

	Conditions	Compliance			
Sl. No.	SPECIFIC CONDITIONS				
1.	Gas produced during testing shall be flared with appropriate flaring booms. The flare system shall be designed as per good oil field practices and Oil Industry Safety Directorate (OISD) guidelines. The stack height shall be provided as per the regulatory requirements and emissions from stacks will meet the MOEF/CPCB guidelines.	Has been complied.			
2.	Ambient air quality shall be monitored near the closest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November, 2009 for PM <sub>10</sub> , PM <sub>2.5</sub> ,SO <sub>2</sub> , NO <sub>X</sub> , CO, CH <sub>4</sub> , HC, Non-methane HC etc.	Complied. Ambient Air Quality Monitoring was carried out during drilling operations and the report of the same is enclosed as <b>Annexure-I</b> .			
3.	Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.	Mercury analysis was carried out during drilling operations and the report of the same is enclosed as <b>Annexure-II</b> .			
4.	Approach road shall be made pucca to minimize generation of suspended dust.	Was complied with.			
5.	The company shall make the arrangement for control of noise from the drilling activity. Acoustic enclosure shall be provided to DG sets and proper stack height shall be provided as per CPCB guidelines.	Silent enclosed DG set was installed at all the drilling locations. Regular DG set stack analysis was carried out during drilling operations and the report of the same is enclosed as <b>Annexure-III.</b>			
6.	Total water requirement shall not exceed 25 $m^3/day$ and prior permission shall be obtained from the competent authority.	Was complied with.			
7.	The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created	Noted and complied during drilling activities. Waste water generated during drilling was collected in impervious HDPE lined pits. Portable ETP was installed at drill site for treatment of waste water generated			



	for oil contaminated and non-oil contaminated. Effluent shall be	during drilling activities.
	properly treated and treated wastewater shall conform to CPCB standards.	
8.	Drilling wastewater including drill cuttings wash water shall be collected in disposal pit lined with HDPE lining evaporated or treated and shall comply with the notified standards for on-shore disposal. The membership of common TSDF shall be obtained for the disposal of drill cuttings and hazardous waste. Otherwise, secured land fill shall be created at the site as per the design approved by the CPCB and obtain authorization from the SPCB. Copy of authorization or membership of TSDF shall be submitted to Ministry's Regional Office at Bhopal.	HDPE lined pits were used for disposal of drilling waste water as per guidelines for disposal of solid waste, drill cuttings and drilling fluids for onshore drilling operation notified vide GSR.546 (E) dated 30th August, 2005. Drill cuttings and other hazardous wastes was disposed through agency with authorized TSDF membership.
9.	No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies.	Was complied with.
10.	Good sanitation facility should be provided at the drilling site. Domestic sewage shall be disposed off through septic tank/soak pit.	Sufficient number of portable toilet were provided at drill site and waste water was treated through septic tank-soak pit
11.	Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.	Oil spill response scheme was prepared and implemented onsite. Onsite spill kits was provided to avoid minor spills. Additionally proper measures was taken care to fulfill the condition.
12.	The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.	Adequate measures were taken to comply the guidelines during drilling activities.
13.	The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed.	Was complied with during drilling activities. Fire fighting equipments and personal protective equipments were provided at the site. Comprehensive



	Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.	HSE manual was prepared for the drilling activities and same was implemented.
14.	The company shall develop a contingency plan for H2S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H2S detectors in locations of high risk of exposure along with self containing breathing apparatus.	Contingency plan for H2S release was prepared and implemented for drilling operations.
15.	The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and its Regional Office at Bhopal.	Adequate measures were taken to comply with the guidelines during drilling activities.
16.	Blow Out Preventer (BOP) system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.	Blow out Preventer system was installed at all the drilling locations as per OMR guidelines.
17.	Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.	Emergency Response Plan was prepared based on the guidelines by OISD, DGMS and Govt. of India. ERP was followed during drilling operations of all the exploratory wells.
18.	The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored the area in original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.	Adequate measures were taken to comply with the guidelines.



19.	All the commitments made to the public during public hearing/public consultation meeting held on 14th August, 2012 for Vadodara District and 1st July, 2012 for Bharuch District shall be satisfactorily implemented and adequate budget provision shall be made accordingly.	Was complied with.
20.	Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.	Adequate measures were taken to comply with the guidelines.
21.	In case the commercial viability of the project (for exploratory drilling) is established, the Company shall prepare a detailed plan for development of oil and gas fields and obtain fresh environmental clearance from the Ministry.	Drilling of all the proposed wells have been completed. In absence of any hydrocarbon discovery the block will be proposed for relinquishing.
22.	Restoration of the project site after completion of drilling shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office at Bhopal.	Noted and Accepted.
23.	Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office at Bhopal.	Was complied during drilling activities of all the exploratory wells.
24.	Under Corporate Social Responsibility (CSR), sufficient budgetary provision should be made for health improvement, education, water and electricity supply etc. in and around the project.	Noted and Accepted.
25.	An audit shall be done to ensure that the Environment Management Plan is implemented in totality and report shall be submitted to Ministry's Regional Office.	Noted and Accepted.
26.	Company should prepare and circulate the environmental policy.	Environmental Policy was prepared and Circulated.



		Environment Policy of IOC is attached as Annexure-IV.		
27.	All personnel including those of contractors shall be trained and made fully aware of the hazards, risks and controls in place.	Was complied with.		
28.	Company shall have own Environment Management Cell having qualified persons with proper background.	Was complied with.		
29.	Company shall prepare operating manual in respect of all activities. It shall cover all safety & environment related issues and system. Measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/project site. Awareness shall be created at each level of management. All the schedules and results of environmental monitoring shall be available at project site office. Remote monitoring of site should be done.	prepared and compilation of the same during drilling operations was ensured.		
30.	Ground water analysis should be carried out at different depth to see stratification.	Adequate measures were taken to comply with the guidelines during drilling activities.		
31.	Drilling site should be at least 500 m away from the school.	Was complied with.		
32.	On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.	Plug & abandonment job were carried out as per Oil Mines Regulation (OMR).		
Sl. No.	GENERAL CONDITIONS			
1.	The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any other statutory authority.	Needful was done as per the guidelines provided by the Gujarat Pollution Control Board (GPCB), State Government and any other authority.		
2.	No further expansion or modification in the project shall be carried out without prior approval of the Ministry of	Complied. No further expansion or modification in the project was carried		



	Environment & Forests. In case of deviations or alterations in	out without prior approval of the Ministry of Environment & Forests.
	the project proposal from those submitted to this Ministry for	out interest prior approval of the ministry of Environment & Polesis.
	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.	
	en in omnominal protoction measures required, ir uny.	
3.	The project authorities must strictly comply with the rules and	Adequate measures were taken to comply with the guidelines.
	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.	
A	The event noise levels in and even date about one of the	Noise Level Meritarian man also associate and design deilling (
4.	The overall noise levels in and around the plant area shall be	Noise Level Monitoring was also carried out during drilling operations
	kept well within the standards by providing noise control	and the report of the same is enclosed as <b>Annexure-V</b> .
	measures including acoustic hoods, silencers, enclosures etc. on	
	all sources of noise generation. The ambient noise levels shall	
	conform to the standards prescribed under EPA Rules, 1989 viz.	
	75 dBA (daytime) and 70 dBA (nighttime).	
5.	A separate Environmental Management Cell equipped with full	Was complied during drilling activities of all the exploratory wells.
	fledged laboratory facilities must be set up to carry out the	
	environmental management and monitoring functions.	
6.	A copy of clearance letter shall be sent by the proponent to	Complied. A copy of clearance letter has been sent to concerned
	concerned Panchayat, Zila Parishad / Municipal Corporation,	Municipal Corporation, Urban Local Body and the Local NGO.
	Urban Local Body and the local NGO, if any, from whom	
	suggestions / representations, if any, were received while	
	processing the proposal. The clearance letter shall also be put on	
	the web site of the company by the proponent.	
	the web site of the company by the proponent.	
7.	The project proponent shall upload the status of compliance of	Was complied during drilling activities of all the exploratory wells.
	the stipulated environment clearance conditions, including	



	results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the GPCB. The criteria pollutant levels namely; $PM_{10}$ , $SO_2$ , $NO_X$ , HC (Methane & Non-methane), VOCs (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	
8.	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the GPCB. The Regional Office of this Ministry /CPCB / GPCB shall monitor the stipulated conditions. Environmental Clearance and six monthly compliance status reports shall be posted on the website of the company.	Complied. Previous six monthly reports on status of the compliance of the Environmental Clearance conditions have been submitted to the regional office of the MoEF, the respective Zonal Office of CPCB and the GPCB. Environmental Clearance and six monthly compliance report have been uploaded on the website of the IOC.
9.	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.	The environmental statement for the financial year ending 31/3/2015 (2014-15) in Form-V has been submitted to the Gujarat Pollution Control Board as well as same also has been uploaded along with the status of compliance of environmental conditions in the IOC website .
10.	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the GPCB and may also be seen at Website of the Ministry of Environment and	Complied. Information regarding EC accorded for the project was published in news papers in English as well as Vernacular languages. Newspapers clips are attached as <b>Annexure-VI</b> .



	Forests at http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office.	
11.	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.	<ul> <li>Petroleum exploration License (PEL) granted for the project on 31.05.2010 for the period of four years. The copy of the same is attached as Annexure VII.</li> <li>Vide order dated 15.4.2015, Government of Gujarat has granted PEL extension for fifth and sixth year i.e from 31.5.2014 to 31.5.2016. PEL extension order is enclosed as Annexure-VIII.</li> </ul>

Remarks: 1. Environmental Clearance granted for drilling activities of 11 wells in NELP-VII Block-CB-ONN-2005/7 is attached as Annexure IX.

**2.** Consent to Establish (CTE) and Consent to Operate (CTO) granted by Gujarat Pollution Control Board (GPCB) for the project is attached as **Annexure-X**.



# Annexure-1: Ambient Air Quality Monitoring Report



# IndianOil



#### **Detox Corporation Pvt. Ltd.**

Environmental Engineers, Consultants, Turnkey Project Developers & Operators of Environment Infrastructure Facility

#### **Ambient Air Sample Analysis Report**

[1] Client Name & Address:				
Indian Oil Corporation Limited	Test Report No : 50000002171			
7th Floor, Indian Oil Bhavan,	Issue Date : 05.05.2015			
1, Sri Aurobindo Marg, Yusuf Sarai,	Report Page (s): 1 of 2			
[2] Sampling Details :				
Protocol Purpose : Ambient Air Quality Analysis	Sample Lab ID : A30-45/AL1 to AL3/280415			
Sampling Procedures : IS-5182 (Part-5) RA-2003	Packing: Filter Paper packed in plastic envelopes and Gaseous Solution in Bottles, Charcoal tubes, Bladders.			
Date of Sampling : 24.04.2015	Sampling Duration : 24 Hrs			
Client Order : E & P/CB07/ECR/DETOX/2015-16/02/LOA Date	d on : 17.04.2015			
Sampling Time : 11:30:00	Client Representative : Mr. R. Sharma			
Sample Received Date : 28.04.2015	Sampling Done By : Hitesh Soni			
Test Start Date : 28.04.2015	Location Of Sampling : IOCL Timbi - 1			
Test Completion Date : 02.05.2015	L1: Project Site, L2: Timbi, L3: Village Urad			

Sr. No.	. Test Parameters	Unit	Results			Method	
51.140.		Onit	L1	L2	L3	Detection Limits	Method of Measurement
1	Respirable Suspended Particulate Matter	µg/m3	62.0	74.0	67.0	1.0	IS – 5182 (Part-23):2006
2	Fine Particulate Matter	µg/m3	25.0	30.0	28.0	8.0	USEPA Quality Assurance Handbook,V- 2,P-2
3	Sulphur Dioxide	μg/m3	6.93	9.22	3.07	1.6	IS - 5182 (Part-2): 2001
4	Nitrogen Oxides	µg/m3	18.87	21.73	14.81	5.5	IS - 5182 (Part-6): 2006
5	Ozone	µg/m3	ND	ND	ND	20.0	IS - 5182 (Part-9)
6	Ammonia	µg/m3	2.81	3.55	4.26	0.7	Indophenol Blue Method
7	Lead	µg/m3	ND	ND	ND	0.05	IS-5182 (Part-22):2004 (RA -2009)
8	Carbon Monoxide	mg/m3	ND	ND	ND	1.0	IS - 5182 (Part-10):1999 (RA -2009)
9	Methane Hydrocarbons	ppm	ND	ND	ND	-	IS - 5182 (Part-17) : 1979 (RA -2003)
10	Non Methane Hydrocarbons	ppm	ND -	ND	ND		IS - 5182 (Part-17) : 1979 (RA -2003)

ce: Surat

Date: 05.05.2015

Tech. Manager / Autho. Signatory

Notes: (1) The results pertain to tested items only.

