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संदर्भ सं./Ref. No.: S&E/E/43C-1/53

दिनांक/Date: 11.01.2024


From	:	Chief General Manager (HSE) I/C
To	:	Member Secretary, State Environmental Impact Assessment Authority (SEIAA), Assam, Bamunimaidam, Guwahati-781021.
Subject	:	Submission of Half-yearly (April 2023 to September 2023) compliance report of the conditions stipulated in the Environment Clearance (EC) of Safrai EC Block (File No. SEIAA.1624/2021) granted to Oil India Limited.

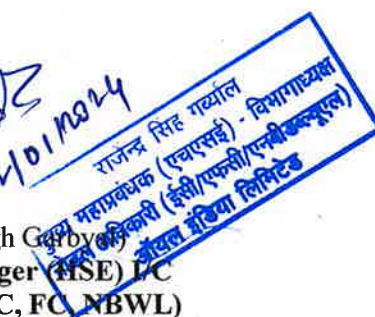
Sir,

Reference to above subject, please find enclosed herewith the Half-yearly (**April 2023 to September 2023**) compliance report of the conditions stipulated in the Environment Clearance (EC) of Safrai EC Block (B2 Category) granted to Oil India Limited.

This is for your kind information please.

Thanking you.


12/01/2024
(Rajendra Singh Garg)
Chief General Manager (HSE) I/C
Nodal Officer (EC, FC, NBWL)
For Resident Chief Executive



Encl: As above

<ul style="list-style-type: none"> ▪ Name of the Project: Onshore Oil & Gas Exploration in Safrai EC Block. ▪ EC Identification No., File No and date: EC22B002AS140056, SEIAA. 1624/2021 dated 10.01.2022. ▪ Period of Compliance Report: April 2023 to September 2023. ▪ Present Status: No drilling activity was carried out during the above period. 		
I. STATUTORY COMPLIANCES		
S. No.	CONDITION	COMPLIANCE STATUS
i	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.	Will be Complied Forest Clearance will be obtained under the provisions of FC Act, 1980 in case of diversion of forestland is involved.
ii	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	Will be Complied Clearance from the Standing Committee of National Board for Wildlife will be obtained (if applicable).
iii	The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of Schedule-I species in the study area)	Complied Site-specific conservation plan and wildlife management plan was prepared. Copy of the same is enclosed as Annexure - I .
iv	The Project proponent shall obtain Consent to Establish/ Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/Committee.	Will be Complied Consent To Establish (CTE) and Consent To Operate (CTO) will be obtained from Pollution Control Board, Assam before start of drilling operations.
v	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.	Complied Hazardous Waste Authorization was obtained from Pollution Control Board, Assam vide No. WB/T-311/21-22/329 dated 13.10.2022. Copy of the same is enclosed as Annexure - D .
vi	The company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.	Will be Complied OIL will comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. Transportation of Hazardous Chemicals shall be carried out as per the Motor Vehicle Act (MVA), 1989.

II. AIR QUALITY MONITORING AND PRESERVATION		
S.No	CONDITION	COMPLIANCE STATUS
i	The project proponent shall install 24 x 7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules, 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Will be Complied DG sets stack gas monitoring will be carried out.
ii	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.	Will be Complied Fugitive emissions (if any) will be monitored in every quarter through labs recognized under Environment (Protection) Act, 1986.
iii	The project shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM ₁₀ and PM _{2.5} in reference to PM emission, and SO ₂ and NO _x in reference to SO ₂ and NO _x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each), covering upwind and downwind directions.	Will be Complied Ambient Air Quality monitoring will be carried out as per NAAQS, 2009.
iv	To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	Will be Complied DG sets will be provided with adequate stack height as per CPCB/ SPCB guidelines.
v	Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.	Will be Complied Raw materials will be stored in silos/covered areas to prevent dust pollution and other fugitive emissions.
vi	National Emissions Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.	Will be Complied National Emissions Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
vii	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.	Will be Complied Ambient Air Quality monitoring will be carried out as per NAAQS, 2009.

III. WATER QUALITY MONITORING AND PRESERVATION

S.No	CONDITION	COMPLIANCE STATUS
i.	The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD).	Will be Complied Effluent generated from drilling operations will be treated in ETP and reused back in the drilling operations.
ii.	As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).	Will be Complied Zero Liquid Discharge condition will be maintained at the drilling location.
iii.	The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.	Will be Complied Treated effluent quality will be kept within the permissible onshore discharge standards as per Environment (Protection) Rules, 1986. No effluent shall be discharged outside the installation premises.
iv.	Total fresh water requirement shall not exceed the proposed quantity or as specified by the committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.	Will be Complied Total freshwater water requirement will not exceed the permitted limit and prior permission from the concerned regulatory authority will be obtained.
v.	Process effluent/any waste water shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separated conveyance system.	Will be Complied Process effluent/any waste water will not be allowed to mix with storm water.
vi.	The company harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilized the same from different industrial operations within the plant.	Will be Complied Rainwater will be collected in the pits and used in the drilling operations.
vii.	The DG sets shall be equipped with suitable Pollution Control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in the regard.	Will be Complied DG sets will be provided with suitable pollution control measures and adequate stack height as per CPCB/ SPCB guidelines.

