

	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 th November, 2009 for PM ₁₀ , PM _{2·5} ,SO ₂ , NO _X , CO, CH ₄ , 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 Annexure-I .		
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 Annexure-II .		
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 Annexure-III.		
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 properly treated and treated wastewater shall conform to CPCB standards.	during drilling activities.
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.	
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.	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 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.	out without prior approval of the Ministry of Environment & Forests.
3.	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.	
4.	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 (daytime) and 70 dBA (nighttime).	Noise Level Monitoring was also carried out during drilling operations and the report of the same is enclosed as Annexure-V .
5.	A separate Environmental Management Cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.	Was complied during drilling activities of all the exploratory wells.
6.	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / 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.	Complied. A copy of clearance letter has been sent to concerned Municipal Corporation, Urban Local Body and the Local NGO.
7.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including	Was complied during drilling activities of all the exploratory wells.



	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 st 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 Annexure-VI .



	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.	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. 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 .

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





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

Sample Lab ID : A30-45/AL1 to AL3/280415		
Packing: Filter Paper packed in plastic envelopes and Gaseous Solution in Bottles, Charcoal tubes, Bladders.		
Sampling Duration : 24 Hrs		
on: 17.04.2015		
Client Representative : Mr. R. Sharma		
Sampling Done By : Hitesh Soni		
Location Of Sampling: IOCL Timbi - 1		
L1: Project Site, L2: Timbi, L3: Village Urad		

Sr. No.	Test Parameters	Unit	Results		Method		
31.110.			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	ND		IS - 5182 (Part-17): 1979 (RA -2003)

ND: Not Detected
Place: Surat

Date: 05.05.2015

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

Tech. Manager / Autho. Signatory

For DETOX CORPORATION PYT. LTD.

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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 : 50000002173
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 in 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 Date	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] Results:						
			Results Method			
Sr. No.	Test Parameters	Unit	L4	Detection Limits	Method of Measurement	
1	Volatile organic Compounds	ppm	ND	0.1	GC - Method	

ND: Not Detected

Place : Surat

For DETOX CORPORATION PYT. LTD.

Date: 05.05.2015

Tech. Manager / Autho. Signatory

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Ambient Air Sample Analysis Report

[1] Client Name & Address:	
Indian Oil Corporation Limited	Test Report No : 50000002178
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			

	Test Parameters		Results			Method	
Sr. No.		Unit	L1	L2	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.

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 : 50000003154
7th Floor, Indian Oil Bhavan,	Issue Date : 06.06.2015
1, Sri Aurobindo Marg, Yusuf Sarai,	Report Page (s): 1 of 1

Sample Lab ID : A33-46/AL4/230515				
Packing: Filter Paper packed in plastic envelopes and Gaseous Solution in Bottles, Charcoal tubes, Bladders.				
Sampling Duration : 30 min				
d on : 17.04.2015				
Client Representative : Mr. R. Sharma				
Sampling Done By : Hitesh Sohni				
Location Of Sampling : IOCL Simli - 1				
L4: Diseal Storage Area				

[3] Res	ultsi		3477	1 1 10°	
Sr. No.	Test Parameters	Unit	Results	Method Detection	Method of Measurement
			L4	Limits	
1	Volatile organic Compounds	ppm	ND	0.1	GC - Method

ND: Not Detected

Place: Surat

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: 50000003137
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] Results:						FETTER C.	
Sr. No.	Test Parameters	II. to	Results			Method	
31. NO.		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	Я	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

Place: Surat

For DETOX CORPORATION PVT. LTD.

Date: 30.06.2015

Tech. Manager / Autho. Signatory

 $\textbf{Notes}: \quad \textbf{(1)} \ \text{The results pertain to tested items only}.$

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Rev./Date 03/11-11-2013





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 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 : A36-30/AL4/220615				
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/2C15-16/02/LOA	Dated 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				

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

ND: Not Detected

Place : Surat

For DETOX CORPORATION PVT. LID.

Date: 30.06.2015

Tech. Manager / Autho. Signatory

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

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03/11-11-20:3





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 : 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 Solution 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	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
Tost Start Date : 15.07.2015	Location Of Sampling : IOCL Lakodra - 1
Test Completion Date : 22.07.2015	L1: Project Site, L2: Lokadra, L3: Osram

[3] Res	ults:						
Sr. No.	. Test Parameters	Unit	Results			Method Detection	Method of Measurement
			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-2
3	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	NU	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	0	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.

