figure 1.1. Location of the proposed wells and associated production facilities on toposheet (nos. 83I14, 83I15, 83M2, 83M3; scale 1:50000) is shown in Figure 1.2

1.4.2 Accessibility

Road: NH 37 is the main road connecting TKD area with rest of Assam. Other important roads within the area include Dibrugarh-Duliajan Road and Naharkatia-Moran. Motorable village roads are available which may require further re-enforcement prior to preparation of well area and carrying out of operational activities. Some of the roads are crossing nallahs, rivulets etc.. which will need construction activity to access the identified drilling locations and to make it suitable for mobilization of drilling rig & its associated service packages.

Railways: Chabua, Dikom and Lahoal railway stations of Northeast Frontier Railway zone of The Indian Railways are located within the TKD area. Dibrugarh is a major station located at a distance of 4 km from TKD area at the western side. Another major raiolway station, Tinsukia Junction Railway station is approximately 10 km from TKD area at the eastern side from the TKD area.

Airport: Dibrugarh Airport will be around 1.5 km from the TKD area at the north eastern side.



Figure 1.1 Regional Setting Map of Tengakhat-Kathaloni-Dikom Area

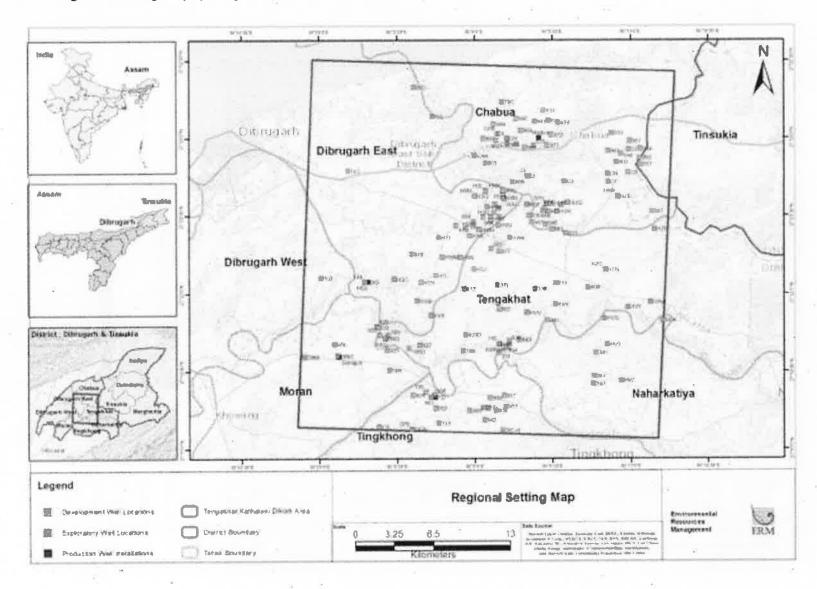
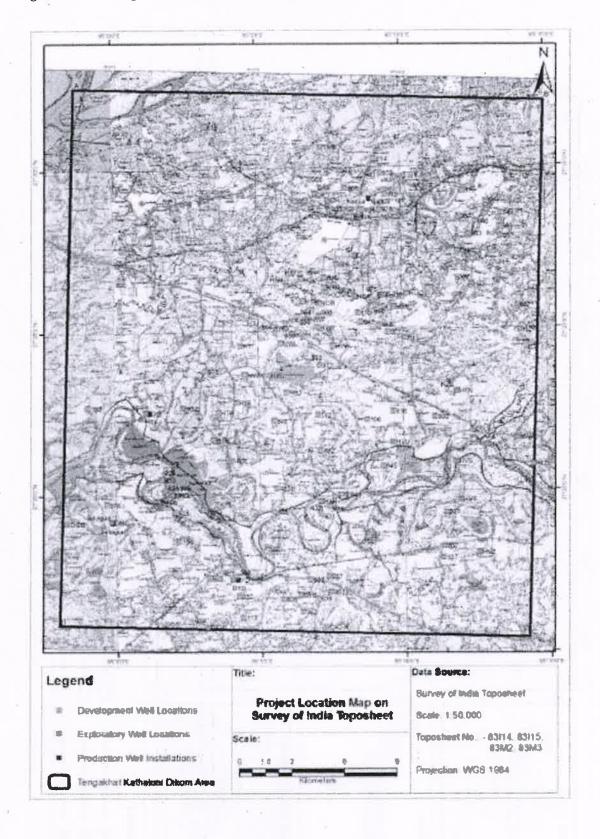


Figure 1.2 Tengakhat-Kathaloni-Dikom Area on Toposheet







1.5 Environmental Settings of the Wells and Production Facility

167 wells to be drilled at the TKD Area and 7 production installation will be installed. The wells are spread across TKD Area in Dibrugarh district. The wells are located in homestead plantation (10 nos.), agricultural land (72 nos.), tea garden site (24 nos.), existing facility of OIL (56 nos) and Riparian vegetation areas (5 nos). The production facilities are located in agricultural land (6 nos) and existing facility of OIL (1 no.). Forest areas within the TKD Area are mostly located at the south-eastern side. Telpani R.F. and Namdang R.F are two reserve forests located within the TKD area. Dibru Saikhowa National Park (DSNP) is located approx. 4 km from the north eastern corner of TKD area. Podumoni section of Bherjan-Borjan-Podumoni Wildlife Sanctuary (BBPWLS) is located approximately 5 km from the north eastern corner of the TKD area.

1.6 PROJECT ACTIVITIES

Site Preparation & Construction Drill site

Site preparation will involve levelling, filling and consolidation of the site for staging equipment and machinery. Individual sites will be duly fenced to a height of about 2 m using jingle wired fencing or Xpm fencing. Preparation and construction of drill site will involve top soil scraping and storage for future use, elevating the site by excavated material from the drill site and material brought from authorized quarry area. Reinforced Cement Concrete (RCC) will be used for the construction of foundation system at drill sites.

Drilling & Testing

The wells will be drilled using a standard land rig or a "Mobile Land Rig" with standard water based drilling fluid treatment system. This rig will be suitable for deep drilling up to the desired depth of 3900 metres as planned for the project.

During drilling operations, a fluid known as drilling fluid (or 'mud') is pumped through the drill string down to the drilling bit and returns between the drill pipe –casing annulus up to surface back into the circulation system after separation of drill cuttings /solids through solids control equipment. Drilling fluid is essential to the operation and helps in controlling down hole pressure, lift soil/rock cuttings to the mud pit, prevent cuttings from settling in the drill pipe, lubricate, cool and clean the drill bit.

Drill cuttings generated will be collected and separated using a solid control system and temporarily stored on-site in HDPE lined pits. Drilling and wash wastewater generated will also be stored at an onsite HDPE lined pit. The water will be adequately treated in a mobile ETP and reused.

Between drilling operations for different zones, logging operations will be undertaken to provide information on the potential type and quantities of hydrocarbons present in the target formations.



Well Site decommissioning

On completion of activities, the wells will be either plugged and connected with flow lines or suspended. In the event of a decision to suspend the well, it will be filled with a brine solution containing very small quantities of inhibitors to protect the well. After the activities, the well will be sealed with a series of cement plugs, all the wellhead equipment will be removed leaving the surface clear of any debris and site will be restored. Abandoned well sites will be reinstated and revegetated as necessary.

Production Installations

Seven production facilities are planned to be established within the TKD Area. The production installation may include Oil Collection System (OCS), Gas Compressor Station (GCS), Field Group Gathering Station (FGGS) or Early Production System (EPS). The production facilities are located in agricultural land (6 nos) and existing facility of OIL (1 no.). The land required for each facility will range from 4 ha to 7 ha.

1.7 UTILITIES AND RESOURCE REQUIREMENTS

Power: The power requirement for each drill site construction will be met through the 100 KW DG Set. During drilling, two DG sets of 1000 KW capacities, will be used to meet the power requirement for drilling, 200 KW DG Set will facilitate lighting and other power requirements at drill sites Power requirement for the production installations will be met through Gas Generator (GG) sets of 216 KW capacity.

Water: During the drilling operations, water requirement at a drill site is expected to be 50 m³ per day. The water requirement at the drilling sites during construction and drilling phase will be met groundwater after obtaining necessary permission. For production facility approximately, 5 m³ per day water will be required for construction and 3 m³ per day for workers during construction phase. Approximately 20 m³ per day water is required during the operation of the production installations. The water requirement will be met groundwater after obtaining necessary permission.

Manpower: The drilling rig will be operated by approximately 50 persons on the rig at any particular time. The manpower will operate in two shifts with continuous operations on the rig. This will include technical experts (including expats), who will be responsible for various drilling related activities and some local workers who will be hired from nearby villages for the entire duration of the Project. Production facility are operated in three shifts with approximately 10 persons operating per shift.

1.8 POLLUTION SOURCES

Air emissions: Point source air emissions will be generated from DG sets. Fugitive
emissions will occur from vehicles involved in the drilling operations and from

windblown dust from storage and staging areas within the drill site and production facility.

- Noise & Vibrations: Noise and vibration will be generated due to operation of drilling rig,
 DG/GG sets and vehicles.
- Liquid wastes: During the drilling phase, wastewater will be generated as a result of rig wash and dewatering of spent mud and washing of drill cuttings. The wastewater will be treated in an Effluent Treatment System (ETP) at site. The treated water would be reused. Domestic wastewater will be generated from the drill sites would be treated in septic tanks and soak pits. In production facility produced formation water will be disposed to the shallow wells after necessary treatment; surface Runoff after treatment through Oil Water Separator (OWS) and sedimentation tank will be discharge to natural drains.
- Drill cuttings & spent mud: Approximately 350-400 m³ of drill cuttings and 900-1200 m³ of spent mud will be generated per site. Drill cuttings and spent mud will be disposed off in a well-designed pit lined with impervious liner located on site.

1.9 EMBEDDED (IN-BUILT) CONTROL MEASURES

Following embedded/In-built pollution control measures will be employed by OIL as part of their project operations.

Air Quality Impacts

- Vehicle, equipment and machinery used for drilling would conform to applicable emission norms;
- Drilling chemical and materials would be stored in covered areas to prevent fugitive emissions;
- DG/GG set stacks would have adequate height, as per statutory requirements, to be able to adequately disperse exhaust gases; and
- Flare stacks of adequate height would be provided.

Soil Quality Impacts

- Construction waste generated from the drill sites/production facility will be utilized for backfilling within the site itself;
- Municipal solid wastes generated from the labour camp and construction sites will be transferred to the disposal site at Dibrugarh in consultation with authority;
- Dedicated paved storage area will be identified for the drilling chemicals, fuel, lubricants and oils within the drill sites;
- Paved storage areas will be provided for storage of oils, lubricants at the production facility;
- HDPE lined pits will be considered for the disposal of unusable drilling mud cuttings.

Noise Quality Impacts

 All vehicle and equipment involved in site development and drilling activity will be provided with noise control measures;

WILDLIFE CONSERVATION PLANT TENCAPULAT VATILLA COLL DISCOLUTION

- Well maintained equipment and vehicles will be used;
- All DG/GG sets would be provided with acoustic enclosures; and
- Appropriate PPEs (e.g. ear plugs) will be used for by workers while working near high noise generating equipment.

Water Quality Impacts

- Septic tanks and soak pits will be in place at drill sites for treatment of the domestic black water;
- Process wastewater would be treated in Effluent Treatment Plant (ETP) at drill sites and
- Impervious storage area to be provided especially for fuel & lubricant, chemical, hazardous waste etc.
- The drill cutting along with spent mud will be stored in HDPE lined pit within drill sites.

