

#### **HSE Department**

Oil India Limited Duliajan, Dibrugarh, 786602, Assam

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

दिनांक/Date: 28.05.2024

संदर्भ सं./Ref. No.: S&E/E/43C-1/588

From	:	Executive Director (HSE & ESG)	
Deputy Director General of Forests (Central), Sub Office, Guwahati (under Regional Office, Shillong), 4th Floor, Housefed Building, Rukminigaon, Guwahati-781022.  (Email: iro.guwahati-mefcc@gov.in, iro.moefcc.ghy@gmail.com		Sub Office, Guwahati (under Regional Office, Shillong), 4th Floor, Housefed Building, Rukminigaon, Guwahati-781022. (Email: iro.guwahati-mefcc@gov.in, iro.moefcc.ghy@gmail.com)	
Subject	**	Submission of Half-yearly (October 2023 to March 2024) compliance reports of the conditions stipulated in the Environment Clearance (EC) granted to Oil India Limited.	

Sir,

Reference to above subject, please find enclosed herewith the Half-yearly (October 2023 to March 2024) compliance reports of the conditions stipulated in the Environment Clearance (EC) granted to Oil India Limited. List of the EC are tabulated below:

S.No	EC Identification No/File No.	Name of the EC proposal		
1.,	F. No. J-11011/413/2008-IA II (I) dated 24.01.2011	OCS Bhogpara.		
2.	F. No. J-11011/1251/2007-IA II (I) dated 01.11.2011	Exploratory Drilling of 01 (One) well a Doomdooma-Pengry Area, District Tinsuki Assam.		
3.	F. No. J-11011/682/2008-IA II (I) dated 17.06.2013	Expansion of Gas field Development in Tengakhat-Naharkatia-Jorajan area and Doomdooma Pengry area, Assam by M/s Oil India Ltd.		
4.	F. No. J-11011/116/2018-IA II (I) dated 07.01.2020	Onshore Oil & Gas Exploration & Development Drilling and Production in Ningru Oil & Gas Field in Districts Changlang and Namsai for Ningru PML Block (Arunachal Pradesh)		
5.	F. No. J-11011/1260/2007-IA II (I) dated 09.04.2020	Onshore Oil & Gas Development Drilling and Production in Mechaki Area covering Mechaki, Mechaki Extension, Baghjan and Tinsukia Extension PMLs on District Tinsukia (Assam).		
6.	F. No. J-11011/150/2016- IA II (I) dated 11.05.2020	Extension Drilling & Testing of Hydrocarbons at 7 (seven) Locations under Dibru-Saikhowa National Park Area, North-West of Baghjan PML, District Tinsukia, Assam.		
7.	F. No. J-11011/1253/2007-IA II (I) dated 28.12.2020	Onshore Oil & Gas development drilling and production by M/S Oil India Ltd in Dibrugarh district under Dibrugarh, Chabua, Higrijan and Tinsukia PMLs. (Dibrugarh- Bhogpara)		
8.	F. No. J-11011/375/2016-IA II (I) dated 28.12.2020	Onshore Oil & Gas Development Drilling and Production (179 wells and 9 Production		



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	K %=	Installations) in North Hapjan – Tinsukia –
9.	F. No. J-11011/35/2018-IA II (I)	Dhola area under Tinsukia district, Assam.  Onshore Oil & Gas development drilling and
1.0	dated 26.02.2021	production by M/S Oil India Ltd. Located in
	*	Khagorijan Oil & Gas Field in Dibrugarh &
	2	Tinsukia District under Tinsukia PML,
		Tinsukia Extension PML and Chabua PML
10	T 21 11011/106/0016 14 II (T)	District: Dibrugarh, Assam
10.	F. No. J-11011/186/2016-IA II (I)	Onshore Oil & Gas development drilling and
	dated 03.03.2021	production in Borhat-Titlagarh area, Dibrugarh, Sibsagar and Charaideo Districts
		under Sapkaintb, Borhat, Moran Extension
		and Doomdooma PMLs.
11.	EC22A002AS110311	Oil & Gas development drilling and
- 4.40	F. No. J-11011/156/2017-IA II (I)	production (16 exploratory, 73 developmental
	dated 28.11.2022	drilling wells and 9 Production Installations)
		in Moran Area under Dibrugarh, Sibsagar and
_ 11	×.	Charaideo districts, Assam.
12.	EC23A002AS125690	Oil & Gas development drilling and
	F. No. J-11011/1254/2007-IA II (I)	production (68 developmental drilling wells
	dated 13.01.2023	and 9 Production Installations) in Khowang Shalmari Area under Dibrugarh, Sibsagar
		districts, Assam.
13.	EC23A002AS188131	Onshore Oil & Gas development drilling and
	F.No J-11011/1257/2007- IA II (I)	production (167 wells and 7 production
	dated 17.04.2023	Installations) in Tengakhat-Kathaloni-Dikom
		(TKD) under Dibrugarh district, Assam.
14.	EC23A002AS198872	Onshore Oil & Gas development drilling (67
	F. No. J-11011/388/2016-IA II (I)	wells) in Jorajan Area under Dibrugarh,
1.5	dated 31.07.2023	Charaideo and Tinsukia districts, Assam.
15.	EC23A002AS146942 F.No. J-11011/546/2017-IA(I)	Onshore Oil & Gas development drilling and production (294 wells and 2 Production
	dated 20.09.2023	Installations) in Naharkatiya-Deohal-
	uaica 20.09.2023	Bogapani-Nagajan (NDBN) area under
		Dibrugarh & Tinsukia districts, Assam.

This is for your kind information please.

Thanking you.

(Rajendra Singh Garbya)

Executive Director (HSE & ESG)

Nodal Officer (EC, FC, NBWL)

