

**BEFORE THE NATIONAL GREEN TRIBUNAL,
EASTERN ZONE, KOLKATA**

IN

Appeal No. 04 of 2020 (EZ)

IN THE MATTER OF: -

Bimal Gogoi

.... Appellant

VERSUS

Union of India

...Respondent

INDEX

Sl. No.	DETAILS	PAGE No.
1.	<u>Annexure R1/1:</u> Copy of the order dated 07.12.2020	5-9
2.	<u>Annexure R1/2:</u> Copy of the letter dated 27.08.2024 of SRO, MoEF&CC, Guwahati	10
3.	<u>Annexure R1/3:</u> Six-monthly compliance report (October 2023 to March 2024)	11-62

FILED BY-
Ms. Anamika Pandey
(Advocate)
(For Respondent No.1)

**BEFORE THE NATIONAL GREEN TRIBUNAL,
EASTERN ZONE, KOLKATA**

IN

Appeal No. 04 of 2020 (EZ)

IN THE MATTER OF: -

Bimal Gogoi Appellant

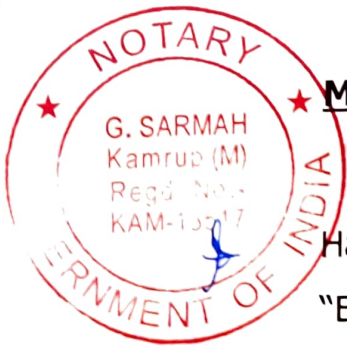
VERSUS

Union of India ...Respondent

**AFFIDAVIT ON BEHALF OF RESPONDENT NO.1,
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE
CHANGE**

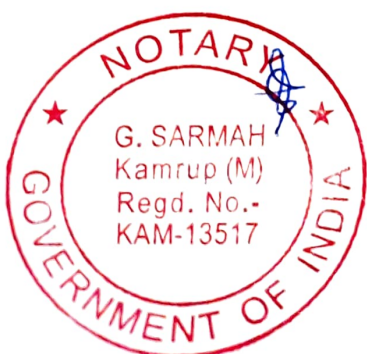
MOST RESPECTFULLY SHOWETH: -

I, Hemen Hazarika, son of Late Harakanta Hazarika, aged about 44 years, presently posted as Scientist "E" in the Sub-Office, Guwahati under Regional Office Shillong, Ministry of Environment, Forest & Climate Change, Government of India at 4th Floor Housefed Complex, Rukminigaon, Six Mile, G.S. Road, Guwahati-781022, do hereby solemnly affirm and state as under: -



1. That I am duly authorized and competent to swear the present counter affidavit on behalf of the Ministry of Environment, Forest and Climate Change (MoEFCC).
2. That the contents of the application, unless specifically admitted, are denied to the extent that they are inconsistent with submissions made hereinafter.
3. It is respectfully submitted that the instant Reply is filed by the Answering Respondent without prejudice to his right to file a fuller and more detailed reply at a later stage, if so necessary.
4. That the Environmental Clearance Dated 11.05.2020 has been granted to M/s Oil India Limited for the drilling of seven wells for hydrocarbon exploration at Dibru Saikhowa National Park area, Tinsukia District, Assam. It is further submitted that the Hon'ble Gauhati High Court at Guwahati in the matter of PIL No. 35 of 2020 in the matter of Mrinmoy Khatanar vs. Union of India has directed as following:

"It has been submitted at the Bar by the learned counsel for the respondent, Mr. Pathak, Standing counsel for the Forest Department that at the instance of the OIL, the Assam State Biodiversity Board is proceeding to make the impact assessment. If that is so, let them proceed with the aforesaid exercise. However, till such exercise is completed by the Assam State Biodiversity Board clearing any such activity, the Environmental

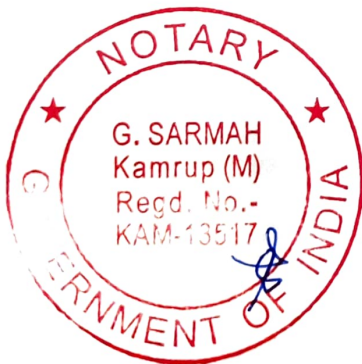


Clearance issued on 11.05.2020 may not be given effect for Extension Drilling and Testing of Hydrocarbons at 7 (seven) locations by OIL under Dibru Saikhowa National Park area, Tinsukia"

A copy of the order dated 07.12.2020 has been annexed herewith as **Annexure R1/1**.

5. It is submitted that, based on the latest six-monthly compliance report submitted by the M/s. Oil India Ltd. for the period from October 2023 to March 2024, the said project has not yet commenced. Further, based on the latest six-monthly compliance report, the Sub Regional Office (SRO) of the Ministry at Guwahati vide letter dated 27.08.2024 informed that the project has not yet been started and the EC Conditions will be complied prior to project execution.

A copy of the letter dated 27.08.2024 of SRO, MoEF&CC, Guwahati and the Six-monthly compliance report (October 2023 to March 2024) are annexed herewith as **Annexure R1/2** and **Annexure R1/3**.



6. That it is respectfully submitted that for reconsideration or re-examination of Environmental Clearance (herewith referred as EC) as per Para 8 of the Hon'ble National Green Tribunal order dated 18.07.2024, the project proponent is required to submit

an application together with the Biodiversity Impact Assessment Study Report.

7. So far, the Ministry has not received any proposal for reconsideration or re-examination from the project proponent. The Ministry shall consider the proposal as and when the same will be applied through the proper channel.
8. Therefore, it is respectfully submitted that the present counter affidavit may kindly be taken on record and into consideration and the Hon'ble Tribunal may pass appropriate Order(s), direction(s) as deemed fit and proper under the facts and circumstances of the present case.

VERIFICATION

Verified at Guwahati on this 2nd day of September, 2024 that the contents of the above affidavit in paragraph 1 to 8 are correct to my knowledge and belief based on official records and nothing material has been concealed there from.

Identified by:

Sl. No.	1204
Date	21/9/24

Mehboob Alam.

MEHBOOB ALAM

Advocate

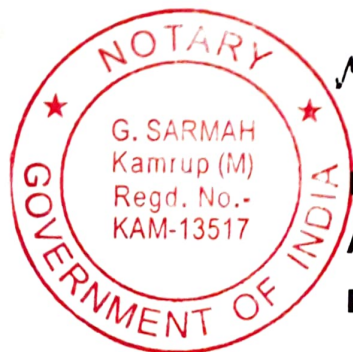
Enrolment No. 571 of 2017

DR. HEMEN HAZARIKA

DEPONENT

NOTARY PUBLIC : OATH COMMISSIONER
Solemnly affirmed before me this day, I certify that I read over and explained the contents to the declarant and that the declarant seemed perfectly to understand them.