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.

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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 in 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	red 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

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

ND: Not Detected

Place: Surat

FOR DETOX CORPORATION PYT. LTD.

Date: 28.07.2015

Tech. Manager / Autho. Signatory

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

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Annexure-2: Mercury analysis Report





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

Ambient Air Sample Analysis Report

[1] Client Name & Address:	The state of the s
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): 2 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 Dated	on: 17.04.2015		
Sampling Time : 11:30:00	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	L1: Project Site, L2: Timbi, L3: Village Urad		

[3] Rest	ults:						
Sr. No.	Test Parameters Unit	Unit	Results			Method Detection	Method of Measurement
			L1	L2	L3	Limits	
1	Mercury	μg/m3	ND	ND	ND	8	AAS Method

ND: Not Detected

Place : Surat

FOR DETOX CORPORATION PVT. LTD.

Date: 05.05.2015

Tech. Manager / Autho. Signatory

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

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DETOX GROUP

Sample Analysis Report

	7-10-11-0-11-0-11-0-11-0-11-0-11-0-11-0
[1] Client Name & Address:	
Indian Oil Corporation Limited	Test Report No : 50000003151
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 : Solid Waste Analysis	Sample Lab ID: W39-39/SL1/280415
Sampling Procedures : Not Specified	Description of Sample : Drill cutting Mud
Date of Sampling : 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 Received Date: 28.04.2015	Client Representative : Mr. R. Sharma
Test Start Date : 28.04.2015	Location Of Sampling : IOCL - Timbi - 1
Test Completion Date : 02.05.2015	L1: Project Site

[3] Resul	lts:		The same	# # # #	· 在在 经 · · · · · · · · · · · · · · · · ·
Sr.No.	Test Parameters	Unit	Results as per locations	Method Detection Limits	Method of Measurement
1	Mercury	mg/kg	ND	0.05	AAS – Method

ND : Not Detected

Place: Surat

For DETOX CORPORATION PVT. LTD.

Tech. Manager / Autho. Signatory

Date: 05.05.2015

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

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DETOX GROUP

Water Sample Analysis Report

[1] Client Name & Address:			
Indian Oil Corporation Limited		Test Report No :	5000002174
7th Floor, Indian Oil Bhavan,		Issue Date : 05.0	5.2015
Sri Aurobindo Marg, Yusuf Sarai,New De	lhi - 110016	Report Page (s):	1 of 1

[2] Sampling Details:	
Protocol Purpose : Water Quality Analysis	Sample Lab ID: W39-39/WL1 to WL3/280415
Sampling Procedures : Not Specified	Description of Sample : Water Sample
Date of Sampling : 24.04.2015	Packing: Plastic Carboy
Sampling Done By : Hitesh Sohni	Sample Quantity/ No. of Samples: 1500 ML / 3 No.
Sampling Time : Not Specified	Client Order: E & P/CB07/ECR/DETOX/2015-16/02/LOA Dated on: 17.04.2015
Sample Received Date : 28.04.2015	Client Representative : Mr. R. Sharma
Test Start Date : 28.04.2015	Location Of Sampling: IOCL - Timbi - 1
Test Completion Date : 30.04.2015	L1: Project Site, L2:Sarapur Timbi, L3: Village Urad

[3] Results:							
				Results		Method Detection	Method of Measurement
Sr. No.	Test Parameters	Unit	L1	L2	L3	Limits	Method of Measurement
1	Mercury	mg/l	ND	ND	ND -	0.001	APHA 3112 - Hg - A&B

ND:Not Detected

Place: Surat

For DETOX CORPORATION PVT, LTD.

Date: 05.05.2015

Tech. Manager / Autho. Signatory

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Ambient Air Sample Analysis Report

[1] Client Name & Address:	
Indian Oil Corporation Limited	Test Report No : 50000002178
7th Floor, Indian Oil Bhavan,	Issue Date : 06.06.2015
1, Sri Aurobindo Marg, Yusuf Sarai,	Report Page (s): 2 of 2

[2] Sampling Details:	
Protocol Purpose : Ambient Air Quality & Analysis	Sample Lab (0 : 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 Dated of	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

[3] Res	ults:						
Sr. No. Test Parameters Unit		Results			Method		
51.140.	rest raisineters	Oint	L1	L2	L3	- Detection Limits	Method of Measurement
1	Mercury	μg/m3	ND	ND	ND	-	AAS Method

ND: Not Detected

Place: Surat

For DETOX CORPORATION PVT. LTD.