For Resident Chief Executive



**HSE Department** 

Oil India Limited Duliajan, Dibrugarh, 786602, Assam

Phone: 0374-2800542

Email: safety@oilindia.in

Encl: As above

#### Copy:

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

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

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

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

# STATUS OF COMPLIANCE OF EC CONDITIONS

Installation: OCS BHOGPARA

• **Period:** 01/10/2023 to 31/03/2024

**EC No:** J-11011/413/2008-I A II(I) DATED 24.01.2011

	Specific Condition			
Si No.	EC Condition	Compliance status/Remark		
i.	Environmental clearance is subject to obtaining prior clearance from wildlife angle including clearance from the Standing Committee of the National Board for Wildlife regarding impact of the proposed projectson the Padumani Wildlife Sanctuary (8.2 km from new BUS at Mahum), Borjhan Wildlife Sanctuary (5 km from STF) and 3 recently declared Wildlife sanctuaries (declared on 20th October, 1999) besides Dibru-Saikhowa National Park (9 km from BUS) located within 10 km. area as applicable.	Not Applicable		
ii.	Grant of environmental clearance does not necessarily imply that wildlife clearance shall be granted to the project. The proposal for wildlife clearance shall be considered by the respective authorities on their merits and decision taken. The investment made in the project, if any, based on environmental clearance so granted, in anticipation of the clearance from wildlife angle shall be at the cost and risk of the project proponent and Ministry of Environmental & Forests shall not be responsible in this regard in any manner.	Point noted		
iii.	Ambient air quality shall be monitored for PM10, SO2, NOx, and non-methane hydrocarbon (NMHC) asper the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R No. 826(E) dated 16 <sup>th</sup> November 2009.	Complied. Display of AAQM parameters is being done at site. Copy of Ambient Air Quality Monitoring Report is enclosed.		
iv.	The stacks of adequate height shall be provided to control emissions from all the sources including DG sets, steam generators etc. as per the regulatory requirements and emissions from stacks shall meet the MOEF/CPCB guidelines.	Complied.		



Sl. No.	EC Condition	Compliance status/Remark
V.	The company shall make the arrangement for control of noise from the DG sets and meet DG setnorms notified by the MoEF.	
vi.	Total ground water requirement for OCS, STF, ITF and BUS shall not exceed 128 m3/day/well and prior permission shall be obtained from the Central GroundWater authority/state Ground Water Board (CGWA/SGWB). A copy of the permission shall be submitted to the Ministry's Regional Office at Shillong. Effluent Treatment Plant (ETP) shall be installed to control oil content and other parameters as per Assam Pollution Control board (APCB) and/or Environment (Protection) Act whichever is more stringent. Treated wastewater shall be passed through multi-media filters to remove solids and clarified water shall be collected into storage tubesbefore pumping to disposal wells. Oily waste water shall be treated in oil separator to remove oil content in the effluent. Domestic effluent shall be treated in septic tank followed by soak pit. The treated effluent shall be monitored regularly.	Complied.  Formation water of Bhogpara OCS is treated in ETP Tengakhat to desired standards.
vii.	Tank bottom sludge from crude oil tanks of OCS shallbe stored in secured covered impermeable concrete sludge pit located outside the proposed installation before safe disposal through approved/registered recyclers. Waste oil and used batteries shall be sold to authorized recyclers/reprocessors. Secured land fillshall be as per the design approved by the CPCB and obtain authorization from the Assam SPCB. Copy of authorization shall be submitted to Ministry's Regional Office at Shillong.	Point noted. Shall be done when tank cleaning will be carried out.
viii.	Total storage capacity of the tanks shall not exceed 40,000 KL after expansion. Capacity of the each of the storage tank shall not exceed 5,000 KL. Instead of fixed roof tanks, floating roof tanks shall be provided.	Complied.
ix.	A comprehensive Oil Spill Contingency plan (OSCP)shall be prepared to handle all major, moderate and miner spill.	Complied during all the operation & maintenance activities.
х.	All the OCS shall have facilities for knocking out water from the formation fluid. The Formation	Complied



SI. No.	EC Condition	Compliance status/Remark
IVO.	water from Electrostatic, Emulsion Treater (EET) shallbe disposed to the disposal wells only after	
	ensuringall the parameters within permissible limit of Assam PCB and / or prescribed under E(P) Act whichever is more stringent.	
xi.	Use of browser for the transportation of oil shall bestopped as soon as pipeline is installed.	Complied
xii.	M/s OIL shall prepare a remediation plan (both bio-remediation) where solid is contaminated due to spillage of oil in existing units and submit to MOEF.	In Situ & Ex-Situ Bioremediation plan is in place for any soil contamination.
xiii,	An immediate action shall be ensured to control and treat oil spill or oil sludge using suitable method. Remaining oil shall be remediated through bioremediation / Phyto-remediation etc. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.	Emergency Response Plan to mitigate oilspillage and its control is in place and bioremediation is carried out for remaining oil. Hence complied.
xiv.	All the solid/hazardous waste including bottom sludge shall be handled as per the rules and guidelines under Manufacture, Storage and Import of Hazardous chemicals Rules, 1989 as amended in October, 1994 and January, 2000. All the oily sludge from ITF, STF, and BUS OCS shall be stored in secured land fill (SLF) as per CPCB guidelines.	Complied as per the Rules. Secured covered, impermeable sludge storage facility is available.
XV.	Handling and disposal of hazardous wastes shall be in accordance with the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008. Authorization from the Assam SPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes.	Complied.
xvi.	The project authorities shall patrol and inspect the pipeline regularly for detection of faults as per OISD guidelines and continuous monitoring of pipeline operations by adopting non- destructive method (S) of testing. Pearson survey and continuous potentialsurvey shall be carried out a regular interval to ensure the adequacy of cathodic protection system.	Complied
xvii.	The project authorities shall install SCADA system for safe operation of pipeline and leak Detection Systems (LDS). Additional sectionalizing valves in the residential area and	SCADA system has been installed at the installation to monitor the leak for safe operation of pipeline. Hence complied.



Sl. No.	EC Condition	Compliance status/Remark		
	sensitive installations shall be provided to prevent the spillage of the oil in the event of pipeline failure.  Intelligent pigging facility shall be provided for the entire pipeline system for internal corrosion monitoring.			
xviii.	M/S OIL shall ensure smokeless flaring in case of ground flaring. The company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseousemissions during operation. To prevent fire and explosion at Oil and Gas facility, potential ignition sources shall be kept to a minimum and adequate separation distance between potential ignition sources and flammable materials shall be	Complied. Complete combustion is ensured by adequate supply of air.		
xix.	in place.  The flare system shall be designed as per good oil fieldpractices and oil industry Safety Directorate (OISD) guidelines.	Complied.		
XX.	The firefighting facilities shall be designed as per OISD-117 guidelines. For fighting prolonged fires, the company shall firm up a plan for assured water supply from nearby ground water/surface water sources.	Complied.		
xxi.	Comprehensive Risk assessment and Consequence Analysis for all the activities regarding impact of the proposed project on the Secondary Tank Farm (STF), Oil Collecting Station (OCS), Intermediate Tank Farm (ITF), Browser Unloading station (BUS) and pipeline shall be carried out. Action plan to implement the recommendations shall be submitted to the ministry and proper implementation shall be ensured.	Risk analysis for the installation has been carried out internally and risk register is being maintained. Hence complied.		
xxii.	Occupational health surveillance of the workers shall be carried out as per the prevailing Acts andRules.	Hence complied.		
xxiii.	The project proponent shall also comply with the environmental protection measures and safeguards recommended in the EIA/EMP report.	I// -		
xxiv.	The surface facilities shall be installed as per applicable codes and standards, international practices and applicable local regulations.	Complied. All the surface facilities are installed as per applicable codes and standards, international practices and		