Gitanjali Sarma
GITANJALEE SARMA
NOTARY
Guwahati, Kamrup (M)
Regd. No. - KAM-13517
GOVT. OF INDIA



GAHC010086122020

**ANNEXURE-R1/1****THE GAUHATI HIGH COURT
(HIGH COURT OF ASSAM, NAGALAND, MIZORAM AND ARUNACHAL PRADESH)****Case No. : PIL/35/2020**

MRINMOY KHATANIAR AND ANR.
S/O- LATE BIJOY CH. KHATANIAR, R/O- NARIKALBARI PATH, MT ROAD,
GUWAHATI- 781024

2: AMAR JYOTI DEKA
S/O- LATE BHABENDRA NATH DEKA
R/O- H NO. 20
NAMONI PATH
KARBI PATH
MOTHER TERESA PATH
P.O- BAMUNIMAIDAM
P.S- GEETANAGAR
GUWAHATI- 781021
ASSA

VERSUS

THE UNION OF INDIA AND 13 ORS
REP. BY THE SECRETARY MIN OF PETROLEUM AND NATURAL GAS, GOVT
OF INDIA, SHASTRI BHAWAN, NEW DELHI-

2:THE SECRETARY TO THE GOVT OF INDIA
MIN OF ENVIRONMENT
FOREST AND CLIMATE CHANGE
INDIRA PARYAVARAN BHAWAN
JORBAGH ROAD
NEW DELHI- 110003

3:THE STATE OF ASSAM
REP. BY THE CHIEF SECRETARY TO THE GOVT OF ASSAM
DISPUR SECRETARIAT COMPLEX
GHY- 06

4:THE PRINCIPAL SECRETARY

TO THE GOVT OF ASSAM
ENVIRONMENT AND FOREST DEPTT
DISPUR
GHY- 6

5:THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS AND HEAD OF
FOREST FORCE
H BLOCK
2ND FLOOR
JANATA BHAWAN
DISPUR
GUWAHATI- 781006
ASSAM

6:THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS (WILDLIFE)
H BLOCK
2ND FLOOR
JANATA BHAWAN
DISPUR
GUWAHATI- 781006
ASSAM

7:THE NATIONAL BOARD FOR WILDLIFE
REP. BY THE STANDING COMMITTEE OF NATIONAL BOARD FOR
WILDLIFE
MIN OF ENVIRONMENT
FOREST AND CLIMATE CHANGE (WILD LIFE DIVISION)
6TH FLOOR
VAYU WING
INDIRA PARYAVARAN BHAWAN
JOR BAGH ROAD
NEW DELHI- 110003

8:STATE BOARD FOR WILDLIFE
REP BY ITS CHAIRMAN
DISPUR SECRETARIAT COMPLEX
GUWAHATI - 6

9:OIL INDIA LIMITED
REPRESENTED BY THE CHAIRMAN / DIRECTOR CORPORATE OFFICE
PLOT NO. 19
NEAR FILM CITY
SECTOR 16A
NOIDA- 201301

10:GENERAL MANAGER
OIL INDIA LIMITED
REGD OFFICE OIL INDUSTRIAL AREA

DULIAJAN- 786602
ASSAM

11:THE DEPUTY COMMISSIONER
TINSUKIA DISTRICT
P.O- BORGURI
TINSUKIA
ASSAM
PIN- 786126

12:THE COMMISSIONER AND SECRETARY
MINES AND MINERALS DEPTT
GOVT OF ASSAM
DISPUR SECRETARIAT COMPLEX
GUWAHATI- 06

13:THE CENTRAL POLLUTION CONTROL BOARD
ENVIS SECRETARIAT
REP. BY ITS CHAIRMAN VAYU WING
6TH FLOOR INDIRA PARYAVARAN BHAWAN
JOR BAGH ROAD
ALIGANJ
NEW DELHI- 110003

14:THE STATE POLLUTION CONTROL BOARD
GOVT OF ASSAM
REP. BY ITS CHAIRMAN
MILANPUR WEST JYOTI NAGAR
BAMUNIMAIDAM
ASSAM
PIN- 78100

Advocate for the Petitioner : MR D K DAS

Advocate for the Respondent : ASSTT.S.G.I.

BEFORE
HONOURABLE THE CHIEF JUSTICE (ACTING)
HONOURABLE MR. JUSTICE MANISH CHOUDHURY

ORDER

Date : 07.12.2020

[N. Kotiswar Singh, CJ (Acting)]

Heard Mr. D.K. Das, learned counsel for the petitioners; Mr. T.C. Chutia, learned

Government Advocate, State of Assam; Mr. R.K. Dev Choudhury, A.S.G.I.; Mr. S.N. Sharma, learned Standing counsel, Oil India Limited (OIL) and Mr. K.P. Pathak, learned Standing counsel, Forest Department.

It has been submitted at the bar that the matter can be finally decided.

List the matter accordingly on 28.01.2020.

However, the learned counsel for the petitioners has prayed that an interim order may be passed for suspending the operation of the environmental clearance issued by the Ministry of Environment, Forest and Climate Change (IA-II Section) issued on 11.05.2020 primarily on the ground that the said environmental clearance was issued in violation of the Hon'ble Supreme Court's order dated 07.09.2017 passed in Interlocutory Application no. 3934 in Writ Petition (Civil) no. 202/1995 (T.N. Godavarman Thirumulpad Vs. Union of India and Others).

In the said order, the Hon'ble Supreme Court had made it specifically clear that Oil India Limited (OIL) will be bound by the undertaking given on 25.07.2017 under which the OIL will carry out Biodiversity Impact Assessment Study through Assam State Biodiversity Board for which budgetary offer had already obtained on 12.05.2017 for starting any drilling activity. It has been submitted that the aforesaid direction of the Hon'ble Supreme Court has not been carried out inasmuch as the OIL has not yet carried out the Biodiversity Impact Assessment Study through Assam State Biodiversity Board and as such, since the said environmental clearance was given by the Ministry of Environment contrary to direction of the Hon'ble Supreme Court it would create serious prejudice to the cause of environment.

It has been submitted at the Bar by the learned counsel for the respondent, Mr. Pathak, Standing counsel for the Forest Department that at the instance of the OIL, the Assam State Biodiversity Board is proceeding to make the impact assessment. If that is so, let them proceed with the aforesaid exercise. However, till such exercise is completed by the Assam State Biodiversity Board clearing any such activity, the Environmental Clearance issued on 11.05.2020 may not be given effect for Extension Drilling and Testing of Hydrocarbons at 7 (seven) locations by OIL under Dibru Saikhowa National Park area, Tinsukia.

It has been submitted by the learned Senior standing counsel for the OIL that this is subject matter which the Hon'ble Supreme Court as well as NGT are also considering, which however, has been denied by the learned counsel for the petitioners. Accordingly, it is made clear that this interim order passed by us in this proceeding today will be subject to any order

that may have been passed or may be passed by the Hon'ble Supreme Court or NGT as the case may be.

It is also made clear that our direction above regarding the environmental clearance dated 11.05.2020 that it will not be acted upon for the purpose of executing as mentioned above, however, will not come in the way of other purposes, viz., making assessment etc. in terms of law.

In view of the order passed in I.A.(Civil)/1905/2020, the Assam State Biodiversity Board, Aranya Bhawan, 2nd Floor, Panjabari, represented by its Member Secretary, is made party respondent no. 15 in this PIL.

Issue notice to respondent no. 15 returnable by 25.01.2021.

Petitioners are to take steps for service of notice upon the newly impleaded respondent no. 15 by registered post with A/D. Dasti is also permitted.

JUDGE

CHIEF JUSTICE (ACTING)

Comparing Assistant

ANNEXURE-R1/2



भारत सरकार
 Government of India
 पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
 Ministry of Environment, Forest & Climate Change
 क्षेत्रीय कार्यालय, शिलांग/REGIONAL OFFICE, SHILLONG
 उप कार्यालय, गुवाहाटी/SUB - OFFICE, GUWAHATI
 चौथीमंजिल, हौसेफेडइमारत, जीएसरोड, रुक्मिणीगाँव, गुवाहाटी-७८१०२२
 4th Floor, Housefed building, GS Road, Rukminigaon, Guwahati - 781022
 दूरभाष/Tel Fax: 0361-2962350, E-mail:iro.guwahati-mefcc@gov.in



File No.RO-NE/E/IA/AS/MI/209/ 396

Date: 27th August, 2024

To,

The Member Secretary (IA-Ind-2), Addl. Director/Scientist 'E'
 Ministry of Environment, Forest & Climate Change,
 Govt. of India
 Indira Paryavaran Bhawan, Jorbagh road,
 New Delhi – 110003

Sub: Bimal Gogoi V. Union of India & Ors., C.A. 2040 of 2022-reg.