(2) This report shall not be reproduced except in full and authenticity of this report must be validated with office copy at Detox Corporation Pvt. Ltd.

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Rev./Date 03/11-11-2013

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Environmental Engineers, Consultants, Turnkey Project Developers & Operators of Environment Infrastructure Facility

#### Ambient Air Sample Analysis Report

[1] Client Name & Address:			
Indian Oil Corporation Limited	Test Report No : 5000002173		
7th Floor, Indian Oil Bhavan,	Issue Date : 05.05.2015		
1, Sri Aurobindo Marg, Yusuf Sarai,	Report Page (s): 1 of 1		
[2] Sampling Details :			
Protocol Purpose : Ambient Air Quality Analysis	Sample Lab ID : A30-46/AL4/280415		
Sampling Procedures : IS-5182 (Part-5) RA-2003	Packing: Filter Paper packed in plastic envelopes and Gaseous Solution i Bottles, Charcoal tubes, Bladders.		
Date of Sampling : 25.04.2015	Sampling Duration : 30 min		
Client Order : E & P/CB07/ECR/DETOX/2015-16/02/LOA Dat	ed on : 17.04.2015		
Sampling Time : 12:00:00	Client Representative : Mr. R. Sharma		
Sample Received Date : 28.04.2015	Sampling Done By : Hitesh Sohni		
Test Start Date : 28.04.2015	Location Of Sampling : IOCL Timbi - 1		
Test Completion Date : 02.05.2015	L4: Diseal Storage Area		

[3] Res	ults :				
			Results	Method	
Sr. No.	Test Parameters	Unit	L4	Detection Limits	Method of Measurement
1	Volatile organic Compounds	ppm	ND	0.1	GC - Method

(2) This report shall not be reproduced except in full and authenticity of this report must be validated with office copy at Detox Corporation Pvt. Ltd.

#### ND: Not Detected

Place : Surat

Date : 05.05.2015

Notes: (1) The results pertain to tested items only.

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te Tech. Manager / Autho. Signatory 1

For DETOX CORPORATION PVT. LTD.

Rev/Date 03/11-11-2013

Doc.No. dT/OP/ASR/05

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Environmental Engineers, Consultants, Turnkey Project Developers & Operators of Environment Infrastructure Facility

#### **Ambient Air Sample Analysis Report**

[1] Client Name & Address:		
Indian Oil Corporation Limited	Test Report No : 5000002178	
7th Floor, Indian Oil Bhavan,	Issue Date : 06.06.2015	
1, Sri Aurobindo Marg, Yusuf Sarai,	Report Page (s): 1 of 2	
[2] Sampling Details :		
Protocol Purpose : Ambient Air Quality Analysis	Sample Lab ID : A33-46/AL1 to AL3/230515	
Sampling Procedures : IS-5182 (Part-5) RA-2003	Packing: Filter Paper packed in plastic envelopes and Gaseous Solution in Bottles, Charcoal tubes, Bladders.	
Date of Sampling : 21.05.2015	Sampling Duration : 24 Hrs	
Client Order : E & P/CB07/ECR/DETOX/2015-16/02/LOA Date	d on : 17.04.2015	
Sampling Time : 11:05:00	Client Representative : Mr. R. Sharma	
Sample Received Date : 23.05.2015	Sampling Done By : Hitesh Soni	
Test Start Date : 25.05.2015	Location Of Sampling : IOCL SIMLI - 1	
Test Completion Date : 29.05.2015	L1: Project Site, L2:Kanthariya, L3: Simli Gam	

			Results			Method	
Sr. No.	Test Parameters	Unit L1 L2 L3		L3	Detection Limits	Method of Measurement	
1	Respirable Suspended Particulate Matter	µg/m3	68.0	62.0	56.0	1.0	IS – 5182 (Part-23):2006
2	Fine Particulate Matter	µg/m3	20.0	15.0	16.0	8.0	USEPA Quality Assurance Handbook,V- 2,P-2
3	Sulphur Dioxide	µg/m3	9.22	6.15	3.07	1.6	IS - 5182 (Part-2): 2001
4	Nitrogen Oxides	µg/m3	12.66	13.37	14.09	5.5	IS – 5182 (Part-6): 2006
5	Ozone	µg/m3	ND	ND	ND	20	IS – 5182 (Part-9)
6	Ammonia	µg/m3	7.57	5.34	5.87	0.7 💈	Indophenol Blue Method
7	Lead	µg/m3	ND	ND	ND	0.05	IS – 5182 (Part-22):2004 (RA -2009)
9	Carbon Monoxide	mg/m3	ND	ND	ND	1.0	IS - 5182 (Part-10):1999 (RA -2009)
10	Methane Hydrocarbons	ppm	ND	ND	ND		IS - 5182 (Part-17): 1979 (RA -2003)
11	Non Methane Hydrocarbons	ppm	ND -	ND	ND	×	IS - 5182 (Part-17): 1979 (RA -2003)

#### ND: Not Detected

Place : Surat

Date: 06.06.2015

For DETOX CORPORATION PVT. LTD. rtel (F Tech. Manager /Autho. Signatory

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Environmental Engineers, Consultants, Turnkey Project Developers & Operators of Environment Infrastructure Facility

#### **Ambient Air Sample Analysis Report**

[1] Client Name & Address:	
Indian Oil Corporation Limited	Test Report No : 50000003154
7th Floor, Indian Oil Bhavan,	Issue Date : 06.06.2015
1, Sri Aurobindo Marg, Yusuf Sarai,	Report Page (s): 1 of 1
[2] Sampling Details :	
Protocol Purpose : Ambient Air Quality Analysis	Sample Lab ID : A33-46/AL4/230515
Sampling Procedures : Not Specified	Packing: Filter Paper packed in plastic envelopes and Gaseous Solution in Bottles, Charcoal tubes, Bladders.
Date of Sampling : 21.05.2015	Sampling Duration : 30 min
Client Order : E & P/CB07/ECR/DETOX/2015-16/02/LOA Dat	ted on : 17.04.2015
Sampling Time : 12:30:00	Client Representative : Mr. R. Sharma
Sample Received Date : 23.05.2015	Sampling Done By : Hitesh Sohni
Test Start Date : 25.05.2015	Location Of Sampling : IOCL Simli - 1
Test Completion Date : 29.05.2015	L4: Diseal Storage Area

[3] Resi	alts :			and the second		
Sr. No.	Test Parameters	Unit	Results	Method Detection	Method of Measurement	
		onne	L4	Limits	Method of Measurement	
1	Volatile organic Compounds	ppm	ND	0.1	GC - Method	

ND: Not Detected

For DETOX CORPORATION PVT. LTD.

Date: 06.06.2015 .

Tech. Manager / Autho. Signatory

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#### **Ambient Air Sample Analysis Report**

[1] Client Name & Address:	
Indian Oil Corporation Limited	Test Report No : 5000003137
7th Floor, Indian Oil Bhavan,	Issue Date : 30.06.2015
1, Sri Aurobindo Marg, Yusuf Sarai,	Report Page (s): 1 of 1
[2] Sampling Details :	
Protocol Purpose : Ambient Air Quality Analysis	Sample Lab ID : A36-29/AL1 to AL3/220615
Sampling Procedures : Not Specified	Packing: Filter Paper packed in plastic envelopes and Gaseous Solution in Bottles, Charcoal tubes, Bladders.
Date of Sampling : 17.06.2015	Sampling Duration : 24 Hrs
Client Order : E & P/CB07/ECR/DETOX/2015-16/02/LOA Date	d on : 17.04.2015
Sampling Time : 11:00:00	Client Representative : Mr. R. Sharma
Sample Received Date : 22.06.2015	Sampling Done By : Hitesh Sohni
Test Start Date : 22.06.2015	Location Of Sampling : IOCL ATALI - 1
Test Completion Date : 27.06.2015	L1: Project Site, L2:Kiya Vill., L3:Atali Vill.

[3] Resi	ults :			, and a		A STREET	
Sr. No.	Test Parameters		Results			Method	
31. 140.	rest Parameters	Unit	L1	L2	L3	Detection Limits	Method of Measurement
1	Respirable Suspended Particulate Matter	µg/m3	73.0	82.0	74.0	1.0	IS – 5182 (Part-23):2006
2	Fine Particulate Matter	µg/m3	36.0	43.0	47.0	8.0	USEPA Quality Assurance Handbook,V 2,P-2
3	Sulphur Dioxide	µg/m3	12.29	15.36	9.22	1.6	IS-5182 (Part-2): 2001
4	Nitrogen Oxides	µg/m3	27.94	38.21	29.85	5.5	IS – 5182 (Part-6): 2006
5	Ozone	µg/m3	ND	ND	ND	20	IS – 5182 (Part-9)
6	Ammonia	μg/m3	102.49	114.2	120.41	0.7	Indophenol Blue Method
7	Lead	µg/m3	ND	ND	ND	0.05	IS - 5182 (Part-22):2004 (RA -2009)
8	Carbon Monoxide	mg/m3	ND	ND	ND	1.0	IS - 5182 (Part-10):1999 (RA -2009)
9	Methane Hydrocarbons	ppm	ND	ND	ND		IS – 5182 (Part-17) : 1979 (RA -2003)
10	Non Methane Hydrocarbons	ppm	ND -	ND	ND	-	IS-5182 (Part-17) : 1979 (RA -2003)

ND:	Not	Detected
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Place	:	Surat	

Date : 30.06.2015

For DETOX CORPORATION PVT. LTD. Tech. Manager / Autho. Signatory

Notes: (1) The results pertain to tested items only.

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Environmental Engineers, Consultants, Turnkey Project Developers & Operators of Environment Infrastructure Facility

#### Ambient Air Sample Analysis Report

[1] Client Name & Address:	
Indian Oil Corporation Limited	Test Report No : 50000003139
7th Hoor, Indian Oil Bhavan,	Issue Date : 30.06.2015
1, Sri Aurobindo Marg, Yusuf Sarai,	Report Page (s): 1 of 1
[2] Sampling Details :	
Protocol Purpose : Ambient Air Quality Analysis	Sample Lab ID : A36-30/AL4/22061.5
Sampling Procedures : Not Specified	Packing: Filter Paper packed in plastic envelopes and Gaseous Solution in Bottles, Charcoal tubes, Bladders.
Date of Sampling : 18.06.2015	Sampling Duration : 30 min
Client Order : E & P/CB07/ECR/DETOX/2015-16/02/LOA Da	ated on : 17.04.2015
Sampling Time : 12:45:00	Client Representative : Mr. R. Sharma
Sample Received Date : 22.06.2015	Sampling Done By : Hitesh Sohni
Test Start Date : 22.06 2015	Location Of Sampling : IOCL Atali - 1
Test Completion Date : 26.06.2015	L4: Diseal Storage Area

r. No.	Test Parameters	Unit	Results	Method Detection Limits	Method of Measurement	
			L4	Wethod Detection Limits		
1	Volatile organic Compounds	ppm	ND	0.1	GC - Method	

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Date: 30.06.2015		Tech. Manager / Autho. Sig	natory
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#### Ambient Air Sample Analysis Report

[1] Client Name & Address:	The second second second second				
Indian Oil Corporation Limited	Test Report No : 50000003144				
7th Floor, Indian Oil Bhavan,	Issue Date : 28.07.2015				
1, Sri Aurobindo Marg, Yusuf Sarai,	Report Page (s): 1 of 1				
[2] Sampling Details :					
Protocol Purpose : Ambient Air Quality Analysis	Sample Lab ID : A36-49/AL1 to AL3/150715				
Sampling Procedures : Not Specified	Packing: Filter Paper packed in plastic envelopes and Gaseous Solu in Bottles, Charcoal tubes, Bladders.				
Date of Sampling : 13.07.2015	Sampling Duration : 24 Hrs				
Client Order : E & P/CB07/ECR/DETOX/2015-16/02/LOA Date	d on : 17.04.2015				
Sampling Time : 00:00:00	Client Representative : Mr. Mohammed Mansuri				
Sample Received Date : 15.07.2015	Sampling Done By : Nishant Singh				
Test Start Date : 15.07.2015	Location Of Sampling : IOCL Lakodra - 1				
Test Completion Date : 22.07.2015	L1: Project Site, L2: Lokadra, L3: Osram				

Sr. No.	r. No. Test Parameters	Unit	Results			Method Detection	
, not not	reser or driftecters	L1 L2 L3 Limits	Method of Measurement				
1	Respirable Suspended Particulate Matter	µg/m3	82.0	68.0	G3.0	1.0	IS - 5182 (Part-23):2006
2	Fine Particulate Matter	µg/m3	16.0	12.0	23.0	8.0	USEPA Quality Assurance Handbook, V-2, P-
з	Sulphur Dioxide	µg/m3	12.29	10.42	10.42	1.6	IS - 5182 (Part-2): 2001
4	Nitrogen Oxides ~	µg/m3	35.58	20.78	14.33	5.5	IS - 5182 (Part-6): 2006
5	Ozone	μg/m3	ND	ND	ND	20	IS - 5182 (Part-9)
6	Ammonia	µg/m3	12.77	28.14	69.28	0.7	Indophenol Blue Method
7	Lead	μg/m3	ND	ND	ND	0.05	IS-5182 (Part-22):2004 (RA -2009)
8	Carbon Monoxide	mg/m3	ND	ND	ND	1.0	IS - 5182 (Part-10):1999 (RA -2009)
9	Methane Hydrocarbons	ppm	ND	ND	ND	٥	IS - 5182 (Part-17): 1979 (RA -2003)
10	Non Methane Hydrocarbons	ppm	ND	ND	ND	2	IS - 5182 (Part-17) : 1979 (RA -2003)

ND: Not Detected	
Place : Surat	

For DETOX CORPORATION PVT. LTD.