IV. NOISE MONITORING AND PRESERVATION

S.No	CONDITION	COMPLIANCE STATUS
i.	Acoustic enclosure shall be provided to DG set for controlling the noise pollution.	Will be Complied DG sets will be provided with acoustic enclosures to minimise noise generation.
ii.	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.	Will be Complied Noise level in the drilling sites will be kept within the permissible limits by providing acoustic enclosures around DG sets, mufflers and silencers on drilling equipment.

iii.	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz, 75 dB(A) during day time and 70 dB(A) during night time.	Will be Complied Noise level monitoring will be carried out as per the Noise Pollution (Regulation and Control) Rules, 2000.
V. ENERGY CONSERVATION MEASURES		
S.No	CONDITION	COMPLIANCE STATUS
i.	The energy sources for lighting purposes shall preferably be LED based.	Will be Complied LED based lights shall be installed for lighting purposes
VI. WASTE MANAGEMENT		
S.No	CONDITION	COMPLIANCE STATUS
i.	Hazardous chemical shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.	Agreed to comply
ii.	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.	Agreed to comply
iii.	The company shall undertake waste minimization measures as below:-	Agreed to Comply wherever applicable.
iv.	Metering and Control of quantities of active ingredients to minimize waste.	Agreed to comply
v.	Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.	Agreed to comply
vi.	Use of automated filling to minimize spillage.	Agreed to comply
vii.	Use of Close Feed system into batch reactors.	Agreed to comply
viii.	Venting equipment through vapors recovery system.	Agreed to comply
ix.	Use of high-pressure hoses for equipment clearing to reduce waste water generation.	Agreed to comply
VII. GREEN BELT		
S.No	CONDITION	COMPLIANCE STATUS
i.	The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.	Agreed to comply

VIII. SAFETY, PUBLIC HEARING AND HUMAN HEALTH ISSUES

S.No	CONDITION	COMPLIANCE STATUS
i.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Complied Offsite and On-Site emergency response plans have been prepared.
ii.	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.	Will be Complied Firefighting system shall be provided at drilling locations as per OMR, 2017 and OISD guidelines.
iii.	The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	Will be Complied Working personnel will be provided with PPE as per Factories Act, 1948.
iv.	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	Will be Complied Regular training will be imparted to employees on safety and health aspects of chemicals handling. Periodical Medical Examinations will be carried out on regular basis.
v.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Agreed to comply
vi.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Will be Complied Occupational Health Surveillance of workers will be carried out as per applicable guidelines.
vii.	There shall be adequate space inside the plant premises ear marked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.	Complied

IX. CORPORATE ENVIRONMENT RESPONSIBILITY

S.No	CONDITION	COMPLIANCE STATUS
i.	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No.22-65/2017-IA III dated 1 st May 2018, as applicable, regarding Corporate Environment Responsibility.	Not Applicable This project is under B2 category of the EIA, Notification, 2006.

ii.	The company shall have a well laid down environment policy duly approved by the Board of Directors. The environment policy should prescribe for standards operating procedures to have proper checks and balances and to bring into focus any infringements/ violation of the environmental/forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental/ forest/ wildlife norms/ conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF& CC as a part of six-monthly report.	Complied OIL has well laid down HSE policy approved CMD, Oil India Limited. Copy of the same is enclosed as Annexure – II .
iii.	A separate environmental Cell both at the project and company held quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.	Complied Details of the Environment Cell of OIL, FHQ is enclosed as Annexure – A .
iv.	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.	Not Applicable This project is under B2 category of the EIA, Notification, 2006.
v.	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Will be Complied Environmental Audit of the EC conditions will be carried out.

X. MISCELLANEOUS

S.No	CONDITION	COMPLIANCE STATUS
i.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safe guards at their cost by prominently advertising it at least in two local newspapers of the District of State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Complied A copy of the Environment Clearance (EC) is uploaded to OIL website under the link https://www.oil-india.com/Environmental.aspx
ii.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Complied OIL has submitted a copy of the Environment Clearance to local Panchayat, Municipality Board/Municipal Corporation.

iii.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Complied EC compliance report for the period October 2022 to March 2023 was submitted to Member Secretary, SEIAA, Assam vide L.No. S&E/E/43C-1/562 dated 29.05.2023. Also, copy of the EC and Six-monthly compliance report is uploaded to OIL website under the link https://www.oil-india.com/Environmental.aspx
iv.	The project proponent shall monitor the criteria pollutants level namely; PM ₁₀ , SO ₂ , NO _x (ambient levels as well as stack emissions) or criteria several parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	Will be Complied Air Quality Monitoring will be carried out as per the National Ambient Air Quality Standards, 2009. Ambient Air quality levels will be displayed at the entrance of the installation.
v.	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at environment clearance portal.	Complied
vi.	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and out on the website of the company.	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 .
vii.	The project proponent 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, commencing the land development work and start of production operation by the project.	Agreed.
viii.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Agreed.
ix.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal committee.	Not Applicable This project is under B2 category of the EIA Notification, 2006.
x.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment Forest and Climate Change (MoEF & CC).	Agreed. No further expansion or modifications will be carried out other than the activities mentioned in the Environment Clearance without the prior approval of MoEF&CC.
xi.	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Agreed.
xii.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Agreed.

xiii.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Agreed.
xiv.	The Regional Office of this Ministry shall monitor compliance to the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.	Agreed.
xv.	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India/ High Courts and any other Court of Law relating to the subject matter.	Agreed.
xvi.	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Agreed.