Date: 06.06.2015

Tech. Manager / Autho. Signatory

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DETOX GROUP

Sample Analysis Report

[1] Client Name & Address:	
Indian Oil Corporation Limited	Test Report No : 50000003152
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 : Solid Waste Analysis	Sample Lab ID: W40-23/SL1/230515
Sampling Procedures : Not Specified	Description of Sample : Drill cutting Mud
Date of Sampling : 21.05.2015	Packing: Plastic Ziplock.
Sampling Done By : Hitesh Sohni	Sample Quantity/ No. of Samples : 500 G / 1 No.
Sampling Time : 15:20:00	Cilent Order: E & P/CB07/ECR/DETOX/2015-16/02/LOA Dated on: 17.04.2015
Sample Received Date : 23.05.2015	Client Representative : Mr. R. Sharma
Test Start Date : 23.05.2015	Location Of Sampling : IOCL - Simli - 1
Test Completion Date : 28.05.2015	L1: Project Site

3] Resul	ts:				
Sr.No.	Test Parameters	Unit	Results as per locations	Method Detection Limits	Method of Measurement
1	Mercury	mg/kg	ND	0.05	AAS – Method

ND: Not Detected

Place: Surat

For DETOX CORPORATION PVT. LTD.

Date: 06.06.2015

Tech. Manager / Autho. Signatory

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Sample Analysis Report

Test Report No : 50000002179
Issue Date : 06.06.2015
Report Page (s): 1 of 1

[2] Sampling Details:	THE REPORT OF THE PARTY OF THE
Protocol Purpose : Water Quality Analysis	Sample Lab ID: W40-23/WL1/230515
Sampling Procedures : Not Specified	Description of Sample : Water Sample
Date of Sampling: 21.05.2015	Packing: Plastic Carboy
Sampling Done By: Hitesh Sohni	Sample Quantity/ No. of Samples : 500 ML / 1 No.
Sampling 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 Representative : Mr. R. Sharma
Test Start Date : 25.05.2015	Location Of Sampling : IOCL - Simli - 1
Test Completion Date : 28.05.2015	L1: Project Site

	esi	

Sr.No.	Test Parameters	AND ADDRESS OF THE PARTY OF THE	Results as per locations	Method Detection Limits	Method of Measurement
			L1		
1	Mercury	mg/I	ND	0.001	APHA 3112 - Hg - A&B

ND:Not Detected

Place: Surat

For DETOX CORPORATION PVT. LTD.

Date: 06.06.2015

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

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

Ambient Air Sample Analysis Report

[1] Gient Name & Address:	
Indian Oil Corporation Limited	Test Report No : 50000003138
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: A36-30/AL1/220615		
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 : 24 Hrs		
Client Order: E & P/CB07/ECR/DETOX/2015-16/02/LOA Da	ted 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 : 26.06.2015	L1: Project Site		

[3] Resi					
Sa Na Tast Sevenders		Unit	Results	Method Detection Limits	Method of Measurement
Sr. No. Test Parameters	Ollic	L1	Triction Detection and		
1	Mercury	μg/m3	ND	-	AAS Method

ND : Not Detected

Date: 30.06.2015

Place: Surat

For DETOX CORPORATION PVT. LTD.

Tech. Manager / Autho. Signatory

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Sample Analysis Report

[1] Client Name & Address:			
Indian Oil Corporation Limited	Test Report No : 50000003141		
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 : Solid Waste Analysis	Sample Lab ID: W41-23/SL1/220615
Sampling Procedures : Not Specified	Description of Sample : Drill cutting Mud
Date of Sampling: 18.06.2015	Packing : Plastic Ziplock.
Sampling Done By : Hitesh Sohni	Sample Quantity/ No. of Samples : 500 G / 1 No.
Sampling Time: 16:20:00	Client Order: E & P/CB07/ECR/DETOX/2015-15/02/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: Project Site

3] Results:						
Sr.No.	Test Parameters	Unit	Results as per locations	Method Detection Limits	Method of Measurement	
			L1			
1	Mercury	rng/kg	ND	0.05	AAS – Method	

ND: Not Detected

Place: Surat

Date: 30.06.2015

For DETOX CORPORATION PVT. LTD.