SI. No.	EC Condition	Compliance status/Remark
110.		applicable local regulations such as API; ASTM, OISD, OMR, APCB & CPCB etc.
XXV,	The design, material of construction, assembly, inspection, testing and safety aspects of operation and maintenance of pipeline and transporting the natural gas/oil shall be governed by ASME/ANSI B 31.8/B31.4 and OISD standard 141.	
xxvi.	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, crèche etc. The housing may be in the form of temporary structuresto be removed after the completion of the project.	Not Applicable
Genera	l Condition	
SI No	EC Condition	Compliance status/Remark
i.	The project authorities must strictly adhere to the stipulations made by the Assam State Pollution Control Board (ASPCB), State Government and any other statutory authority.	Complied
ii.	No further expansion or modifications in the project shall be carried out without prior approval of the Ministry of environment & Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Complied
iii.	The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous chemicals Rules, 2000 as amended subsequently. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire safety Inspectorate etc. must be obtained, wherever applicable.	Complied.



Sl. No.	EC Condition	Compliance status/Remark
iv.	The project authorities must strictly comply with the rules and regulation with regarding to handling and disposal of Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008wherever applicable. Authorization from the State Pollution Control Board must be obtained for collections/treatment/storage/disposal of hazardous wastes.	Complied
V.	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generations. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70dBA (night time).	Complied.
vi.	A separate Environment Management Cell equipped with full-fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.	Already exists centrally at HSE department.
vii.	The project authorities shall provide adequate funds both recurring and non- recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	Complied.
viii.	The Regional Office of this Ministry/Central Pollution Control Board/ Assam State Pollution Control Board shall monitor the stipulated conditions. A six-monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Being complied.
ĭx.	A copy of clearance letter shall be sent by the proponent to concern Panchayat, Zila Parishad Municipal Corporation, Urban Local Body and local NGO, if any, from whom suggestions representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the companyby the proponent.	



Sl.	EC Condition	Compliance status/Remark
X.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the Assam SPCB. The Criteria pollutant levels namely; SPM, RSPM, SO2, NOx, HC (Methane & Nonmethane), VOCs (ambient levels as well as stack emissions) or critical sectoral parameters, indicated forthe projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Complied Compliance status including monitored data is regularly uploaded in company's website and sent to concerned government authorities. Monitored data is also enclosed herewith.
xi.		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 <a href="https://www.oil-india.com/Environmental.aspx">https://www.oil-india.com/Environmental.aspx</a>
xii.	The environment statement for each financial year ending 31st march in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF 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.
xiii.	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 Assam SPCB and may also be seen at Website of the Ministry of Environment and Forest at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspaper that are widely circulated in the region of which one shall be forwarded to the Regional Office.	



Sl. No.	EC Condition	Compliance status/Remark
xiv.	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Complied

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# Ambient Air Quality Monitoring Report

Report No.: MSK/2023-24/2533 Name & Address of the Customer Report Date: 28.02.2024 "M/s OIL INDIA LIMITED", Sample Description: Ambient Air Sample Number: MSKGL/ED/2023-24/02/00442 Duliajan, Dibrugarh, Assam-786602 Sampling Location: OCS BHOGPARA GPS Reading: N 27°51'38", E 95°42'53" Ref. No.: W.O. NO. - 8125981 of Contract No. 6116895 Analysis Complete Date Date of Sampling Analysis Start Date Sample Received Date 01 02 24 22.01.24 25.01.24 25.01.24

Environmental Conditions During Sampling & Transport Condition : Temperature : 27°C, Rain fall : NO

Analysis Result					
SI. No.	Test Parameter	Method	Unit	Results	CPCB Limit
l,	Particulate Matter ( PM10)	IS: 5182 (Pan-23)-2006	(µg/m3)	62.2	100
2.	Particulate Matter ( PM2 s)	1S: 5182 (Part-24)	(μg/m3)	34.6	60
3.	Sulphur Dioxide (SO <sub>2</sub> )	IS: 5182 (Part-2)-2001	(µg/m3)	6.8	80
4.	Nitrogen Dioxide (NO <sub>2</sub> )	IS: 5182 (Part-6)-2006	(µg/m3)	20.1	80
5.	Carbon Monoxide ( CO )	IS 5182 : (Part-10) : 1999	(mg/m3)	0.66	2
6.	Ozone (O <sub>1</sub> )	IS:5182 (Part-IX)-1974 Reaffirmed-2019	(µg/m3)	<20.0	180
7_	Ammonia (Nil)	IS 5182 (Part 25): 2018	(μg/m3)	<10.0	400
8.	Lead (Pb)	USEPA IO-3.4	(μg/m3)	<0.01	1
9.	Nickel (Ni)	USEPA IO-3.4	(ng/m3)	·:5.0	20
10.	Arsenic (As)	USEPA IO-3,4	(ng/m3)	<1.0	6
11.	Benzene (C <sub>6</sub> H <sub>6</sub> )	IS 5182 : (Part 11) :2006	(µg/m3)	<4.2	5
12.	Benzo(a)Pyrene (BaP)	IS 5182 : (Part 12) :2004	(ng/m3)	<0.5	1
13.	Mercury ( Hg )	USEPA IO-5.0	(μg/m3)	<0.002	
14.	Methane (Hydrocarbon)	IS 5182 : (Part 17)	ppm	1.78	
15.	Non-methane (Hydrocarbon)	IS 5182 : (Part 17)	ppm	<:0.5	
16.	Total Hydrocarbon	IS 5182 : (Part 17)	ppm	1.78	
17	Volatile Organic Compounds (VOC)	IS 5182 : (PART-11):2006	(µg/m3)	<4.2	

Analyzed By:

Prepared By:

**Authorized Signatory** Mitra S.K. Frivat

Signature Name

Designation.

: Executive Chemist

: Mr. Dipankar Mazumdar

Signature Name

: Miss Jyosmita Borah Designation. : Office Assistant

Signature Name

Designation : 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.E. Private Limited.