PROJECT TIMELINE 1.10

Drilling of each well location is expected to take three to four months. After development phase, the wells if converted to production wells will continue till the life of the well. Construction of production facility will require approximately 2 years. The production facility would be permanent. The overall timeline for developmental drilling, construction of production facility and pipelines would be conducted within 7 years.

PROJECT COST 1.11

Cost of drilling of each well would be approximate INR 30-35 crores.



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NORTH EAST ____

Student body threatens to resume agitation

fribal Students Union, Ma-nipur (ATSUM) today warned that it would resume us suspended agitation from April 24 as the Regional In-stitute of Medical Sciences (RIMS) authorities have mled to fulfil the terms of the tripartite agreement signed among the ATSUM, RIMS, and the Manipur Govern-

cellation of the RIMS notice on declaration of the results for LDC posts, fresh an-nouncement of LDC posts with three per cent reserva-tion for SCs. 34 per cent res-

Publishing Date

Janasanyog/C/1117/23

NO BKC 2/2023/180

Tender Download

Pre-Bid Meeting Date

Bid Submission Date

Technical Bid Opening Date (Part-1)

Price Bid Opening Date To be announced

Period of

2 (Iwo)

Basundhara 2.0 applications

Janasanyog/D/703/23

ervation for STs, and 13 per cent quota for OBCs within a week's time, and adherence to the rules and DoPT guidelines in recruitment to all

al student body of Manipur, a joint meeting of the ATSUM, its subordinate bodies, and federating units was held on April 17 to discuss the issue.

reporting agreement by the RIMS authorities", resolved to resume the suspended agitation from April 24, demanding action against the erring RIMS authorities and implementation of the agreed

CORRIGENDUM

It is for information to all concerned that due to technical problem the schedule tender dates of the tender of "Construction of Ground floor with provision for three stoned RCC Building (Forest Guard/Game Watcher/Grade-IV Quarter and other quarter) under CAMPA APO 2021-22 all Johnst Range Office Campus, Johnst issued vide Notice No. 53 Dated 04 04 2023 Johnst is hereby modified as follows.

19/04/2023

20/04/2023

28/04/2023

WALK-IN-INTERVIEW

In pursuance of Director of Land Records & Survey etc., Assam, Letter No. DLR-11015[11]/10/2023 ACC/4 Dated/29.03.2023 & teller No. ECF No. 230440 Dated-204-2023 and as directed by Deputy Commissioner, Golaphar regarding hiring of Field Assistant for Implementation of the Mission Basundhara 2.0; interested and eligible candidates are hereby invited to attend for a "Walk-in-Interview" for the

Remuneration

Rs. 13048.00

wing posts under Bokakhat Revenue Circle In the District of Golaghat

Venue/Date of Interview: Walk-in-Interview cum Computer Test will be held on 21,04 2023 From 10,00 A.M. to 12,00 Noon in the Mandel Barrack, opposite Office of the Circle Officer, Bokakhat Revenue Circle The candidates are asked to bring

Original Certificates for verilication No candidates will be entertained after 12.00 Noon.

Terms & Conditions:

1. The age of the candidates should be minimum 18 years as on 01,01,2023 and shall not be more than 40 years on that day.

2. Candidates without Computer knowledge need not apply.

3. The engagement is purely on contractual basis and will not claim for permanent absorption or acquire any right for regular employment in Govt. Services.

4. Preference will be given to candidates of the respective Circle Judicional area.

Duttes and responsibilities:

To assist the jurisdictional Lot Mandals in field for one-landing of Mission

To assist the jurisdictional Lot Mandals in field for geo-lagging of Mission

3. ID proof & Address proof

NOTICE INVITING TENDERS

lender (NIT) Reference No. JDTB/NTEP/IGRA/23-24/MRG/01 Notice Inviting Tender for engaging Agency Diagnostic Laboratory for providing services or TB Interferon Gamma Revease Assay (IGRA)testing under National Tuberculous Elimination Programme (NTEP) program at District TB Office, Marigaon district of Assam.

The proposed project aims to promote prevention of Latent TB Infection amongst th

contacts of TB patients by increasing access to IGRA lesting services as well as Preventive therapy. The project will undertake counselling of contacts of TB patients to generate awareness around Latert TB and support them in accessing the required services as early as possible and

ollowing them up till end of treatment. This intervention aligns with India's move towards Elimination

The proposal shall include per sample quote for providing the following service package as 1.1 IGRA lesting through currently NTEP endorsed test. The agency shall procure the

lesting kits as per estimated load (Number of bactenologically confirmed pulmonary TB patients or (pulmonary TB patient) X (average lamily size-1) in concerned geography)

1.2 Collection of blood samples from the residence of beneficiaries household contacts 12 Collection or blood samples on the research to be indicate its blood to be supported by the collection of age, adolescents, and adults) of bacteriologically confirmed pulmonary TB pallents/ pulmonary TB

instruction given for sample collection.

1.4 The agency shall deploy trained HR for counselling, sample collection, packaging

1.5 The person going for blood collection should be Iralned in NTEP PMTPT guidelines

1.6 Testing of samples at the assigned laboratory using the Gol endorsed tests

ne self-learning module and verified by certificate or physical training imparted by

storage and transport of the sample to empanelled laboratory

NTEP) for provioing quality counselling

ications,

1. H.S.L.C.& H.S. Passed certificate, Mark sheet etc.

2. Computer Certificate/Diploma etc.

School closure in West Garo Hills dist due to heat

TURA, April 18: Educational institutions in West Garo Hills, including primary, middle, secondary and higher secondary schools, have been directed to remain closed from April 19 to 21 in view of vailing in the region.

An order in this regard as passed by West Garo Hills Deputy Commission-er Jagadish Chelani today, All school activities will remain suspended during this period. However, evening and

empted from the order.

Start time | End Date | End Time

10 00 AM 19/05/2023 02:00 PM

01:00 PM 20/05/2023 02:00 PM

Stil- Divisional Forest Officer Jornal Division, Jornal.

Qualification

Minimum H.S. Passed with Computer Knowledge

Sd/- Circle Officer

Bokakhat Rev. Circle

22 Nos

26/04/2023 02:00 PM

12 00 PM

Fresh influx of Myanmar nationals into Mizoram

CORRESPONDENT

AIZAWL, April 18: Fresh influx of refugees from My-anmar has been reported from the border Champhai district, especially East Tuipui Assembly constituency. of Mizoram, leaders of the village-level committees on Myanmac refugees (VLC-MR) said today.

VLCMR secretary T Latrindika said that 820 new refugees have entered Farkawn village. A leader of the Young Mizo Association (YMA) branch in the adjoining Vaphai village said that about 30 people have newly entered the village from the Chin state of Myanmar.

"We have a total of 1.812 we have a total of 1,812 refugees taking shelter at Farkawn village," Lalrindika said over phone from Farkawn. These refugees originally hail from Halkha and Thantlang towns, and Tlangpui, Farrawn and Tlanglo villages, he added.

Farkawn is situated near the Mizoram-Myanmar bor-der river Tiau, and Camp Victoria, the military headal Army (CNA), is barely 7 km away from the river.

Leaders of Myanmar's border villages said that more refugees might flee the Chin state and take shelter in Mizoram in view of the intensified civil war in Myanmar. Intensified civil war be-

tween the Myanmar army, known as Tatmadaw, and the ethnic insurgent groups and local civilian resistance forces in the Chin state has triggered the fresh influx of refugees into Mizoram.

Frequent ambush of the Tatmadaw patrol parties by the cadres of militant groups and local civilian militia, mainly Chin Defence Force (CDF) and retaliation by the Myanmar army in the form of aerial bombardment, and use of artillery on civilian settlements have made peo-ple flee towns and villages in the neighbouring country.

The Radio Free Asia has reported that 40 houses were putted at Hoiarlawnthar hamlet within Halkha town, the headquar-ters of Chin state on Satur-

day, leading to exodus of people. Haikha town was bornbarded by Myanmar army planes on April 12 and 13.

Meanwhile, following the fresh entry of refugees from the Chin state, the central committees of the Young Mizo Association (YMA) and the Zo Reunification Organisation (ZoRO) have sent materials for construction of makeshift shelters in the border areas, especially in the southern part of Champhai district.

Mizoram has been provid-ing shelter to over 31,000 refugees from Myaomar following the military coup in that

country in February, 2021. The civilian Myanmar gov ernment in exile. the National Unity Government (NUG), called the Spring Revolution in September 2021 to oust the military junta headed by Min Aung Hlaing.

Aung San Suu Kyi's National League for Democracy (NLD) and its allies. It also enkys the support of ethnic armed or-ganisations active in almost all the states of Myanmar.

Minister Nemcha Kipger said that Hun is a major festi-vals of the Thadou commu-nity. During the festival, the Thadou community offers prayers for a fruitful year ahead, the added.

IN THE COURT OF CIVIL
JUGGE NO.2, KASHRUP AT.
GUWAHATI
(Under Order 5 Rules 1 & 5 of
Civil Procedure Code)
Bummary Suit Case No.12/2022
ICICI Bank Ltd. Plaintiff
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Mr. N. Amarik Sienhe

N.P. A Amargit Singha — Defendant

R. Hamariti Singha Siber Hamariti Singha

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UDP candidate files papers for Sohiong bypoll

STAFF CORRESPONDENT

SHILLONG, April 18; United Democratic Party (UDP) candidate Synshar Lyngdoli today filed his nomination before the Returning Officer here for the Sultiong bypoll, scheduled on May 10.

The UDP candidate is the nephew of former Home Minister HDR Lyngdoh who passed away while cam-paigning during the Assembly elections held in February this year. Following his demise, the election to the

Sohiong seat was adjourned.
Meanwhile, Synshar Lyngdoh today said that his uncle was a "legend". He added said that the sudden death of his uncle was a big loss for

the people of the State and the constituency

"I am his replacement to carry forward his legacy. Synshar Lyngdoh said.

Earlier, a huge entourage followed Synshar to the DC's office here. The UDP supporters sang and danced, and shouted slogans carrying the party flag. Several senior UDP leaders accompanied Synshar during the filing of his nomination papers.
The last date of filing nom-

inations for the by-election is April 20 and the date of scrutiny is April 21. The last date for withdrawal of nomination papers is April 24. The counting of votes will take place on May 13.

Research & Development Section Indian Institute of Technology Guwahati Guwahati-781039, Assam

Walk-in interview for various positions under some sponsored projects in the Department BSBE.IIT Guwahati. For detailed advertisements may please riall https://www.iitg.ac.in/iitg_recruitment

GAUHATI UNIVERSITY

ADVERTISEMENT NO.: 1/2023/01

ONLINE applications are reflect from adopting camedidates in teaching positions for amount Department Last date of subONLINE application in 13 05 2072 (11.50 P.M.)

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Details if the succession, mode and nature of payment of approach and other stems and conditions will be available in the University many authority 55.5. 5d/- Registrar, Q.U

ASSAM POWER GENERATION CORPORATION LIMITED

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Bid end date: 11.00 hours of 09-05-8023
Bid opening date: 15.00 hours of 09-05-8023
Further details will be made available on the website www.abgst.long
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ppointment of Assistant Vice President / Investment Principal / Senior Investment Associate / Investment Associate

SDBI Venture Capital Limited (SVCL), a wholly owned subsidiary of Smoothships Development Bank of India (SIDBI) invites application from eligible of suitable candidates for the following posts initially at Gowahali and I

Assistant Vice President / Investment Precipal
 Senior Investment Associate / Investment Associate

Selnot Investrent Associate / Investment Associate / Ero details, places visit our webbite annual Mahkentinescella Applications must reach SVCL on email rescultante (Earlightenthessoc) in or by post is office address by May 9, 2022. Modification / Corrigordum, V any will be issued only on SVCL is website.