WILDLIFE CONSERVATION PLAN FOR SCHEDULE- I SPECIES

Fifteen Schedule-I species recorded/reported from the Safrai Block area which includes two reptilian species, seven avian species and six mammalian species. The Schedule- I species recorded/reported from the Safrai Block area are presented at **Table 1.**

Table 1: Schedule I species reported/recorded from the Safrai Block

Sl. No	Scientific Name	Schedule WPA, 1972
1.	Bengal Monitor (<i>Varanus bengalensis</i>)	Sch I (Part II)
2.	Indian Rock Python (<i>Python molurus</i>)	Sch I (Part II)
3.	White backed Vulture (<i>Gyps bengalensis</i>)	Sch I (Part III)
4.	Indian Vulture (<i>Gyps indicus</i>)	Sch I (Part III)
5.	Black-winged Kite (<i>Elanus caeruleus</i>)	Sch I (Part III)
6.	Common Kestrel (<i>Falco tinnunculus</i>)	Sch I (Part III)
7.	Oriental Pied Hornbill (<i>Anthraceros albrostris</i>)	Sch I (Part III)
8.	Black Kite (<i>Milvus migrans</i>)	Sch I (Part III)
9.	Great Hornbill (<i>Buceros bicornis</i>)	Sch I (Part III)
10.	Common Leopard (<i>Panthera pardus</i>)	Sch I (Part I)
11.	Western Hoolock Gibbon (<i>Hoolock hoolock</i>)	Sch I (Part I)
12.	Capped Langur (<i>Trachypithecus pileatus</i>)	Sch I (Part I)
13.	Asian Elephant (<i>Elephas maximus</i>)	Sch I (Part I)
14.	Chinese Pangolin (<i>Manis pentadactyla</i>)	Sch I (Part I)
15.	Slow loris (<i>Nycticebus coucang</i>)	Sch I (Part I)

Schedule-I species in the study area, their habitat, threats and conservation measures proposed has been presented in **Table 2.**

Table 2: Conservation Plan for Schedule-I Species in Safrai Block

S N	Species	Habitats within Study Area	Threats	Broad Conservation Actions	Responsibilities	Actions Required
	Reptilian Fauna					
1.	Bengal Monitor (<i>Varanus bengalensis</i>)	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"> 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 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 minimize risk of road kill. Project proponent shall comply with all the pollution control and other conditions imposed in the environmental clearance by statutory authorities. Apart from pollution control measures, it is also important to inform the workers about the presence of the species. 	OIL with assistance from Forest Department	<ul style="list-style-type: none"> Awareness campaigns to be conducted for conservation of Schedule I species, their ecosystem and values. Pollution Control measures to be implemented
2.	Asiatic Rock Python (<i>Python molurus</i>)	Primarily within the forest areas	Threats within the study area is identified as hunting and road kills	<ul style="list-style-type: none"> Awareness campaigns to be carried out among village communities, focusing on local schools While laying approach road, measures will be taken to keep 		

S N	Species	Habitats within Study Area	Threats	Broad Conservation Actions	Responsibilities	Actions Required
				<p>natural drainage unhindered, by construction of culverts, which will provide crossing points for reptiles and minimize risk of road kill.</p> <ul style="list-style-type: none"> OIL will comply with all the pollution control and other conditions imposed in the environmental clearance by statutory authorities. Apart from pollution control measures, it is also important to inform the workers about the presence of the species. 		
	Avifauna					
3.	White backed Vulture (<i>Gyps bengalensis</i>)	Covering all terrestrial habitats within the study area	<p>The anthropogenic threats to these species is hunting, loss of habitat.</p> <p>Project activities resulting in air, water and noise pollution, degradation of vegetation could potentially affect the habitat of these bird species and their population in the study area.</p>	<ul style="list-style-type: none"> The villagers, school children, industry workers working in the vicinity are to be made aware about the importance of wildlife, its habitat, importance of conservation etc. OIL will also conduct awareness campaigns at the village level to make the locals aware about the protected species in the area; their behaviour, habitat, ecology, breeding/nesting seasons, threats to habitats and species, laws regarding protection of species. Awareness generation campaigns will include preparation of 	OIL with assistance from Forest Department	<ul style="list-style-type: none"> Contributing to habitat improvement activity as planned by Forest Dept. Awareness campaigns to be conducted for conservation of Schedule I species, their ecosystem and values. Workshops on forestry and biodiversity to be arranged for the forest department staffs
4.	Indian Vulture (<i>Gyps indicus</i>)	Covering all terrestrial habitats within the study area				
5.	Black-winged Kite (<i>Elanus caeruleus</i>)	Covering all terrestrial habitats within the study area				