Ref: (i) Ministry's e-mail dated 23-08-2024.

(ii) Letter F.No. RO-NE/E/IA/AS/MI/209/1765 dated 31st December, 2021 of IRO,
 Guwahati, MoEF&CC.

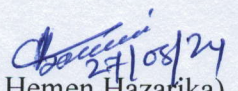
Sir,

With reference to the subject and letters cited above, I am directed to inform that as per the Six-monthly compliance report (October, 2023 to March, 2024) submitted vide e-mail dated 11-06-2024 (copy enclosed) by M/s. Oil India Ltd. it was stated that project has not yet been started and the EC Conditions will be complied prior to project execution. In this regard, prior to conducting site inspection, Sub-Office Guwahati vide letter under reference (ii) above requested the project proponent to submit the required documents, which are yet to be submitted to this office.

This is for your kind information please.

Enclosed as stated.

Yours faithfully,


 (Dr. Hemen Hazarika)
 Scientist 'E'

o/c

ANNEXURE-R1/3

- **Name of the Project:** Extension Drilling & Testing of Hydrocarbons at 7 (Seven) locations under Dibru-Saikhowa National Park Area, North-West of Baghjan PML, District Tinsukia, Assam by M/s Oil India Ltd.
- **Clearance L.No and date:** J-11011/150/2016- IA II (I) dated 11.05.2020.
- **Period of Compliance Report:** October 2023 to March 2024.
- **Status of the Project:** No drilling activity has been started.

Specific Condition:

Sl. No.	Specific Condition	Compliance status
1.	No drilling shall be conducted in forest areas without obtaining prior permission under the Forest (Conservation) Act, 1980.	Complied. The Plinth areas of the proposed project are falling outside the forest area. However, for the drilling below the Dibru-Saikhowa National Park area, Forest Clearance proposal has been submitted vide proposal No. FP/AS/MIN/28749/2017, dated 04.09.2017. OIL will drill the well after obtaining the forest clearance.
2.	Drilling in the National Park/Wildlife Sanctuaries are subject to the recommendations of orders of Hon'ble Supreme Court recommendations of Standing Committee of NBWL. recommendations of the State Chief Wildlife Warden and strict compliance of the conditions imposed therein.	Complied. Condition will be complied before project execution. NBWL clearance for the proposed project is obtained. Copy enclosed as Annexure- I
3.	Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.	Will be Complied Consent To Establish (CTE) and Consent To Operate (CTO) will be obtained before commencement of drilling activities.
4.	As proposed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged to any surface water body, sea and/or on land. Mobile ETP along with RO plant shall be installed to treat the waste water.	Will be complied. Zero Liquid Discharge will be maintained at the drilling locations. Mobile ETP coupled with RO will be installed to treat the wastewater.
5.	To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	Will be Complied Adequate Stack heights will be provided in DG sets as per CPCB guidelines.
6.	Necessary authorization required under the Hazardous and other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly	Will be Complied Hazardous Waste Authorization was obtained from Pollution Control Board, Assam vide No. WB/T-311/21-22/329 dated 13.10.2022

	adhered to.	
7.	Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air quality Emission Standards issues by the Ministry' vide G.S.R. No. 826 (E) dated 16 th November, 2009 for PM ₁₀ , PM _{2.5} , SO ₂ , NO _x , CO, CH ₄ , HC, Non-methane HC etc.	Will be Complied Ambient Air Quality will be monitored as per NAAQS, 2009.
8.	During exploration, 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 shall be used to detect fugitive emissions of Methane (if any).
9.	The project proponent also to ensure trapping/storing of the CO ₂ generated, if any, during the process and handling.	Will be Complied CO ₂ generated (if any) will be trapped/stored.
10.	Approach road shall be made pucca to minimize generation of suspended dust.	Will be Complied Approach road to the drilling locations will be made pucca to minimise generation of suspended dust.
11.	The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.	Will be Complied Acoustic enclosures shall be provided around DG sets and also adequate Stack Height shall be provided for DG sets as per CPCB guidelines.
12.	Total fresh water requirement shall not exceed 20 cum/day. Prior permission shall be obtained from the concerned regulatory authority. Mobile ETP coupled with RO shall be installed to reuse the treated water in drilling system. Size of the waste shall be equal to the hole volume + volume of drill cutting and volume of discharged mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix with waste water. Alternatively, if possible pit less drilling be practiced instead of above.	Will be Complied Permission will be obtained before extracting groundwater. Also, ETP coupled with RO will be installed to treat the effluent generated from the drilling location.
13.	The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.	Will be Complied Garland drains shall be constructed around the drilling location to prevent runoff any oil containing waste into the nearby water bodies. Separate drainage system will be created for oil contaminated and non- oil contaminated.
14.	Drill cuttings separate from drilling fluid shall be adequately washed and disposed in	Will be Complied Drill cuttings separated from drilling fluid

	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 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.	will be adequately washed and disposed in HDPE lined pit. No effluent/ drilling mud will be discharged/disposed off into nearby surface water bodies. OIL will 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.
15.	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 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 recyclers.
16.	The company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.	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.
17.	The company 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.	Will be Complied Contingency Plan for H ₂ S release was in place. OIL never encountered H ₂ S and no such evidence exists in our field of operation. However, multi-gas detector and Self Containing Breathing Apparatus (SCBA) are kept available to meet the emergency situation, if any.
18.	The company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to be Ministry and Regional Office.	Complied. Copy of Long term Subsidence Report enclosed as Annexure - II .
19.	Blow out Preventer system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.	Will be Complied Blow Out Preventer (BOP) system will be installed to prevent blowouts during drilling operations.
20.	Emergency Response Plan shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.	Will be Complied OIL has site specific Emergency plan and contingency plan and Disaster management plan (DMP) based on relevant and realistic emergency scenarios.

21.	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 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.
22.	Atleast 2% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item- wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	Will be complied.
23.	No lead acid batteries shall be utilized in the project site.	Will be complied. No lead acid batteries will be utilized at the drilling location
24.	Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.	Will be complied. Occupational Health Surveillance of workers engaged in drilling operation will be carried out on regular basis.
25.	Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office.	Will be complied.
26.	Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.	Complied. SOPs for all the operations covering safety and environment related issues are prepared. OIL has prepared Environmental manual which is made available at the drilling location. Copy of the same is enclosed Annexure – B . Also, all the environmental monitoring reports related to ambient air quality, Stack Gas monitoring, ETP effluent, Noise level will be maintained at the drilling location.

General Condition:

Sl. No.	General Condition	Compliance status
1.	The Project Proponent shall obtain all other statutory/ necessary permissions/ recommendations/ NOCs prior to start of construction/ operation of the project, which inter alia include permission / approvals under the	Will be complied.

	Forest (Conservation) Act, 1980; the Wildlife (Protection) Act, 1972; the Coastal Regulation Zone Notification, 2019 as amended from time to time, and other Office Memorandum/ Circular issued by the Ministry Of Environment, Forest and Climate Change from time to time, as applicable to the project.	
2.	The project proponent shall ensure compliance of 'National Emission Standards', as applicable to the project, issued by the Ministry from time to time. The project proponent shall also abide by the rules/ regulations issued by the CPCB/SPCB for control/ abatement of pollution.	Will be complied. Ambient Air Quality monitoring will be carried out as per NAAQS, 2009.
3.	The project authorities shall adhere to the stipulations made by the State Pollution Control Board/ Committee, Central Pollution Control Board, State Government and any other statutory authority.	Will be complied.
4.	The project proponent shall prepare a site-specific conservation plan and wildlife management plan in case of the presence of Schedule - I species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approval. The recommendations shall be implemented in consultation with the State Forest/ Wildlife Department in a time bound manner.	Will be complied. Copy of the Site-Specific Wildlife Conservation and Management Plan was submitted to Chief Wildlife Warden for approval. Copy of the same is enclosed as Annexure – III.
5.	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 of 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 modification other than mentioned in the EIA Notification, 2006 and its amendments, will be carried out without prior approval of the Ministry of Environment, Forest and Climate Change.
6.	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 utilized for lighting purposes at the drilling locations.
7.	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the unwind and downwind direction as well as where maximum ground level concentrations are anticipated.	Will be complied. Location of Ambient air quality monitoring stations will be decided in consultation with the State Pollution Control Board (SPCB)
8.	The National Ambient Air Quality Emission	Will be complied.