Date: 28.07.2015

Notes: (1) The results partain to tested items only.

te Tech\_Manager / Autho. Signatory

(2) This report shall not be reproduced except in full and authenticity of this report must be validated with office copy at Detox Corporation Pvt. Ltd.

Doc.No. dT/OP/ASR/05

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Environmental Engineers, Consultants, Turnkey Project Developers & Operators of Environment Infrastructure Facility

#### **Ambient Air Sample Analysis Report**

[1] Client Name & Address:					
Indian Oil Corporation Limited	Test Report No : 50000003146				
7th Floor, Indian Oil Bhavan,	Issue Date : 28.07.2015				
1, Sri Aurobindo Marg, Yusuf Sarai,	Report Page (s): 1 of 1				
[2] Sampling Details :					
Protocol Purpose : Ambient Air Quality Analysis	Sample Lab ID : A36-49/AL4/150715				
Sampling Procedures : As per Standard Method	Packing: Filter Paper packed in plastic envelopes and Gaseous Solution Bottles, Charcoal tubes, Bladders.				
Date of Sampling : 13.07.2015	Sampling Duration : 30 min				
Client Order : E & P/CB07/ECR/DETOX/2015-16/02/LOA Dat	ed on : 17.04.2015				
Sampling Time : 00:00:00	Client Representative : Mr. Mohammed Mansuri				
Sample Received Date : 15.07.2015	Sampling Done By : Nishant Singh				
Test Start Date : 15.07.2015	Location Of Sampling : IOCL Lakodra - 1				
Test Completion Date : 22.07.2015	L4: Diseal Storage Area				

L4     Limits       1     Volatile organic Compounds     ppm     ND     0.1     GC - Method       ID: Not Detected       Place : Surat       Tech. Manager / Autho. Signatory	Sr. No.	Sr. No. Test Parameters	Test Parameters Unit Results		Method Detection	Method of Measurement
AD: Not Detected Place : Surat For DETOX CORPORATION PVT. LTD.				L4	Limits	
ID: Not Detected Place : Surat For DETOX CORPORATION PVT. LTD.	1	Volatile organic Compounds	ppm	ND	0.1	GC - Method
					\$	Date

Rev./Date

03/11-11-2013

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Doc.No. dT/OP/ASR/05

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# Annexure-2: Mercury analysis Report







1		-		-			
K	$\sim$	Environmental Er Operators of Envi			ject Developers &		
ETO)	GROUP	Samp	ole Analysis Re	port			
[1] Client	Name & Address:						
Indian Oi	I Corporation Limited	- [	Test Report No :	50000003151			
7th Floor	, Indian Oil Bhavan,		Issue Date : 05.0	5.2015			
1, Sri Aur	obindo Marg, Yusuf Sarai,		Report Page (s): 1 of 1				
[2] Samp	ling Details ;						
Protocol	Purpose : Solid Waste Analysis		Sample Lab ID : V	V39-39/SL1/280415			
Sampling	Procedures : Not Specified		Description of Sa	mple : Drill cutting Mu	d		
Date of S	ampling : 24.04.2015		Packing : Plastic Ziplock.				
Sampling	Done By : Hitesh Sohni		Sample Quantity,	/ No. of Samples : 500	G / 1 No.		
Sampling	Time : 14:00:00		Client Order : E & P/CB07/ECR/DETOX/2015-16/02/LOA Dated on : 17.04.2015				
Sample R	eceived Date : 28.04.2015		Client Representa	ative : Mr. R. Sharma			
Test Start	Date : 28.04.2015		Location Of Samp	pling : IOCL - Timbi - 1			
Test Com	pletion Date : 02.05.2015		L1: Project Site				
[3] Result	S: 6		A MARY AND		A I I AN AN		
Sr.No.	Test Parameters	Unit	Results as per locations	Method Detection Limits	Method of Measurement		
			<b>L1</b>				
	Mercury	mg/kg	ND	0.05	AAS – Method		
ND : Not D Place : :				For DETOX CORPOR	RATION PYT. LTD.		
Date : 0	05.05.2015			Tech. Manager / A	Autho. Signatory		
	1) The results pertain to tested items only			6			
(	2) This report shall not be reproduced exc	ept in full and authenticity of th	is report must be validated w	vith office copy at Detox Corpor	ration Pvt. Ltd.		
Doc.No.				2	Rev /I		



V	N	Env	Environmental Engineers, Consultants, Turnkey Project Developers & Operators of Environment Infrastructure Facility						
ETO	X GROUP	1	Wat	er Samp	le Analysi	s Report			
[1] Clien	t Name & Address:								
Indian C	Dil Corporation Limited		1		Test Report N	lo : 50000002174			
7th Floo	r, Indian Oil Bhavan,				Issue Date : 0	5.05.2015			
Sri Auro	bindo Marg, Yusuf Sarai,N	ew Delhi - 11	0016		Report Page (	s): 1 of 1			
[2] Sam	pling Details :								
	Purpose : Water Quality	Analysis			Sample Lab II	D : W39-39/WL1 to WL3/2	80415		
	g Procedures : Not Specifi				Description of Sample : Water Sample				
Date of	Sampling: 24.04.2015				Packing : Plastic Carboy				
Sampling Done By : Hitesh Sohni					Sample Quan	tity/ No. of Samples : 150	0 ML / 3 No.		
Samplin	g Time : Not Specified				Client Order :	E & P/CB07/ECR/DETOX/	2015-16/02/LOA Dated on : 17.04.2015		
Sample	Received Date : 28.04.201	5			Client Repres	entative : Mr. R. Sharma			
	rt Date : 28.04.2015	-				ampling : IOCL - Timbi - 1	4		
Test Cor	mpletion Date : 30.04.201	5	_		L1: Project Si	te, L2:Sarapur Timbi, L3: V	illage Urad		
[3] Resu	ilts :	1 1		D	AL STREET	and a second second second			
Sr. No.	Test Parameters	Unit		Results	13	Method Detection Limits	Method of Measurement		
			11						
1 ND:Not [	Mercury	mg/l	ND	ND	ND	0.001	APHA 3112 - Hg - A&B		
Place : Date :	Surat 05.05.2015					For DETOX CORPORATIO	atel		
Mahaa	<ol> <li>The results pertain to tested</li> </ol>	items only.							



		Environ	mental 6	naineere	Consultar	ts Turnkov Pr	oject Developers &	
Y	$\sim$					ture Facility	oject Developers a	
FTO	K GROUP							
	Concor						×	
		Am	hient A	ir Sampl	e Analysis	Report		
[1] Client	Name & Address:	Am	bient A	in Sampi	C Palatysis	Report		
Indian Oi	Corporation Limited		Test Repor	t No : 5000000217	78			
7th Floor,	Indian Oil Bhavan,				Issue Date	: 06.06.2015		
1, Sri Auro	obindo Marg, Yusuf Sarai,				Report Pag	e (s): 2 of 2		
[2] Sampl	ing Details :							
Carlos Contraction	Purpose : Ambient Air Qualit	y & Analysis		and the second sec	Sample Lab 10 : A33-46/AL1 to AL3/230515			
Sampling	Procedures : IS-5182 (Part-5	RA 2002				Packing: Filter Paper packed in plastic envelopes and Gaseous		
Samping	Flocedules : 13-5162 (Part-5)	RA-2005				Bottles, Charcoal t		
	mpling : 21.05.2015					uration : 24 Hrs	100	
	er : E & P/CB07/ECR/DETOX,	/2015-16/02/L	OA Dated o	on : 17.04.20	)15			
	Time : 11:05:00				Client Repr	esentative : Mr. R.	Sharma	
	ceived Date : 23.05.2015	_			Sampling D	one By : Hitesh So	ni	
	Date : 25.05.2015		_		Location Of Sampling : IOCL SIMLI - 1			
Test Comp	oletion Date : 29.05.2015				_	Site, L2:Kanthariy	a, L3: Simli Gam	
[3] Results					<*			
				Results		Method		
Sr. No.	Test Parameters	Unit -	L1	L2	L3	Detection	Method of Measurement	
1 M	ercury	µg/m3	ND	ND	ND	-	AAS Method	
ND: Not De	tected					, <b>F</b>		
Place : Su	rat				Fo	r DETOX CORPOR	ATION PVT. LTD.	
						C	Dlee	
Date: 06	.06.2015				т	ech. Manager / Au	utho. Signatory	
- P								
Notes : (1)	The results pertain to tested items	only.						
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(2)								



V	Envi Ope	ronmental Engrators of Envir	gineers, Consulta onment Infrastru	ints, Turnkey Proje Icture Facility	ct Developers &
ETOX	GROUP	Samp	le Analysis Rep	oort	
[1] Client N	lame & Address:	C. ANTA			
Indian Oil (	Corporation Limited	1	Test Report No : 5		
	ndian Oil Bhavan,	_	Issue Date : 06.06		
1, Sri Aurol	bindo Marg, Yusuf Sarai,	-	Report Page (s): 1	of 1	
[2] Samplin	ng Details :				
Protocol Pu	urpose : Solid Waste Analysis			/40-23/SL1/230515	
Sampling P	Procedures : Not Specified			nple : Drill cutting Mud	
Date of Sar	mpling : 21.05.2015		Packing : Plastic Ziplock.		
Sampling D	Done By : Hitesh Sohni			No. of Samples : 500 G	
Sampling Time : 15:20:00			Client Order : E & P/CB07/ECR/DETOX/2015-16/02/LOA Dated on : 17.04.2015		
Sample Re	ceived Date : 23.05.2015			ative : Mr. R. Sharma	
Test Start	Date : 23.05.2015			oling : IOCL - Simli - 1	
Test Comp	letion Date : 28.05.2015		L1: Project Site		
[3] Results	51				
Sr.No.	Test Parameters	Unit	Results as per locations	Method Detection Limits	Method of Measurement
			L1		
1	Mercury	mg/kg	ND	0.05	AAS – Method
ND : Not Do Place : S				For DETOX CORPOR	pola



K			ingineers, Consul vironment Infrasti	tants, Turnkey Pro ructure Facility	ject Developers &		
ETO	X GROUP	Sam	ple Analysis Re	eport			
[1] Clie	nt Name & Address:						
Indian (	Oil Corporation Limited		Test Report No :	5000002179			
The second se	or, Indian Oil Bhavan,		Issue Date : 06.0	Issue Date : 06.06.2015			
Sri Auro	bindo Marg, Yusuf Sarai,New Delhi	- 110016	Report Page (s):	Report Page (s): 1 of 1			
[2] Sam	pling Details :	3. 2. 5	100 100 10 10 10 10 10 10 10 10 10 10 10	A THE YE			
Protoco	l Purpose : Water Quality Analysis		Sample Lab ID : \	W40-23/WI 1/230515	· · · · · · · · · · · · · · · · · · ·		
	g Procedures : Not Specified		Sample Lab ID : W40-23/WL1/230515 Description of Sample : Water Sample				
Date of	Sampling : 21.05.2015		Packing : Plastic Carboy				
Samplin	g Done By : Hitesh Sohni		Sample Quantity	/ No. of Samples : 500	ML/1No.		
	g Time : Not Specified		Client Order : E & P/CB07/ECR/DETOX/2015-16/02/LOA Dated on : 17.04.2015				
Sample	Received Date : 23.05.2015		Client Representa	ative : Mr. R. Sharma			
	t Date : 25.05.2015		Location Of Sam	pling : IOCL - Simli - 1			
Test Con	npletion Date : 28.05.2015		L1: Project Site				
[3] Resu	lts :						
Sr.No.	Test Parameters	Unit	Results as per locations	Method Detection Limits	Method of Measurement		
			L1	Detection Linits			
1	Mercury	mg/l	ND	0.001	APHA 3112 - Hg - A&B		
D:Not D	etected						
lace :	Surat			For DETOX CORPOR	PATION PVT. LTD.		
Date :	06.06.2015			Tech. Manager / A	utho. Signatory		
	<ol> <li>The results pertain to tested items only.</li> <li>This report shall not be reproduced except in 1</li> </ol>			1.			