Pro-Uningen - revoce, assem, mose, pre-Little Assemble Change The Ministry of Environment, Forest and Clinate Change (MoEFSCC) has accorded Environmental Clearance for Onshore Oil & Gas development drilling and production against the proposal No IA/ASIND/2/212739/2007

proposal no inframinate sci sassour. The copy of Environmental Cleanance, F. No. J-11011/1257/2007. IA it (f) dated 17 04 2023 is areliable for reference with Pollution Control Board Assam (PCBA) and may also be seen at the website of MoEFACC at https://psr/vesh.nlc.ln/

The Minustry of Environment, Forest and Climate Change (MoEF&CC), QOI has accorded Environmental Clearance for the said project under the provisions of EIA Notification 2006 - Nodel Officer EC/FC/NBWL, Oil India Limited.

DR. B. BOROOAH CANCER INSTITUTE

NEWMAI NEWS

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O.O No: 58

Group C and D posts.
According to the apex trib-

The meeting, "irked by the deliberate breach of the

terms of the signed pact.

CORRESPONDENT

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night schools have been ex-

The NUG is supported by

Manipur celebrates Thadou fest



CORRESPONDENT

IMPHAL, April 18: The two-day Hun Thadou Cultur-al Festival has got under way in Kangpokpi district. Manipur Chief Minister N

Biren Singh, addressing the gathering during inaugura-tion of the festival, called for preservation of indigenous identities and establishment of a drug-free society. Commerce and Industries

Arunachal Guv hails BRO work

CORRESPONDENT

ITANAGAR, April 18: Arunachal Pradesh Gover-nor Lt General KT Parnaik (retd) today said that the Border Roads Organization (BRO) has become one of the most valued partners in the development of the fron-

er State.

He praised the BRO for its contributions towards proriding road connectivity in Arunachal Pradesh, Parnaik stated that BRO roads connect villages, towns, and peo-ple, and that credit for the

prosperity of the region goes to the BRO to a great extent. Flagging off the 'Ekta Evam Shradhanjali Abhiyan' motorcycle rally from the Rai Bhavan helipad here, the Governor called upon the BRO to lend a hand to the State Government in its Vi-brant Villages Programme to develop remote villages lo-cated along the international

border. The rally is being conducted by the BRO to com-memorate the sacrifices and contributions of BRO karmyogis in nation building as well as to mark its 64th

raising day.

Earlier, BRO Project Arunank Chief Engineer Brig
Yogesh Nair briefed the Governor on the motores cle rally. Senior Army, ITBP and police officers were present on the occasion along with NCC cadets.

WEATHER NorthEast

Forecast for NE: Light rain is very likely to occur at isolated places over Aurachal Pradosh, Assam, Meghalaya, Nagaland, Manpur, Mizoram and Tripura. Maximum temperature very kilely to be 1-91°C above normal over Assam, Meghalaya, Nagaland, Manpur, Mizoram and Tripura.

Warning: Thunderstorm with lightning is very likely to occur at isolated places over Arunachal Pradesh, Assam and

Tezpur | Silchar | Max Min | 33.6 24.5 | 35.2 22.1 Dibrugarh

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of the same ST4 HOURS धवावाणी : मार निग्र गैन, ১৮ d allel sales अधिन । सम्बद्ध गाँउक सम्बद्ध त्रा हेल मधी क क्रतवाद्व পৰিবর্তনৰ ফলত দেশৰ তেইবাখনো বাজ। यहासीड बीच बतास करनार भीतः। व्यक्तितिस्य सम्बन्धः ৰ্মত প্ৰবাহৰ পৰা সুৰক্ষিত হৈ লাহে যদিও বাজাখনত व्यक्तिसम्बद्ध ss finister

চলিত বৰ্ষত দ্বতিনেতা m মকালৈ ৰাজ্যৰ া ৬,৩০০ হজযাত্রী

তা প্রকান কর গেন্ডে আমারি ভিক্তমান হ ইয়ত বিপাটার, ১৮ विधिन : धटिनश्वन महत्व नद्गा क्षेत्र এইবছনো পবিত্র হজন্রত বানাদ উদ্দেশ্যে ডিব্ৰুগড় জিলাৰ পৰা মুঠ ৭৯গনাকী পুৰুষ মহিলা মকা-মদিনালৈ হজরত কবাৰ উদ্দেশ্যে বাওনা হ'ব। ইতিমধ্যে ২০২০ চনৰ হজবারীয়ে প্রথম কিন্তি হিচাপে as Ridde

মথুৰাপুৰত চলন্ত বাছত মৃত অৱস্থাত উদ্ধাৰ যাত্ৰী

स्मामानि : मिक्स शक्तिमक, ३४-विकार कार्येटका किया । स्थान कार्याच्या अध्यानी साथ যাত্ৰী আদি পুৰাৰ ভাগত মৃত অবস্থাত উদ্ধান হোৱা গটনাই চাঞ্চলাৰ সৃষ্টি কৰিছে। খান্ত তথ্য মতে, শিবদাগৰৰ ১১ শিক্টিৰ



দাবী তৃণমূল কংগ্ৰেছ অসমৰ

ওবাহাটী ঃ স্কাফ বিপাটাব, ১৮ এখিল : পুলবামা আৰু দুৰ্নীতি সন্দৰ্ভত অসু আৰু কাশীৰৰ পুনৰ বাজাপাল

গুৱাহাটীত অপহৃত দুই ব্যৱসায়ীক উদ্ধাৰ

আহ্মেদে দাবা কৰিছিল ১০ লাখ টকা নৃক্তিপণ ওবাহাটা ঃ স্তাঞ্চ বিদ্যাল, ১৮ এপ্রিল : অপবাদাৰ ৰমা হুমিত পৰিণত হৈছে ওৱাহাটা। অপৰাধক্ৰমিত ঘটনা বোধ কৰাৰ বাবে আৰক্ষীয়ে ন'ন ক্ষেত্ৰৰ প্ৰধাৰ भव्यां हे बहेबान वापटनपदानी(स वापदांड स्मादंड চনাহাটীতেওঁ আৰুদ্ৰ কৰি ৰখাৰ তথ্য পোচৰলৈ আভিছে। टाइका जामिन मुक्ति नद्य, छानि किन सनि क्रवाडाही द अभइनम्मनीन क्रवलंड शक्तिल डिमालनन मुक्ता नानभागी। हाटीपछि भागान भना

ব্যজোৰা বক্তৃতামালা

এশটা বক্তৃতা প্ৰদানৰ বাবে 'কটন'লৈ আমন্ত্ৰিত দিগন্ত বিশ্ব শৰ্মা

ইতিপূৰ্বে অসম বিশ্ববিঃ আই আই টি ওৱাহাটীতো **अमार्मना**नि वक्ठा श्रमान কৰিছে শৰ্মাই



ওৰাহাটী ঃ মাফ বিপাটাৰ ১৮ এপ্ৰিল কলৈ বিশ্ববিদ্যালয়ে মানসিক সাস্থা ৯০**৫** राहित्वन मन्तुनशा दिशा । ५००० বহুতাৰ এব বন্ধতামালা ভদান কৰিবলৈ STAND BURGE CHANGE SHOWS STA প্রভা বিশ্বর বিশ্ব শতাক। উল্লেখ্যানা য়ে বিশ্ববিদ্যালয়সমূহৰ পৈতিত যাত্ৰাত धक सद्भ देशिकामान मृष्टि । ३३ निर्वास

ৰাজ্যত শ্বহীদ দয়াল দাস পানিকা স্ব-নিয়োজিত আঁচনি ৰূপায়ণত অনিয়ম

অযোগ্য হিতাধিকাৰীৰ নাম কৰ্তন, তদন্ত দাবী আছাৰ 🔳 কোকৰাঝাৰত চাহ জনগোষ্ঠীৰ শিক্ষাৰ্থীৰ প্ৰতিবাদ খোৱাং আৰু টংলাৰ নিজা প্ৰতিবেদক, ১৮ এপ্ৰিল :

আদিবাসী চাহ শ্রমিক শিক্ষিত যুবক-যুবতীসকলক সংস্থাপিত কৰাৰ উদ্দেশ্যে অসম চৰকাৰে প্ৰতি বছৰে শ্বহীদ দয়াল দাস পানিকা' স্ব-নিয়োজন নামেৰে এখন আঁচনিৰ জৰিয়তে ২৫,০০০ টকাকৈ এককালীন সাহায্য আগবঢ়াই আহিছে। এই স্থ-নিয়োজন আঁচনিৰ ধন কেইদিনমান আগতে নিৰ্বাচিত হোৱা হিতাধিকাৰীৰ একাউণ্টত জমা হৈছে। কিন্তু, এই আঁচনিত হিতাধিকাৰী নিৰ্বাচিত কৰাত ব্যাপক অনিয়ম আৰু দুনীতি হোৱা দেখা গৈছে। কিছু কিছু জিলাৰ হিতাধিকাৰী বাছনি কৰোঁতে টকাৰ লেনদেন হোৱাৰ কথাও সদৌ অসম



অবৈধ সম্পর্কই কাল হ'ল নেকি তেজপুৰৰ কেকে কৰ্মচাৰী মনীয়াৰ ১ প্রাক্তন প্রেমিক দেৱাশিসসহ দুজনক মাৰাথন জেৰা

ডিঙি চেপি হত্যা কৰাৰ সন্দেহ তেজপুৰ ঃ হিপেত প্ৰতিনিধি, ১৮ এপ্ৰিল ঃ হেজপুৰৰ মাজমভিয়াছিত

উৰানাৰত যোৱা ১৪ এচিখৰ নিশা সাম্ভিত মনীবা বড়েগৰ হত্তাক ওৰ হল অভিযুক্ত দেৱাৰিস কৰ অৱশ্ৰেষত অপজ্ঞাৰ ৯০৮৫ পৰিল। উক্লেখনোণ্য যে স্থানীয় পঞ্জাব দেশায়েল বোকৰ কৰ্মচাৰী ক্ৰীয়া হলোকাতৰ পাছতে তেজপুৰৰ সমীপৰ চেলাম্বৰ ্ল নিক্ষী দেৱসির হন নামে প্রাক্তন ক্রেমিকজন করাওক হৈ আছিল। তেরপুর বয়বীগাত মার্ল্যা গুরীর মন্তর্গত :: প্রাধিত

ভেঞ্চাৰ স্কুলত মধ্যাহ্ন ভোজন অব্যাহত ৰাখিবলৈ কেন্দ্ৰৰে যোগাযোগ কৰিব শিক্ষা মন্ত্ৰীয়ে

সেও মানিবলৈ বাধা হ'ল ৰাজা চৰকাৰ,

ওবাহাটী। মাত বিশামীৰ ১৮ এখিল: পূৰ্বৰ দৰে তেকাৰ সংকাৰে সিদ্ধান্ত সলনি কৰিবলৈ বাধা হৈ পৰিত। ত্তনৰ শিক্ষাৰ্থীয়ে লাভ কৰিব মধ্যাহ জোঞ্চন। পি এম পোষণৰ অধীনত মধ্যাহে ভোজন লাভ কৰা স্কুলৰ হাদিকাৰ পৰা ভেজাৰ স্কুলক বাদ দিবলৈ সমগ্ৰ পিজাৰ নিচন সঞ্চালকে নিৰ্মেণ ভাবি কৰিছিল যদিও বিষয়টোক