Our Lub is Approved by NABL & MOEF, Lub Address: P-48 Udayan Industrial Estate, Pagladenga Road Kal-700015

Head Office: Shrachi Centre (5th floor), 748, A.J.C. Hose Razd, Kalkata - 700 016. West Bengal, 2ndia. Tel.: 91 33 40143000 / 22650006 / 22650007 Fax: 91 33 22650008 Email: Info@mitrask.com. Website: www.mitrask.com





Name & Address of the Customer

"M's OIL INDIA LIMITED"

Duhajan, Dibrugath, Assam-786602

Ref. No. W.O. NO. - 8125981 of Contract No. 6116895

Date of Sampling 18.12.2023

21.12.2023

Sample Received Date

Report No. Report Date Nature of Sample

Sample Mark Sample Number MSK/2023-24/2393

30.01.2024 Stack Emission

OCS BHOGPARA

MSKGL/ED/2023-24/01/80778

Analysis Start Date 21 12.2023

Analysis Complete Date 28.12.2023

-	ANALYSIS	KESULI		
A.	General information about stack :	CODP-1		
	Stack connected to	CRUDETA	NK	
2	Emission due to	NG		
3.	Material of construction of Stack	MS		
4.	Shape of Stack	Circular		
1	Whether stack is provided with permanent platform & ladder	Yes		
100	DG capacity	: 157HP		
3.	Physical characteristics of stack:		an Hizero	TOWN TO PERSON STREET
	Height of the stack from ground level	2.438 m	NAS COLUM	
	Diameter of the stack at sampling point	0.102 m		
	Area of Stack	0.00810m2		
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)	149	BEL 01 00	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.)	19.7		USEPA Part 2, 25.09 1996
4.	Quantity of Gas Flow (Nm3/hr)	404		USEPA Part 2, 25.09, 1996
5,	Concentration of Oxygen (%v/v)	13.4		IS-13270 1992 Reaff, 2014
6	Concentration of Carbon Monoxide (g/kW-hr)	0.149	≤ 3.5	IS 13270 :1992 Reaff, 2014
7	Concentration of Carbon Dioxide (%v/v)	6.2		IS.13270 1992 Reaff, 2014
8	Concentration of Sulphur Dioxide (mg/Nm3)	24.3		USEPA-29, 25/06/1996
9	Concentration of Nitrogen Oxide & Hydrocarbons (g/kW-hr)	0.258	≤ 4.7	USEPA Part-7, 12/03/1996 & USEPA 18 -25:09:1996
10.	Concentration of Lead (mg/Nm3)	< 0.005	No. of the last of	USEPA-29, 25/06/1996
11	Concentration of Particulate matter (g/kW-hr)	0.095	≤ 0.3	USEPA Part-17, 16/08/1996
E.	Pollution control device : Details of pollution control devices attached with the stack	: Nii		Remarks Nil

Analyzed By:

Signature

Designation

Name

Mr. Dipankar Mazumdar **Executive Chemist** 

Signature Name

Designation.

Prepared By:

: Miss Jyosmita Borah : Office Assistant

**Authorized Signatory** For Mitra S.K. Private Limited

Signature Name

Mr. Rakis No. Designation | Branch Manager

The results relate only to the stem(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 & MORF, Lab Address: P-48 Udavan Industrial Estate, 3 Pogladanga Road Kal-7000]3

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

Wathar . Approved by Utram Profilmen Suprily Research Scientist Rich Dept. Oil India Ltd., Dulinjan, Assau



Name & Address of the	Customer	Report No.	: MSK/2023-24/2394
"M/s OIL INDIA LIMITED"		Report Date	: 30.01.2024
		Nature of Sample	Stack Emission
Duliajan, Dibrugarh, Assam-	786602	Sample Mark	OCS BHOGPARA
		Sample Number	MSKGL/ED/2023-24/01/00779
Ref. No.: W.O NO 812598	RI of Contract No. 6116895		No. of the last of
Date of Sampling	Sample Received Date	Analysis Start Date	Analysis Complete Date
18.12.2023	21,12,2023	21.12.2023	28.12.2023

#### ANALYSIS RESULT

A.	General information about stack:	: CODP-2		
1	Stack connected to	CRUDE TA	NK	
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	Bar Sag	
6	DG capacity	: 157HP		
В.	Physical characteristics of stack :	1 300 20		
	Height of the stack from ground level	2.438 m		
2	Diameter of the stack at sampling point	: 0.102 m	Call In the	
3	Area of Stack	: 0.00810m2		
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)	162	100	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.)	19.93		USEPA Part 2, 25.09.1996 USEPA Part 2, 25.09.1996
4.	Quantity of Gas Flow (Nm3/hr)	396		IS:13270:1992 Reaft, 2014
5	Concentration of Oxygen (%v/v)	13.6		IS:13270 :1992 Reaff, 2014
6.	Concentration of Carbon Monoxide (g/kW-hr)	0.152	≤ 3.5	IS:13270:1992 Reaff, 2014
7	Concentration of Carbon Dioxide (%v/v)	5.8		
8	Concentration of Sulphur Dioxide (mg/Nm3)	24.1	2000 0000	USEPA-29, 25/06/1996
9.	Concentration of Nitrogen Oxide & Hydrocarbons	0.258	≤ 4.7	USEPA Part-7, 12/03/1996 & USEPA 18 -25.09.1996
3.	(g/kW-hr)	< 0.005	m 44.15	USEPA-29, 25/06/1996
10	Concentration of Lead (mg/Nm3)	0.095	≤ 0.3	USEPA Part-17, 16/08/1996
11	Concentration of Particulate matter (g/kW-hr)	The state of the s		Remarks:Nil
E.	Pollution control device :  Details of pollution control devices attached with the stack	: Nil		

Analyzed By:

Signature

Designation.

Name

Delegtory

Mr. Dipankar Mazumdar **Executive Chemist** 

Signature

Name Designation:

Prepared By: Forusk

: Miss Jyosmita Borah Office Assistant

**Authorized Signatory** For Mitra S.K. Private Limited

Signature Mr. Rhijh Roy Name Designation Branch Manager

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

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

Robbur

Approved by Unam Prodhan Suptdg Research Scientist R&D Dept... Oil India Ltd. Duliajan: Assaul





Name & Address of the Customer

"M/s OIL INDIA LIMITED"