	Standards issued by the Ministry vide G.S.R. No. 826 (E) dated 16 th November, 2009 shall be followed.	Ambient Air Quality monitoring will be carried out as per NAAQS, 2009.
9.	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 at the drilling locations will be kept within the permissible limits by providing acoustic enclosures around the DG sets.
10.	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and to utilize the same for process requirements.	Will be complied.
11.	Training shall be imparted to all employees on safety and health aspects of chemical handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	Will be complied. Training will be imparted to all employees on safety and health aspects of chemical handling and PME shall be carried out on regular basis.
12.	The company shall comply also 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.	Will be complied. All the environmental protection measures proposed in the EIA – EMP shall be implemented.
13.	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented.	Will be complied.
14.	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	Will be complied.
15.	A separate environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/ specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Complied. OIL has Environment Cell along with laboratory facilities to carry out environmental management and monitoring functions. Details are enclosed as Annexure – A.
16.	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	Will be complied. Project not yet started. Condition will be complied prior to Project Execution.

	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.	
17.	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.
18.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six-monthly compliance status reports shall be posted on the website of the company.	Complied EC compliance report for the period April 2023 to September 2023 was submitted to Sub-RO, Guwahati, Zonal Office CPCB, Shillong and, Chairman - Pollution Control Board Assam vide L.No. S&E/E/43C-1/52 dated 11.01.2024. Also, copy of the EC and Six-monthly compliance report are uploaded to OIL website under the link https://www.oil-india.com/Environmental.aspx
19.	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 .
20.	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.	Complied. Copy of Newspaper Advertisement is enclosed as Annexure- IV .
21.	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	Will be complied.

	project.	
22	This Environmental Clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Agreed



Annexure - I



Government of India
Ministry of Environment, Forest and Climate Change
(Wildlife Division)

6th Floor, Vayu Wing
 Indira Paryavaran Bhawan
 Jor Bag Road
 New Delhi 110 003

F.No. 6-159/2107 WL

Date: 9 August 2017

To
 All Members
 Standing Committee of NBWL

Sub: Minutes of 44th Meeting of the Standing Committee of NBWL- reg.

Sir/Madam,

Kindly find enclosed copy of the Minutes of 44th Meeting of the Standing Committee of National Board for Wildlife held on **29th July 2017 at 1.00 PM in Teesta Conference Hall, I Floor, Vayu Block, Indira Paryavarn Bhavan, New Delhi** under the chairmanship of Hon'ble Union Minister of Environment, Forest and Climate Change.

Yours faithfully,

(Handwritten signature)

(Dr. Pasupala Ravi)
 Scientist C

E-mail: ddwlmef@gmail.com

Encl: As above

Distribution

- (1) Secretary, MoEF&CC
- (2) DGF&SS, MoEF&CC
- (3) Member Secretary, NTCA
- (4) ADGF(FC), MoEF&CC
- (5) ADGF(WL), MoEF&CC
- (6) Director, WII, Dehradun
- (7) Director, GEER Foundation, Gandhinagar, Gujarat
- (8) Dr. R.Sukumar, Member, NBWL
- (9) Dr. H.S. Singh, Member, NBWL
- (10) Pr. Secretary (Forests), Govt. of Andhra Pradesh

Copy to

- (1) PS to Hon'ble MoEF&CC
- (2) PPS to DGF&SS, MoEF&CC
- (3) PPS to Addl.DGF(WL), Member Secretary, NBWL
- (4) PPS to IGF(WL)/PS to DIG(WL)/PS to JD(WL)

(Handwritten signature)

- (l) Once the work of creation of barrage and associated canals are completed the project proposes to build the Religious City and Hi-tech City covering both the banks of Ganga River. The project proposes to divert 7395 sq.km area of the Sanctuary. This is will negatively affect the population of endangered swamp deer, sambar and host of other rare and threatened species of Hastinapur Wildlife Sanctuary. This may also have negative impact on the adjacent to Ramsar Site.
- (e) The project is based on the premises of drawing a minimum of 6000 cusec of water from the Ganga River for sustaining the project. The Ganga river is already water stress. As evident from the 48527 cusec of water is already being extracted before the proposed site (CPCB 2016). Diverting 6000 cusec of water from the barrage will render the downstream to the project site ecologically dead. The unregulated extraction of water without ecological consideration is one of the major factors that is affecting the integrity of the Ganga.

After discussions the Standing Committee decided to reject the present form of the proposal and requested the State Government to submit the revised proposal for the consideration of the Standing Committee of NBWL.

42.3.2 Proposal of the Oil India Limited to Extract Hydrocarbon beneath 3900-4000 meters of Dibru Saikhowa National Park

The IGF(WL) briefed the Committee on the proposal and stated that the proposal of the Oil India Limited was considered by the Standing Committee of the National Board for Wildlife in its 42nd meeting held on 15th May 2017, wherein the comments were sought from the State Government of Assam on the proposal. The State Government of Assam vide its letter 24th May 2017 gave their comments and has stated that, they are not in a position to submit the desired proposal for obtaining clearance from the Standing Committee of NBWL.

Further IGF(WL) stated that as per the Hon'ble Supreme Court Order vide dated 17.07.2017 in I.A. No.3934 in W.P.(C) 202/1995, a meeting was convened on 24th July 2017 under the chairmanship of DGF&SS. It was decided that the State Government of Assam would submit the proposal. The State Government of Assam submitted the proposal very recently. He

mentioned further that the State Chief Wildlife Warden has recommended the proposal with the following safety and mitigation measures:

1. Environment Impact Assessment and Environment Management Programme (EIA/EMP)
2. Preventive measures to ensure there is no contamination of surface water
3. Flaring of gas
4. Measure to prevent noise pollution
5. Measures to prevent oil spills
6. Measures to prevent fire hazard
7. To erect 10 feet **high barricade around the drilling plinths of each well**. Also a **safety zone of 7.5 meters around the barricade** may be fenced with chain link fencing and planted with indigenous plant species to prevent any **injuries / mortality of wildlife** and also environmental damage and pollution in the mining locality.

In addition to the above specified safety measures certain protection and mitigation measures are to be taken by the Forest Department for the welfare of the existing wildlife population as well as to prevent environmental damage and pollution in and around the vicinity of the National park. Thus the user Agency shall have to provide a reasonable amount to PCCF, WL & CWLW, Assam as Corpus Fund, which will be utilized for wildlife conservation and other allied activities in the interest of the wildlife prior to allowing the use of the area.

Accordingly the Standing Committee decided to recommend the proposal along with the conditions imposed by the State Chief Wildlife Warden.

43.1.19 Realignment of area of the buffer area of Indravati Tiger Reserve, Chhattisgarh

The IGF(WL) briefed the Committee on the proposal and stated that the proposal was considered in the 43rd meeting of SC-NBWL held on 27th June 2017 and the Standing Committee suggested to seek the recommendations of the CWLW for further consideration. He also mentioned that recommendation of the State Chief Wildlife Warden has not been received.