আদিবাসী ছাত্র সন্থাই অভিযোগ উত্থাপন

উল্লেখযোগ্য যে মধ্যাক্ তোজনৰ পৰা তেখাৰ খুলত বাদ দিয়াৰ প্ৰতেতী পৰ্যায়ত বিনামুলীয়া পাঠাপুথি, ইউনিফর্ম যোগানো যদ্ধ কৰি ভেগাৰ ঝুল বদ্ধ কৰিবলৈ বাধ্য কৰোৱা বা প্ৰাইভেট ফুললৈ নাপাওঁৰ কৰাৰ প্ৰতিয়া লৈ তাঁৱ প্ৰতিজ্ঞিনা সৃষ্টি হোৱাৰ পাছত অৱশেষত ৰাজ্য ৰাজ্যৰ দিক্ষা বিভাগে আৰম্ভ কৰা বুলি

আজি মৰাণসকলৰ গৰু বিভ ঠায়ে ঠায়ে ধর্ম হুঁচৰি-ৰাতি বিহুৰ আয়োজন

মনোৰঞ্জন মৰাল ঃ তিনিচুকীয়া, ১৮ এপ্ৰিল ঃ স্থাচতি ঐ চ ত/বিচতি ঐ চ'ত/বুধে বিৰচতি/মঞ্জল উৰুকা/বিশ্ব সৈ আছিলি ক'ও। এনে ঐতিহাসিত পৰস্পৰাৰে অসমৰ আদিম ভূমিপুত্ৰ মৰাণসকলৰ কৃষি ভিত্তিক উৎসৱ বিচ আৰম্ভ देहरू। डीइपिक ध्वरम विष आस्ताङम कवान मीडि-नियम থকা মধাণসকলৰ আজি বিচৰ উৰকা। কাইলৈ গৰু বিষ উদযাপন কৰিব। মৰাণ বিহু উপলক্ষে উঞ্চলি অসমৰ মৰাণ প্রধান অঞ্চলসমূহত, গাঁওসমূহত উচাহে

ऑयल इंडिया लिमिट्रेड Oil India Limited

100000 No WASHNDED127352007

The copy of Environmental Clearance, F. No. J-11011/1257/2007-(A II (I) dated 17 04 2023 is available for reference with Poliuto Control Board Assam (PCBA) and may also be seen at the website of MoEF&CC at https://paricesh.nic.in/

The Ministry of Environment Forest and Climate Change (MoEFACC), GOI has accorded Environmental Clearance for said project under the provisions of EIA Notification, 2006.

- Nodal Officer EC/FC/NBWL, Oil India Limited

ঠেঙাল কছাৰী স্বায়ত্তশাসিত পৰিষদৰ অচলাবস্থা

নিৰ্দেশত তৎপৰ সাংসদ তপন গগৈ

বিসন্ধাদী সদস্যৰ পৃথকে পৃথকে সাক্ষাৎ ল লৈ ফণী শৰ্মাই

প্ৰতাপ কছাৰী হটাও অভিযানত নাচোৰবান্দা ক্ষুব্ধ সদস্য

ভিতাৰৰ : নিজা প্ৰতিবেদক, ১৮ এপ্ৰিল : ক্ষমতাকেন্দ্ৰিক সংখাতে তীব্ৰ ৰূপ ধানদকৰা ঠেন্ডান কছাৰী স্বায়ন্তশাসিত পৰিষদৰ অচলাতস্থাই অস্থিপ কৰা পৰিবদক গতি প্ৰদান কৰাত তংগৰতা আৰম্ভ কৰিছে ৰাজ্য চনকাৰে। বিজেপি আৰু অসম গুল প্ৰিয়ন দলৰ সন্মিলিত শাসন থকা চিনাম্বাত লোমহর্যক ঘটনা

পিতৃয়ে চোকা অস্ত্ৰৰে ঘপিয়াই গুৰুতৰভাৱে আহত কাৰলে কন্যাক

মোৰচাটঃ ট্রাফ বিশ্বটাব, ১৮ এপ্রিল: যোৰচাটৰ উপকা চিনামণাও আমি

म्(नाम्धनम (महिसमा महाम रेल प्रिक्तिया उने(जान कहक (कदान







ANNEXURE - A

ENVIRONMENT MANAGEMENT CELL OF OIL INDIA LIMITED - FHQ, DULIAJAN

No	NAME	DESIGNATION	QUALIFICATION			
1.	Sri. Rupam Jyoti Sutradhar	Deputy General Manager (HSE)	B.Sc (Chemistry), M.Sc (Chemistry)			
2.	Sri. Swapnanil Kakaty	Deputy Chief Engineer (HSE)	B.E (Electrical Engineering)			
3.	Sri. Sachin Kumar Verma	Superintending Engineer (HSE)	B.Tech (Environmental Engineering)			
4.	Sri. Akash Neel Das	Superintending Engineer (HSE)	B.E (Mechanical Engineering), PG Diploma (Fire & Safety Management), PGDM			
5.	Sri. Bantupalli Sai Venkatesh	Superintending Engineer (HSE)	B.E (Civil Engineering), M.Tech (Environmental Engineering)			





Common Environment Management Plan for Onshore Oil & Gas Drilling Activity



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1.0 INTRODUCTION:

OIL INDIA LIMITED (OIL), a Government of India Maharatna Enterprise, is currently engaged in carrying out hydrocarbon exploration and production activities mostly in its operational areas in Upper Assam, Arunachal Pradesh and Mizoram in the North Eastern part of India. OIL is also undertaking hydrocarbon exploration activities in few Indian states and few overseas countries. Oil India Limited was incorporated on 18th February 1959 to expand and develop the newly discovered oil fields of Naharkatia and Moran in the Indian North East. In 1961, it became a joint venture company between the Indian Government and Burmah Oil Company Limited, UK. In 1981, OIL became a wholly owned Government of India enterprise. Today, OIL is a premier Indian National Oil Company engaged in the business of exploration, development and production of crude oil and natural gas, transportation of crude oil and production of LPG.

Govt. of India and Assam has awarded Petroleum Mining Leases (PML) to OIL for exploration and development of oil & gas at Dibrugarh, Chabua, Tinsukia, Hugrujan, Naharkatiya Extn, Dholiya and Dumduma areas including the adjoining areas in Dibrugarh, Tinsukia and Sibsagar Districts.

2.0 Environmental Management Plan

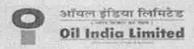
This Environmental Management Plan and Monitoring Framework is a site-specific document for the drilling activities that have been developed to ensure that OIL can implement the project in an environmentally conscious manner and where all contractors, understand the potential environmental risks arising out of the proposed project and take appropriate actions to properly manage such risk.

This EMP will be an overview document that will guide environmental management of all aspects of OIL's activities i.e. construction and operation of drilling wells. This EMP will be backed up by more specific Environmental Action Plans, Procedures and Bridging Documents.

The EMP describes the actions to be adopted in terms of:

- National Policies and Regulations;
- Best Practices and guides; and
- Local Environmental and Social Sensitivities.

The Environment Policy of OIL is presented below.



ENVIRONMENT POLICY

Oil India Limited is guided by its Core purpose of "being a fastest growing energy company with global presence and providing value to all stake holders". Currently as an E&P company, OIL has a pan India presence with overseas foot prints.

In alignment with the core purpose, OIL is deeply committed to the Preservation of Environment & Ecology, Sustainable Development, Enrichment of the quality of life of Employees, Customers and the Community around its operational areas.

In pursuance of the above mentioned policy OIL is committed to:

- 1. Ensure an environment friendly work place in all our operations.
- 2. Comply with relevant Environmental Laws and Regulations in OIL's operations, prescribed by the statutory bodies...
- 3. Follow a systemic approach to Environmental Management Plan in order to achieve continual performance improvement.
- 4. Adopt technologies that conserve energy, prevent pollution, maximize recycling, reduce wastes, discharge and emissions.
- 5. Develop green belts and plant trees in and around OIL's operational areas in harmony with nature.
- 6. Protect aesthetic, cultural, social patterns and historical characteristics in and around OIL's operational areas.
- 7. Promote a culture among OIL employees, contractors and all the stake holders associated with OIL for shared responsibility towards environmental protection.

8. Promote and nurture a healthy, safe & productive environment in its area of operations

be a

DIRECTOR (OPERATIONS)

Effective Date: 25th April, 2012

Approved in the 420th Board Meeting

3.0 IMPACT ASSESSMENT

The potential impacts arising due to the construction and operation of the drilling activities are given below:

- **3.1 Air Quality:** The operation of DG/GG sets, movement of vehicles and machineries during construction and drilling at drill sites will result in the generation of air pollutants viz. PM, NOx and SOx that may affect the ambient air quality temporarily. Air pollutants like particulate matter, hydrocarbons and NOx will also be generated during drilling operations.
- **3.2 Noise Quality:** Operation of heavy machinery/equipments and vehicular movement during site preparatory and road strengthening/construction activities may result in the generation of increased noise levels. Operational phase noise impacts are anticipated from therunning of drilling rig and ancillary equipment *viz.* shale shakers, mud pumps and diesel generators, gas generators.
- <u>3.3 Soil Quality:</u> Stripping of top soil will affect the soil fertility of the well sites temporarily. Potential adverse impacts on soil quality may also result from improper storage and handling of fuel, lubricants, drilling mud and drill cuttings.
- **3.4 Water Quality and Hydrogeology:** All wastewater discharged from the drilling operations will be treated in the ETP and discharges will conform to CPCB standards. As the volume of water to be discharged is small, it is anticipated to cause minor increase in pollution load for specific parameters in receiving water bodies. Uncontrolled surface runoff from the drill sites may compose of waste fluids or storm water mixed with oil and grease and may pollute the surface water quality. However, the surface runoff will be treated with sedimentation tank and oil water separator at site.

3.5 Biological Environment:

The existing vegetation at the proposed drill sites, approach roads and RoU of the pipeline will be felled for site development. Noise generated from drilling operations and vehicular movement within the drill sites and approach roads may affect the reptiles, birds and mammals adversely and may result in their moving away from the project area for a temporary period. OIL will obtain Forest Clearance from MoEF&CC for drilling within the forestlands; all the conditions mentioned in the forest clearance would be complied. Surface runoff from the drill sites contaminated with sediment, may reachsurface water channels and increase the suspended solids load of the channel water. Increaseof suspended solid will increase the turbidity of river water that ultimately will adversely affect the DO level in the water. The turbid water and lower DO may affect the primary productivity of the impacted areas of the rivers. The process effluent will be adequately treated in the ETP to meet the industrial effluent discharge standards. The discharge of treated effluent is not expected to cause perceptible changes in the water quality of the receiving stream.

3.6 Socio-Economic Environment: Approximately 3 ha. land would be required for each well. Land will be purchased from local communities however; no physical displacement during land procurement is anticipated. Additionally, land will also be procured for construction of 100-200 m approach road to the drill site from existing roads. Anticipated number of families directly impacted would be limited to 2-5 nos. for each of the drill sites. The dependency of the landowner in case of generation of livelihood is limited as the land is classified as monocropped agricultural land.

OIL/its contractors would endeavour to provide maximum employment to the local people; however, certain percentage of semi-skilled and highly skilled migrant labour would be used by contractors for manning technical activities. It is anticipated that occasional conflicts would arise with the local community over the recruitment of migrant workers. Discomfort due to dust and noise to adjoining communities, influx of people are likely to occur.

The construction phase of the project is likely to generate both direct and indirect opportunities for employment. The estimated direct employment would be approximately 50 un-skilled workers during the peak construction phase that will primarily sourced from nearby areas. Indirect employment would be primarily in the supply chain as vendors, which are anticipated to be set up to support the construction.

3.7 Impact on Community Health & Safety: Community health and safety of inhabitants residing close to the proposed well sites stand to get affected from frequent heavy vehicular movements along village access roads and due to noise from drilling rig operations, movement of heavy vehicles during construction etc.