Duliajan, Dibrugarh, Assam-786602

Ref. No. W O. NO. - 8125981 of Contract No. 6116895

Date of Sampling

Sample Received Date 21,12,2023

18.12.2023

Report No. Report Date Nature of Sample

Sample Mark Sample Number MSK/2023-24/2395

30.01.2024

Stack Emission

OCS BHOGPARA

MSKGL/ED/2023-24/01/00780

Analysis Start Date 21 12.2023

Analysis Complete Date 28.12.2023

	ANALYSIS	RESULT		
A.	General information about stack :	: CODP-3		
	Stack connected to	CRUDET	ANK	
	Emission due to	NG		
	Material of construction of Stack	MS		
	Shape of Stack	Circular		
	Whether stack is provided with permanent platform & ladder	Yes		
	DG capacity	: 157HP		
	Physical characteristics of stack			
	Height of the stack from ground level	2.438 m		
	Dinmeter of the stack at sampling point	0.102 m		
	Area of Stack	0.00810m2		
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)	155		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.)	19.93	-	USEPA Part 2, 25,09 1996
4.	Quantity of Gas Flow (Nm3/hr)	396	1	USEPA Part 2, 25.09, 1996
5.	Concentration of Oxygen (%v/v)	13.6	1 (St. 1)	IS 13270 :1992 Reaff, 2014
6	Concentration of Carbon Monoxide (g/kW-hr)	0.152	≤ 3.5	IS:13270:1992 Reaff, 2014
7	Concentration of Carbon Dioxide (%v/v)	5.8	Section 15	IS:13270:1992 Reaff, 2014
8	Concentration of Sulphur Dioxide (mg/Nm3)	24.1	0.00 2 S	USEPA-29, 25/06/1996
9	Concentration of Nitrogen Oxide & Hydrocarbons	0.258	≤ 4.7	USEPA Part-7, 12/03/1996 & USEPA 18 -25:09:1996
0.	Concentration of Lead (mg/Nm3)	< 0.005		USEPA-29, 25/06/1996
1	t oncentration of Particulate matter (g/) W-br)	0.094	≤ 0.3	USEPA Part-17, 16/08/1996
E	Pollution control device : Details of pollution control devices attached with the stack	: Nil		Remarks: Nil

Analyzed By:

Prepared By:

Jasiah.

**Authorized Signatory** For Mitra S.K. Private Limited

Signature Name:

Designation

Mr. Dipankar Mazumdar Executive Chemist

Signature Name

Designation.

Miss Jyosmita Borah Office Assistant

Signature Name |

Designation | Hanch Mahaber

Kan de : Nir

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

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THE P Approved by Union Prodhan Suprite Research Scientist, R&D Dept. Oil India Ltd., Du hajan, Assaui



Name & Address of the	Customer	Report No.	: MSK/2023-24/2396	
"M/s OIL INDIA LIMITED		Report Date	30.01.2024	
INIS OIL INDIA CIMITED	Nature of Sample		Stack Emission	
Duhajan, Dibrugarh, Assam-	786602	Sample Mark	OCS BHOGPARA	
		Sample Number	MSKGL/ED/2023-24/01/00781	
Ref. No. W.O. NO - 812598	81 of Contract No. 6116895			
Date of Sampling	Sample Received Date	Analysis Start Date	Analysis Complete Date	
18.12.2023	21.12.2023	21.12.2023	28.12.2023	

#### **ANALYSIS RESULT**

A.	General information about stack :	: DRENCHI	NG PUMP	
1	Stack connected to	WATER TANK		
2.	Emission due to	HSD		
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	: 310 HP		
B.	Physical characteristics of stack :			
1	Height of the stack from ground level	: 2.438 m		
2.	Diameter of the stack at sampling point	0.102 m		
3	Area of Stack	-0.00810m2		
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)	133		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.)	18.85		USEPA Part 2, 25.09 1996
4.	Quantity of Gas Flow (Nm3/hr)	401		USEPA Part 2, 25 09 1996
5.	Concentration of Oxygen (%v/v)	13.4		IS:13270 :1992 Reaff, 2014
6	Concentration of Carbon Monoxide (g/kW-hr)	0.256	≤ 3.5	IS-13270 1992 Renff, 2014
7	Concentration of Carbon Dioxide (%v/v)	5.4		1S:13270:1992 Reaff, 2014
8	Concentration of Sulphur Dioxide (mg/Nm3)	25.1		USEPA-29, 25/06/1996
9	Concentration of Nitrogen Oxide & Hydrocarbons (g/kW-hr)	0.271	≤ 4.7	USEPA Part-7, 12/03/1996 & USEPA 18 -25.09.1996
10	Concentration of Lead (mg/Nm3)	< 0.005	1	USEPA-29, 25/06/1996
11	Concentration of Particulate matter (g/kW-hr)	0.104	≤ 0.3	USLEA Part-17 16/08/1996
E.	Pollution control device : Details of pollution control devices attached with the stack	Nil		Remarks Nil

Analyzed By:

Prepared By:

**Authorized Signatory** For Mitra S.K. Private Limited

Signature Name Designation. Delayaby

Mr. Dipankar Mazumdar Executive Chemist

Signature Name

Designation

Miss Jyosmita Borah Office Assistant

Signature

Name Mr. Juny Monager Designation : Branco Monager

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

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Kalilur

Approved by Urrain Prodlian Supridg Research Scientist R&D Dept. Oil India Ltd. Dubojun, Assam





Name & Address of the Customer Report No. : MSK/2023-24/2397 Report Date "M/s OIL INDIA LIMITED" 30.01.2024 Nature of Sample Stack Emission Duliajan, Dibrugarb, Assam-786602 Sample Mark OCS BHOGPARA Sample Number MSKGL/ED/2023-24/01/00782 Ref. No.: W O. NO. - 8125981 of Contract No. 6116895 Date of Sampling Sample Received Date Analysis Start Date Analysis Complete Date 18.12.2023 21 12 2023 21.12.2023 28.12.2023

۹.	General information about stack :			
		: DRENCHING PUMP		
	Stack connected to	: WATER TANK		
	Emission due to	HSD		
	Material of construction of Stack	MS		
	Shape of Stack	Circular		
	Whether stack is provided with permanent platform & ladder	: Yes		
	DG capacity	: 310 HP		
	Physical characteristics of stack :			
1	Height of the stack from ground level	2.438 m		
	Diameter of the stack at sampling point	0.102 m		
	Area of Stack	0.00810m2		
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)	127		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.)	19.07		USEPA Part 2, 25.09.1996
4	Quantity of Gas Flow (Nm3/hr)	412	****	USEPA Part 2, 25.09, 1996
5	Concentration of Oxygen (%v/v)	13.8		IS:13270:1992 Renff, 2014
6.	Concentration of Carbon Monoxide (g/kW-hr)	0.249	≤ 3.5	IS:13270:1992 Reaff, 2014
7	Concentration of Curbon Dioxide (%v/v)	5.8		IS:13270 1992 Reaff, 2014
В	Concentration of Sulphur Dioxide (mg/Nm3)	24.9		USEPA-29, 25/06/1996
9.	Concentration of Nitrogen Oxide & Hydrocarbons (g/kW-hr)	0.249	≤ 4.7	USEPA Part-7, 12/03/1996 & USEPA 18 -25.09.1996
0.	Concentration of Lead (mg/Nm3)	< 0.005		USEPA-29, 25/06/1996
1	Concentration of Particulate matter (g/kW-hr)	0.102	≤ 0.3	USEPA Part-17, 16/08/1996
E,	Pollution control device : Details of pollution control devices attached with the stack	Nil		Remarks: Nil

Analyzed By:

Prepared By:

**Authorized Signatory** For Mitra S.K. Private Limited

Signature Name

Designation.