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

Tech. Manager / Autho. Signatory

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Sample Analysis Report

[1] Client Name & Address:	
Indian Oil Corporation Limited	Test Report No : 50000003140
7th Floor, Indian Oil Bhavan,	Issue Date : 30.06.2015
Srl Aurobindo Marg, Yusuf Sarai, New Delhi - 110016	Report Page (s): 1 of 1

[2] Sampling Details:	
Protocol Purpose : Water Quality Analysis	Sample Lab ID: W41-23/WL1/220615
Sampling Procedures : Not Specified	Description of Sample : Wastewater Sample
Date of Sampling: 18.06.2015	Packing: Plastic Bottle.
Sampling Done By : Hitesh Sohni	Sample Quantity/ No. of Samples: 1000 ML / 1 No.
Sampling Time : Not Specified	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: Project Site

[3] Resul	lts:					
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 Detected

Place: Surat

For DETOX CORPORATION PVT. LTD.

Date: 30.06.2015

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 : 50000003145
7th Floor, Indian Oil Bhavan,	Issue Date: 30.07.2015
1, Sri Aurobindo Marg, Yusuf Sarai,	Report Page (s): 1 of 1

[2] Sampling Deteils:	
Protocol Purpose : Ambient Air Quality Analysis	Sample Lab ID : A36-49/AL1/150715
Sampling Procedures : Not Specified	Packing: Filter Paper packed in plastic envelopes and Gaseous Solution 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	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	L1: Project Site

[3] Res	ults:				TO THE STATE OF TH	
Sr. No. Test Parameters		Results		Method Detection	Method of Measurement	
			L1	Limits		
1	Mercury	μg/m3	ND	(24)	AAS Method	

ND: Not Detected

Place: Surat

For DETOX CORPORATION PVT. LTD.

Tech. Manager / Autho. Signatory

Date: 30.07.2015

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

Sample Analysis Report

[1] Client Name & Address:	
Indian Oil Corporation Limited	Test Report No : 50000003149
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 : Solid Waste Monitoring & Analysis	Sample Lab ID : W42-04/SL1/150715
Sampling Procedures : As per Standard Method	Description of Sample : Drill cutting Mud
Date of Sampling : 14.07.2015	Packing: Plastic Ziplock.
Sampling Done By : Nishant Singh	Sample Quantity/ No. of Samples: 500 G / 1 No.
Sampling Time: 16:40:00	Client Order: E & P/CB07/ECR/DETOX/2015-16/02/LOA Dated on: 17.04.2015
Sample Received Date : 15.07.2015	Client Representative : Mr. Mohammed Mansuri
Test Start Date: 15.07.2015	Location Of Sampling: IOCL - Lokadra - 1
Test Completion Date : 20.07.2015	L1: Project Site

[3] Resu	lts:		771		
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 Detected

Place: Surat

For DETOX CORPORATION PVT. LTD.

Date: 28.07.2015

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

Tech. Manager / Autho. Signatory

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

Sample Analysis Report

[1] Client Name & Address:	了。 第一章
Indian Oil Corporation Limited	Test Report No : 50000003147
7th Floor, Indian Oil Bhavan,	Issue Date : 28.07.2015
Sri Aurobindo Marg, Yusuf Sarai,New Delhi - 110016	Report Page (s): 1 of 1

[2] Sampling Details:	
Protocol Purpose : Water Quality Monitoring & Analysis	Sample Lab ID : W42-04/WL1/150715
Sampling Procedures: IS-3025 (P-1)	Description of Sample: Wastewater Sample
Date of Sampling: 14.07.2015	Packing : Plastic Bottle.
Sampling Done By: Nishant Singh	Sample Quantity/ No. of Samples: 500 ML / 1 No.
Sampling Time : Not Specified	Client Order: E & P/CB07/ECR/DETOX/2015-16/02/LOA Dated on: 17.04.2015
Sample Received Date : 15.07,2015	Client Representative : Mr. Mohammed Mansuri
Test Start Date : 15.07.2015	Location Of Sampling : IOCL - Lakodra - 1
Test Completion Date: 22.07.2015	L1: Project Site

[3] Resu	ilts:				
Sr.No. Test Pa	Test Parameters	arameters Unit	Results as per locations	Method Detection Limits	Method of Measurement
			L1		
1	Mercury	mg/I	ND	0.001	APHA 3112 - He - A&B

ND:Not Detected Place: Surat

Date: 28.07.2015

For DETOX CORPORATION PVT. LTD.