S N	Species	Habitats within Study Area	Threats	Broad Conservation Actions	Responsibilities	Actions Required
6.	Common Kestrel (<i>Falco tinnunculus</i>)	Covering all terrestrial habitats within the study area		brochures in local language, film shows and display of posters, etc.		<ul style="list-style-type: none"> • Pollution Control measures to be implemented • Identification of vulture nesting sites, if any, in proximity to the project area
7.	Oriental Pied Hornbill (<i>Anthracoceros albrostris</i>)	Primarily within the forest areas		<ul style="list-style-type: none"> • OIL would support the Forest Department for habitat improvement program. • Workshops on forestry and biodiversity to be arranged for the forest department staffs for capacity building. External experts to be engaged for coordinating the workshops. 		
8.	Black Kite (<i>Milvus migrans</i>)	Covering all terrestrial and aquatic habitats within the study area specially in proximity to the settlement areas				
9.	Great Pied Hornbill (<i>Buceros bicornis</i>)	Primarily within the forest areas		<ul style="list-style-type: none"> • Lightings of within the project area could potentially deter the species presence. Therefore, OIL will ensure that minimum illumination comes out from the project area. This can be done by adjusting the angles of the light sources and using low intensity focused bulbs inside the project area. • Special care to be taken for identification of vulture nests, if any, and maintain distance from the nests. • OIL will take utmost care in controlling air, water, noise and soil pollution in line with the requirement of Environmental Clearance. 		
	Mammals					

S N	Species	Habitats within Study Area	Threats	Broad Conservation Actions	Responsibilities	Actions Required
10.	Common Leopard (<i>Panthera pardus</i>)	The distribution of Common Leopard is primarily confined to the reserve forests areas and tea gardens within the Block	<p>The primary threats to Leopards are habitat fragmentation through degradation of forest habitats, reduced prey base and conflict with livestock and game farming</p> <p>Movement of vehicle, presence of human, direct noise, vibrations and illuminations could cause disturbance to the species and affect their movements if any in the proximity of the project site.</p>	<ul style="list-style-type: none"> OIL would support the Forest Department for habitat improvement program. Awareness campaign will be carried out in local villages, on conservation of leopards and their ecosystem services and values. 	OIL with assistance from Forest Department	<ul style="list-style-type: none"> Contributing to habitat improvement activity as planned by Forest Dept. Contributing to the conservation measures taken by forest department for Hoolock Gibbons, Capped langur, Chinese pangolin, Indian leopard, slow loris and elephants Awareness campaigns to be conducted for conservation of Schedule I species, their ecosystem and values.
11.	Western Hoolock Gibbon (<i>Hoolock hoolock</i>)	The distribution of the species is primarily confined to the reserve forest areas within the study area.	The primary threats are habitat fragmentation through degradation of forest habitats	<ul style="list-style-type: none"> Special care to be taken for identification of roosting sites for Hoolock Gibbon and maintain distance from the roosting site. OIL would support the Forest Department for habitat improvement program and any program taken by the forest department for conservation of Hoolock Gibbons Awareness campaign will be carried out in local villages, on conservation of the species, their ecosystem services and values. 		
12.	Capped Langur (<i>Trachypithecus</i>)	The distribution of the species is primarily confined to the reserve	The primary threats are habitat fragmentation	<ul style="list-style-type: none"> Special care to be taken for identification of roosting sites. 		

S N	Species	Habitats within Study Area	Threats	Broad Conservation Actions	Responsibilities	Actions Required
	<i>pileatus</i>)	forest areas within the study area.	through degradation of forest habitats	<ul style="list-style-type: none"> OIL would support the Forest Department for habitat improvement program. Awareness campaign will be carried out in local villages, on conservation of the species, their ecosystem services and values 		
13.	Asian Elephant (<i>Elephas maximus</i>)	Asian Elephant movement is primarily reported within the reserve forest areas and also within the settlements in proximity to Abhaypur R.F within the study area.	The primary threats are habitat fragmentation through degradation of forest habitats; blockage of movement corridors	<ul style="list-style-type: none"> OIL would support the Forest Department for habitat improvement program and also in other programs for conservation of elephants Awareness campaign will be carried out in local villages, on conservation of the species, their ecosystem services and values. 		
14.	Chinese Pangolin (<i>Manis pentadactyla</i>)	The distribution of the species is primarily confined to the reserve forest areas within the study area.	The primary threats are habitat fragmentation through degradation of forest habitats	<ul style="list-style-type: none"> OIL would support the Forest Department for habitat improvement program. Awareness campaign will be carried out in local villages, on conservation of the species and their ecosystem services and values. 		
15.	Slow Loris (<i>Nycticebus coucang</i>)	The distribution of the species is primarily confined to the reserve forest areas within the study area.	The primary threats are habitat fragmentation through degradation of forest habitats	<ul style="list-style-type: none"> OIL would support the Forest Department for habitat improvement program. Awareness campaign will be carried out in local villages, on conservation of the species and their ecosystem services and values. 		

Implementation of Conservation Measures

The budgetary provision has been made for implementation of wildlife conservation measures for 7 years of working period for the Safrai Block.