4.0 DETAIL ENVIRONMENTAL MANAGEMENT PLAN

4.1 Air Quality Management Plan

- Vehicles delivering raw materials like fine aggregates will be covered to prevent fugitive emissions.
- Sprinkling of water on earthworks, material haulage and transportation routes on a regular basis during construction and decommissioning phase of the wells.
- Flare stacks of adequate height would be provided.
- DG/GG set stacks would have adequate height, as per statutory requirements, to be able to adequately disperse exhaust gases
- Periodic monitoring of DG/GG set stack emission will be carried out in accordance with the Environmental Monitoring Plan to assess compliance with CPCB DG set exhaust standards.

4.2 Noise Management Plan

- Selection and use of low noise generating equipment with in-built engineering controls viz. mufflers, silencers, etc.
- All DG/GG sets would be provided with acoustic enclosures.
- Appropriate PPEs (e.g. ear plugs) will be used for by workers while working near high noise generating equipment.
- All vehicles utilized in transportation of raw materials and personnel will have valid Pollution under Control Certificates (PUC).
- All high noise generating equipment will be identified and subjected to periodic preventive maintenance.
- No night time operation of vehicles and construction activities will be undertaken.



4.3 Soil Quality Management Plan

- Drip trays to be used during vehicular/equipment maintenance and during re-fuelling operations.
- Spill kits will be made available at all fuel and lubricant storage areas. All spills/leaks contained, reported and cleaned up immediately.
- Dedicated paved storage area will be identified for the drilling chemicals, fuel, lubricants and oils within the drill sites.
- 1.5 mm HDPE lined pits will be considered for the disposal of unusable drilling mud cuttings and drilling wastewater etc.

4.4 Surface Water Quality Management Plan

- Levelling and grading operations will be undertaken with minimal disturbance to the existing site contours thereby maintaining the general slope and topographical profile of the site.
- During site preparation and construction, surface water run-off will be channelized through appropriately designed drainage system.
- Sediment filters and oil-water separators will be installed to intercept run-off and remove sediment before it enters water courses.
- Domestic wastewater generated from drill sites will be treated through septic tank and soak pit system and then discharged.
- Process wastewater would be treated in Effluent Treatment Plant (ETP) at drill sites.

4.5 Ground Water Quality Management Plan

- Water based mud would be used as a drilling fluid for the proposed project.
- Eco-friendly synthetic based mud if required for deeper sections, will be used after providing intimation to the Pollution Control Board;
- The drill cutting along with spent mud will be stored in HDPE lined pit.

4.6 Waste Management Plan

- Use of low toxicity chemicals for the preparation of drilling fluid.
- Management of drill cuttings, waste drilling mud, waste oil and domestic waste, wastewater in accordance with Standards for Emission or Discharge of Environmental Pollutants from Oil Drilling and Gas Extraction Industry of CPCB as modified in 2005.
- The hazardous waste (waste and used oil) will be managed in accordance with Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016.
- The kitchen waste will be disposed in nearest municipal/village dumping site on a daily basis through approved waste handling contractors.
- •The sewage generated will be treated through septic tank and soak pit system.
- •Used batteries will be recycled through the vendors supplying lead acid batteries as required under the Batteries (Management & Handling) Rules, 2001.
- The drilling cuttings pit will be bunded and kept covered using tarpaulin sheets during monsoon.

4.7 Wildlife Management Plan

- Movement of heavy vehicles will be restricted at night time, especially if access roads pass though forest areas, as most of the mammals movement occurs during night;
- Noise levels at the drill siteswill be controlled through selection of low noise generating equipment and installation of sufficient engineering controls viz. mufflers, silencers etc.
- No temporary electric supply connection line from the grid will be laid for the proposed project activity. All electric requirements will be supplied from the internal DG sets.
- OIL will have to take Forest Clearance from MoEFCC for development of drill sites, access roads and laying of pipeline within forest areas.

4.8 Road Safety & Traffic Management Plan

- The condition of roads and bridges identified for movement of vehicles and drilling rig will be assessed and if required strengthened by OIL to ensure their safe movement.
- Precautions will be taken by the contractor to avoid damage to the public access routes including highways during vehicular movement.
- Traffic flows will be scheduled wherever practicable during period of increased commuter movement.

4.9 Occupation Health & Safety Management Plan

- All machines to be used in the construction will conform to the relevant Indian Standards (IS) codes, will be kept in good working order, will be regularly inspected and properly maintained as per IS provisions and to the satisfaction of the site Engineer.
- Hazardous and risky areas, installations, materials, safety measures, emergency exits, etc. shall be appropriately marked.

4.10 Management of Social issues and concerns

- People from adjoining areas especially given job preference through local contractors according to the skill sets possessed.
- Prior to the commencement of the proposed activity, a consultation program will be conducted by OIL with the target groups and local authorities. The primary objective of such consultation will be to share with the concerned villagers/stakeholders the objective of the proposed project associated impacts and their mitigation.
- OIL will give more emphasis and priority on periphery development, development of health facilities and provision for drinking water facility as per Corporate Social Responsibility (CSR) Plan.
- The drill sites would be fenced and gates would be constructed so that the children are refrained from straying into the site.



4.11 Emergency Response Plan

- Drilling rig and related equipment to be used for drilling will be conformed to international standards specified for such equipment.
- Blow-out preventers and related well control equipment shall be installed, operated, maintained and tested generally in accordance with internationally recognized standards.
- Appropriate gas and leak detection system will be made available at each of the drill sites.
- Adequate fire-fighting equipment shall be provided at each drilling site.

The environmental mitigation measures and plans are presented in form of a matrix according to the sequential flow of activities in the project life cycle. The matrix focuses on strategies to be adopted for safe guard of the environment from possible impacts resulting out of the project activities. The strategies have further been detailed out as management procedures and programmes in subsequent sections.

The EMP helps establish the linkage between the activities environmental impacts and mitigation measures and presents the monitoring framework i.e. the Environmental Performance Indicator (EPI) No. as well as the Environmental Quality Indicator (EQI).



5.0 Environment Management Matrix

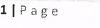
S No	Activity	Ref	Aspect	Impact	Mitigation Measures	Monitoring	Timing/ Frequency	Responsible Party	Related Plans
1.	Physical Presence of drill site, rig and other machinery.	1.1	Change in visual characteristics of the area due to installation of drilling setup		On completion of works (in phases) all temporary structures, surplus materials and wastes will be completely removed. Only structure required for safety purposes would be retained on the bare drill site.	Site Inspection	Construction & Drilling	OIL/Contractor	Waste Management Plan
-80	¥.	1.2	Increase of illumination at night time due to installation of drilling setup	disturbance of the	Appropriate shading of lights to prevent scattering	Grievance records/ Consultation with Villagers	Construction &Drilling	OIL/Contractor	Management o social issues 8 concerns
		1.3	Influx of man power & immigrant labour force to nearby villages		Preference used of local labour forces to the extent possible	Grievance records	Construction & Drilling	OIL/Contractor	Management o social issues 8 concerns
2.	Storage & Handling of Materials & Spoils		Emission of fugitive dust from loading & unloading operation		All loading and unloading activities to be carried out as close as possible to the storage facilities.	Site Inspection	Construction & Drilling	OIL/Contractor	Air Qualit Management
	al a	2.2	Accidental spillage of oil & chemicals	contamination surface water	All spills to be reported and contained to prevent entry of spilled chemicals/fuels to any surface water body or drainage channel	spills/Community	Construction & Drilling	OIL/Contractor	Surface wate quality management plan, Wildlife Management Plan
	31	ll lie	*	Potential impact on soil quality	All spills to be reported and remedial measures to be taken for clean-up of the spill.	Spills/Site	Construction & Drilling	OIL/Contractor	Spill management plan



10 | Page



No	Activity	Ref	Aspect	Impact	Mitigation Measures	Monitoring	Timing/ Frequency	Responsible Party	Related Plans
3.	Transport Materials, Spoils ar Machinery	of 3.1	Emission of gaseou pollutants from vehicl during transportation of materials, spoils an machinery	f air quality alon	n equipment will be regular	ne	te Construction & Drilling		Air Quali Management plan
					Vehicle / equipment a emissions will be controlled by good practice procedure (such as turning of equipment when not in use) Vehicle / equipment exhausts observed emitting significant black smoke in their exhausts will be	es fff ; t g			
	a	3.2	Noise emission during transport of materials, spoils and machinery	deterioration in ambient noise	Undertake preventive maintenance of vehicles and machinery to reduce noise levels.	III	Construction & Drilling	OIL/Contractor	Noise Quality Management Plan
	Operation &				Restriction on unnecessary use of horns by trucks and vehicle in settlement area			8	
. Je	maintenance of rig and associated machinery.		Hom DG/GG sets	on air quality due	Preventive maintenance of DG sets to be undertaken as per manufacturers schedule	Site Inspection/Recor ds of repairs	Drilling	OIL/Contractor	Air Quality Management plan
			DG/GG sets	ncrease of h	All workers working near nigh noise generating equipment to be provided		Drilling		Noise Quality Management





La catalità	Ref	Aspect	Impact	Mitigation Measures	Monitoring	Timing/ Frequency	Responsible Party	Related Plans
Activity	Ket							Occupational -
			work place noise	With the second				Health & Safety
		2	level	equipment			-	Management
								Plan
W 2								
				Preventive maintenance of			E "	
				machinery to be undertaker				
				as per manufacturers	3			
				schedule				
	1			30.130	1.			
	1							
		1						
4				Install sufficient engineerin	g			
				control (mufflers) to reduce	e			
	1			noise level at source				1
				Holse level at 304, 66				Noise Qualit
				All workers working nea	ar Site	Drilling of Wells	OIL/Contractor	
Y	4.3	Emission of noise from			ng .			Management
	14	operation of the rig	increase C					Plan ai
			ambient as well	a equipment to be provide			1	Occupational
			work place nois	e with Personal Protection	/e			Health & Safe
1			level	equipment				Management
A	1			1				Plan
	4							1.75.
						6		
				Preventive maintenance	of			
V		24		machinery to be undertak	en			
				as per manufactur	ers			
				schedule				
							011/01-1	None
			d Danlatian	of Optimize use of water dur	ing Record Keep	ing Construction & Drilling	OIL/Contractor	None
	4.4			ter drilling operations	and Auditing		14	
		water for project usage	0	Lei di liling operations				
			resources	N.				Noise Qua
				Preventive maintenance	of Recording	of Drilling of Wells	OIL/Contractor	
	4.			of machinery to be underta	ken Noise			Management
		during preparation	of increase	1		n #		Plan
/		drilling mud	ambient & w	1	C13			Occupationa
			place noise leve	schedule				Health &Sa
				2 2				Management
						117.5		



B

No	Activity	Ref	Aspect	Impact	Mitigation Measures	Monitoring	Timing/ Frequency	Responsible Party	Related Plans
					All workers working near high noise generating equipment to be provided with Personal Protective equipment		White Committee of the Article	2	Plan
		4.6		Contamination of soil resulting loss of soil living organism	Manage spills of contaminants on soil	Records of spills	Drilling of Wells	OIL/Contractor	Spill Management plan
0 2 2	Tip .	4.7		on surface water	All spill to be contained so that it does not reach any surface water body or drainage channels		Drilling of Wells	OIL/Contractor	Surface water quality management plan
5.	Operation & maintenance of Vehicles	5.1	Emission of Noise from vehicles	increase of noise	Preventive maintenance of vehicles to be undertaken as and when required		Construction & Drilling	OIL/Contractor	Noise quality management plan
p 0		5.2	Emission of gaseous air pollutant from vehicles	deterioration air	Preventive maintenance of vehicles to be undertaken as and when required		Construction & Drilling	OIL/Contractor	Air quality management plan
ж У4		5.3	Spillage of fuels & lubricants from vehicles	soil resulting loss	Adopt best practices e.g. use pumps and dispensing nozzle for transfer of fuel, use of drip trays. Etc.	Inspections/Audit	Construction & Drilling	OIL/Contractor	Spill Management plan
	ŧ			Impact on surface water quality and	The drainage system on site to be provided with Sedimentation tank and Oil-	Inspection/Audits	Drilling	OIL/Contractor	Surface water quality management