**Executive Chemist** 

Mr. Dipankar Mazumdar

Signature Name

Designation.

Miss Jyosmita Borah

: Office Assistant

Signature Name

Mr. Rajili Hoy Designation Branch Manager

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

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The Literary Approved by Uttun Prodhm Supride Research Scientist R&D Dept. Oil India Ltd., Duliapin, Assam



Name & Address of the Customer Report No. MSK/2023-24/2398 30.01.2024 Report Date "M/s OIL INDIA LIMITED" Nature of Sample Stack Emission Duliajan, Dibrugarh, Assam-786602 OCS BHOGPARA Sample Mark MSKGL/ED/2023-24/01/00783 Sample Number Ref. No. W.O. NO. - 8125981 of Contract No. 6116895 Analysis Start Date Analysis Complete Date Date of Sampling Sample Received Date 28.12.2023 18.12.2023 21.12.2023 21,12,2023

## ANALYSIS RESULT

A.	General information about stack:	: GENSET-1		
1	Stack connected to	WATER TA	NK	
2	Emission due to	HSD		
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	: 250 KVA		
B.	Physical characteristics of stack:			
1	Height of the stack from ground level	2.438 m		
2	Diameter of the stack at sampling point	: 0.102 m		
3	Area of Stack	: 0.00810m2		
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)	127	18	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.)	19.07		USEPA Part 2, 25.09.1996
4.	Quantity of Gas Flow (Nm3/hr)	412		USEPA Part 2, 25.09 1996
5	Concentration of Oxygen (%v/v)	13.8	1	IS 13270 1992 Reaff, 2014
6.	Concentration of Carbon Monoxide (g/kW-hr)	0.249	≤ 3.5	IS:13270:1992 Reaff, 2014
7	Concentration of Carbon Dioxide (%v/v)	5.8	300	IS.13270 :1992 Reaff, 2014
8.	Concentration of Sulphur Dioxide (mg/Nm3)	24.9		USEPA-29, 25/06/1996
9.	Concentration of Nitrogen Oxide & Hydrocarbons (g/kW-hr)	0.249	≤ 4.7	USEPA Part-7, 12/03/1996 & USEPA 18 -25:09 1996
10	Concentration of Lead (mg/Nm3)	<0.005		USEPA-29, 25/06/1996
11	Concentration of Particulate matter (g/kW-hr)	0.102	≤ 0.3	USEPA Part-17 16/08/1996
E.	Pollution control device : Details of pollution control devices attached with the stack	: Nil		Remarks:Nil

Analyzed By:

Designation.

Balustry Signature Name

Mr. Dipankar Mazumdar **Executive Chemist** 

Prepared By:

Signature : Miss Jyosmita Borah Name : Office Assistant Designation.

**Authorized Signatory** For Mitra S.K. Private Limited

Signature Mr. R Name Designation Branch Manager

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

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



Walter 1 Approved by Unam Produm Suptide Research Scientist R&D Dept. Oil furin i. id. Duliman. Asson Form-0
[See Rules 29 - F (2) and 29 -L]
Report of Medical Examination under Rule 29 - B
(To be issued in Triplicate)\*\*

Certificate No: E2029718

Certified that Shri KONWAR TITUL KUMAR (E202971) is employed as TECHNICIAN-2(CA) in CENTRAL ASSET mine,

Form D, no. has been examined for a periodical medical examination. He appears to be 33 years of age.

The findings of the examining authority are given in the attached sheet

It is considered that Shri KONWAR TITUL KUMAR

- \*(a) is medically fit for employment in mines
  - \*(b) is suffering from .... and is medically unfit for
    - (i) any employment in mine or
    - (ii) any employment below ground or
    - (iii) any employment of work ....

Place: DULIAJAN HOSPITAL

Date: 04.11.2022

Signature of Examining Authority DR PUNYESWAR KEOT, CHIEF Name and Designation in Block Letter

हों. पुण्यस्वर केउट DR. PUNYESWARKEOT उम महाप्रवेधक (व्यावसायिक स्वास्थ्य सेवाएं) DGM (Occupational Health Service) भागत इंडिया लिमिटेड, अस्पताल, दुलियाजान आ India Lunited, Hospital, Duliajar

Delete whatever not applicable

One copy of the certificate shall be handed over to the person concerned and another copy shall be sent to the manager of the mine concerned by registered post and the third copy shall be retained by examining authority



# Report of the Examining Authority

(To be filled in for every medical examination whether initial or periodical or re-examination or after curel control of disability)

Annexure to certificate number E2029718 as a result of medical examination on 04.11.2022.

Left Thumb impression of Candidate

SL		
	Identification Mark	
1	General Development	NORMAL
2	Height(cm)	170
3	Weight(Kg.)	75
4	Eves	
	(i)Visual Acuity - Distance Vision	
	(With Glass) Right Eye	6/6
	(With Glass) Left Eye	6/6
	(ii)Any organic disease of eyes	ABSENT
	(iii)Night Blindness	ABSENT
	(iv) Squint	ABSENT
5	Ears	
	(i)Hearing Right Ear:	NORMAL
	(ii)Hearing Left Ear:	NORMAL
	(iii)Any organic disease of ears	NO
6	Respiratory System	
	Chest Measurement	
	(i) After full inspiration(cm)	103
	(ii) After full expiration(cm)	99
7	Circulatory System	
	(i) Blood Pressure(mm of Ha)	110 / 80
	(ii) Pulse(/Min)	62
8	Abdomen	ABSENT
	Tenderness	ABSENT
	Liver	NONPALPABLE
	Spleen	NONPALPABLE
	Tumor	NONPALPABLE
9	Nervous System	
	History of fits or epilepsy	ABSENT
	Paralysis	ABSENT
	Mental Health	NORMAL
10	Locomotor system	NORMAL
11	Skin	MOIST
12	Hernia	ABSENT
13	Hydrocele	ABSENT
14	Any other abnormality	NO N
15	Urine	
	(i) Reaction	NO
	(ii) Albumin	ABSENT
16	(iii) Sugar	ABSENT
17	Skiagram of Chest	ABSENT
18	Any other #C" test considered necessary by the	COUNTY TO THE STATE OF THE STAT
19	Any opinion of specialist considered necessary	Carl Washington Edward Company

P

Place : DULJAJAN HOSPITAL

Signature of Examining Authority
Page No 2/3.