Table 3: Budget for Wildlife Conservation Plan

S. No.	Action Item	Details	Budget (INR in Lakh)
1	Contributing to Forest Department's habitat improvement and species conservation programs	Partial Assistance to forest department from OIL (@ INR 1 lakh per year x 7 years)	7.00
2.	Contributing towards logistical support for Forest department for forest management	Partial Assistance to forest department from OIL (@ INR 1 lakh per year x 7 years)	7.00
2	Cost of capacity building of forest department staffs (Engagement of external expert; Logistic cost for arrangement of workshop; Cost of development of IEC Material)	Assistance towards capacity building training program (@ INR 1 lakh per year x 2 years)	2.00
3	Awareness Generation Meetings at villages (Development of Brochure; Arrangement of Meeting; Development of Posters)	Awareness program – @ 0.50 lakh per year x 7 years	3.50
4	Engaging a NGO for Identification of Hoolock Gibbon roosting, Vulture nesting sites	@ 0.50 lakh per year x 7 years	3.50
7	Pollution Control Measures	Air, water, noise, soil pollution control and monitoring budget included in the Environmental Management Plan	0.00
8	Monitoring & Reporting budget	Hiring of Third Party Consultant for annual monitoring & Reporting @ Rs. 1 lakh x 7 years	7.00
	Total Budget		30.00

Monitoring & Reporting

OIL will engage a third party monitoring Agency (working in the wildlife conservation) for annual monitoring and review of wildlife conservation program. This agency will review all the proposed wildlife action plan, likely benefits and will provide an annual report. The annual Monitoring report will be submitted to the Forest Department.



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

Annexure - II

स्वास्थ्य, सुरक्षा आरु पर्यावरण नीति (एचएसई) (एचएसई)

ऑयल इंडिया लिमिटेड (ओआईएल) नीति सारांश है - मानव, आरु पर्यावरण को नुकसान न पहुंचे, कोई दुर्घटना न हो आरु पर्यावरण को कोई हानि न हो।

ऊपर उल्लिखित उद्देश्यों को प्राप्त करने के लिए, हम:

हमारे दृष्टिकोण तथा विश्व स्तरीय मानकों के साथ बेंचमार्क स्थापित करते हुए व्यावसायिक स्वास्थ्य, सुरक्षा आरु पर्यावरण संरक्षण के उच्चतम मानकों का विकास, कार्यान्वयन आरु रखरखाव करेंगे।

हमारे व्यवसाय में व्यावसायिक स्वास्थ्य, सुरक्षा आरु पर्यावरण संरक्षण को बढ़ावा देने के लिए हमारी अपनी नीतियों आरु नियमावली के अलावा, कानूनों द्वारा निर्धारित सभी लागू नियमों आरु विनियमों का पालन करेंगे।

हमारे द्वारा निर्धारित एचएसई निष्पादन लक्ष्यों को पूरा करने आरु निगरानी करने के लिए नेतृत्व, प्रत्यक्ष प्रतिबद्धता, दिशा आरु संसाधन प्रदान करने हेतु सभी स्तरों पर स्पष्ट भूमिकाएं जिम्मेदारियां आरु उत्तरदायित्व सौंपेंगे।

कर्मचारियों आरु हितधारकों के साथ प्रभावी संवाद, भागीदारी आरु परामर्श के माध्यम से साझा मूल्यों, दृष्टिकोणों आरु आचरण के साथ सामंजस्य स्थापित करते हुए सकारात्मक एचएसई संस्कृति को बढ़ावा देंगे।

हमारे सभी परिचालन क्षेत्रों में सुरक्षित आरु स्वस्थ कार्य परिवेश बनाए रखने के लिए आवश्यक प्रशिक्षण, उपकरण आरु सुविधाएं प्रदान करेंगे।

जोखिम आरु व्यावसायिक खतरों को कम करने तथा उनसे निपटने के लिए प्रौद्योगिकी, सुव्यवस्थित चिंतन आरु निगरानी के आधार पर प्रणाली विकसित करेंगे।

एचएसई उत्कृष्टता प्राप्त करने के लिए आंतरिक आरु बाहरी पक्षकारों द्वारा आवधिक मूल्यांकन के माध्यम से एचएसई प्रबंधन प्रणाली में निरंतर सुधार करेंगे।

उपर्युक्त एचएसई उद्देश्यों को पूरा करने में सभी आंतरिक हितधारकों की भागीदारी आरु योगदान को सशक्त बनाएं।

स्वास्थ्य, सुरक्षा आरु पर्यावरण (एचएसई) नीति

ऑयल इंडिया लिमिटेड (ओआईएल) की एचएसई नीति का सार है लोगों उपकरणों को कोई नुकसान न पहुंचे, कोई दुर्घटना न हो आरु पर्यावरण को कोई हानि न हो।

ऊपर उल्लिखित उद्देश्यों को प्राप्त करने के लिए, हम:

हमारे दृष्टिकोण तथा विश्व स्तरीय मानकों के साथ बेंचमार्क स्थापित करते हुए व्यावसायिक स्वास्थ्य, सुरक्षा आरु पर्यावरण संरक्षण के उच्चतम मानकों का विकास, कार्यान्वयन आरु रखरखाव करेंगे।