	5	Environn	nental Engine	eers, Consultants, Turnkey	Project Developers &			
~		Operators of Environment Infrastructure Facility						
ETC	X GROUP	1						
		Ambie	nt Air Sam	ple Analysis Report				
1] Client	Name & Address:							
ndian O	il Corporation Limited		onnenter daar	Test Report No : 50000003138				
7th Floor	, Indian Oil Bhavan,			Issue Date : 30.06.2015				
I, Sri Aur	robindo Marg, Yusuf Sarai,			Report Page (s): 1 of 1				
2] Samp	ling Details :							
Protocol	Purpose : Ambient Air Quality	Analysis		Sample Lab ID : A36-30/AL1/220	615			
Sampling	g Procedures : Not Specified			Packing: Filter Paper packed in plastic envelopes and Gaseous Solution in Bottles, Charcoal tubes, Bladders.				
Date of S	Sampling : 18.06.2015			Sampling Duration : 24 Hrs				
	der : E & P/CB07/ECR/DETOX/	2015-16/02/LC	A Dated on : 17	.04.2015				
	g Time : 11:00:00			Client Representative : Mr. R. Sh	arma			
	Received Date : 22.06.2015			Sampling Done By : Hitesh Sohni				
	t Date : 22.06.2015			Location Of Sampling : IOCL ATA	ALI - 1			
	npletion Date : 26.06.2015		2	L1: Project Site				
			In the second					
[3] Resu	lts:							
Sr. No.	Test Parameters	Unit	Results	Method Detection Limits	Method of Measurement			
			11		AAC BLAL A			
1	Mercury	µg/m3	ND		AAS Method			
ND : Not	Detected							
Place : :	Şurat			For DETOX CORPORATIO	NPVI. LID.			
				· Del				
Date :	30.06.2015			Tech. Manager / Autho.	Signatory			
	140							
Notes :	(1) The results pertain to tested items	only.						
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	(2) This report shall not be reproduced							



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ETOX	GROUP	Samp	le Analysis Rep	oort			
[1] Client Na	me & Address:						
Indian Oil Co	prporation Limited		Test Report No : 5	0000003141			
7th Floor, Inc	dian Oll Bhavan,		Issue Date : 30.06				
1, Sri Aurobi	ndo Marg, Yusuf Sarai,		Report Page (s): 1	of 1			
[2] Sampling	Details :						
Protocol Pur	pose : Solid Waste Analysis		Sample Lab ID : W	41-23/SL1/220615			
Sampling Pro	ocedures : Not Specified		Description of San	nple : Drill cutting Mu	d		
Date of Sam	pling : 18.06.2015		Packing : Plastic Ziplock.				
Sampling Do	ne By : Hitesh Sohni		Sample Quantity/	No. of Samples : 500	G / 1 No.		
Sampling Tin	ne : 16:20:00		Client Order : E & 17.04.2015	P/CB07/ECR/DETOX/	2015-15/02/LOA Dated on :		
Sample Rece	eived Date : 22.06.2015	_	Client Representa	tive : Mr. R. Sharma			
Test Start Da	ate : 22.06.2015		Location Of Samp	oling : IOCL • Atali - 1			
Test Comple	etion Date : 26.06.2015		L1: Project Site				
[3] Results :	Same - Street and a surger	Straight Linds	And State of Concession, or South	CONTRACTOR STREET	And		
Sr.No.	Test Parameters	Unit	Results as per locations	Method Detection Limits	Method of Measurement		
		÷	L1				
1 Me	ercury	mg/kg	ND	0.05	AAS – Method		
ND : Not Dete							
Place: Su	rat			For DETOX CORPO	RATION PVT. LTD.		
Date: 30	.06.2015			Tech. Manager /	Autho. Signatory		
Notes : (1)	The results pertain to tested items only.			-			



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K	2		l Engineers, Consu nvironment Infras	ltants, Turnkey Pro tructure Facility	oject Developers &
DETO	X GROUP	Sam	ple Analysis Re	port	
[1] Client	Name & Address:				
ndian Oi	I Corporation Limited		Test Report No : 5	0000003140	
7th Floor	, Indian Oil Bhavan,		Issue Date : 30.06	.2015	
Sri Aurob	indo Marg, Yusuf Sarai,Ne	w Delhi - 110016	Report Page (s): 1	of1	
[2] Samp	ling Details :				
The second second second	Purpose : Water Quality A	nalysis	Sample Lab ID : W	41-23/WL1/220615	
Sampling Procedures : Not Specified		Description of Sar	nple : Wastewater Sa	mple	
Date of S	ampling : 18.06.2015		Packing : Plastic B	ottle.	
	Done By : Hitesh Sohni		Sample Quantity/	Nc. of Samples : 100	0 ML / 1 No.
Sampling	Time : Not Specified		17.04.2015		2015-16/02/LOA Dated on :
Sample R	eceived Date : 22.06.2015		Client Representa	tive : Mr. R. Sharma	
Test Star	t Date : 22.06.2015		Location Of Samp	oling : IOCL - Atali - 1	
Test Com	pletion Date : 26.06.2015		L1: Project Site		
[3] Resul	ts :				
Sr.No.	Test Parameters	Unit	Results as per locations	Method Detection Limits	Method of Measurement
			L1		
1	Mercury	mg/l	ND	0.001	APHA 3112 - Hg - A&B
ND:Not D	etected				
Place :	Surat			For DETOX CORPOR	ATION PVT. LTD.
					Beler
54	-			• (	De
Date :	30.06.2015			Tech. Manager / A	utho. Signatory
	а.			/	
Notes :	<ol> <li>The results pertain to tested ite</li> <li>This report shall not be reprodu</li> </ol>		enticity of this report must be	validated with office corv at	Detox Corporation Pyt. Ltd.
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Y	2	Environmental En Operators of Envir	gineers, Consulta onment Infrastru	ants, Turnkey Proj ucture Facility	ect Developers &		
ETO)	K GROUP	Samp	le Analysis Re	port			
[1] Clien	t Name & Address:						
Indian O	Il Corporation Limited		Test Report No : !	50000003149			
7th Floo	r, Indian Oil Bhavan,		Issue Date : 28.07	7.2015			
1, Sri Au	robindo Marg, Yusuf Sarai,		Report Page (s): 1	of 1			
[2] Samp	aling Details :		and and a second		Claumaner of		
Protocol	Purpose : Solid Waste Monitor	ing & Analysis	Sample Lab ID : W	v42-04/SL1/150715			
Sampling	g Procedures : As per Standard I	Viethod	Description of Sample : Drill cutting Mud				
Date of 9	Sampling : 14.07.2015		Packing : Plastic Ziplock.				
Sampling	g Done By : Nishant Singh		Sample Quantity/	No. of Samples : 500	G / 1 No.		
Sampling	g Time : 16:40:00		Client Order : E & 17.04.2015	P/CB07/ECR/DETOX/2	2015-16/02/LOA Dated on :		
Sample A	Received Date : 15.07.2015		Client Representa	ative : Mr. Mohammed	Mansuri		
Test Star	rt Date : 15.07.2015		Location Of Samp	oling : IOCL - Lokadra -	1		
Test Con	npletion Date : 20.07.2015		L1: Project Site				
[3] Resu	lts:						
Sr.No.	Test Parameters	eters Unit	Results as per locations-	Method Detection Limits	Method of Measurement		
			L1				
1	Mercury	mg/kg	ND	0.05	AAS - Method		
ND : Not	Detected						
Place :	Surat			For DETOX CORPOR	RATION PVT. LTD.		
				<	R		
Date :	28.07.2015			Tech. Manager / J	Autho. Signatory		
Notes :	(1) The results pertain to tested items only			-			
,	(2) This report shall not be reproduced exercise	ept in full and authenticity of t	his report must be validated v	with office topy at Detox Corpo	ration Pvt. Ltd.		



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1			vironment Infras			
DETO	K GROUP				Reading and the second s	
	( GROOT					
_	A. (1991)	Sam	ple Analysis R	eport		
and the second se	Name & Address:					
	Corporation Limited		Test Report No :	5000003147		
	Indian Oil Bhavan,		Issue Date : 28.0	7.2015		
Sri Aurobir	ndo Marg, Yusuf Sarai,New Delh	i - 110016	Report Page (s):	1 of 1		
[2] Sampli	ng Details :					
Protocol P	urpose : Water Quality Monitor	ing & Analysis	Sample Lab ID : V	V42-04/WL1/150715		
	rocedures : IS-3025 (P-1)	-		mple : Wastewater Sar	mple	
Date of Sampling : 14.07.2015		Packing : Plastic Bottle.				
Sampling D	one By : Nishant Singh		Sample Quantity	No. of Samples : 500	ML/1No.	
	ime : Not Specified				2015-16/02/LOA Dated on :	
Sample Rec	eived Date : 15.07.2015		Client Representa	tive : Mr. Mohammed	Mansuri	
	ate : 15.07.2015			ling : IOCL - Lakodra -		
Test Compl	etion Date : 22.07.2015		L1: Project Site			
[3] Results		Carlos R.				
Sr.No.	Test Parameters		Results as per .	Method		
	icst rarameters	Unit	locations	Detection Limits	Method of Measurement	
			L1			
1 M D:Not Dete	ercury	mg/l	ND	0.001	APHA 3112 - Hg - A&B	
Place : Su						
				For DETOX CORPOR	ATION PVT. LTD.	
					Stel	
ate: 28	.07.2015				yc-	
				Tech. Manager / A	utho. Signatory	
otes: (1)	The results pertain to tested items only.			1		
(2)	This report shall not be reproduced except	in full and authenticity of	this report must be validated	Audala - 60		



# Annexure-3: DG set stack analysis Report



# DETOX GROUP

#### **Detox Corporation Pvt. Ltd.**

Environmental Engineers, Consultants, Turnkey Project Developers & Operators of Environment Infrastructure Facility

#### **Stack Sample Analysis Report**

[1] Client Name & Address:	
Indian Oil Corporation Limited	Test Report No : 50000002175
7th Floor, Indian Oil Bhavan,	Issue Date : 05.05.2015
Sri Aurobindo Marg, Yusuf Sarai, New Delhi - 110016	Report Page (s) : 1 of 1
[2] Sampling Details :	
Protocol Purpose : Stack Emission Monitoring & Analysis	Sample Lab ID : S15-30/SL1/080415
Sampling Procedures : As per Method of Measurement	Sampling Duration : 30 min
Date of Sampling : 25.04.2015	Packing: Filter Paper packed in plastic envelopes and Gaseous Solution in Bottles, Charcoal tubes, Bladders.
Sampling Done By : Hitesh Sohni	Sample Quantity/ No. of Samples : 1 EA / 1 No.
Sampling Time : 11:00 to 11:30 AM	Client Order : E & P/CB07/ECR/DETOX/2015-16/02/LOA Datec on : 17.04.2015
Sample Received Date : 28.04.2015	Client Representative : Mr. R. Sharma
Fest Start Date : 28.04.2015	Location Of Sampling : IOCL - Timbi - 1
Test Completion Date : 30.04.2015	L1: D G DET

Sr.	Test Parameters	Test Parameters Unit Results Minimum Detection Method				
No.	lo.	onit	L1	Detection Limit	Method of Measurement	
1	Suspended Particulate Matter	mg/Nm3	30.0	5.0	IS - 11255(Part 1):1985	
2	Sulphur Dioxide	mg/Nm3	10.05	5.0	IS - 11255(Part 2):1985	
3	Nitrogen Oxides	mg/Nm3	7.16	4.0	IS - 11255(Part 7):2005	
4	Volatile organic Compounds	ppm	ND	-	GC – Method	
5	Hydrocarbons	ppm	ND		GC – Method	

ND:Not Detected

inder burge

#### Date: 05.05.2015

For DETOX CORPORATION PVT. LTD.

tel Tech. Manager / Autho. Signatory

Notes: (1) The results pertain to tested items only.