The Chief Wildlife Warden, Chhattisgarh informed that the recommendations would be submitted in two weeks. Consequently the Standing Committee decided to defer the proposal.

Project Report

On

MONITORING OF LAND SUBSIDENCE DUE TO HYDROCARBON EXTRACTION IN ASSAM

A collaborative project between



**National Remote Sensing Centre (NRSC)
Indian Space Research Organisation (ISRO)
Hyderabad**

and



ऑयल इंडिया लिमिटेड

Oil India Limited

**Oil India Limited
Duliajan - 786 602, Assam**

June, 2019

NATIONAL REMOTE SENSING CENTRE
REPORT / DOCUMENT CONTROL SHEET

1	Security Classification	Restricted			
2	Distribution	OIL and ISRO			
3	Report / Document version	(a) Issue no. 01	(b) Revision & Date	28.06.2019	
4	Report / Document Type	Project report			
5	Document Control Number	NRSC - RSAA - GSG - JUN-2019-TR-1317-V1.0			
6	Title	Monitoring of land subsidence due to hydrocarbon extraction in Assam			
7	Particulars of collation	Pages 28	Figures 15	Tables 6	References 9
8	Author(s)	Shri Priyom Roy, S/E 'SD' and Dr. Tapas Ranjan Martha			
9	Affiliation of authors	Geosciences Group, RSA-A, NRSC/ISRO			
10	Scrutiny mechanism	Compiled by Priyom Roy & Tapas R. Martha	Reviewed by Group Head, Geosciences	Approved /Controlled by DD (RSA-A)	
11	Originating unit	NRSC			
12	Sponsor(s)/ Name and Address	OIL, New Delhi			
13	Date of Initiation	1 st July 2018			
14	Date of Publication	28 th June 2019			
15	Abstract (with Keywords):	<p>Subsidence due to hydrocarbon extraction has been reported in various oilfields (e.g. Aghajari, Iran and Lost Hills and Belridge, USA) across the world. In this project, we have attempted to delineate zones of possible land subsidence, if any due to hydrocarbon extraction in and around the oil fields owned by Oil India Limited within Assam and parts of Arunachal Pradesh. Microwave remote sensing data were analysed by differential interferometric technique to identify land subsidence. An integrated suite of microwave data ranging from Envisat ASAR (C band), ALOS-PALSAR 1&2 (L band) and Sentinel-1 (C band) were used in this study. The temporal range for the data extends from 2005 (Envisat) to 2018 (Sentinel). A total of 17 master-slave pairs have been processed with temporal interval of 1 to 3 years.</p> <p>It is observed that due to the thick vegetation cover and annual dynamicity of the vegetation and fluvial landforms, there is a significant loss in coherence between the master-slave pairs. Distinguishable, but random and gradational fringe patterns are observed in and around towns of Chabua, Duliajan, Doom Dooma, Tinsukia and Digboi in Assam and around Diyun in Arunachal Pradesh. However, field verifications reveal no signatures of ground subsidence in this region. Further the identified locations are not correlated to the well locations of OIL. Therefore, on the basis of the interferometric method and time frame of the observation, the study does not reveal and delineate any subsidence in the area.</p>			

Acknowledgements

The project team is grateful to Shri. Santanu Chowdhury, Director, NRSC for his support at various stages of project execution. We are extremely grateful to Dr. P.V.N. Rao, Deputy Director (RSAA), NRSC for his overall guidance and encouragement. We thank Shri P. Chandrasekharan, Director (E&D), Shri Rahul Dasgupta, former ED (corporate affairs) and Shri S K Rai, CGM (HSE & Coordination) of OIL, New Delhi for their support to this project. We thank OIL Duliajan for providing us the opportunity to collaborate for this work. We thank the following officers of OIL, Duliajan for the continuous correspondence, discussions and support during the field visit.

- G.V.J. Rao, Chief General Manager (Geophysics)
- Dr. B.N. Sahoo, General Manager (Safety & Environment)
- Sudhanshu Chugh, Dy. General Manager (Geophysics)
- Abhijit Sonowal, Dy. Chief Geophysicist
- Imran Khan, Superintending Geophysicist
- Ratnadeep Das, Senior Engineer (Safety & Environment)



Executive Summary

Subsidence due to hydrocarbon extraction has been reported in various oilfields (e.g. Aghajari, Iran and Lost Hills and Belridge, USA) across the world. In this project, we have attempted to delineate zones of possible land subsidence, if any due to hydrocarbon extraction in and around the oil fields owned by Oil India Limited within Assam and parts of Arunachal Pradesh. Microwave remote sensing data were analysed by differential interferometric technique to identify land subsidence. An integrated suite of microwave data ranging from Envisat ASAR (C band), ALOS-PALSAR 1&2 (L band) and Sentinel-1 (C band) were used in this study. The temporal range for the data extends from 2005 (Envisat) to 2018 (Sentinel). A total of 17 master-slave pairs have been processed with temporal interval of 1 to 3 years.

It is observed that due to the thick vegetation cover and annual dynamicity of the vegetation and fluvial landforms, there is a significant loss in coherence between the master-slave pairs. Distinguishable, but random and gradational, fringe patterns are observed in and around towns of Chabua, Duliajan, Doom Dooma, Tinsukia and Digboi in Assam and around Diyun in Arunachal Pradesh. However, field verifications reveal no signatures of ground subsidence in this region. Further the identified locations are not correlated to the well locations of OIL. Therefore, on the basis of the interferometric method and time frame of the observation, the study does not reveal and delineate any subsidence in the area.



SPECIES SPECIFIC CONSERVATION PLAN FOR ENVIRONMENTAL IMPACT ASSESSMENT EXTENSION DRILLING AND TESTING OF HYDROCARBONS AT 7 (SEVEN) LOCATIONS UNDER DIBRU-SAIKHOWA NATIONAL PARK AREA. NORTH-WEST OF BAGHJAN PML UNDER TINSUKIA DISTRICT.

The conservation priorities of the habitats within the study area as defined in the following sections;

HABITATS

The available terrestrial habitats within the study area are agricultural lands, tea gardens, homestead plantation areas and forests. Of the aquatic habitats, species of conservational significance are mostly confined to Brahmaputra River and small streams, Maguri Beel and village ponds within the study area. The species identified within the aquatic and terrestrial habitats are provided in Table 1

Table 1: Species of Conservation Priorities in Habitats within the Study Area

SL No	Scientific Name	Schedule WPA, 1972	IUCN Category
1.	Indian or Ganges Softshell Turtle (<i>Nilssonina gangetica</i>)	Sch I (Part II)	Vulnerable/ CITES Appendix I
2.	Indian Peacock Softshell Turtle (<i>Nilssonina hurum</i>)	Sch I (Part II)	Vulnerable/ CITES Appendix I
3.	Spotted Pond Turtle (<i>Geoclemys hamiltonii</i>)	Sch I (Part II)	Vulnerable/ CITES Appendix I
4.	Burmese Rock Python (<i>Python bivittatus</i>)	Sch I (Part II)	Vulnerable/ CITES Appendix I
5.	Bengal Monitor (<i>Varanus bengalensis</i>)	Sch I (Part II)	Least Concern / CITES Appendix II
6.	Water Monitor (<i>Varanus salvator</i>)	Sch I (Part II)	Least Concern / CITES Appendix II
7.	White backed Vulture (<i>Gyps bengalensis</i>)	Sch I (Part III)	Critically Endangered/CITES Appendix II
8.	Black Kite (<i>Milvus migrans</i>)	Sch I (Part III)	Least Concern/CITES Appendix II
9.	Shikra (<i>Accipiter badius</i>)	Sch I (Part III)	Least Concern/CITES Appendix II
10.	Black-Winged Kite (<i>Elanus caeruleus</i>)	Sch I (Part III)	Least Concern/CITES Appendix II
11.	Common Kestrel (<i>Falco tinnunculus</i>)	Sch I (Part III)	Least Concern/CITES Appendix II
12.	Short-toed Snake Eagle (<i>Circaetus gallicus</i>)	Sch I (Part III)	Least Concern/CITES Appendix II
13.	Common Leopard (<i>Panthera pardus</i>)	Sch I (Part I)	Vulnerable/ CITES Appendix I
14.	Fishing Cat (<i>Prionailurus viverrinus</i>)	Sch I (Part I)	Least Concern/CITES Appendix II