हमारे व्यवसाय में व्यावसायिक स्वास्थ्य, सुरक्षा आरु पर्यावरण संरक्षण को बढ़ावा देने के लिए हमारी अपनी नीतियों आरु नियमावली के अलावा, कानूनों द्वारा निर्धारित सभी लागू नियमों आरु विनियमों का पालन करेंगे।

हमारे द्वारा निर्धारित एचएसई निष्पादन लक्ष्यों को पूरा करने आरु निगरानी करने के लिए नेतृत्व, प्रत्यक्ष प्रतिबद्धता, दिशा आरु संसाधन प्रदान करने हेतु सभी स्तरों पर स्पष्ट भूमिकाएं जिम्मेदारियां आरु उत्तरदायित्व सौंपेंगे।

कर्मचारियों आरु हितधारकों के साथ प्रभावी संवाद, भागीदारी आरु परामर्श के माध्यम से साझा मूल्यों, दृष्टिकोणों आरु आचरण के साथ सामंजस्य स्थापित करते हुए सकारात्मक एचएसई संस्कृति को बढ़ावा देंगे।

हमारे सभी परिचालन क्षेत्रों में सुरक्षित आरु स्वस्थ कार्य परिवेश बनाए रखने के लिए आवश्यक प्रशिक्षण, उपकरण आरु सुविधाएं प्रदान करेंगे।

जोखिम आरु व्यावसायिक खतरों को कम करने तथा उनसे निपटने के लिए प्रौद्योगिकी, सुव्यवस्थित चिंतन आरु निगरानी के आधार पर प्रणाली विकसित करेंगे।

एचएसई उत्कृष्टता प्राप्त करने के लिए आंतरिक आरु बाहरी पक्षकारों द्वारा आवधिक मूल्यांकन के माध्यम से एचएसई प्रबंधन प्रणाली में निरंतर सुधार करेंगे।

उपर्युक्त एचएसई उद्देश्यों को पूरा करने में सभी आंतरिक हितधारकों की भागीदारी आरु योगदान को सशक्त बनाएं।

HEALTH, SAFETY AND ENVIRONMENT (HSE) POLICY

The essence of Oil India Limited (OIL)'s HSE policy is - no harm to people, equipment, no accident and no damage to environment.

In achieving the above mentioned objectives, we shall:

1. Develop, implement and maintain highest standards of Occupational health, Safety and Environmental protection aligned with our vision and benchmarked with world class standards.

2. Comply with all applicable Rules & Regulations stipulated by Statutes besides our own policies and manuals to promote Occupational Health, Safety and Environmental protection across our business.

3. Assign clear roles, responsibilities and accountability at all levels for providing leadership, visible commitment, direction and resources to meet and monitor our identified HSE performance targets.

4. Promote a positive HSE culture by aligning shared values, attitudes, and behaviours through effective communication, participation and consultation with employees and stakeholders.

5. Provide training, equipment and facilities necessary to maintain a safe and healthy work environment at all our operational areas.

6. Develop systems based on technology, systemic thinking, and surveillance to minimise and manage risks and occupational hazards

7. Drive continual improvement in the HSE management system through periodic evaluation by internal and external parties to achieve HSE excellence.

8. Empower involvement and contribution of all internal stakeholders in meeting the above mentioned HSE objectives.

रंजीत रथ
(ड. रंजीत रथ)

अध्यक्ष आरु परिचालन सঞ্চालक कार्यकारी तारिख २ आगस्ट २०२२

रंजीत रथ
(डॉ. रंजीत रथ)

अध्यक्ष एवं प्रबंध निदेशक

प्रभावी तिथि : 2 अगस्त, 2022

Ranjit Rath
(Dr. Ranjit Rath)

Chairman & Managing Director Effective Date 2nd August 2022

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

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



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.

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	NIL. There is no discharge of pollutants from drilling locations and Production Installations. <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 - I). Quality of Formation water is analyzed frequently (Test report enclosed as Annexure- 	No variation is observed. All parameters of treated effluent and Formation water are within the permissible limits.

	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.

Report No.: ENV/ARDS/22-23/S-07/WW-03/01
Date : 22/03/2023

Order No.: Telecon
Date :

Report Issued To : **ADITI R & D SERVICES**
Nilesh Buisness Complex, A. T. Road, Digboi, Assam