Tech. Manager / Autho. Signatory

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

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Annexure-3: DG set stack analysis Report





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Stack Sample Analysis Report

	pro- raidiyala ite por t			
[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 Dates on : 17.04.2015
Sample Received Date : 28.04.2015	Client Representative : Mr. R. Sharma
Test Start Date : 28.04.2015	Location Of Sampling : IOCL - Timbi - 1
Test Completion Date: 30.04.2015	L1: D G DET

Sr. No.	Test Parameters	Unit	Results L1	Minimum Detection	Method of Measurement
				Limit	
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

Place: Surat

For DETOX CORPORATION PVT. LTD.

Tech. Manager / Autho. Signatory

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

Stack Sample Analysis Report

Indian Oil Corporation Limited	Test Report No : 50000002180
7th Floor, Indian Oil Bhavan,	Issue Date : 06.06.2015
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 : S15-42/SL1/230515		
Sampling 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.		
Sampling Done By : Hitesh Sohni	Sample Quantity/ No. of Samples: 1 EA / 1 No.		
Sampling Time: 02:15 to 02:45 PM	Client Order: E & P/CB07/ECR/DETOX/2015-16/02/LOA Dated on: 17.04.2015		
Sample Received Date : 23.05.2015	Client Representative : Mr. R. Sharma		
Test Start Date : 25.05.2015	Location Of Sampling: IOCL - Simli - 1		
Test Completion Date : 28.05.2015	L1: D G DET		

[3] Results:					
Sr. No.	. Test Parameters	Unit	Results	Minimum Detection Limit	Method of Measurement
2	Sulphur Dioxide	mg/Nm3	11.71	5.0	IS - 11255(Part 2):1985
3 .	Nitrogen Oxides	mg/Nm3	9.85	4.0	IS - 11255(Part 7):2005
4	Volatile organic Compounds	ppm	ND		GC – Method
5	Hydrocarbons	ppm	ND		GC – Method

ND:Not Detected

Place: Surat

FOR DETOX CORPORATION PVT. LTD.

Date: 06.06.2015

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.

Rev./Date 03/11-11-2013

dT/OP/SAR/04





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/\$L1/220615		
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		

[3] Results:					
Sr. No.	. Test Parameters	Unit	Results L1	Minimum Detection Limit	Method of Measurement
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		GC – Method
5	Hydrocarbons	ppm	ND		GC – Method

ND:Not Detected

Place : Surat

For DETOX CORPORATION PVT. LTD.

Tech. Manager / Autho. Signatory

Date:

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.

Doc.No. dT/OP/SAR/04 Rev_/Date 03/11-11-2013





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 : 50000003148
7th Floor, Indian Oil Bhavan,	Issue Date : 28.07.2015
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 : \$16-22/\$L1/150715		
Sampling Procedures : As per Method of Measurement	Sampling Duration : 15 min		
Date of Sampling: 14.07.2015	Packing: Filter Paper packed in plastic envelopes and Gaseous Solution in 3ottles, Charcoal tubes, Bladders.		
Sampling Done By : Nishant Singh	Sample Quantity/ No. of Samples : 1 EA / 1 No.		
Sampling Time: 03:10 to 03:20 PM	Client Order: E & P/CB07/ECR/DETOX/2015-16/02/LOA Dated on: 17.04.2015		
Sample Received Date : 15.07.2015	Client Representative : Mr. Mohammed Mansurl		
Test Start Date: 15.07.2015	Location Of Sampling : IOCL - Lokadra - 1		
Test Completion Date : 20.07.2015	L1: DG DET		

[3] Results :					
Sr. No.	Test Parameters	Unit	Results L1	Minimum Detection	Method of Measurement
				Limit	
1	Suspended Particulate Matter	mg/Nm3	11.3	5.0	IS - 11255(Part 1):1985
2	Sulphur Dioxide	mg/Nm3	8.53	5.0	IS - 11255(Part 2):1985
3	Nitrogen Oxides	mg/Nm3	9.59	4.0	IS - 11255(Part 7):2005
4	Volatile organic Compounds	ppm	ND	2.5	GC – Method
5	Hydrocarbons	ppm	ND	- 4	GC – Method

ND:Not Detected

Place : Surat

For DETOX CORPORATION PVT. LTD.