S No	Activity	Ref	Aspect	Impact	Mitigation Measures	Monitoring	Timing/ Frequency	Responsible Party	Related Plans
				aquatic ecosystem	water Separator to prevent contamination especially oil and grease from being carried off by runoff.				plan and Spill Management plan
6.	Casing & cementing of well	6.1	Noise from machinery during preparation of cement slurry	increase of	Install sufficient engineering control on equipment and machineries (like mufflers in DG sets) to reduce noise and vibration emission levels at		Drilling of Wells	OIL/Contractor	Noise quality management plan
				3	source, carry out proper maintenance and subject them to rigid noise and vibration control procedures.	3 9 *			
		6.2	Loss of drilling mud and cement slurry during casing of well	contamination of	Proper engineering controls during cementing operation to prevent migration of drilling mud and cement slurry into ground water aquifer	Inspection	Drilling of Wells	OIL/Contractor	Ground water quality management plan
7.	Temporary storage, handling & disposal of process waste	1	Accidental spillage of process waste (unused cement slurry, return mud & drill cuttings) at the temporary storage site	contamination of soil and ground	3	Drilling and Decommissioning Phases		nd OIL/Contractor	Ground water quality management plan
		7.2	temporary storage site	water quality and	All Temporary waste storage area will have proper bunds to prevent any escape of contaminated runoff		Drilling and Decommissioning Phases	nd OIL/Contractor	Surface water quality management plan and Spill Management plan
			-	10	Ensure that any runoff from such temporary storage area			and the second second	





No	Activity	Ref	Aspect	Impact	Mitigation Measures	Monitoring	Timing/ Frequency	Responsible Party	Related Plans
STATISTICS.					are channelized into ETP	18			
£		7.3		soil resulting in loss of soil living	Dispose process waste and domestic waste as per regulation/ best practices Dispose debris and waste in designated areas and as per plan to prevent degradation of land		Construction & Drilling	OIL/Contractor	Waste Management Plan and Spill Management plan
		7.4	Accidental leakage/spillage of oils and lubricants from temporary storages	surface water resulting in deterioration of surface water	All chemical and fuel storage areas will have proper bunds so that contaminated run-off cannot escape into the storm-water drainage system. The waste pits (waste water and drill cuttings) will be bounded and covered by tarpaulin sheet to prevent mixing of runoff water with waste water and leachate from waste pit and also reduce the volume of waste water.		Construction & Drilling	OIL/Contractor	Waste Management Plan and Spill Management plan
. ,		7.5	Disposal/spillage of spent oils & lubricants into environmental media	soil resulting loss	authorized dealer	100	Construction & Drilling	OIL/Contractor	Waste Management Plan and Spill Management plan



S No	Activity	Ref	Aspect	Impact	Mitigation Measures	Monitoring	Timing/ Frequency	Responsible Party	Related Plans
				ecosystem					
20 20 m		7.6	Disposal of used battery & spent filters in environmental media		Ensure recycling of waste through authorized waste recycler		Construction & Drilling	OIL/Contractor	Waste Management Plan and Spill Management plan
		7.7	Offsite disposal of metallic, packing, scrap	Localized visual impacts	3 27	Site Inspection and Record Keeping	Construction & Drilling	OIL/Contractor	Waste Management Plan
8,	Testing & Flaring of natural gas	8.1	Emission of air pollutants from flare stack at drill site.	localized	Proper engineering controls to ensure complete combustion of gas Location of Flare stack to be chosen considering the sensitive receptors adjoining the site		Construction & Drilling	OIL S& E Teamand Drilling team	Waste Management Plan
9.	Storage of materials (equipment, chemicals, fuel)	9.1	Accidental spillage during storage and handling of materials			Site Inspection	Construction & Drilling	OIL/Contractor	Spill Management plan
				for workers involved in	Personal protective equipment to be provided to workers involving in handling of hazardous materials	I .	Construction & Drilling	OIL/Contractor	Health and Safety Plan



No	Activity	Re	f Aspect	Impact	Mitigation Measures	Monitoring	There are		
	Technical	10.	1 Probabilian of the				Timing/ Frequency	Responsible Party	Related Plans
10.	Emergencies				rse Proper engineering controls on to prevent leakage of sour	Site Inspection	Drilling	OIL/Contractor	Emergency
	2	P	hydro-carbons due failure of safety devices	o i personnel.	gases &				Response Plan
			2	assets	Obtain an early warning of				
					emergency conditions so as to prevent a negative impact				
			*		on personnel, the environment, and assets		-	-	
					Safeguard personnel to prevent injuries or loss of life				
			:4		by either protecting personnel from the hazard			1	
					and/or evacuating them				
			_		from the facilities				
	*				Minimize the impact of such an event on the environment				
					and the facilities by				
					mitigating the potential for escalation and, where				
					possible, containing the release	w			
					Develop evacuation				
					procedures to handle		**		
	Dismantling of	11.1	Emission of noise during	T	emergency situations.	e J		·	
11.	rig & associated machineries		dismantling of rig	deterioration of ambient noise	All noise generating activities Sit will be restricted during day time	1	Well Decommissioning Phase	OIL/Contractor	Noise quality management
	domineries			quality resulting in discomfort	=			-	plan
		11.2	Generation of waste during dismantling of rig i			Inspection V	Vell Decommissioning	Oll /Contractor	10/-
Pag					designated areas only recyclable waste should be recycled through authorized	F	hase		Waste Management Plan

& O

	Activity	Ref	Aspect	Impact	Mitigation Measures	Monitoring	Timing/ Frequency	Responsible Party	Related Plans
	Activity				water recycler				Waste
		11.3	spent oils & lubricants	3011 102311 8	Mariage	Site Inspection and Record keeping	Well Decommissioning Phase	OIL/Contractor	Management Plan
			into environmental media	organism Contamination of surface water	1				
				resulting deterioration of surface water					
	4			quality and aquation ecosystem		ir Site Inspection	on Well Decommissionin	og OIL/Contractor	Air qualit
12.	Transportatio of drillir facilities		Emission of gaseous al pollutant durin transportation of drillin facilities	g localized g deterioration of a	equipment when not in use and	ed and Reco keeping off e);	Phase		management plan
					exhausts observed emitt significant black smoke their exhausts will serviced/replaced	ing in be		ing OIL/Contractor	Air qua
4	<i>u</i> .	12	.2 Fugitive emissions due re-entrainment of d during transport drilling facilities	of deterioration of quality due increase in S	sprinkled daily with water air to	be Site Inspection	Well Decommission Phase	ing Oil/Contractor	management plan
		1	2.3 Emission of noise du transport of dri facilities	ring Temporary ling deterioration noise quality	Restrict all noise general of operations, except drillin daytime	ating Site Inspection	n Well Decommission Phase	ning OIL/Contractor	Noise qu management plan



No	Activity	Ref	Aspect	Impact	Mitigation Measures	Monitoring	Timing/ Frequency	Responsible Party	Related Plans
					Restriction on unnecessary use of horns by trucks and vehicle in settlement area				



6.0 Summary and Conclusion

The EMP has been made to assess the potential significant adverse environmental effects due to the proposed construction and drilling activities.

Mitigation measures have been proposed as part of EMP to minimize adverse environmental impacts, if any. Risk assessment includes Jet Fire and Vapour Cloud Explosion for blowout of wells. The existing Emergency Management Plan of OIL will be extended to this project, strengthened as necessary and implemented in the event of any emergency arising due to above mentioned risks.

The present impact assessment study indicates that the overall impact from the proposed project will be short to medium term, reversible, localised and are not expected to contribute significantly to the surrounding environment. Also, with the implementation of the pollution control and strengthen the existing environment management measures, these anticipated impacts due to proposed site preparation and drilling operation and decommissioning activities of the proposed project will be mitigated. Summary of impact significance without mitigation measures and with mitigation measures is presented at the table below.

Summary of Impact Significance without and with Mitigation Measures

Impact	Impact significance without mitigation measures	Impact significance with mitigation measures		
Aesthetic & visual	Moderate	Minor		
Land Use	Negligible	(#)		
Soil Quality	Moderate	Minor		
Air Quality	Moderate	Minor		
Noise Quality	Major	Moderate		
Road & Traffic	Moderate	Minor		
Surface Water Quality	Moderate	Moderate		
Ground water resource	Minor	Minor		
Ground Water Quality	Moderate	Minor		
Terrestrial Ecology	Negligible	(s)		
	Minor	Minor		
	Major	Moderate		
Aquatic Ecology	Moderate	Moderate		
Livelihood & Income generation	Moderate	Moderate		
Conflict with local people	Moderate	Moderate		
Benefit to Local Enterprises	Positive	105%		
Employment Generation	Positive			
Occupational health & safety	Moderate	Minor		
Community health & safety	Moderate	Minor		

OIL will also ensure that the environmental performances of all the activities are monitored throughout execution of the project during site preparation, drilling and decommissioning phases. Monitoring will be carried out for ambient air quality, stack emission, noise quality, quality of treated effluents, surface and groundwater qualities, waste generated and disposed etc. and verified that they meet the prescribed standards. OIL will continue to report environmental performance and submit monitoring reports regularly to statutory authorities.



The effective management system coupled with monitoring of environmental components and efforts for continual improvements will result in satisfactory environmental performance of the proposed oil and gas drilling and development project.

THANKS YOU



Health Safety & Environment Department

P.O. DULIAJAN-786602, ASSAM, INDIA Phone: 0374-2800542 Fax: 0374-2801796

Email: safety@oilindla.in

Ref. No.: S&E/E/21(B)/940

Date: 20.09.2023

To
The Member Secretary,
Pollution Control Board, Assam,
Bamunimaidam, Guwahati- 781021.

Sub: Submission of Environmental Statement (Form-V) under Environment (Protection) Rules, 1986.

Sir,

With reference to the above subject, we are submitting herewith the Environmental Statement (Form-V) for the financial year ending 31st March, 2023 pertaining to the operations of Oil India Limited in the districts of Dibrugarh, Tinsukia, Sivsagar and Charaideo in Assam.

Thanking You,

Yours faithfully OIL INDIA LIMITED

(Ajit Chandra Haloi) Executive Director (HSE)

For Resident Chief Executive

Encl: As above.

Copy:

- 1. Regional Executive Engineer, Pollution Control Board Assam, Back Side of ASTC Bus Station, Chowkidinghee, Dibrugarh, PIN: 786001.
- 2. Executive Engineer, Regional Laboratory cum Office, Pollution Control Board Assam, Melachakar, Sibsagar, PIN: 785640.

FORM - V (See Rule 14)

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31st MARCH, 2023

PART - A

(i) Name and address of the owner/occupier of the industry operation or process.

OIL INDIA LIMITED P.O. DULIAJAN DIST. DIBRUGARH ASSAM -786602.

Note: Environmental Statement (Form – V) is pertaining to the operations of Oil India Limited in the districts of Dibrugarh, Tinsukia, Sivasagar and Charaideo in Assam.

(ii) **Industry category:** Red - Oil and gas extraction (on-shore extraction through drilling wells)

(iii) Production capacity - Units

OIL's production target is fixed as per the Memorandum of Understanding (MoU) with Ministry of Petroleum and Natural Gas, Govt. of India, which varies from year to year.

Production details during F.Y. 2022-23:

- Crude Oil: 3.114 MMT.
- Natural Gas: 2809.214 MMSCM
- LPG: 32,100 MT.