TEST RESULTS

Sample Ref. No.: ARDS/2023/S-07/1303/01
Collected On : 13-03-2023

Sample Source : Rig S#7/MFT, Sonari
Received On : 14-03-2023

Sample Type : ETP Treated Water (RO)
Collected By : ETP Supervisor, ARDS

SL No.	Parameters	Results	Limit [G.S.R. 176(E), 02.04.1996]
1	Colour	Colourless	Colourless
2	Odour	Odourless	Odourless
3	pH value	7.16	5.5 – 9.0
4	Temperature, °C	25.6	40 °C
5	TSS, mg/l	3.9	100
6	BOD, mg/l	<1.0	30
7	COD, mg/l	18	100
8	Chlorides (as Cl), mg/l	3.6	600
9	Sulfates (as SO ₄), mg/l	<1.0	1000
10	TDS, mg/l	61	2100
11	Sodium, (%)	1.6	60
12	Oil & Grease, mg/l	<4.0	10
13	Phenolic Compounds as C ₆ H ₅ OH, mg/l	<0.001	1.2
14	Cyanides, mg/l	<0.001	0.2
15	Fluorides (as F), mg/l	<0.01	1.5
16	Sulfide (as S), mg/l	<0.01	2.0
17	Chromium (Cr ⁺⁶), mg/l	<0.001	0.1
18	Chromium (Total), mg/l	<0.001	1.0
19	Copper, mg/l	<0.001	0.2
20	Lead, mg/l	<0.001	0.1
21	Mercury, mg/l	<0.001	0.01
22	Nickel, mg/l	<0.001	3.0
23	Zinc, mg/l	<0.01	2.0

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, **ENVIROCON**

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, I.O.C.L (AOD) New Market, Digboi – 786171, Assam.

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



ऑयल इंडिया लिमिटेड
Oil India Limited
(An ISO 9001:2015 Certified Laboratory)
Registered Office: Duliajan, Assam

Annexure - II

CHEMICAL LABORATORY

(An ISO 9001:2015 Certified Laboratory)
CHEMICAL DEPARTMENT, DULIAJAN 786 602, ASSAM, INDIA
(Phone : 91-374-2800439, Fax : 91-374-2801680/2800633.
Email : chemical@oilindia.in)

For internal use only

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

Date: 23.03.2023 4 MAR 2023

CGM - PSS 24.03.2023

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

Sub: WATER SAMPLE ANALYSIS REPORT OF STF MADHUBAN

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

Date:- 21.03.2023

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

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

Sample details :

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

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

Tested by :- WR/PJK/PS/NC

Pranab Jyoti Das

Suptdg. Chemist (Lab)

For DGM-Chemical (Lab)

Copy: Analytical & Environmental sec. file

ChemLab/Ana/Dept/Env/Sec/4

Name & Address of the Customer		Report No.	: MSK/2022-23/1881
"M/s OIL INDIA LIMITED" Duliajan, Dibrugarh, Assam-786602		Report Date	: 31.01.2023
		Nature of Sample	: Stack Emission
		Sample Mark	: GCS TENGAKHAT
		Sample Number	: MSKGL/ED/2022-23/12/00398
Ref. No.:W.O. NO.- 8125981 of Contract No. 6116895			
Date of Sampling	Sample Received Date	Analysis Start Date	Analysis Complete Date
14.12.2022	17.12.2022	17.12.2022	24.12.2022

A. General information about stack :		: GB-1		
1.	Stack connected to	: GAS COMORESSOR		
2.	Emission due to	: NG		
3.	Material of construction of Stack	: MS		
4.	Shape of Stack	: Circular		
5.	Whether stack is provided with permanent platform & ladder	: Yes		
6.	DG capacity	: NIL		
B. Physical characteristics of stack :				
1.	Height of the stack from ground level	: 3.6576 m		
2.	Diameter of the stack at sampling point	: 0.2032 m		
3.	Area of Stack	: 0.03241 m ²		
C. Analysis/Characteristic of stack:				
1. Fuel used : NG				
D. Result of sampling & analysis of gaseous emission		Result	Limit as per CPCB	Method
1.	Temperature of emission (°C)	187	...	USEPA Part 2, 25.09.1996
2.	Barometric Pressure (mm of Hg)	762.0	...	USEPA Part 2, 25.09.1996
3.	Velocity of gas (m/sec)	24.4	...	USEPA Part 2, 25.09.1996
4.	Quantity of Gas Flow (Nm ³ /hr)	1854	...	USEPA Part 2, 25.09.1996
5.	Concentration of Oxygen (%v/v)	13.6	...	IS:13270 :1992 Reaff, 2014
6.	Concentration of Carbon Monoxide (mg/Nm ³)	25.1	...	IS:13270 :1992 Reaff, 2014
7.	Concentration of Carbon Dioxide (%v/v)	5.8	...	IS:13270 :1992 Reaff, 2014
8.	Concentration of Sulphur Dioxide (mg/Nm ³)	20.5	...	USEPA-29, 25/06/1996
9.	Concentration of Nitrogen Oxide (ppmv)	69.3	...	USEPA Part-6, 25/09/1996
10.	Concentration of Lead (mg/Nm ³)	<0.005	...	USEPA Part-7, 12/03/1996& USEPA 18 -25.09.1996
11.	Concentration of Particulate matter (mg/Nm ³)	35.9	...	USEPA Part-17, 16/08/1996
12.	Concentration of Hydrocarbons (ppm)	13.46	...	USEPA 18 -25.09.1996
E. Pollution control device :		Remarks: Nil		
Details of pollution control devices attached with the stack : Nil				