Tech. Manager / Autho. Signatory

Date: 28.07.2015

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.

Doc.No. cT/OP/SAR/04

Rev/Date 03/11-11-2013



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 & Address:	######################################		
Indian Oil Corporation Limited	Test Report No : 50000002	177	
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 : Noise Level Monitoring	Sample Lab ID: N12-14/NL1 to NL3/280415	
Sampling Procedures : IS-4954	Sampling Duration : Day Time & Night Time	
Client Order : E & P/CB07/ECR/DETOX/2015-16/02/LG	DA Dated on : 17.04.2015	
Date of Sampling: 24.04.2015	Sampling Done By : Hitesh Sohni	
Sampling Time : Day Time & Night Time	Client Representative : Mr. R. Sharma	
Sample Received Date : 24.04.2015	Location Of Sampling : IOCL Timbi - 1	
Test Start Date : 24.04.2015		
Test Completion Date : 24.04.2015	As Per Sample Table No. [3]	

[3] Results:				
Sr.No.	Location (1 m from source)	Noise Level dB(A) Day Time	Noise Level dB(A) Night Time	Limits
1	L1: Project Site	74.1	67.4	Day Time Limit <75 dB(A) (6:00 AM to 10:00 PM) Night Time Limit <70 dB(A) (10:00 PM to 05:00 AM)
2	L2: Timbi	51.8	45.6	
3	L3: Village Urad	51.7	42.2	

Place : Surat

For DETOX CORPORATION PVT. LTD.

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





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

Noise Level Sample Analysis Report

[1] Client Name & Address:	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/LOA 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	A. D. C. and T. H. M. Fol	
Test Completion Date : 21.05.2015	As Per Sample Table No. [3]	

[3] Results :				
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) (6:00 AM to 10:00 PM) Night Time Limit <70 dB(A) (10:00 PM to 06:00 AM)
2	L2: Simri	62,3	58.2	
3	L3: Kanthariya	59.6	55.4	

Place: Surat

For DETOX CORPORATION PVT. LTD.

Date: 06.06.2015

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

dT/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 : 50000003143
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 : 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	As Per Sample Table No. [3]	
Test Completion Date : 18.06.2015		

[3] Res	[3] Results :				
Sr.No.	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) (6:00 AM to 10:00 PM) Night Time Limit <70 dB(A) (10:00 PM to 06:00 AM)	
2	L2:Kiya Vill.	54.6	50.3		
3	L3:Atali Vill.	53.6	48.6		

Place: Surat

For DÉTOX CORPORATION PVT. LTD.

Date: 30.06.2015

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.

Doc.No.

Rev./Date 03/11-11-2013

dT/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 : 50000003150
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:	The state of the s
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 o	n: 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]
Test Completion Date : 13.07.2015	As Let Sauthe Lance to: [5]

[3] Results :				
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) (6:00 AM to 10:00 PM) Night Time Limit <70 dB(A) (10:00 PM to 05:00 AM)
2	L2: Lokadra	58.6	52.1	
3	L3:Atali VIII.	52.3	48.6	

Place: Surat

For DETOX CORPORATION PVT. LTD.

Date: 28.07.2015

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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dT/OP/NAR/11

03/11-11-2013



Annexure-6 Newspaper clips for EC Advertisement



IndianOil



IndianOil



Corporate Office-New Delhi (Exploration & Production) Public Notice

It is hereby informed by M/s. Indian Oil Corporation Limited (IOCL) that our project "Onshore Oil and Gas Exploration in NELP-VII Block CB-ONN-2005/7 at Cambay Basin" located at Vadodara and Bharuch Districts has been accorded Environmental Clearance by Honourable Ministry of Environment and Forests (MoEF), Government of India, The copies of the environmental clearance letter are available with the Gujarat Pollution Control Board (GPCB) and may also be seen at MoEF Website at http://envfor.nic.in.

Hridesh Baindail, DGM (E&P)

Visit: www.iocl.com for more details.