(iv) Year of establishment:

OIL INDIA LTD. was formed in 1961 as a joint venture with M/S. Burma Oil Company, UK and on 14th Oct. 1981, OIL became a fully owned Govt. of India Enterprise.

(v) Date of last Environmental Statement submitted: 20.09.2022.

<u>PART - B</u> WATER AND RAW MATERIAL CONSUMPTION

(I) Water consumption m³/d:

S.No	Purpose	Water Consumption (m ³ / day)
1.	Process & Cooling	14473.7
2.	Domestic	16038.63
	TOTAL	30512.33

Name of Products	Process water consumption per unit of product output				
	During F.Y. 2021-22	During F.Y. 2022-23			
(1)	(2)	(3)			
Hydrocarbon (Crude	1.12 m ³ /MT	1 m³/MT			
Oil, Natural Gas, LPG)	(Approx.)	(Approx.)			

(II) Raw material consumption

*Name of raw materials	Name of products	Consumption of raw material per unit			
		During	During		
		F.Y. 2021-22	F.Y. 2022-23		

No raw materials are used as Oil India Limited is engaged in Exploratory and development drilling activities & production of Crude Oil and Natural Gas. However, chemicals such as Bentonite are used for preparation of Water based drilling mud.

PART - C
POLLUTION DISCHARGED TO ENVIRONMENT/UNIT OF OUTPUT

(Parameter as specified in the consent issued).

Pollutants	Quantity of Pollutants Discharged (mass/day)	Concentrations of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
(a) Water	NIL. There is no discharge of pollutants from drilling locations and Production Installations. • Wastewater generated from drilling locations is treated in Effluent Treatment Plant (ETP) and reused back in the drilling operation. • The formation water generated after separation from crude oil and	 Quality of ETP treated water from the drilling locations is analyzed frequently. (Test report is enclosed as Annexure - 1). Quality of Formation water is analyzed frequently (Test report enclosed as Annexure- 	treated effluent and Formation water are within

	treatment is pumped back to the underground formation (depth greater than 1600 m) through formation water disposal wells.	II)	
(b) Air	No major air pollutants are emitted from Oil & Gas exploratory and development drilling and production activities except Stack Gas emissions at drilling locations and Production Installations & Flaring at Oil Collecting Stations.	Ambient Air Quality (AAQ) monitoring is carried out frequently at drilling locations and Production Installations (Test report enclosed as	

PART – D HAZARDOUS WASTES

(As specified under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016)

Hazardou	s Category of Hazardous	Total Quanti	ty generated	
Wastes	Waste as per Schedule - I of HW Rules, 2016	During F.Y. 2021-22	During F.Y. 2022-23	
a) From process	S.No. 2.2 Sludge containing Oil	9943 MT	4671.52 MT	
process	S.No. 5.1 Used or Spent Oil	60 KL	208 KL	
n	S.No. 33.1 Empty barrels/containers/liners contaminated with hazardous chemicals/wastes	41569 Nos.	26616 Nos.	
	S.No. 33.2 Contaminated cotton rags or other cleaning materials	3.7 MT	6.19 MT	
b) From pollution control facilitie	from waste water treatment	2600 KL	120.84 KL	

PART - E SOLID WASTES

Solid Wastes	Total Quantity		
	During F.Y. 2021-22	During F.Y. 2022-23	
(a) From process			
	23,000 m ³	27,000 m ³	
Drill Cuttings	(Approx.)	(Approx.)	
(b) From pollution control facilities	N	IL	
(c)			
(1) Quantity recycled or re-utilized within	N	/A	
the unit.			
(2) Sold	N,	/A	
(3) Disposed	N/A		

PART - F

PLEASE SPECIFY THE CHARACTERIZATION (IN TERMS OF COMPOSITION AND QUANTUM) OF HAZARDOUS AS WELL AS SOLID WASTES AND INDICATE DISPOSAL PRACTICE ADOPTED FOR BOTH THESE CATEGORIES OF WASTES.

(I) Hazardous Wastes:

Name of the Hazardous Waste		Quantity generated during F.Y. 2022-23	Disposal Practices		
a)	Sludge containing Oil	4671.52 MT	Sent to Sludge Processing Plant for oil recovery followed by Bioremediation		
b)	Used or Spent Oil	208 KL	Stored in barrels under covered shed and sold to authorized recyclers through auction		
c)	Empty barrels/ containers/liners contaminated with hazardous chemicals/ wastes	26616 Nos	Sold to authorized recyclers through auction		
d)	Contaminated cotton rags or other cleaning materials	6.19 MT	Bioremediation		
e)	Chemical sludge from waste water treatment	120.84 KL	Disposed in HDPE lined pits		



(I) Solid Wastes:

Name of the Solid Waste	Quantity generated during F.Y. 2022-23	Disposal Practices			
a) Drill Cuttings	27,000 m ³ (Approx.)	Disposed in HDPE lined pits			

PART - G

IMPACT OF THE POLLUTION ABATEMENT MEASURES TAKEN ON CONSERVATION OF NATURAL RESOURCES AND ON THE COST OF PRODUCTION

- > Acoustic enclosures have been provided around all gensets to reduce noise levels.
- > Recovery of drilling mud from drill cuttings by using a combination of Vertical Cutting Dryer (VCD) and a high-performance centrifuge.
- > Wastewater generated from drilling locations is collected in HDPE lined pits, treated in Effluent Treatment Plant (ETP) with Reverse Osmosis unit and the treated effluent is reused back in the drilling operation.
- > Formation water generated from Production Installations is treated in Effluent Treatment Plant (ETP) before disposal in the abandoned/ water disposal wells.
- > Processing of oily sludge for recovery of Crude oil and further treatment of sludge through Bioremediation.
- > Construction of central concrete pit for disposal of waste mud.
- > Treatment of Biomedical waste through incinerator.
- Plantation of 50,000 saplings was carried out at 8 nos. of abandoned OIL well sites.

PART - H

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

- > MoU with District Administration, Tinsukia for treating the legacy waste of Tinsukia Municipality through the process of Biomining.
- > Proposal for construction of Community Sewage Treatment Plant (STP) at Duliajan.
- > MoU with Digboi Forest division, Assam for carrying out afforestation in 100 Ha of degraded forest area.
- > MoU with IIT Guwahati to study the feasibility of using treated drill cutting as a building material.

PART - I ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF THE ENVIRONMENT.



Pollution Control Board, Assam

Envirocon Building, I.O.C.L (AOD) New Market P.O.: Digboi, Dist.: Tinsukia, Assam - 786 171 Ph: 03751-264414, 9435008657, 8876028672 E-mail: envirocon@rediffmail.com

Annexure - I

ISO 9001:2015 Certified ISO 45001:2018 Certified

Report No.: ENV/ARDS/22-23/S-07/WW-03/01

: 22/03/2023 Date

Order No.: Telecon

Date

Report Issued To: ADITIR & D SERVICES

Nilesh Buisness Complex, A. T. Road, Digboi, Assam

TEST RESULTS

Sample Ref. No.: ARDS/2023/5-07/1303/01

Sample Source : Rig S#7/MFT, Sonari

Sample Type: ETP Treated Water (RO)

Collected On : 13-03-2023

Received On : 14-03-2023

Collected By : ETP Supervisor, ARDS

SL No.	Parameters	Results	Limit [G.S.R. 176(E), 02.04.1996
1	Colour	Colourfess	Colourless
2	Odour	Odourless	Odourless
3	pfl value	7.16	5.5 - 9.0
4	Temperature, °C	25.6	40 °C
5	TSS, mg/l	3,9	100
6	BOD, mg/l	<1.0	30
7	COD, mg/l	18	100
8	Chlorides (as CI), mg/I	3.6	600
9	Sulfates (as SO ₄), mg/l	<1.0	1000
10	TDS. mg/l	61	2100
11	Sodfum. (%)	1.6	60
12	Oil & Grease, mg/l	<4.0	10
13	Phenolic Compounds as CoHsOH, mg/l	<0.00T	1.2
14	Cyanides , mg/l	<0.001	0.2
1.5	Fluorides (as F), mg/l	<0.01	1.5
16	Sulfide (as S), mg/l	<0.01	2.0
17	Chromium (Cr-6), mg/l	< 0.001	0.1
18	Chromium (Total), mg/l	<0.001	1.0
19	Copper, mg/l	<0.001	0.2
20	Lead, mg/l	< 0.001	0.1 ,
21	Mercury, mg/l	<0.001	0.01
22	Nickel, mg/l	<0.001	3.0
23	Zinc, mg/l	<0.01	2.0

Analysis Protocol: IS 3025



'Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE: 1. Results reported are valid at the time of and under the provailing conditions of measurement.

2. Results refer only to the particular parameters tested.

3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, LO.C.L. (AOD) New Market, Dighoi - 786171, Assam.

Core Services: Environmental Manitoring & Data Generation, EIA & EMP, Environmental Audit & Allied Environmental Management jobs Associate Services: Certification by Competent Person (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.



Annexure - II CHEMICAL LABORATORY

(An ISO 9001: 2015 Certified Laboratory)

CHEMICAL DEPARTMENT, DULIAJAN 786 602, ASSAM, INDIA (Phone: 91-374-2800439, Fax: 91-374-2801680/2800633. Email: chemical@ollindla.in)

For internal use only

Ref. No.: Chem/Ana/Misc/466/DJN/23

CGM - PSS 474 103 2023

Attn.: Prajesh Das, Dy.CE(PSS) & IM -STF

Date: 23.03.20232 4 MAR 2023

Od Babil. L. Millia.

Sub: WATER SAMPLE ANALYSIS REPORT OF STF MADHUBAN

Ref.:- PSS/ STF-35/2022-23/434,

Date:- 21.03.2023

Reference above, please find below the test results of the water sample forwarded to us from your end for laboratory testing.

Characteristics	Unit	Clarified water sample	Test Method/ Instrument used
рН		8.4	Metrohm pH meter
TSS	mg/l	56	Gravimetric method
TDS	mg/l	4100	Grayimetric method
Salinity as NaCl	mg/l	2100	Titraton with silver nitrate
Oil & Grease	mg/l	Nil	Horiba oil content analyser
Turbidity	NTU	6.02	Turbidity meter

Sample details:

The above clarified water sample was collected by PSS Department from STF Madhuban on 21.03.2023 & received at Analytical & Environmental laboratory on 21.03.2023 for necessary laboratory testing.

Note: Parameters were tested as per requirement of the customer mentioned in the memo.