Suptdg. Research Scientist, R&D Dept.,
Oil India Ltd., Duliagan, Assam

Ambient Air Quality Monitoring Report

Name & Address of the Customer :		Report No. : MSK/2022-23/1463			
"M/s OIL INDIA LIMITED", Dulajjan, Dibrugarh, Assam-786602		Report Date : 30.12.2022			
		Sample Description : Ambient Air			
		Sample Number : MSKGL/ED/2022-23/1200252			
Ref. No.: W.O. NO.- 8125981 of Contract No. 6116895		Sampling Location : GCS TENGAHAT			
GPS Reading : N 27°23'55", E 95°06'56"					
Date of Sampling	Sample Received Date	Analysis Start Date	Analysis Complete Date		
15.11.2022	18.11.2022	18.11.2022	25.11.2022		
Environmental Conditions During Sampling & Transport Condition : Temperature : 26°C, Rain fall : NO					
Analysis Result					
Sl. No.	Test Parameter	Method	Unit	Results	CPCB Limit
1	Particulate Matter (PM ₁₀)	IS : 5182 (Part-23)-2006	(µg/m ³)	59.2	100
2	Particulate Matter (PM _{2.5})	IS : 5182 (Part-24)	(µg/m ³)	28.1	60
3	Sulphur Dioxide (SO ₂)	IS : 5182 (Part-2)-2001	(µg/m ³)	<6.0	80
4	Nitrogen Dioxide (NO ₂)	IS : 5182 (Part-6)-2006	(µg/m ³)	16.8	80
5	Carbon Monoxide (CO)	IS 5182 : (Part-10) : 1999	(mg/m ³)	0.59	2
6	Ozone (O ₃)	IS:5182 (Part-IX)-1974 Reaffirmed-2019	(µg/m ³)	<20.0	180
7	Ammonia (NH ₃)	IS 5182 (Part 25) : 2018	(µg/m ³)	<10.0	400
8	Lead (Pb)	USEPA IO-3.4	(µg/m ³)	<0.01	1
9	Nickel (Ni)	USEPA IO-3.4	(ng/m ³)	<0.5	20
10	Arsenic (As)	USEPA IO-3.4	(ng/m ³)	<1.0	6
11	Benzene (C ₆ H ₆)	IS 5182 : (Part 11) : 2006	(µg/m ³)	<4.2	5
12	Benzo(a)Pyrene (BaP)	IS 5182 : (Part 12) : 2004	(ng/m ³)	<0.5	1
13	Mercury (Hg)	USEPA IO-5.0	(µg/m ³)	<0.002	
14	Methane (Hydrocarbon)	IS 5182 : (Part 17)	ppm	1.38	
15	Non-methane (Hydrocarbon)	IS 5182 : (Part 17)	ppm	<0.5	
16	Total Hydrocarbon	IS 5182 : (Part 17)	ppm	1.38	
17	Volatile Organic Compounds (VOC)	IS 5182 : (PART-11):2006	(µg/m ³)	<4.2	

Limit as per CPCB notification, New Delhi, 18th Nov, 2009, for Ambient air quality

Analyzed By:

Signature

Name

Designation

Mr. Dipankar Mazumdar
Executive Chemist

Prepared By:

Signature

Name

Designation

Mr. Dhrubajyoti Das
Assistant Chemist

Authorized Signatory

For Mitra S.K. Private Limited

Signature

Name

Designation

Tajmool Haque
Branch Manager

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced except in full, without the permission of Mitra S.K. Private Limited.
- Our Lab is Approved by NABL & MOEF, Lab Address: P-48 Udayan Industrial Estate, 3 Pagladanga Road Kol-700015

Head Office: Shreechi Centre (5th floor), 74B, A.J.C. Bose Road, Kolkata - 700 016, West Bengal, India.
 Tel : 91 33 40143000 / 22650006 / 22650007 Fax : 91 33 22650008
 Email : info@mitrask.com, Website: www.mitrask.com

Tulsi

Approved by
Uttam Prodhan

Suptdg. Research Scientist, R&D Dept.,
Oil India Ltd., Dulajjan, Assam



Pollution Control Board:: Assam
Bamunimaidam; Guwahati-21
 (Department of Environment & Forests:: Government of Assam)
 Phone: 0361-2652774 & 3150318; Fax: 0361-3150319
 Website: www.pcbassam.org



No. WB/T-311/21-22/529

Dated Guwahati the. 13/10 October, 2022

FORM – 2
[See Rule 6(2)]

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

1. Number of Authorisation and date of issue : No. WB/T-311/21-22/ dtd. .10.2022
2. Reference of application (No. and date) : 1292415
3. M/s OIL INDIA LIMITED, Percy Evans Road, Duliajan, Dibrugarh, Assam-786602 is hereby granted an authorisation based on the signed inspection report for Generation, storage and transportation of Hazardous or Other wastes or both.

DETAILS OF AUTHORISATION

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

4. This authorisation shall be in force for the period of five years up to 31.03.2027 unless otherwise revoked or withdrawn within this period.

5. The authorisation is subject to the following general and specific conditions:

A. GENERAL CONDITIONS OF AUTHORISATION:

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

m/s OIL INDIA LIMITED



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

B. SPECIFIC CONDITIONS:

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

(Shantanu Kr. Dutta)
Member Secretary

Dated Guwahati the, 13/10 Oct, 2022

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

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

138/43
(Shantanu Kr. Dutta)
Member Secretary