કોર્પોરેટ કાર્યાલય - નવી દિલ્હી (સંશોધન અને ઉત્પાદન) જાહેર નોટિસ

આ સાથે મેસર્સ ઈન્ડિઅન ઓઈલ કોર્પોરેશન લિમિટેડ (આઈઓસીએલ) દ્વારા જણાવવાનું કે અમારા પ્રોજેક્ટ "ઓનશોર ઓઈલ એન્ડ ગેસ એક્સપ્લોરેશન ઈન એન્ઈએલપી (નેશ્પ)- VII બ્લોક સીબી- ઓએનએન-૨૦૦પ/૭ જે ખંભાત બેસિન ખાતે" આવેલ છે જે વડોદરા અને ભરૂચ જિલ્લાઓમાં સ્થિત છે, તેને માનનીય પર્યાવરલ અને વન મંત્રાલય (એમઓઇએક), ભારત સરકાર દ્વારા પર્યાવરલ સંબંધી નિકાલ પરવાનગી ની સંમતિની નકલો ગુજરાત પ્રદુષલ નિયંત્રલ ભોકલ પરવાનગી સંમતિની નકલો ગુજરાત પ્રદુષલ નિયંત્રલ બોર્ડ (જપીસીબી) પાસે ઉપલબ્ધ છે. અને એમઓઇએકની વેબસાઇટ http://envfor.nic.in પર જોઇ શકાશે.

હીદેશ બેઇન ડેઇલ, ડીજીએમ (ઇએન્ડવી)

મુલાકાત લો : www.iocl.com વિશેષ વિગતો માટે.



Annexure- 7: Petroleum exploration License (PEL)



- 10 -10

Grant Petroleum Exploration Licence for the Block CB-ONN-2005/7 (NELP-VII), area measuring 199.00 Sq.Km, in Vadodara & Bharuch Dist.

Government of Gujarat, Energy & Petrochemicals Department, No. PEL-10-2009-147-E, Sachivalaya, Gandhinagar.

Dated the 3 1 MAY 2010

Read: (1) Indian Oil Corporation Ltd.'s letter No. E&P/CO/51 dated 05.01.2009.

(2) Ministry of Petroleum and Natural Gas D.O.letter No. 0-12012/47/2008-ONG.iii dated 19.01,2009.

ORDER:

In exercise of the powers conferred by Rule 5(1) (ii) of the Petroleum and Natural Gas Rules, 1959, the Government of Gujarat is pleased to Grant a Petroleum Exploration License to Indian Oil Corporation Ltd.as an operator for a period of 4 years (Four years) to prospect for petroleum with effect from the date of issue of the order in the area admeasuring 199.00 Sq.Km. for the Block CB-ONN-2005/7(NELP-VII) in Vaclor Lett & Blanuck Dist.

The grant of the licence is subject to the terms and conditions mentioned

below:

- If any minerals are found during the exploration work, the Indian Oil Corporation Ltd.should bring them to the notice of State Government with full particulars available with them.
- The Indian Oil Corporation Ltd.has deposited security deposit prescribed in Rule 13 of the Petroleum & Natural Gas Rules, 1959. The Indian Oil Corporation Ltd.has also paid the necessary amounts as an application fee and preliminary expenses as detailed below:

Sr. No.	Nature of payment	Challan No. & Date	Amount Rs.	Head of Account
1	2	3	4	-5
1.	Security Deposit, Deposited in S.B.I., Gandhinagar,	08.01.2009	Rs.1,00,000/-	(B) Deposit not bearing interest. Major Head-8443-Civil Deposits. Sub Head-103- Security Deposit. Minor Head-(1) Deposits from IOCL under P&NG Rules, 1959.
2.	Application fee & preliminary expenses Deposited in S.B.I., Gandhinagar.		Rs.34,950/-	0853, Mines & Minerals, (e) Mineral Concession fee and royalty. Receipts under Petroleum & Natural gas Rules, 1959.

The Indian Oil Corporation Ltd shall immediately on demand submit to the State (c) Government and the Director of Petroleum confidentially a full report of the Geological



- 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:-

- (1) 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 VAMP 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.



-12 - 12

- (14) Licensee shall allow Government, authorities to enter and inspect area for security check-up, if 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 falling 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.
- (25) No existing infrastructure public or private underground utility and human beings 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 ticense 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 automatically render this PEL null and void ab-intio.