Sl. No	Scientific Name	Schedule WPA, 1972	IUCN Category
15.	Western Hoolock Gibbon (<i>Hoolock hoolock</i>)	Sch I (Part I)	Endangered/ CITES Appendix II
16.	Slow Loris (<i>Nycticebus coucang</i>)	Sch I (Part I)	Vulnerable/ CITES Appendix II
17.	Gangetic Dolphin (<i>Planatista gangeticus</i>)	Sch I (Part I)	Endangered/CITES Appendix I

The detailed conservation plan is provided in Table 2.

Table 2: Conservation Plan for Species and Habitats of Conservational Priority Species in the Study Area

Sn.	Species	Source of its Occurrence	Habitats within Study Area	Threats	Broad Conservation Actions	Responsibilities	Actions Required
1	Reptiles-turtles	Secondary sources- Discussion with forest department and locals	At the riparian habitats near Brahmaputra, Dangori and Dibru Rivers	Threats within the study area is identified as hunting, mortality due to fish bycatch	<ul style="list-style-type: none"> Identify basking sites of this species and enhance protection of these sites through village communities. Awareness campaigns to be carried out among village communities, focusing on local schools for protection of the species Involve local communities in celebration of wildlife week and create awareness to conserve these species. 	Primary-Forest and Wildlife Department Secondary - Assistance from OIL	Awareness campaigns to be conducted for conservation of Schedule I species, their ecosystem and values.
2	Reptiles-Snakes and Lizards	Secondary sources- Discussion with forest department and locals	Monitor lizards can be found in variety of habitats depending upon their food resource. In the study area the species was predominantly found in the forest habitats and homestead plantation areas	Threats within the study area is identified as hunting and road kills	<ul style="list-style-type: none"> While laying approach road, measures will be taken to keep natural drainage unhindered, by construction of culverts, which will provide crossing points for reptiles and 		

Sn.	Species	Source of its Occurrence	Habitats within Study Area	Threats	Broad Conservation Actions	Responsibilities	Actions Required	
							<ul style="list-style-type: none"> minimize risk of road kill. Awareness campaigns to be carried out among village communities, focusing on local schools. 	
3	White backed Vulture (<i>Gyps bengalensis</i>)	Primary Survey	Covering all available habitats	The anthropogenic threats to these species is mortality by electrocution from power transmission lines and entanglement in the protective net/nylon strings covers over the fish culture ponds.	<ul style="list-style-type: none"> Birds of prey may sometimes select Awareness campaign will be carried out in local villages, on conservation of birds of prey and their ecosystem services and values. 			
4	Shikra (<i>Accipiter badius</i>)	Primary Survey						
5	Short-toed Snake Eagle (<i>Circus gallicus</i>)	Primary Survey						
6	Black Winged Kite (<i>Elanus caeruleus</i>)	Primary Survey						
7	Black Kite (<i>Milvus migrans</i>)	Primary Survey						
8	Common Kestrel (<i>Falco tinnunculus</i>)	Primary Survey						
9	Common Leopard (<i>Panthera pardus</i>)	Secondary sources- Discussion with forest department and locals	The distribution of Common Leopard is primarily confined to the reserve forests areas and tea gardens within the study area			The primary threats to Leopards are habitat fragmentation through degradation of forest habitats, reduced prey base and conflict with livestock and game farming	<ul style="list-style-type: none"> Protection of forest areas and leopard habitats Awareness campaign will be carried out in local villages, on conservation of 	

Sn.	Species	Source of its Occurrence	Habitats within Study Area	Threats	Broad Conservation Actions	Responsibilities	Actions Required
							leopards and their ecosystem services and values.
10	Western Hoolock Gibbon (<i>Hoolock leuconedyls</i>)	Secondary sources- Discussion with forest department and locals	The distribution of the species is primarily confined to the ecologically protected areas within the study area.	The primary threats are habitat fragmentation through degradation of forest habitats	<ul style="list-style-type: none"> • Protection of forest areas and habitats of the Schedule I species • Awareness campaign will be carried out in local villages, on conservation of the species their ecosystem services and values. 		
11	Slow Loris (<i>Nycticebus coucang</i>)	Secondary sources- Discussion with forest department	The distribution of the species is primarily confined to the ecologically protected areas within the study area.	The primary threats are habitat fragmentation through degradation of forest habitats			
12	Asian Elephant (<i>Elephas maximus</i>)	Secondary sources- Discussion with forest department and locals	Elephant activity is present within the DSNP. Elephant activity is not reported in the villages in proximity to the proposed well sites.	The primary threats are habitat fragmentation through degradation of forest habitats; blockage of movement corridors			
13	Gangetic Dolphin (<i>Platanista gangeticus</i>)	Secondary Sources- Discussion with forest department	At Brahmaputra and Dangori River in proximity ERD surface locations	Entanglement at fishing nets. Pollution of the river			Campaign will be carried out about awareness generation and conservation of these Cetacean species in the coastal villages, schools and particularly in fisherman community's

ANNEXURE - A**ENVIRONMENT MANAGEMENT CELL OF OIL INDIA LIMITED - FHQ, DULIAJAN**

S.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



A handwritten signature in blue ink, appearing to be a stylized 'S' or similar character.

U. S. DEPARTMENT OF THE INTERIOR



BLM National System of Public Lands
Inventory and Management Planning



Contents

S.No	Content
1.0	INTRODUCTION
2.0	Environmental Management Plan
3.0	IMPACT ASSESSMENT
4.1	Air Quality
4.2	Noise Quality
4.3	Soil Quality
4.4	Water Quality and Hydrogeology
4.5	Biological Environment
4.6	Socio-Economic Environment
4.7	Impact on Community Health & Safety
4.0	DETAIL ENVIRONMENTAL MANAGEMENT PLAN
5.1	Air Quality Management Plan
5.2	Noise Management Plan
5.3	Soil Quality Management Plan
5.4	Surface Water Quality Management Plan
5.5	Ground Water Quality Management Plan
5.6	Waste Management Plan
5.7	Wildlife Management Plan
5.8	Road Safety & Traffic Management Plan
5.9	Occupation Health & Safety Management Plan
5.10	Management of Social issues and concerns
5.11	Emergency Response Plan
5.0	Environment Management Matrix
6.0	Summary and Conclusion



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.



ऑयल इंडिया लिमिटेड
Oil India Limited

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.



(S.RATH)
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, NO_x and SO_x that may affect the ambient air quality temporarily. Air pollutants like particulate matter, hydrocarbons and NO_x 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 the running of drilling rig and ancillary equipment viz. shale shakers, mud pumps and diesel generators, gas generators.