Tested by :- WR/PJK/PS/NC

Pranab Jyoti Das

Suptdg. Chemist (Lab)

For DGM-Chemical (Lab)

Copy: Analytical & Environmental sec. file

Chemi aly A my Day and Wester 104



STACK GAS MONITORING REPORT

N W. Addrson of the	Cuctomer	Report No.	: MSK/2022-23/1881
Name & Address of the Customer "M/6 OIL INDIA LIMITED" Duliajan, Dibrugarh, Assam-786602		Report Date	31.01,2023
		Nature of Sample	: Stack Emission
		Sample Mark	GCS TENGAKHAT
		Sample Number	: MSKGL/ED/2022-23/12/00398
Ref. No.: W.O. NO \$12598	1 of Contract No. 6116895		
Date of Sampling	Sample Received Date	Analysis Start Date	Analysis Complete Date
14.12.2022	17,12,2022	17.12.2022	24.12.2022
4. 2.202			

4. I	General information about stack :	: GB-1				
	Stack connected to	: GAS COMO	RESSOR			
2.	Emission due to	: NG				
	Material of construction of Stack					
	Circular					
5.	Whether stack is provided with permanent platform & ladder	: Yes				
).).	DG capacity	: NEL				
3.	Physical characteristics of stack :					
1	Height of the stack from ground level	: 3.6576 m	Δ.			
2.	Diameter of the stack at sampling point	: 0.2032 m				
3.	Area of Stack	: 0.03241 m2				
C.	Analysis/Characteristic of stack: 1. Fuel used: NG			141		
D.	Result of sampling & analysis of gaseous emission	Result	Limit as per CPCB	Method		
1	Temperature of emission (°C)	187	(H)	USEPA Part 2, 25.09.1996		
2.	Barometric Pressure (mm of Hg)	762.0		USEPA Part 2, 25 09 1996		
3.	Velocity of gas (m/sec.)	24.4		USEPA Part 2, 25.09.1996		
4.	Quantity of Gas Flow (Nm3/hr)	1854	1000	USEPA Part 2, 25.09 1996		
5.	Concentration of Oxygen (%v/v)	13.6	365	(S:13270 :1992 Reaff, 2014		
6.	Concentration of Carbon Monoxide (mg/Nra3)	25.1	49.4	IS:13270 :1992 Reaff, 2014		
7	Concentration of Carbon Dioxide (%v/v)	5.8	200	IS:13270:1992 Reaff, 2014		
8.	Concentration of Sulphur Dioxide (mg/Nm3)	20.5	200	USEPA-29, 25/06/1996		
9.	Concentration of Nitrogen Oxide (ppmv)	69.3	***	USEPA Part-6, 25/09/1996		
10.	14 At a)	<0.005	io.	USEPA Part-7, 12/03/1996& USEPA 18 -25.09.1996		
11	Concentration of Particulate matter (mg/Nm3)	35.9	411	USEPA Part-17, 16/08/1996		
12		13.46		USEPA 18-25.09.1996		
E.	Pollution control device : Details of pollution control devices attached with the stace	k: NE		Remarke:Nil		

Analyzed By:

Prepared By:

Authorized Signatory ForMitra S.K. Private-timited

: Mr. Kaintof Flaque

Signature Name

Designation.

: Mr. Dipankar Mazumdar

Signature Name

: Mr. Dhrubajyoti Das : Assistant Chemist

Signature

Name Designation : Branch Manager

: Executive Chemist

The results relate only to the Nem(s) tested.

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Our Lob is Approved by NABL & MOEF, Lab Address: P-48 Udoyan Industrial Extote. 3 Paglodungo Road Kol-7000[3

Designation.

Head Office: Shrucki Centre (5th Boot), 74B, A.J.C. Buse Road, Koltata - 700 016. West Bengal, India. Tel.: 91 33 40143000 / 22650006 / 22650007 Pax: 91 33 22650008 Email: info@mitrast.com. Website: www.mitrast.com.

Approved by Uttain Prodhan

Suptdg. Research Scientist, R&D Dept., Oil India Ltd., Duliajan, Assan



Ambient Air Quality Monitoring Report

Name 6	& Address of the Customer;		Report No.: MSK/2022-23/1463			
"M/s OIL INDIA LIMITED", Duliajan, Dibrugarh, Assam-786602		Report Date: 30.12.2022				
		Sample Description : Ambient Air				
1.7 cm action	n, Diorugani, Assam-786602			cr : MSKGL/ED/2022	-23/12/00252	
				ation : GCS TENGA		
	.:W.O. NO 8125981 of Contract No. 6	116895		N 27 23 55 E 9500		
D	Pate of Sampling Sample	Received Date		is Start Date		omplete Date
-		.11,2022	18	11 2022		1.2022
Enviror	mental Conditions During Sampling	& Transport Cond	lition: Temperatur	re: 26°C Rain fall :	NO.	1.2022
		Anai	ysis Result	o, runt tan .	110	
SI. No.	Test Parameter		Method	Unit	Results	COCOLU
Í	Particulate Matter (PM ₁₀)	IS: 5182 (Part	-23)-2006	(µg/m3)	59.2	CPCB Lim
2.	Particulate Matter (PM;)	IS: 5182 (Part		(µg/m3)		100
3.	Sulphur Dioxide (SO ₂)	IS : 5182 (Part-	-2)-2001		28.1	60
4	Nitrogen Dioxide (NO2)	13:5182 (Part-		(µg/m3)	<6.0	80
5	Carbon Monoxide (CO)	IS 5182 : (Part-		(µg/m3)	16.8	80
6	Ozons (O ₂)	18:5182 (Part-L		(mg/m3)	0.59	2
7	Ammonia (NHs)	Reaffirmed-201		(µg/m3)	<20.0	180
8	Lead (Pb)	13 5182 (Part 2		(µg/m3)	<10.0	400
9	Nickel (Ni)	USEPA IO-3.4		(µg/m3)	<0.01	1
10.	Arsenic (As)	USEPA 10-3.4		(ng/m3)	<0,5	20
11.		USEPA IO-3.4		(ng/m3)	<1.0	6
12.	Benzene (C ₆ H ₆)	1S 5182 : (Part)	11):2096	(µg/m3)	<4.2	5
_	Benzo(a)Pyrene (BaP)	IS 5182 : (Part)	2):2004	(ng/m3)	<0.5	1
13.	Mercury (Hg)	USEPA IO-5.0		(µg/m3)	<0.002	
14.	Methane (Hydrocarbon)	IS 5182 : (Part 17)		ppm	1.38	100
15,	Non-methane (Hydrocarbon)	1S 5182 : (Part 17)		ppm	<0.5	
16	Total Hydrocarbon	IS 5182 : (Part I	7)	ppm	1.38	
17.	Volatile Organic Compounds (VOC)	IS 5182 : (PART	-11):2006	(#g/m3)	<4.2	
mit as po	or CPCB notification, New Delhi, 18th N	100 2000 for A-L:	ema al	(FØIID)	4.2	

Analyzed By:

Signature

Designation.

Name

Prepared By:

Delayroley

Executive Chemist

: Mr. Dipankar Mazumdar

Signature Name Designation,

: Mr. Dhrubajyoti Das : Assistant Chemist

Authorized Signatory Follow For Mitra S.K. Private Limited

Signature Name

Designation Brook Manage

The results reinte only to the item(s) tessed.

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Our Lab is Approved by NABL & MOEF, Lab Address :P-48 Udayan Industrial Estate, 3 Pagladanga Road Eol-760015

Head Office: Shrachi Centre (5th floor), 74B, A.J.C. Bose Road, Kolkata - 700 016. West Bengal, India. Tel.: 91 33 40143000 / 22650006 / 22650007 Fax: 91 33 22650008

Email : info@mitrask.com. Website: www.mitrask.com

Tulded Approved by Uttam Prodhan Suptdg. Research Scientist. R&D Dept. Oil India Ltd., Du liajan, Assam



Pollution Control Board:: Assam Bamunimaidam: Guwahati-21

(Department of Environment & Forests:: Government of Assam)

Phone: 0361-2652774 & 3150318; Fax: 0361-3150319

Website: www.pcbassam.org

No WB/T-311/21-22/314

Dated Guwahati the, 1311-October, 2022

FORM – 2 [See Rule 6(2)]

[Grant of Authorization under the Provision of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016]

1. Number of Authorisation and date of issue : No. WB/T-311/21-22/ dtd. .10.2022

2. Reference of application (No. and date) : 1292415

3. M/s OIL INDIA LIMITED, Percy Evans Road, Duliajan, Dibrugarh, Assam-786602 is hereby granted an authorisation based on the signed inspection report for Generation, storage and transportation of Hazardous or Other wastes or both.

DETAILS OF AUTHORISATION

Sí. No.	Category of Hazardous Waste as per the Schedules-I, II & III of these rules	Authorised mode of disposal or recycling or utilisation or co-processing, etc.	Quantity (ton/arroum)	Mode of Management
1.	Schedule-I, SUNo. 2.2 Sludge containing oil	Generation Storage & Transportation	4000 T/Annum	Transportation to authorized actual user/ Disposal agences/ Captive treatment through Bio-remodiation as per prescribed norms after recovery of oil
7.	Schedule-I, St No. 33.2 Contaminated cotton rags or other cleaning materials	Generation, Storage & Transportation	300 WAraum	Transportation to suition sed Disposal agencies for Incineration/ Co-Processing in cement plant.
3	Schedule-I, St.No. 33.1 Empty barrels/containers/liners contaminated with hazardous chemicals /wastes	Generation, Storage & Transportation	15000 Nos./Annum	Transportation to anthorized actual user/Recyclers
4.	Schedule-I, St.No. 5.1 Used or spent oil	Generation, Storage & Transportation	500 KI /Annum	Transportation to authorized actual user/Recyclers
5.	Schedule-I, SLNo. 35.3 Chemical sludge from waste water treatment	Generation, Storage & Transportation	7000 T/Annum	Transportation to authorized actual user/Disposal agencies/ - Co-processing in cement plant.

- 4. This authorisation shall be in force in force for the period of five years up to 31.03.2027 unless otherwise revoked or withdrawn within this period.
- 5. The authorisation is subject to the following general and specific conditions:
- A. GENERAL CONDITIONS OF AUTHORISATION:
 - 1. The authorised person shall comply with the previsions of the Environment (Protection) Act, 1986, and the rules made there under.
 - The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.
 - 3. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
 - 4. The agencies should ensure that the barrels are decontaminated before collection in the premises of the occupier / generator equipped with adequate effluent treatment plant.
 - Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorization
 - 6. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time

MAJIE



- 7. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time
- 8. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
- It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.
- The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental
 occurrence and its clean-up operation.
- 11. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
- 12. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
- 13. The importer or exporter shall bear the cost of import or export and mitigation of damages if any
- 14. An application for the renewal of an authorisation shall be made as laid down under these Rules,
- 15. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Contral Pollution Control Board from time to time.
- 16. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

B. SPECIFIC CONDITIONS:

- The unit shall maintain the records of Hazardous & Other Wastes in Form-3 under provision of Rules 6(5), 13(7), 14(6), 16(5) & 20(1)
- The Unit Shall Provide The Transporter Witin The Relevant Information In Form 9 Regarding The Hazardous Nature Of The Wasles And Measures To Be Taken In Case Of An Emergency
- The unit shall submit Annual Returns in Form-4 to State Pollution Control Board by 30th June of every year for the preceding period April to March.
- The unit shall prepare 6 (six) copies of the manifest in From-10 as per Rules-19(1) for every transit of consignment of hazardous Waste under this authorization.
- Any other conditions for compliance as per the guidelines issued by the Ministry of Environment. Forests & Climate Change, GOI. New-Delhi & Central Poliution Control Board, Delhi shall be compiled.
- The unit shall submit an Environmental Statement for the financial year ending on 31st March, in Form—V of the Environment (Protection) Rules, 1986 before 30th September every year.
- 7. Any occupier handling hazardous or other wastes and operator of the treatment, storage and disposal facility shall ensure that the hazardous and other wastes are packaged in a manner suitable for safe handling, storage and transport as per the guidelines issued by the Central Pollution Control Board from time to time. The labelling shall be done as per Form 8.
- The unit shall submit the report on any accident occurs at their facility immediately to the state Pollution Control Board, in Form-11 of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
- The transport of the hazardous and other waste shall be in accordance with the provisions of Rule 18 of Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- The unit shall install a display board in the prescribed format in accordance with PCBA notification vide. WB/T-237/ 19-20/95 dated 17.08.2020 and regularly update the same.

(Shantanu Kr. Dutta) Member Secretary

Dated Guwahati the, 13 /4 Oct, 2022

Memo No. WB/T-311/21-22/329-A

M/s OIL INDIA LIMITED, Percy Evans Road, Duliajan, Dibrugarh, Assam-786602 for information & compliance of conditions



(Shantanu Kr. Dutta) Member Secretary