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Doc.No. dT/OP/SAR/04



	L)	Environm Operator	nental Engi s of Enviror	neers, Co nment Infi	nsultants, Turnkey astructure Facility	Project Developers &	
ETC	X GROUP	1					
		Sta	ck Sample	Analysis	Report		
1] Clier	nt Name & Address:			Saul I			
ndian (	Dil Corporation Limited			Test Repor	: No : 5000002180		
7th Floo	er, Indian Oil Bhavan,			Issue Date	: 06.06.2015		
Sri Auro	bindo Marg, Yusuf Sarai, New Dell	ni - 110016		Report Pag	e (s) : 1 of 1		
21 Sam	pling Details :					Contraction of the local division of the loc	
CONTRACT.	Purpose : Stack Emission Analys	is		Sample Lat	ID : \$15-42/\$L1/230515		
Samplin	g Procedures : IS-3025 (P-1)			Sampling Duration : 30 min			
Date of	Sampling : 22.05.2015			Packing: Filter Paper packed in plastic envelopes and Gaseous Solution in Bottles, Charcoal tubes, Bladders.			
Samplin	g Done By : Hitesh Sohni				antity/ No. of Samples : 1		
Samplin	g Time : 02:15 to 02:45 PM			Client Orde 17.04.2015		X/2015-16/02/LOA Dated on :	
Sample	Received Date : 23.05.2015				esentative : Mr. R. Sharm		
	rt Date : 25.05.2015				f Sampling : IOCL - Simli -	1	
Test Cor	mpletion Date : 28.05.2015			L1: D G DE	[		
[3] Resu	ults :						
			F	lesults	Minimum		
Sr. No.	Test Parameters	Unit	-	L1	Detection Limit	Method of Measurement	
1	Evenended Particulate Matter	ma (Nim 2		32.0	5.0	IC _ 112EE/Doct 1):109E	
	Suspended Particulate Matter	mg/Nm3		11.71	5.0	IS - 11255(Part 1):1985	
	Sulphur Dioxide	mg/Nm3		9.85		IS – 11255(Part 2):1985 IS – 11255(Part 7):2005	
	Nitrogen Oxides	mg/Nm3	-	ND	4.0		
	Volatile organic Compounds	ppm		ND	-	GC – Method GC – Method	
	Hydrocarbons Detected	ppm				oc – wethou	
Place :	Surat				For DETOX CORPO	PRATION PVT. LTD.	
Date :	06.06.2015		5 ×		Tech. Manager /	Autho. Signatory	
	(1) The results pertain to tested items of (2) This report shall not be reproduced e		authenticity of thi	s report must b	e validated with office copy at I	Detox Corporation Pvt. Ltd.	
Doc.No.	,					Rev./Date	





Environmental Engineers, Consultants, Turnkey Project Developers & Operators of Environment Infrastructure Facility

#### Stack Sample Analysis Report

[1] Client Name & Address:	
Indian Oil Corporation Limited	Test Report No : 50000003142
7th Floor, Indian Oil Bhavan,	Issue Date : 30.06.2015
Sri Aurobindo Marg, Yusuf Sarai, New Delhi - 110016	Report Page (s) : 1 of 1
[2] Sampling Details :	
Protocol Purpose : Stack Emission Analysis	Sample Lab ID : \$16-10/SL1/220615
Sampling Procedures : Not Specified	Sampling Duration : 30 min
Date of Sampling : 18.06.2015	Packing: Filter Paper packed in plastic envelopes and Gaseous Solution in Bottles, Charcoal tubes, Bladders.
Sampling Done By : Hitesh Sohni	Sample Quantity/ No. of Samples : 1 EA / 1 No.
Sampling Time : 11:45 to 12:15 PM	Client Order : E & P/CB07/ECR/DETOX/2015-16/02/LOA Dated on 17.04.2015
Sample Received Date : 22.06.2015	Client Representative : Mr. R. Sharma
Test Start Date : 22.06.2015	Location Of Sampling : IOCL - Atali - 1
Test Completion Date : 26.06.2015	L1: D G DET

Sr. No.	Test Parameters	Unit	Results Minimum Detection Method of Meas	Method of Measurement	
51.110.		method of measurement			
1	Suspended Particulate Matter	mg/Nm3	24	5.0	IS - 11255(Part 1):1985
2	Sulphur Dioxide	mg/Nm3	8.22	5.0	IS – 11255(Part 2):1985
3	Nitrogen Oxides	mg/Nm3	6.83	4.0	IS – 11255(Part 7):2005
4	Volatile organic Compounds	ppm	ND	1	GC – Method
5	Hydrocarbons	ppm	ND		GC – Method

ND:Not Detected

Place : Surat

Date :

For DETOX CORPORATION PVT. LTD. DE ha Tech. Manager / Autho. Signatory

Rev\_/Date

03/11-11-2013

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Notes: (1) The results pertain to tested items only.

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Doc.No. dT/OP/SAR/04



		Environmer Operators o	ital Engineers, If Environment	Consultants, Tur Infrastructure Fa	nkey Project Developers & acility			
DET	OX GROUP	Stack Sa	mple Analysi	s Report				
[1] Cli	ent Name & Address:							
Indian	Oil Corporation Limited		Test Repor	1 No : 50000003148				
7th Flo	oor, Indian Oil Bhavan,		Issue Date	: 28.07.2015				
Sri Au	robindo Marg, Yusuf Sarai,New De	lhi - 110016	Report Pag	e (s) : 1 of 1				
[2] Sa	mpling Details :							
Protoc	ol Purpose : Stack Emission Monit	oring & Analysis	Sample La	DID: \$16-22/SL1/150	715			
Sampl	ing Procedures : As per Method of	Measurement	Sampling [	Juration : 15 min				
Date o	f Sampling : 14.07.2015			Packing: Filter Paper packed in plastic envelopes and Gaseous Solution in Bottles, Charcoal tubes, Bladders.				
Sampl	ing Done By : Nishant Singh			antity/ No. of Sample				
	ing Time : 03:10 to 03:20 PM		Client Ordo 17.04.2015		ETOX/2015-16/02/LOA Dated on :			
	e Received Date : 15.07.2015		Client Repr	esentative : Mr. Moh	ammed Mansuri			
	art Date : 15.07.2015			f Sampling : IOCL - Lo	kadra - 1			
rest ci	ompletion Date : 20.07.2015		L1: D G DE	-53				
[3] Res	sults :							
Sr. No	Test Parameters	Unit	Results	Minimum Detection	Method of Measurement			
1	Suspended Particulate Matter		11.3	Limit				
2	Sulphur Dioxide	mg/Nm3	8.53	5.0	IS - 11255(Part 1):1985			
3	Nitrogen Oxides	mg/Nm3	9.59	5.0	IS - 11255(Part 2):1985			
4	Volatile organic Compounds	mg/Nm3	ND	4.0	IS - 11255(Part 7):2005			
5	Hydrocarbons	ppm	ND	1	GC – Method			
	Detected	ppm		-	GC – Method			
Place :					PORATION PVT. LTD.			
	28.07.2015			Tech. Manager	/Autho. Signatory			
Notes :	(1) The results pertain to tested items on	γ.	-	<				
Doc.No.	(2) This report shall not be reproduced ex	cept in full and authen	ticity of this report must	be validated with office co	ppy at Detox Corporation Pvt. Ltd. Rev/D			



# Annexure-4: Environment Policy



#### Safety, Health & Environment Policy

Indian Oil Corporation is committed to conduct business with strong environment conscience ensuring sustainable development, safe workplaces and enrichment of quality of life of Employees, Customers and the Community. We, at IndianOil, believe that good S, H&E performance is an integral part of efficient and profitable business management. We shall:

- Establish and maintain good standards for safety of the people, the processes and the assets.
- Comply with all Rules and Regulations on Safety, Occupational Health and Environmental Protection.
- Plan, design, operate and maintain all facilities, processes and procedures to secure sustained Safety, Health and Environmental Protection.
- Remain trained, equipped and ready for effective and prompt response to accidents and emergencies.
- Welcome audit of our S, H&E conduct by external body, so that stakeholder confidence is safeguarded.
- Adopt and promote industry best practices to avert accidents and improve our S, H&E performance.
- Remain committed to be a leader in Safety, Occupational Health and Environment Protection through continuing improvement.
- Make efforts to preserve ecological balance and heritage.



### Annexure-5: Noise Level Monitoring Report





Environmental Engineers, Consultants, Turnkey Project Developers & Operators of Environment Infrastructure Facility

#### **Noise Level Sample Analysis Report**

[1] Client Name & Ad	dress:		TRUT A BEAT	
Indian Oil Corporatio	n Limited	Test Report No : 5000002177		
7th Floor, Indian Oil B	havan,	Issue Date : 05.05.2015		
1, Sri Aurobindo Marg, Yusuf Sarai,		Report Page (s): 1 of 1		
[2] Sampling Details :				
Protocol Purpose : No	ise Level Monitoring	Sample Lab ID : N1	2-14/NL1 to NL3/2804	115
Sampling Procedures	: IS-4954	Sampling Duration	: Day Time & Night Tir	me
Client Order : E & P/C	B07/ECR/DETOX/2015-16/02/LOA	Dated on : 17.04.2015		
Date of Sampling : 24.04.2015		Sampling Done By : Hitesh Sohni		
Sampling Time : Day 1	Time & Night Time	Client Representative : Mr. R. Sharma		
Sample Received Date	: 24.04.2015	Location Of Sampling : IOCL Timbi - 1		
Test Start Date : 24.04	1.2015			
Test Completion Date	: 24.04.2015	As Per Sample Tabl	e No. [3]	
[3] Results :				
Sr.No.	Location (1 m from source)	Noise Level dB(A) Day Time	Noise Level dB(A) Night Time	Limits

Sr.No.	(1 m from source)	Day Time	dB(A) Night Time	Limits
1	L1: Project Site	74.1	67.4	Day Time Limit <75 dB(A)
2	L2: Timbi	51.8	45.6	(6:00 AM to 10:00 PM) Night Time Limit <70 dB(A)
з	L3: Village Urad	51.7	42.2	(10:00 PM to 06:00 AM)

1

For DETOX CORPORATION PVT. LTD.

Tech. Manager / Autho. Signatory

del

Place : Surat

#### Date: 05.05.2015

Notes: (1) The results pertain to tested items only.

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Environmental Engineers, Consultants, Turnkey Project Developers & **Operators of Environment Infrastructure Facility** 

#### **Noise Level Sample Analysis Report**

[1] Client Name & Address:	and and the second s		
Indian Oil Corporation Limited	Test Report No : 50000003153		
7th Floor, Indian Oil Bhavan,	Issue Date : 06.06.2015 -		
1, Sri Aurobindo Marg, Yusuf Sarai,	Report Page (s): 1 of 1		
[2] Sampling Details :			
Protocol Purpose : Noise Level Monitoring	Sample Lab ID : N12-19A/NL1 to NL3/230515		
Sampling Procedures : Not Specified	Sampling Duration : Day Time & Night Time		
Client Order : E & P/CB07/ECR/DETOX/2015-16/02/LC	A Dated on : 17.04.2015		
Date of Sampling : 21.05.2015	Sampling Done By : Hitesh Sohni		
Sampling Time : Day Time & Night Time	Client Representative : Mr. R. Sharma		
Sample Received Date : 21.05.2015	Location Of Sampling : IOCL Simli - 1		
Test Start Date : 21.05.2015			
Test Completion Date : 21.05.2015	As Per Sample Table No. [3]		

Sr.No.	Location (1 m from source)	Noise Level dB(A) Day Time	Noise Level dB(A) Night Time	Limits	
1	L1: Project Site	71.0	67.5	Day Time Limit <75 dB(A	
2	L2: Simri	62.3	58.2	(6:00 AM to 10:00 PM) Night Time Limit <70 dB(/	
3	L3: Kanthariya	59.6	55.4	(10:00 PM to 06:00 AM)	

Place : Surat

Date :	06.06.2015

Doc.No.

dT/OP/NAR/11

Notes : (1) The results pertain to tested items only.