3.3 Soil Quality: 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 reach surface water channels and increase the suspended solids load of the channel water. Increase of 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 through forest areas, as most of the mammals movement occurs during night;
- Noise levels at the drill sites will 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	Temporary change in landscape	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
		1.2	Increase of illumination at night time due to installation of drilling setup	Temporary disturbance of the nearby villagers	Appropriate shading of lights to prevent scattering	Grievance records/ Consultation with Villagers	Construction & Drilling	OIL/Contractor	Management of social issues & concerns
		1.3	Influx of man power & immigrant labour force to nearby villages	Possibility Cultural and behavioural conflict	Preference used of local labour forces to the extent possible	Grievance records	Construction & Drilling	OIL/Contractor	Management of social issues & concerns
2.	Storage & Handling of Materials & Spoils	2.1	Emission of fugitive dust from loading & unloading operation	Temporary impact on air quality especially SPM	All loading and unloading activities to be carried out as close as possible to the storage facilities.	Site Inspection	Construction & Drilling	OIL/Contractor	Air Quality Management
		2.2	Accidental spillage of oil & chemicals	Potential contamination water body resulting impact on aquatic ecosystem	All spills to be reported and contained to prevent entry of spilled chemicals/fuels to any surface water body or drainage channel	Records of spills/Community Grievances	Construction & Drilling	OIL/Contractor	Surface water quality management plan, Wildlife Management Plan
				Potential impact on soil quality	All spills to be reported and remedial measures to be taken for clean-up of the spill.	Records of Spills/Site Inspection	Construction & Drilling	OIL/Contractor	Spill management plan

S No	Activity	Ref	Aspect	Impact	Mitigation Measures	Monitoring	Timing/ Frequency	Responsible Party	Related Plans
3.	Transport of Materials, Spoils and Machinery	3.1	Emission of gaseous pollutants from vehicle during transportation of materials, spoils and machinery	Temporary deterioration on air quality along transport route	All diesel-powered equipment will be regularly maintained and idling time reduced to minimise emissions; Vehicle / equipment air emissions will be controlled by good practice procedures (such as turning off equipment when not in use); Vehicle / equipment exhausts observed emitting significant black smoke in their exhausts will be serviced/ replaced	Records and Site Inspection	Construction & Drilling	OIL/Contractor	Air Quality Management plan
		3.2	Noise emission during transport of materials, spoils and machinery	Temporary deterioration in ambient noise along the transportation route	Undertake preventive maintenance of vehicles and machinery to reduce noise levels. Restriction on unnecessary use of horns by trucks and vehicle in settlement area	Site Inspection/Records of repairs	Construction & Drilling	OIL/Contractor	Noise Quality Management Plan
4.	Operation & maintenance of rig and associated machinery.	4.1	Emission of air pollutant from DG/GG sets	Temporary impact on air quality due to increase in concentration of gaseous pollutants e.g. NOx, HC	Preventive maintenance of DG sets to be undertaken as per manufacturers schedule	Site Inspection/Records of repairs	Drilling	OIL/Contractor	Air Quality Management plan
		4.2	Emission of Noise from DG/GG sets	Temporary increase of ambient as well a	All workers working near high noise generating equipment to be provided	Recording of Noise	Drilling	OIL/Contractor	Noise Quality Management Plan and

S No	Activity	Ref	Aspect	Impact	Mitigation Measures	Monitoring	Timing/ Frequency	Responsible Party	Related Plans
				work place noise level	with Personal Protective equipment Preventive maintenance of machinery to be undertaken as per manufacturers schedule Install sufficient engineering control (mufflers) to reduce noise level at source				Occupational Health & Safety Management Plan
		4.3	Emission of noise from operation of the rig	Temporary increase of ambient as well as work place noise level	All workers working near high noise generating equipment to be provided with Personal Protective equipment Preventive maintenance of machinery to be undertaken as per manufacturers schedule	Site Inspection	Drilling of Wells	OIL/Contractor	Noise Quality Management Plan and Occupational Health & Safety Management Plan
		4.4	Abstraction of ground water for project usage	Depletion of ground water resources	Optimize use of water during drilling operations	Record Keeping and Auditing	Construction & Drilling	OIL/Contractor	None
		4.5	Noise from mud pump during preparation of drilling mud	Temporary increase of ambient & work place noise level	Preventive maintenance of machinery to be undertaken as per manufacturers schedule	Recording of Noise	Drilling of Wells	OIL/Contractor	Noise Quality Management Plan and Occupational Health & Safety Management

S 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				Plan
		4.6	Accidental spillage of chemicals during preparation drill mud	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
		4.7	Accidental spillage of chemicals during preparation drill mud	Potential impact on surface water quality and aquatic ecosystem	All spill to be contained so that it does not reach any surface water body or drainage channels	Records of spills	Drilling of Wells	OIL/Contractor	Surface water quality management plan
5.	Operation & maintenance of Vehicles	5.1	Emission of Noise from vehicles	Temporary increase of noise level in areas abutting transport route	Preventive maintenance of vehicles to be undertaken as and when required	Maintenance Records	Construction &Drilling	OIL/Contractor	Noise quality management plan
		5.2	Emission of gaseous air pollutant from vehicles	Temporary deterioration air quality in areas abutting transport routes	Preventive maintenance of vehicles to be undertaken as and when required	Site Inspection/Records of repairs	Construction &Drilling	OIL/Contractor	Air quality management plan
		5.3	Spillage of fuels & lubricants from vehicles	Contamination of soil resulting loss of soil living organism	Adopt best practices e.g. use pumps and dispensing nozzle for transfer of fuel, use of drip trays. Etc.	Site Inspections/Audits	Construction &Drilling	OIL/Contractor	Spill Management plan
				Impact on surface water quality and	The drainage system on site to be provided with Sedimentation tank and Oil-	Site 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	Temporary increase of ambient noise level	Install sufficient engineering control on equipment and machineries (like mufflers in DG sets) to reduce noise and vibration emission levels at source, carry out proper maintenance and subject them to rigid noise and vibration control procedures.	Site Inspection	Drilling of Wells	OIL/Contractor	Noise quality management plan
		6.2	Loss of drilling mud and cement slurry during casing of well	Potential contamination of ground water aquifer	Proper engineering controls during cementing operation to prevent migration of drilling mud and cement slurry into ground water aquifer	Site Inspection	Drilling of Wells	OIL/Contractor	Ground water quality management plan
7.	Temporary storage, handling & disposal of process waste	7.1	Accidental spillage of process waste (unused cement slurry, return mud & drill cuttings) at the temporary storage site	Potential for contamination of soil and ground water	Proper engineering controls for the drilling and cementing operations;	Drilling and Decommissioning Phases	Drilling and Decommissioning Phases	OIL/Contractor	Ground water quality management plan
		7.2	Surface runoff from temporary storage site of drill cuttings & unused mud into surface water bodies	Impact on surface water quality and aquatic ecosystem	All Temporary waste storage area will have proper bunds to prevent any escape of contaminated runoff Ensure that any runoff from such temporary storage area	Site Inspection and Record keeping	Drilling and Decommissioning Phases	OIL/Contractor	Surface water quality management plan and Spill Management plan