# Report of Medical Examination as per the recommendation of National Safty Conferences in Mines (To be used in Continuation with Form "O")

Certificate : E2029718

Name : KONWAR TITUL KUMAR

Identification:

1. Cardiological Assessment:	
Auscultaion S1	NORMAL
Auscultaion S2	NORMAL
Auscultaion Additional Sound	NORMAL
Electrocardiograh (12 Leads) Finding	NORMAL

2. Neurological Assessment:	
Findings	NORMAL
Superfacial Reflexs	NORMAL
Deep Reflexes	NORMAL
Peripheral Circulation	NORMAL
Vibration Syndromes	NORMAL

NOT APPLICABLE		
Grades	Types	

4. Audiometry Findings:		
Conduction Type	Left Ear	Right Ear
Ear Conduction	NORMAL	NORMAL
Bone Conduction	NORMAL	NORMAL

Sr.No.	Tests	Findings
1	Blood - Tc, Dc, Hb, ESR, Platelets	WNL
2.	Bold Sugar - Fasting & PP	WNL
3.	Lipid Profile	WNL
4.	Blood Urea , Creatinine	WNL
5.	Urine Routine	WNL
6.	Stool Routine	WNL

6. Special Tests for Mn exposure :	NOT APPLICABLE
Behavior Disturbances	
Neurological Disturbances Speech Defect	
Neurological Disturbances Tremor	
Neurological Disturbances Adiadocokinesia	
Neurological Disturbances Emotional Changes	

7. Any other Special Test Required ( Result of	of Lung Function Test 'Spirometry		
Parameters	Predicted Value	Performed Value	% of Predicted
Forced Vital Capacity (FVC)	0.00	0.00	0.00
Forced Vital Capacity 1 (FEV1)	0.00	0.00	0.00
FEV1/FVC	0.00	0.00	0.00
Pick Expiratory Flow	0.00	0.00	0.00



Signature of Examining Authority

Page No 3/3.

#### Form-O [See Rules 29 - F (2) and 29 -L] Report of Medical Examination under Rule 29 - B

(To be issued in Triplicate)\*\*

Certificate No: E1031424

Certified that Shri PATHRAI ASHOK ( E103142 ) is employed as TECHNICIAN-1(CA) in CENTRAL ASSET mine,

Form D, no, has been examined for a periodical medical examination. He appears to be 58 years of age.

The findings of the examining authority are given in the attached sheet.

It is considered that Shri PATHRAI ASHOK

\*(a) is medically fit for employment in mines.

(b) is suffering from .... and is medically unfit for

- (i) any employment in mine or
- (ii) any employment below ground . or
- (iii) any employment of work ....

Place: DULIAJAN HOSPITAL

Date: 18.08.2023

Signature of Examining Authority DR PUNYESWAR KEOT, CHIEF Name and Designation in Block Letter

डॉ. पुण्येस्वर केउट DR. PUNYESWAR KEOT उप महाप्रबंधक (व्यावसायिक स्वास्थ्य सेवार DGM (Occupational Health Service आयल इंडिया लिमिटेड, अस्पताल, दुलिया Oil India Limited, Hospital, Dulia)

Delete whatever not applicable

One copy of the certificate shall be handed over to the person concerned and another copy shall be sent to the manager of the mine concerned by registered post and the third copy shall be retained by examining authority



#### **Report of the Examining Authority**

(To be filled in for every medical examination whether initial or periodical or re-examination or after cure/ control of disability)

Annexure to certificate number E1031424 as a result of medical examination on 18.08.2023 .

#### Left Thumb impression of Candidate

SL			
	Identification Mark		
1	General Development	NORMAL	le i
2	Height(cm)		
3	Weight(Kg.)	161	Ye.
4	Eves	65	
18/	(i)Visual Acuity - Distance Vision		- 50
4	(With Glass) Right Eve	0/0	
708	(With Glass) Left Eve	6/6	113
1	(ii)Any organic disease of eyes	6/6	ll e
	(iii)Night Blindness	ABSENT	- 1
BALL	(iv) Squint	ABSENT	8 1
5	Ears	ABSENT	
119	(i)Hearing Right Ear:	NORMAL	
	(ii)Hearing Left Ear :	NORMAL	
30	(ili)Any organic disease of ears	NO	R.M
6	Respiratory System	NO TO THE RESIDENCE OF THE PARTY OF THE PART	
Title	Chest Measurement		7.0
	(i) After full inspiration(cm)	105	
ST ST	(ii) After full expiration(cm)	100	
7	Circulatory System	100	
	(i) Blood Pressure(mm of Hg)	130 / 86	-
dh ly	(ii) Pulse(/Min)	76	
	Abdomen	ABSENT	
3	Tenderness	ABSENT	
MAIT 1		NONPALPABLE	-310
3	Liver	NONPALPABLE	
Joyce .	Spleen	NONPALPABLE	UII.
	Tumor	NONFALPABLE	
9	Nervous System	ABSENT	
-	History of fits or epilepsy	ABSENT	
	Paralysis		0.1
	Mental Health	NORMAL	Sin
0	Locomotor system	NORMAL	
1	Skin	MOIST	
2	Hernia	ABSENT	IVA.
3	Hydrocele	ABSENT	
4	Any other abnormality	NO	n i
5	Urine		
	(i) Reaction	NO	SR
	(ii) Albumin	ABSENT	
6	(iii) Sugar	ABSENT	
7	Skiagram of Chest	ABSENT	
8	Any other #C" test considered necessary by the		I AO
9	Any pointon of specialist considered necessary		0



Signature of Examining Authority
Page No 2/3.

# Report of Medical Examination as per the recommendation of National Safty Conferences in Mines (To be used in Continuation with Form "O")

Certificate : E1031424

: PATHRAI ASHOK Name

Identification:

1. Cardio	logical Assessment:		Transfer seems to the second		
Auscultaion S1			NORMAL		
Auscultaion S2			NORMAL		
Auscultaid	on Additional Sound		NORMAL		
Electroca	rdiograh (12 Leads) Finding		NORMAL		
2. Neurol	ogical Assessment:				
Findings			NORMAL		
Superfaci	al Reflexs		NORMAL		
Deep Ref	lexes		NORMAL NORMAL		
Periphera	Il Circulation				
Vibration	Syndromes		NORMAL		
		THE REAL PROPERTY.	NOT APPLICABLE		
3. ILO CI	assification of Chest Radiograph:		NOT APPLICABLE	Types	
Profusion	of Pnenumoconiotic Opacities	Grades	IN STATE OF THE ST		
			V Committee of the comm		
2					
Company of the last	metry Findings :	Left Ear		Right Ear	
Conduction		Type Left Ear NORMAL		NORMAL	
Ear Conduction			NORMAL NORMAL		
Bone Cor	nduction	NOTHING.			
THE VALUE				2005	
CONTRACTOR AND ADDRESS OF THE PARTY OF THE P	ogical / Microbiological Investigation	Tests		Findings	
Sr.No.	T D. LIL ECR Platelets	TESTS TO THE REPORT OF THE PARTY OF THE PART	WNL		
1.	Blood - Tc, Dc, Hb, ESR, Platelets		WNL		
2.	Bold Sugar - Fasting & PP			WNL	
3.	Lipid Profile			WNL	
4.	Blood Urea , Creatinine			WNL	
5.	Urine Routine			WNL	
6.	Stool Routine				
distance of			NOT APPLICAL	BLE	
	Tests for Mn exposure :	Manual VIII I Wallet			
	Disturbances			ALC: N	
	cal Disturbances Speech Defect	OR WAS WELL TO BE WITH			
	cal Disturbances Tremor				
	cal Disturbances Adiadocokinesia				
Neurologic	cal Disturbances Emotional Changes				
		una Function Test 'Snirometry	New York Vinder	PAR UPPER A	
7. Any oth	er Special Test Required ( Result of I	Predicted Value	Performed Value	% of Predicted	
	Parameters	0.00	0.00	0.00	
	al Capacity (FVC)	ALMO CONTRACTOR OF THE PARTY OF	The state of the s		
	al Capacity 1 (FEV1)	0.00	0.00	0.00	

0.00

0.00



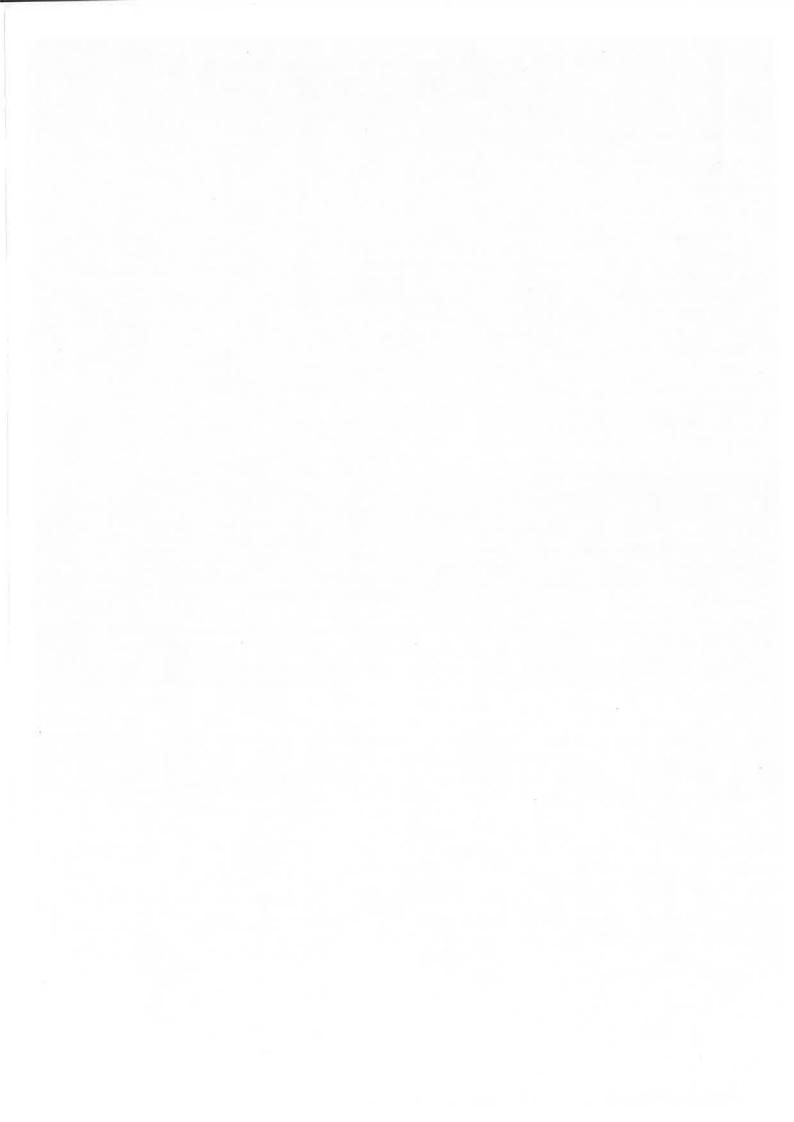
FEV1/FVC

Pick Expiratory Flow

Signature of Examining Authority

0.00

0.00





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, Sibsagar, PIN: 785640.





#### FORM - V (See Rule 14)

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

#### PART - A

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

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

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

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

### (iii) Production capacity - Units

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

Production details during F.Y. 2022-23:

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

#### (iv) Year of establishment:

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

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

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

#### (I) Water consumption m<sup>3</sup>/d:

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



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

### (II) Raw material consumption

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

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

PART - C
POLLUTION DISCHARGED TO ENVIRONMENT/UNIT OF OUTPUT

(Parameter as specified in the consent issued).

Pollutants	Quantity of Pollutants Discharged (mass/day)	Concentrations of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
(a) Water	<b>NIL.</b> There is no discharge	• Quality of ETP treated	No variation is observed.
	of pollutants from drilling locations and Production Installations.  • Wastewater generated from drilling locations is treated in Effluent Treatment Plant (ETP) and reused back in the drilling operation.  • The formation water generated after separation	water from the drilling locations is analyzed frequently. (Test report is enclosed as <b>Annexure</b> – 1).	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.	Ambient Air Quality (AAQ) monitoring is carried out frequently at drilling locations and Production Installations (Test report enclosed as	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	Category of Hazardous	Total Quanti	ty generated
Wastes	Waste as per Schedule - I of HW Rules, 2016	During F.Y. 2021-22	During F.Y. 2022-23
a) From process	S.No. 2.2 Sludge containing Oil	9943 MT	4671.52 <b>MT</b>
•	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			
	23,000 m <sup>3</sup>	27,000 m <sup>3</sup>	
Drill Cuttings	(Approx.)	(Approx.)	
(b) From pollution control facilities	NIL		
(c)			
(1) Quantity recycled or re-utilized within	N/A		
the unit.			
(2) Sold	N/A		
(3) Disposed	N/A		

#### PART - F

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

## (I) Hazardous Wastes:

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



#### (I) Solid Wastes:

Name of the Solid Waste	Quantity generated during F.Y. 2022-23	Disposal Practices
a) Drill Cuttings	27,000 m <sup>3</sup> (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.