For DETOX CORPORATION PVT. LTD. 2

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Environmental Engineers, Consultants, Turnkey Project Developers & Operators of Environment Infrastructure Facility

#### **Noise Level Sample Analysis Report**

[1] Client Name & Address:			
Indian Oil Corporation Limited	Test Report No : 5000003143		
7th Floor, Indian Oil Bhavan,	Issue Date : 30.06.2015		
1, Śri Aurobindo Marg, Yusuf Sarai,	Report Page (s): 1 of 1		
[2] Sampling Details :			
Protocol Purpose : Noise Level Monitoring	Sample Lab ID : N12-24A/NL1 to NL3/220615		
Sampling Procedures : Not Specified	Sampling Duration : Day Time & Night Time		
Client Order : E & P/CB07/ECR/DETOX/2015-16/02/LO	A Dated on : 17.04.2015		
Date of Sampling : 18.06.2015	Sampling Done By : Hitesh Sohni		
Sampling Time : Day Time & Night Time	Client Representative : Mr. R. Sharma		
Sample Received Date : 18.06.2015	Location Of Sampling : IOCL Atali - 1		
Test Start Date : 18.06.2015			
Test Completion Date : 18.06.2015	As Per Sample Table No. [3]		

[3] Res	Location (1 m from source)	Noise Level dB(A) Day Time	Noise Level dB(A) Night Time	Limits
1	L1: Project Site	73.6	66.5	Day Time Limit <75 dB(A)
2	L2:Kiya Vill.	54.6	50.3	(6:00 AM to 10:00 PM) Night Time Limit <70 dB(A)
3	L3:Atali_Vill.	53.6	48.6	(10:00 PM to 06:00 AM)

Place : Surat
For DÉTOX CORPORATION PVT. LTD.
Date : 30.06.2015
Notes : (1) The results pertain to tested items only.
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Doc.No.
T/OP/NAR/11





Environmental Engineers, Consultants, Turnkey Project Developers & Operators of Environment Infrastructure Facility

#### Noise Level Sample Analysis Report

[1] Client Name & Address:		
Indian Oil Corporation Limited	Test Report No : 5000003150	
7th Floor, Indian Oil Bhavan,	Issue Date : 28.07.2015	
1, Sri Aurobindo Marg, Yusuf Sarai,	Report Page (s): 1 of 1	
[2] Sampling Details :		
Protocol Purpose : Noise Level Monitoring	Sample Lab ID : N12-28A/NL1 to NL3/150715	
Sampling Procedures : Not Specified	Sampling Duration : Day Time & Night Time	
Client Order : E & P/CB07/ECR/DETOX/2015-16/02/	LOA Dated on : 17.04.2015	
Date of Sampling : 15.07.2015	Sampling Done By : Hitesh Sohni	
Sampling Time : Day Time & Night Time	Client Representative : Mr. Mohammed Mansuri	
Sample Received Date : 15.07.2015	Location Of Sampling : IOCL Lokadra - 1	
Test Start Date : 13.07.2015	As Per Sample Table No. [3]	
	As ret sample rable no. [5]	

Sr.No.	Location (1 m from source)	Noise Level dB(A) Day Time	Noise Level dB(A) Night Time	Limits	
1	L1: Project Site	68.7	62.4	Day Time Limit <75 dB(A)	
2	L2: Lokadra	58.6	52.1	(6:00 AM to 10:00 PM) Night Time Limit <70 dB(A)	
3	L3:Atali Vill.	52.3	48.6	(10:00 PM to 05:00 AM)	

Place : Surat
For DETOX CORPORATION PVT. LTD.
Tech. Manager / Autho. Signatory
Notes : (1) The results per tain to tested items only.
(2) This report shall not be reproduced except in full and authenticity of this report must be validated with office copy at Detox Corporation Pvt. Ltd.
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### Annexure-6 Newspaper clips for EC Advertisement



પા સાથે મસસ ઇન્ડબ્રેમ આઇવે કાવારશે વિવર (આઈઓસીએલ) દારા જણાવવાનું કે અમારા પ્રોજેક્ટ ''ઓનશોર ઓઈલ એન્ડ ગેસ એક્સપ્લોરેશન ઈન એનઈએલપી (નેશ્પ)- VII બ્લોક સીબી- ઓએનએન-૨૦૦૫/૭ જે ખંભાત બેસિન ખાતે" આવેલ છે જે વડોદરા અને ભરૂચ જિલ્લાઓમાં સ્થિત છે, તેને માનનીય પર્યાવરલ અને વન મંત્રાલય (એમઓઇએક), ભારત સરકાર દારા પર્યાવરલ સંબંધી નિકાલ પરવાનગી ની સંપત્તિ આપવામાં આવેલ છે. પર્યાવરલ નિકાલ પરવાનગી સંપત્તિની નકલો ગુજરાત પ્રદુષલ નિયંત્રલ બોર્ડ (જીપીસીબી) પાસે ઉપલબ્ધ છે. અને એમઓઇએકની વેબસાઇટ http:/envfor.nic.in પર લોઇ શકાશે.

હીદેશ બેઇન ડેઇલ, ડીજીએમ (ઇએન્ડવી)

મુલાકાત લો : www.iocl.com વિશેષ વિગતો માટે



### Annexure- 7: Petroleum exploration License (PEL)

1010		- 1	0 -10	·· .	÷.
				Petroleum Exploration he Block CB-ONN-2005/7 a measuring 199.00 Sq.Km, Bharuch Dist.	
lead	(1) Indian Oil Corpor	ergy & Petroche No. PEL-10 Sachivalaya, Date Date ation Ltd.'s lette eum and Natura	r No. E&P/CO/5	1AY <b>2010</b>	
Explo Four he a	ration License to India years) to prospect for rea_admeasuring_199 ///; Dist.	an Oil Corporati r petroleum witi 9.00 Sq.Km.	on Ltd.as an op h effect from the for the Block (	ised to Grant a Petroleum erator for a period of 4 years date of issue of the order in CB-ONN-2005/7(NELP-VII) in $t/c$	notactetetet
a) _td.si with 1 (b) 13 of paid	v: If any minerals are hould bring them to the hem. The Indian Oil Corp the Petroleum & Natu the necessary amount	found during th he notice of Sta oration Ltd.has iral Gas Rules.	e exploration we ate Government deposited secu 1959. The India	and conditions mentioned ork, the Indian Oil Corporation with full particulars available rity deposit prescribed in Rule n Oil Corporation Ltd.has also liminary expenses as detailed	
with 1 (b) 13 of paid belov Sr.	v: If any minerals are hould bring them to the hem. The Indian Oil Corp the Petroleum & Natu the necessary amount	found during th he notice of Sta oration Ltd.has iral Gas Rules, is as an applica Challan No.	e exploration we ate Government deposited secu 1959. The India	ork, the Indian Oil Corporation with full particulars available rity deposit prescribed in Rule n Oil Corporation Ltd.has also	
a) _td.s with 1 (b) 13 of paid below Sr. No.	v: If any minerals are nould bring them to the hem. The Indian Oil Corp the Petroleum & Natu the necessary amount v: Nature of payment	found during th ne notice of Sta oration Ltd.has Iral Gas Rules, is as an applica	e exploration wo ate Government deposited secu 1959. The India tion fee and pre	ork, the Indian Oil Corporation with full particulars available rity deposit prescribed in Rule n Oil Corporation Ltd.has also liminary expenses as detailed	
a) _td.si with 1 b) 13 of below Sr.	v: If any minerals are hould bring them to the hem. The Indian Oil Corp the Petroleum & Natu the necessary amount v:	found during th he notice of Sta oration Ltd.has iral Gas Rules, is as an applica Challan No. & Date 3 08.01.2009	e exploration we ate Government deposited secu 1959. The India titon fee and pre Amount Rs.	ork, the Indian Oil Corporation with full particulars available rity deposit prescribed in Rule n Oil Corporation Ltd.has also liminary expenses as detailed Head of Account	



#### - 11 -11

data of all the minerals found during the exploration of oil and/or gas and shall submit without fail every six months, the results of all operation boring and exploration to the State Government and Central Government.

(d) The Indian Oil Corporation Ltd.shall take preventive measures against the hazard of fire under ground and/or on the surface and shall keep such equipment, supplies and means to extinguish the fire at all times and shall pay such compensation to the third party and/or Government as may be determined in case damage due to fire.

#### OTHER TERMS AND CONDITIONS:-

- The license shall be in respect of Crude Oil and Natural Gas.
- (2) The grant of license shall be valid for a period of 4 (Four) years.
- (3) This license shall be subject to the provision of Oil field (Regulations and Development) Act, 1948, (53 of 1948) and the Petroleum & Natural Gas Rules, 1959 made there under as amended from time to time.
- (4) Immediately on demand or upon determination or relinquishment of any area covered by this lease, the lessee shall furnish to the Central Government / DGH, through the State Government confidentiality, the complete records of data as specified in Rule 19 (c) of the P&NG Rules, 1959. The lessee shall submit to Central Government, without fail, every six months the results of all operations, boring and test production.
- (5) If any minerals other than petroleum are found during the exploration activities, Licensee shall bring that to the notice of the Central Government with full particulars thereof.
- (6) All army Cantonments, stations, depots, establishments, field firing ranges and ordnance factories within the exploration block are excluded from exploration, survey and digging activities.
- (7) For development of new roads and tracts related to exploration activities in the border belt, prior sanction of Ministry of Defence shall be obtained.
- (8) For work in close proximity of Army cantonments/Stations, depots, ranges, ordnance factories and visits to these installations, if any, specific permission of Army authorities shall be taken.
- (9) Necessary approval from the Competent Authority should be obtained for the Reserve Forest Area (if any) falling in the licensed area.
  - "However, the Licensee may carryout surveys for oil exploration in the Reserved Forest Area falling in such leased area without obtaining prior clearance of the Ministry of Environment and Forests, Government of India under the Forest (Conversation) Act, 1980 so long as the surveys do not involve cutting of trees. The Licensee shall, however, in no circumstance carry out such surveys in specially protected areas like wildlife sanctuary, national park and preservation or sample plots demarcated by the Forest Department (Re. Letter No.11-28/86-FRY (CONS) dated 8-5-1986, Department of Environment & forest & Wildlife, Government of India).
- (10) If international companies or foreigners are entrusted with the task, the Licensee may get security vetting of these companies through the appropriate Government agencies with help of this Ministry. The lessee shall also seek prior clearance from the Ministry of Home Affairs and Ministry of Defense with the full particulars of the foreigner employees under intimation to this Ministry.
- (11) The exploration activities shall not interfere with the safety/security of any civil VAVP covered in this area.
- (12) The Licensee shall issue identity card to each of the employees. The system of checking identity cards of personnel will have to be strictly enforced.
- (13) Security to its employees both at the project sites and en-route in insurgencyeffected areas will be the responsibility of the Licensee.

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(14)	Licensee shall allow Government, authorities to enter and inspect area for security check-up, it necessary.
(15)	Licensee shall not employ any foreign national surreptitiously in the area along the border.
(16)	No ground / aerial survey of the Defense VAs/VPs is permitted. Aerial survey, if any would be governed by the provisions of Ministry of Defense letter No. 18(8)/82-D (GS 111) dated January 31, 1989.
(17)	Air Force area failing within the zones embarked for delineation should be avoided.
(18)	For works in close vicinity of Indian Air Force units / installations and visit to these installations, if any, specific permission of Air Headquarters, should be obtained.
(19)	Any work within 500m of the perimeter of Air Force Station should be intimated to Air Force authority at least 10 days before commencement of the activities.
(20)	No obstruction shall be erected higher than 15 mtrs. Within 5 kms. radius of Air Force Air Fields and construction of any high mast / towers shall be carried out in consultation with the Air Force Authority.
(21)	Planned use of explosives on or below the surface shall be intimated to Air Force Authority atleast 48 hours in advance.
(22)	No drilling work or installation of pipeline shall be carried out in and around village lake or residential area.
(23)	All approach roads and natural drainage should be kept clear, open and intact.
(24)	No work shall be carried out as to damage public interest in any form.
	No work shar be comed out as to damage public interest in any form.
(25)	No existing infrastructure public or private underground utility and human beings
10.03	to be harmed
(26)	The licensee have to submit the report of activities carried out in the said PEL
	area to the Director of Petroleum every month.
(27)	During the license period if any discovery is made, licensee has to immediately
	report it to the State Government and Director of Petroleum.
(28)	Licensee shall execute a separate lease deed in respect of such other covenants,
, ,	terms and conditions as per the prescribed format.
(29)	Infringement of any one or more of the conditions enumerated above shall
<b>,</b> ,	automatically render this PEL null and void ab-intio
	By order and in the name of the Governor of Gujarat,
	THE CONTRACT
	Far we
	(K.H. Chorera)
	Under Secretary to Government,
	Energy and Petrochemicals Department,
Το,	
	The District Collector, Dist. Vadodara/Bharuch.
	The Director of Petroleum, Gandhinagar.
	The Accountant General, Ahmedabad.
-	
-	The Accountant General, Rajkot.
-	Shri B.K. Dutta, Under Secretary to the GOI, Ministry of Petroleum & Natural Gas,
	Shastri Bhavan, New Delhi.
1 ~	Shri V.S.Okhde, Executive Director (E&P) Indian Oil Corporation Ltd, Indian Oil
	Bhavan, No-1, Sri Aurobindo Marg, Yusuf Sarai, New Delhi-110016.
-	The Select file.
	·
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	- 12 -



### Annexure-8: PEL extension order



Pel-Ext.-letter.11

5" and 6" Year Extension of Petroleum Exploration Licence to IOCL for CB-ONN 2005/7 (NELP-VII) block for 199.00 Sq. Km.

Government of Gujarat. Energy & Petrochemicals Department, No. PEL-10-2009-147-E. Sachivalaya, Gandhinagar. Dated the1 5 APR 2015

Read:- 1) Government Order of even number dated 31-05-2010 2) IOCL Letter No.E & P/CO/163 Dated: 11-03-2015.

#### ORDER

In pursuance of Rule-10 of the Petroleum & Natural Gas Rules. 1959. Government of Gujarat is pleased to grant Fifth and Sixth year extension from 31-05-2014 to 30-05-2016 to the IOCL Vide Letter referred to at Sr.No.2 in the preamble in respect of PEL granted under Government Order referred to at Sr.No. 1 above.

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

Plan (R.P.Ghoghari) Section Officer, Energy & Petrochemicals Departmen

To,

The District Collector, Vadodara/Bharuch.