S No	Activity	Ref	Aspect	Impact	Mitigation Measures	Monitoring	Timing/ Frequency	Responsible Party	Related Plans
					are channelized into ETP				
		7.3	Accidental leakage/spillage of oils and lubricants and fuel from temporary storages	Contamination of soil resulting in loss of soil living organism	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	Site Inspection	Construction &Drilling	OIL/Contractor	Waste Management Plan and Spill Management plan
		7.4	Accidental leakage/spillage of oils and lubricants from temporary storages	Contamination of surface water resulting in deterioration of surface water quality and adverse impact on aquatic ecosystem	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.	Site Inspection	Construction &Drilling	OIL/Contractor	Waste Management Plan and Spill Management plan
		7.5	Disposal/spillage of spent oils & lubricants into environmental media	Contamination of soil resulting loss of soil living organism Contamination of surface water resulting deterioration of surface water quality and aquatic	Ensure recycling of spent oil & lubricant through authorized dealer	Site Inspection	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					
		7.6	Disposal of used battery & spent filters in environmental media	Potential for contamination of soil, ground water and surface water body	Ensure recycling of waste through authorized waste recycler	Site Inspection and Record Keeping	Construction & Drilling	OIL/Contractor	Waste Management Plan and Spill Management plan
		7.7	Offsite disposal of metallic, packing, scrap	Localized visual impacts		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	Temporary localized deterioration air quality (NOx, HC)	Proper engineering controls to ensure complete combustion of gas Location of Flare stack to be chosen considering the sensitive receptors adjoining the site	Engineering Designs /Site inspections	Construction & Drilling	OIL S& E Team and Drilling team	Waste Management Plan
9.	Storage of materials (equipment, chemicals, fuel)	9.1	Accidental spillage during storage and handling of materials	Potential for contamination of soil & ground water	Impervious storage area, especially for fuel & lubricant, chemical, hazardous waste, etc.	Site Inspection	Construction & Drilling	OIL/Contractor	Spill Management plan
			Safety concerns for workers involved in handling of hazardous materials		Personal protective equipment to be provided to workers involving in handling of hazardous materials	Site Inspection	Construction & Drilling	OIL/Contractor	Health and Safety Plan

S No	Activity	Ref	Aspect	Impact	Mitigation Measures	Monitoring	Timing/ Frequency	Responsible Party	Related Plans
10.	Technical Emergencies	10.1	Probability of accidental leakage of gas/ liquid hydro-carbons due to failure of safety devices	Potential adverse impact on personnel, environment & assets	<p>Proper engineering controls to prevent leakage of sour gases</p> <p>Obtain an early warning of emergency conditions so as to prevent a negative impact on personnel, the environment, and assets</p> <p>Safeguard personnel to prevent injuries or loss of life by either protecting personnel from the hazard and/or evacuating them from the facilities</p> <p>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</p> <p>Develop evacuation procedures to handle emergency situations.</p>	Site Inspection	Drilling	OIL/Contractor	Emergency Response Plan
11.	Dismantling of rig & associated machinerles	11.1	Emission of noise during dismantling of rig	Temporary deterioration of ambient noise quality resulting in discomfort	All noise generating activities will be restricted during day time	Site Inspection	Well Decommissioning Phase	OIL/Contractor	Noise quality management plan
		11.2	Generation of waste during dismantling of rig	Temporary visual impacts	Storage of waste in designated areas only recyclable waste should be recycled through authorized	Site Inspection	Well Decommissioning Phase	OIL/Contractor	Waste Management Plan

S No	Activity	Ref	Aspect	Impact	Mitigation Measures	Monitoring	Timing/ Frequency	Responsible Party	Related Plans
					water recycler				
		11.3	Disposal/spillage of spent oils & lubricants into environmental media	Contamination of soil resulting loss of soil living organism Contamination of surface water resulting deterioration of surface water quality and aquatic ecosystem	Manage spills of contaminants on soil	Site Inspection and Record keeping	Well Decommissioning Phase	OIL/Contractor	Waste Management Plan
12.	Transportation of drilling facilities	12.1	Emission of gaseous air pollutant during transportation of drilling facilities	Temporary localized deterioration of air quality due to emission gaseous pollutants	Vehicle / equipment air emissions will be controlled by good practice procedures (such as turning off equipment when not in use); and Vehicle / equipment exhausts observed emitting significant black smoke in their exhausts will be serviced/ replaced	Site Inspection and Record keeping	Well Decommissioning Phase	OIL/Contractor	Air quality management plan
		12.2	Fugitive emissions due to re-entrainment of dust during transport of drilling facilities	Temporary localized deterioration of air quality due to increase in SPM levels	Approach road to be sprinkled daily with water	Site Inspection	Well Decommissioning Phase	OIL/Contractor	Air quality management plan
		12.3	Emission of noise during transport of drilling facilities	Temporary deterioration of noise quality	Restrict all noise generating operations, except drilling, to daytime	Site Inspection	Well Decommissioning Phase	OIL/Contractor	Noise quality management plan

S 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	-
	Minor	Minor
	Major	Moderate
Aquatic Ecology	Moderate	Moderate
Livelihood & Income generation	Moderate	Moderate
Conflict with local people	Moderate	Moderate
Benefit to Local Enterprises	Positive	-
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



Annexure - C



ऑयल इंडिया लिमिटेड
(भारत सरकार का उद्यम)
Oil India Limited
(A Government of India Enterprise)

Health Safety & Environment Department

P.O. DULIAJAN-786602,
ASSAM, INDIA
Phone : 0374-2800542
Fax : 0374-2801796
Email: safety@oilindia.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, Sivsagar,
PIN: 785640.

2. [Illegible]

[Illegible text block]

[Illegible text block]



[Illegible text block]

[Illegible text block]

[Illegible text block]

[Illegible text block]

[Illegible text block]

[Illegible text block]

[Illegible text block]

[Illegible text block]

[Illegible text block]

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.

PART - B

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 Oil, Natural Gas, LPG)	1.12 m ³ /MT (Approx.)	1 m ³ /MT (Approx.)

(II) Raw material consumption

*Name of raw materials	Name of products	Consumption of raw material per unit	
		During F.Y. 2021-22	During 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	<p>NIL.</p> <p>There is no discharge of pollutants from drilling locations and Production Installations.</p> <ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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- 	<p>No variation is observed.</p> <p>All parameters of treated effluent and Formation water are within the permissible limits.</p>

	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.	Stack Gas and Ambient Air Quality (AAQ) monitoring is carried out frequently at drilling locations and Production Installations (Test report enclosed as Annexure- III)	No variation is observed. All parameters of Stack Gas emissions and Ambient Air are within the permissible limits.

PART - D

HAZARDOUS WASTES

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

Hazardous Wastes	Category of Hazardous Waste as per Schedule - I of HW Rules, 2016	Total Quantity generated	
		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
	S.No. 5.1 Used or Spent Oil	60 KL	208 KL
	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 facilities	S.No. 33.5 Chemical sludge 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		
Drill Cuttings	23,000 m ³ (Approx.)	27,000 m ³ (Approx.)
(b) From pollution control facilities	NIL	
(c)		
(1) Quantity recycled or re-utilized within the unit.	N/A	
(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.**

Appeal-04-2020/EZ- Bimal Gogoi -vs- Union of India

Anamika Pandey <legumjure@gmail.com>

Mon, Sep 2, 2024 at 4:22 PM

To: ritwickdutta@gmail.com, rahulpratap.adv@gmail.com, mrdey@rediffmail.com, Surendra Kumar <surendra_kr15@rediffmail.com>

Cc: membersecretary@pcbassam.org

To,

Mr. Ritwick Dutta, Advocateritwickdutta@gmail.com

For Appellant(s)

Mr. Rahul Pratap, Advocate

for For Respondent -2

rahulpratap.adv@gmail.com**Mr. Shyambar Deb, Advocate**

For Respondent - 3

membersecretary@pcbassam.org**Ms. Malabika Roy Dey, Advocate**

For Respondent -4

mrdey@rediffmail.com

Dear Sir/Madam,

Please find the scan copy of notarized affidavit filed
on behalf of the MOEFCC.

This is for your kind information and record.

Regards,

Warm Regards,

Anamika Pandey

Advocate

Calcutta Office:

Hasting Chambers,

7 C, Kiran Shankar Roy Road,

2nd Floor, Room No. 6, Kolkata-700 001

033- 46033642, +91 8336835229, +91 7439600631.

APPEAL04-2020 BIMAL GOGOI AFFIDAVIT 02-09-2020.pdf

6580K