- The Director of Petroleum, Gandhinagar
- The Accountant General, Rajkot.
- The Accountant General, Ahmedabad.
- The Shri Hridesh Baindail, Dy.G.M.(E. & P.), Indian Oil Corporation Ltd., 1, Sri Aurobindo Marg, Yusuf Sarai, New Deihi-110016.
  - Under Secretary to Government of India, Ministry of Petroleum & Natural Gas, (Deptt. of Petroleum & Natural Gas), Shastri Bhavan, New Delhi.
  - The Director General (Hydro Carbon), C-139, Sector-63, Noida-201301.
  - The Select file



## Annexure 9: Copy of Environmental Clearance granted for drilling activities of 11 wells in NELP-VII Block-CB-ONN-2005/7



F. No. J-11011/279/2011 - IA II (I)

Government of India Ministry of Environment and Forests (I.A. Division) Paryavaran Bhawan CGO Complex, Lodhi Road New Delhi – 110 003 E-mail : vp.upadhyay@nic.in Telefax : 011: 2436 2875 Dated 7<sup>th</sup> June, 2013 aindaji (Dy. General Manager)

То

Shri Hridesh Baindail (Dy. General Manager) M/s Indian Oil Corporation Limited. 7<sup>th</sup> Floor, Indian Oil Bhavan Sri Aurobindo Marg, Yusuf Sarai, New Delhi - 110016

E -mail: baindailh@indianoil.co.in ; Fax : 91-11-26512611

Subject: Drilling Activities of On-Shore Oil & Gas Exploration at Cambay Basin, Block-CB-ONN-2005/7 in Vadodara and Bharuch Districts, Gujarat by M/s Indian Oil Corporation Limited – Environmental Clearance reg.

Ref. : Your letter no. E & P/CO/163 dated 22<sup>nd</sup> October, 2012.

Sir,

This has reference to your letter dated 22<sup>nd</sup> October, 2012 alongwith Form-1, Prefeasibility Report, EIA/EMP report alongwith public hearing report regarding the above mentioned subject.

2.0 The Ministry of Environment & Forests has examined your application. It is noted that proposal is for onshore exploratory drilling of 11 wells at Cambay Basin, Block-CB-ONN-2005/7 in Vadodara and Bharuch Districts of Gujarat. Ministry of Petroleum & Natural Gas (MoPNG), Govt. of India awarded exploration block CB-ONN-2005/7 to Indian Oil Corporation Ltd. during seventh round of bidding under New Exploration Licensing Policy (NELP). A Production Sharing Contract (PSC) was signed between the Government of India (Gol) and Indian Oil Corporation Limited (IOCL) on 22<sup>nd</sup> December, 2008. The proposed block CB-ONN-2005/7 spreads across an area of 199 sq. km. in Vadodara and Bharuch districts of Gujarat. As per the Production Sharing Contract (PSC), the project will involve drilling of 10 exploration wells of 2000 m depth each in Phase-1 & one exploration well of 800 m depth in phase-2 within licensed area of 199 km<sup>2</sup> of which 175 km<sup>2</sup> and 24 km<sup>2</sup> in Vadodara and Bharuch Districts respectively. Narmada River is flowing within the block. Dhadhar River (7.6 km) and Vishwamitri River (9.00 km) are flowing within 10 Km distance. Cost of project is Rs. 310.00 Crore. No forest land is involved. No national park/ wildlife sanctuary/ reserve forest is located within 10 km from the proposed wells. Coordinates of the Block are as follows:

Point	Latitude	Longitude
4	21°57'16.00"	73°01'26.00"
B	21°57'24.00"	73°00'14.00"
C	21°58'42.00"	73°00'17.00"
D	22°00'40.00"	73°04'22.00"
E	21°59'32.00"	73°05'00.00"
F	22°02'00.00"	73°05'00.00"
G	22°02'10.00"	73°05'00.00"
-	22°02'10.00"	73°07'20.00"



1	21°59'52.00"	73°07'20.00"
J	21°59'52.00"	73°11'43.00"
K	21°54'00.00"	73°14'50.00"
L	21°54'00.00"	73°08'02.00"
M	21°54'00.00"	73°05'50.89"
N	21°56'52.23"	73°04'47.84"
0	21°58'2.42"	73°03'8.74"

3.0 Air emissions from D.G. sets will be dispersed by providing adequate stack height. Water based mud will be used. Total water requirement from ground water/surface water source will be 40 m<sup>3</sup>/day. Drilling and wash water generation will be 20 m<sup>3</sup>/day and treated in ETP and stored in HDPE lined pit. Domestic effluent will be treated in septic tank followed by soak pit. No effluent will be discharged outside the premises and 'Zero' effluent discharge concept will be adopted. Drilling well will generate drill cutting (800 MT) and drilling mud (20 m<sup>3</sup>) and stored in HDPE lined pit. Disposal of drill cuttings and drill mud will be carried out in accordance with the GSR 546 (E) dated 30<sup>th</sup> August, 2005. Used oil will be sold to authorized recyclers.

4.0 The proposal was considered by the Expert Appraisal Committee (Industry-2) in its  $25^{th}$  meeting held during  $28^{th}$ - $30^{th}$  July, 2011 and by the Reconstituted Expert Appraisal Committee (Industry) in its  $4^{th}$  meeting held during  $8^{th} - 9^{th}$  January, 2013 respectively.

5.0 All the projects related to offshore and onshore Oil and Gas exploration, development and production are listed in para 1(b) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.

6.0 Public hearings/public consultations were held on 14<sup>th</sup> August, 2012 for Vadodara District and 1<sup>st</sup> July, 2012 for Bharuch District.

7.0 Based on information submitted by you, presentation made by you and Environmental Consultant namely M/s SENES Consultants India Pvt. Ltd., the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006 subject to strict compliance of the following specific and general conditions:

#### A. SPECIFIC CONDITIONS :

- i. Gas produced during testing shall be flared with appropriate flaring booms. The flare system shall be designed as per good oil field practices and Oil Industry Safety Directorate (OISD) guidelines. The stack height shall be provided as per the regulatory requirements and emissions from stacks will meet the MOEF/CPCB guidelines.
- ii. Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, CH<sub>4</sub>, HC, Non-methane HC etc.
- iii. Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.
- iv. Approach road shall be made pucca to minimize generation of suspended dust.
- v. The company shall make the arrangement for control of noise from the drilling activity. Acoustic enclosure shall be provided to DG sets and proper stack height shall be provided as per CPCB guidelines.



- vi. Total water requirement shall not exceed 25 m<sup>3</sup>/day/well and prior permission should be obtained from the Competent Authority.
- vii. The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.
- viii. Drilling wastewater including drill cuttings wash water shall be collected in disposal pit lined with HDPE lining evaporated or treated and shall comply with the notified standards for on-shore disposal. The membership of common TSDF shall be obtained for the disposal of drill cuttings and hazardous waste. Otherwise, secured land fill shall be created at the site as per the design approved by the CPCB and obtain authorization from the SPCB. Copy of authorization or membership of TSDF shall be submitted to Ministry's Regional Office at Bhopal.
- ix. No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies.
- x. Good sanitation facility shall be provided at the drilling site. Domestic sewage shall be disposed off through septic tank/ soak pit.
- xi. Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- xii. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30<sup>th</sup> August, 2005.
- xiii. The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- xiv. The company shall develop a contingency plan for H<sub>2</sub>S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H<sub>2</sub>S detectors in locations of high risk of exposure along with self containing breathing apparatus.
- xv. The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and its Regional Office at Bhopal.
- xvi. Blow Out Preventor (BOP) system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.
- xvii. Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.



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	discribed indiagram in a discrimination
xviii.	The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored the area in original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.
xix.	All the commitments made to the public during public hearing/public consultation meeting held on 14 <sup>th</sup> August, 2012 for Vadodara District and 1 <sup>st</sup> July, 2012 for Bharuch District shall be satisfactorily implemented and adequate budget provision shall be made accordingly.
XX.	Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.
XXI.	In case the commercial viability of the project (for exploratory drilling) is established, the Company shall prepare a detailed plan for development of oil and gas fields and obtain fresh environmental clearance from the Ministry.
xxii.	Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office at Bhopal.
xxiii.	Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office at Bhopal.
xxiv.	Under Corporate Social Responsibility (CSR), sufficient budgetary provision should be made for health improvement, education, water and electricity supply etc. in and around the project.
xxv.	An audit shall be done to ensure that the Environment Management Plan is implemented in totality and report shall be submitted to the Ministry's Regional Office.
xxvi.	Company should prepare and circulate the environmental policy.
xxvii.	All personnel including those of contractors shall be trained and made fully aware of the hazards, risks and controls in place.
xxviii.	Company shall have own Environment Management Cell having qualified persons with proper background.
xxix.	Company shall prepare operating manual in respect of all activities. It shall cover all safety & environment related issues and system. Measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.
ххх.	Ground water analysis should be carried out at different depth to see stratification.
xxxi.	Drilling site should be at least 500 m away from the school.
xxxii.	On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.



#### B. GENERAL CONDITIONS:

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



x. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the GPCB and may also be seen at Website of the Ministry of Environment and Forests at http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office.

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

8.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

9.0 The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

10.0 The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

(V. P. Upadhyay) Director

#### Copy to:

- The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8th Floor, Gandhi Nagar - 382 010, Gujarat.
- The Chief Conservator of Forests (Western Zone), Ministry of Environment & Forests, Regional Office, E-5, Arera Colony, Link Road -3, Bhopal -462 016, M.P.
- 3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi 110 032.
- The Chairman, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043, Gujarat.
- 5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
- 6. Guard File/Monitoring File/Record File.

(V. P. Upadhyay) Director



## Annexure-10: Copy of Consent to Establish (CTE) and Consent to Operate (CTO) granted by Gujarat Pollution Control Board (GPCB)



### Copy of Consent to Establish (CTE)





#### **GUJARAT POLLUTION CONTROL BOARD**

PARYAVARAN BHAVAN Sector 10-A, Gandhinagar 382 010 Phone : (079) 23226295 Fax : (079) 23232156 Website : www.gpcb.gov.in

CONSENT TO ESTABLISH CTE NO:65675

#### NO: GPCB/NOC-VRD-3776/ID-42847 / 2 327 42

Date:0k/12/2014.

TO,

M/s. Indian Oil Corporation Ltd Karjan(Total 175 Sq. M area Bolck), Drilling well, Karjan, (Block Cb- onm-2005/7) onshore, Near Karjan Village - 391240 Tal: Karjan, Dist: Vadodara.

Sub: Consent to Establish (NOC) under Section 25 of Water Act 1974 and Section 21 of Air Act 1981.

Ref: Your online CTE- fresh application. No: 81769 dated: 27/06/2014.

Sir,

Without prejudice to the powers of this Board under the Water (Prevention and Control of Pollution) Act-1974, the Air Act-1981 and the Environment (Protection) Act-1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that this Board grants Consent to Establish (NOC) for <u>setting up</u> of an industrial plant/activities at (Block Cb- onm-2005/7) onshore. Karjan(Total 175 Sq. M area Bolck). Drilling well, Karjan ...Near Karjan Village – 391240 Tal: Karjan. District. Vadodara for the manufacturing of the following item with the conditions mentioned herewith. The Validity period of the order will be up to 23/06/2019.

Sr.	PRODUCT	QUANTITY
No.		
1.	Drilling of Exploratory wells	5 Nos.

#### **1. SPECIFIC CONDITION:**

1.1 Applicant shall comply with all the conditions stipulated by Ministry of Environment and Forests. New Delhi, GOI in their order of Environment Clearance No. F.No.J – 11011/279/2011-1A 11(1) dated. 07/06/2013.

### GPCB ID-42847Clean Gujarat Green Gujarat

ISO - 9001 - 2008 & ISO - 14001 - 2004 Certified Organisation



1.2 Applicant shall obtain N.A. permission from Competent Authority & shall submit to this office before commencing the production/ activities.

#### 2. CONDITION UNDER THE WATER ACT:

- 2.1 The quantity of the industrial effluent to be generated from the manufacturing process and other ancillary industrial operations shall not exceed to 10 kl /day.
- 2.2 The quantity the domestic waste water (sewage) shall not exceed 1.50 kl/ day.

#### 3 TRADE EFFLUENT:

- 3.1 The ETP plant shall conform to the following units:
  - Solar evaporation pond
- 3.2 The entire effluent from the industrial plant shall be evaporated & there shall no discharge of any industrial effluent into an environment like river, land, drain, nallah etc.
- 3.3. Domestic effluent shall be disposed off through septic tank/soak pit system.

#### 4. CONDITIONS UNDER AIR ACT 1981:

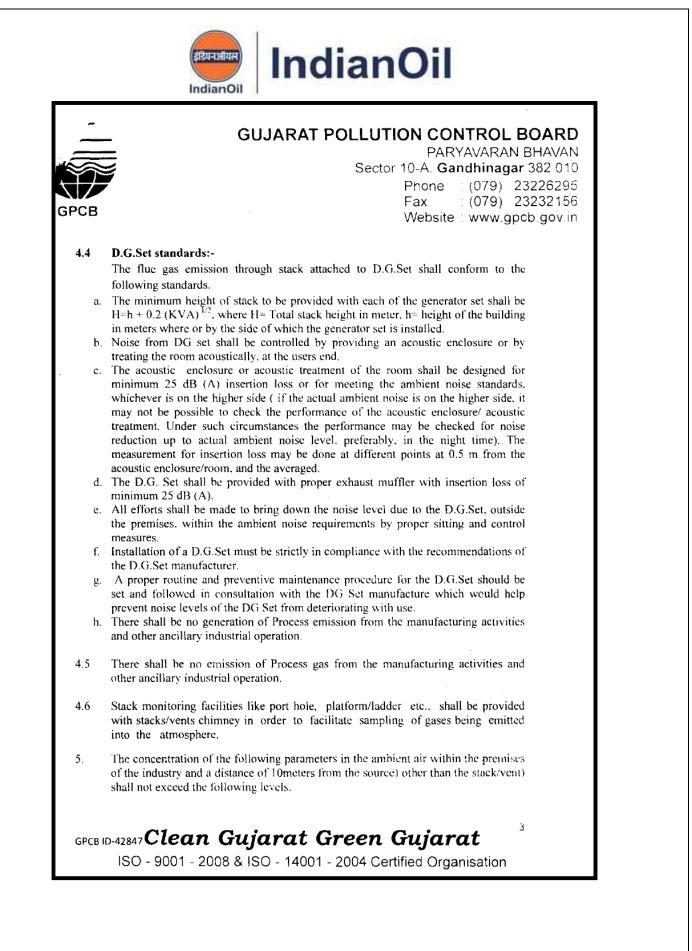
4.1	The following shall be used as fuel into boilers/ furnaces/ D.G sets etc.	
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Sr. No.	FUEL	QUANTITY
1.	HSD	6 kl/day

- 4.2 The applicant shall install & operate air pollution control system in order to achieve norms prescribed below.
- 4.3 The flue gas emission through stack attached to Boiler & D.G. Set shall conform to the following standards:

Stack	Stack attached	Stack height in	Parameter	Permissible
No.	to	Meter		Limit
1.	D.G.Sets	11	Particulate	150 mg/NM <sup>3</sup>
1	( 500 KVA)		Matter	100 ppm
	1		$SO_2$	50 ppm
			NO <sub>N</sub>	
2.	D. G. Set	11	Particulate	150 mg/NM3
	(100 KVA)		Matter	100 ppm

GPCB ID-42847





# IndianOil

PARAMETER	PERMISSIBLE	PERMISSIBLE LIMIT 24
	LIMIT ANNUAL	HRS. AVERAGE
Particulate matter- 10[PM10]	60 Microgram /NM <sup>3</sup>	100 Microgram /NM <sup>3</sup>
Particulate matter- 2.5[PM2.5]	40 Microgram /NM <sup>3</sup>	60 Microgram /NM <sup>3</sup>
Oxides of Sulphur	50 Microgram /NM3	80 Microgram /NM <sup>3</sup>
Oxides of Nitrogen	40 Microgram /NM3	80 Microgram /NM <sup>3</sup>

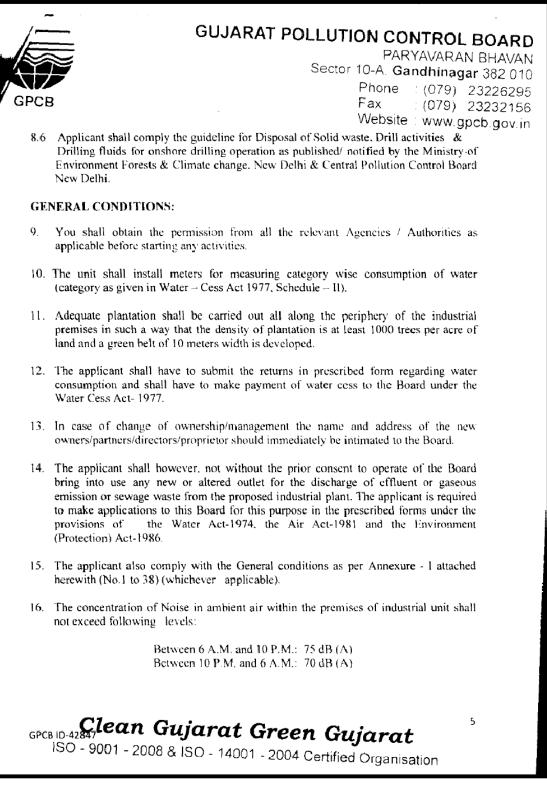
- 6. The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/displayed to facilitate identification.
- 7. The Industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75 dB(a) during day time and 70 dB (A) during night time. Daytime is reckoned in between 6a.m. and10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.

#### 8. CONDITIONS UNDER HAZARDOUS WASTE RULES 2008 AS AMENDED

- 8.1 The applicant shall provide temporary onsite storage facilities for each type of Haz Waste as per Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time.
- 8.2. The applicant shall be obtained membership of authorized common hazardous waste incinerator facility and/or common TSDF facility for disposal of hazardous wastes based on its characteristics and as categorized in Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time.
- 8.3. Hazardous Waste generated shall be disposed off in accordance with the Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 and unit shall have to obtain authorization of the Board for all applicable categories of Hazardous wastes.
- 8.5 The applicant shall explore possibilities for waste minimization, reuse, recovery, and utilization. The applicant shall also explore possibilities of utilization/ treatment/ disposal of high calorific wastes through authorized Cement kilns.

GPCB 1D-42847







- 17. Applicant is required to comply with the Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.
- 18. If it is established by any competent authority that the damage is caused due to their industrial activities to any person or his property in that case they are obliged to pay the compensation as determined by the competent authority.

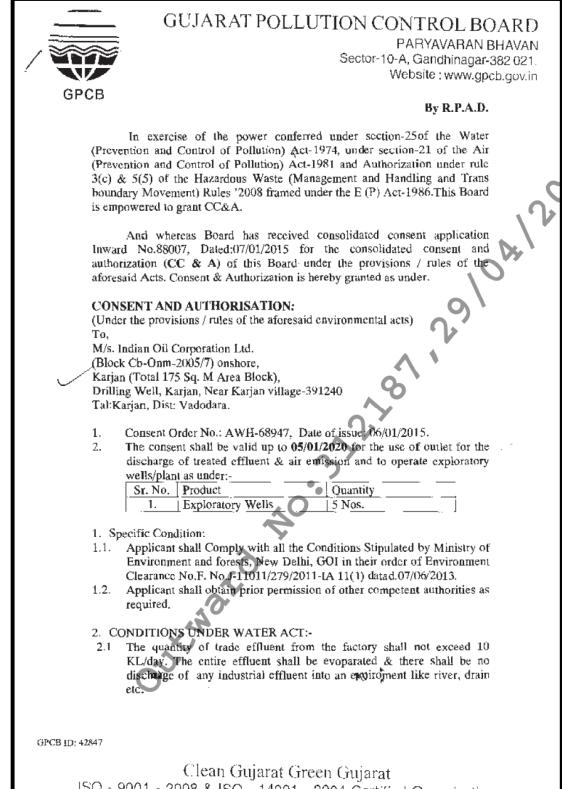
For and on behalf of Gujarat Pollution Control Board

(Dipali'Tank) Unit Head



### Copy of Consent to Operate (CTO)







- 2.2 The quantity the domestic waste water (sewage) shall not exceed 1.50 KL/day.
- 2.3 Domestic effluent shall be disposed of through septic tank/soak pit system.

### CONDITIONS UNDER THE AIR ACT: The following shall be used as flue in 1

l

The following	shall be used	1 as flue in D.G. Set.

Sr. No.	Fuel	 Quantity
1.	HSD	 6 KL/Day

- 4.2 The applicant shall install & operate air pollution control system in order to achieve norms prescribed below.
- 4.2.1 The flue gas emission through stack attached to D.G. Set shall conform to the following standards.

01010	nowing standards.		· · · ·
1	Stack Attached To	Stack	Parameter Permissible
Sr.		Height	Limit
No			
1.	D.G. Set (500	11	Particulate Matter 150 mg/NM <sup>2</sup>
	KVA)	_Meter_	SO <sub>2</sub> 100 ppm
2	D.G. Set (100	11	NOx 50 ppm
	KVA)	Meter	

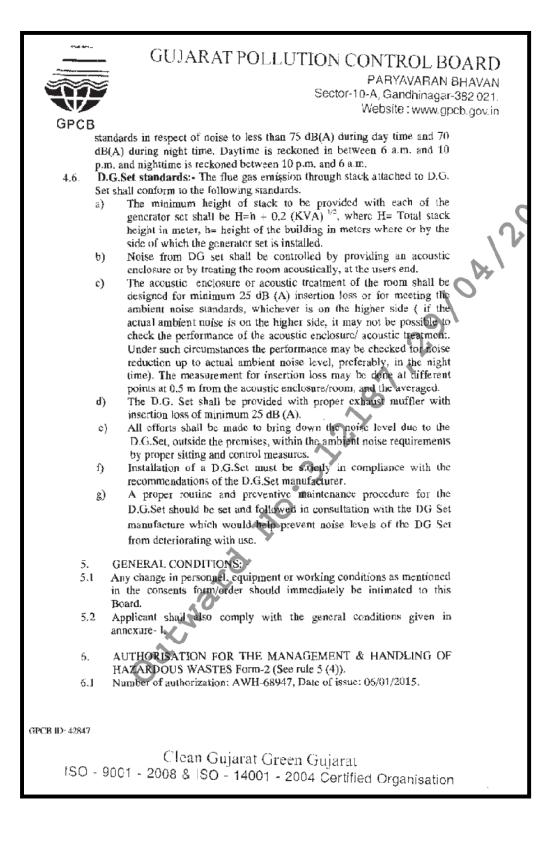
- 4.2.2 There shall be no process gas emission from the manufacturing process and other ancillary industrial operations.
- 4.2. Stack monitoring facilities like port hole, platform/ladder etc., shall be provided with stacks/vents Chimney in order to facilitate sampling of gases being emitted into the atmosphere.
- 4.3. The concentration of the following parameters in the ambient air within the premises of the industry and a distance of 10meters from the source) other than the stack/vent) shall not exceed the following levels.

Parameter	Permissible Limit	Permissible Limit 24
	Annual	Hrs. Average
Particulate matter-10[PM10]	60Microgram/NM <sup>3</sup>	
Particulatematter <sub>2.5</sub> [PM2.5]	40Microgram/NM <sup>3</sup>	60 Microgram /NM <sup>3</sup>
Oxides of Sulphur	50Microgram/NM	<sup>↑</sup> 80 Microgram /NM <sup>3</sup>
Oxides of Nitrogen	40Microgram/NM <sup>3</sup>	80 Microgram /NM <sup>3</sup>

- 4.4. The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
- 4.5. The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality

#### GPCB ID: 42847







6.2. M/s. Indian Oil Corporation Ltd. (Block Cb-Onm-2005/7) onshore, is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at-Karjan (Total 175 Sq. M Area Block), Drilling Well., Karjan, Near Karjan village-391240, Tal:Karjan, Dist: Vadodara.

Sr.	Waste	Quantity	Sch-L	Facility
No		í		
1.	Drilling Mud	3200	2.3	Collection, Storage &
	and Other	MT/Y		Disposal.
i –	Drilling wastes			
2.	Used Oil		5.1	Collection, Storage,
Į.	Ì	i		treatment & Disposal by
				selling to registered
				recyclers.

6.3 The authorization is granted to operate a facility for collection, storage, transportation, and disposal of Hazardous wastes as above. The treatment and disposal hazardous waste shall be as per the guideline issued by the Central Pollution Control Board, New Delhi and the Ministry of Environment, Forest and Climate Change time to time.

- 6.4 The authorization shall be in force for a period up to 05/01/2020.
- 6.5 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.

#### 6.6 TERMS AND CONDITIONS OF AUTHORISATION:-

- 6.6.1 The applicant shall comply with the provisions of the Environment (Protection) Act 1986 and the rules made there under.
- 6.6.2 The authorization shall be produced for inspection at the request of an officer authorized by the Gujarat Pollution Control Board.

6.6.3 The persons authorized shall not rent, lend, sell, and transfer of otherwise transport the hazardous wastes without obtaining prior permission of the Gujarat Pollution Control Board.

- 6.6.4 Any unauthorized change in personnel, equipment or working conditions as mentioned in the authorization order by the persons authorized shall constinute a breach of this authorization.
- 6.6.5 It is the duty of the authorized person to take prior permission of the Gujarat Pollution Control Board to close down the facility.
- 6.6.6 An application for the renewal of an authorization shall be made as laid down in rule 5 (6) (ii).
- 6.6.7 Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Court's order in W.P. No.657 of 1995 dated 14<sup>th</sup> October 2008.
- 6.6.8 Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled

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