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

(K.H. Chorera)

Under Secretary to Government, Energy and Petrochemicals Department,

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T٥,

- 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.

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.



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 the 1 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,

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

To.

The District Collector, Vadodara/Bharuch.

The Director of Petroleum, Gandhinager

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 Delhi-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 7th June, 2013

То

Shri Hridesh Baindail (Dy. General Manager) M/s Indian Oil Corporation Limited. 7th 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 22nd October, 2012.

Sir,

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

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 22nd 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 km² of which 175 km² and 24 km² 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
A	21°57'16.00"	73°01'26.00"
В	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"
Н	22°02'10.00"	73°07'20.00"



	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 m³/day. Drilling and wash water generation will be 20 m³/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 m³) 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 30th August, 2005. Used oil will be sold to authorized recyclers.
- 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 14th August, 2012 for Vadodara District and 1st 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 14th 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 16th November, 2009 for PM₁₀, PM_{2.5}, SO₂, NO_x, CO, CH₄, 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 m³/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.
- 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.
- 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.
- 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.
- 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 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.
- 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.



- 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 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.
- 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.
- xxx. 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; PM₁₀, SO₂, 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 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company 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.

 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.

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 setting up 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
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.

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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.

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 ³
	(500 KVA)		Matter	100 ppm
!	!		$^{\circ}$ SO ₂	50 ppm
į		i	NO _s	
2.	D. G. Set	11	Particulate	150 mg/NM ³
L	(100 KVA)	<u> </u>	Matter	100 ppm

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GPCB ID-42847





GUJARAT POLLUTION CONTROL BOARD

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Sector 10-A. Gandhinagar 382 010

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4.4 D.G.Set standards:-

The flue gas emission through stack attached to D.G.Set shall conform to the following standards.

- a. The minimum height of stack to be provided with each of the generator set shall be H=h + 0.2 (KVA)^{1/2}, where H= Total stack height in meter, h= height of the building in meters where or by the side of which the generator set is installed.
- b. Noise from DG set shall be controlled by providing an acoustic enclosure or by treating the room acoustically, at the users end.
- c. The acoustic enclosure or acoustic treatment of the room shall be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on the higher side (if the actual ambient noise is on the higher side, it may not be possible to check the performance of the acoustic enclosure/ acoustic treatment. Under such circumstances the performance may be checked for noise reduction up to actual ambient noise level, preferably, in the night time). The measurement for insertion loss may be done at different points at 0.5 m from the acoustic enclosure/room, and the averaged.
- d. The D.G. Set shall be provided with proper exhaust muffler with insertion loss of minimum 25 dB (A).
- e. All efforts shall be made to bring down the noise level due to the D.G.Set, outside the premises, within the ambient noise requirements by proper sitting and control measures.
- f. Installation of a D.G.Set must be strictly in compliance with the recommendations of the D.G.Set manufacturer.
- g. A proper routine and preventive maintenance procedure for the D.G.Set should be set and followed in consultation with the DG Set manufacture which would help prevent noise levels of the DG Set from deteriorating with use.
- h. There shall be no generation of Process emission from the manufacturing activities and other ancillary industrial operation.
- 4.5 There shall be no emission of Process gas from the manufacturing activities and other ancillary industrial operation.
- 4.6 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.
- 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.

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

- 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. and 10 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.

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8.6 Applicant shall comply the guideline for Disposal of Solid waste, Drill activities & Drilling fluids for onshore drilling operation as published/ notified by the Ministry of Environment Forests & Climate change. New Delhi & Central Pollution Control Board New Delhi

GENERAL CONDITIONS:

- You shall obtain the permission from all the relevant Agencies / Authorities as applicable before starting any activities.
- 10. The unit shall install meters for measuring category wise consumption of water (category as given in Water Cess Act 1977, Schedule II).
- 11. Adequate plantation shall be carried out all along the periphery of the industrial premises in such a way that the density of plantation is at least 1000 trees per acre of land and a green belt of 10 meters width is developed.
- The applicant shall have to submit the returns in prescribed form regarding water consumption and shall have to make payment of water cess to the Board under the Water Cess Act-1977.
- In case of change of ownership/management the name and address of the new owners/partners/directors/proprietor should immediately be intimated to the Board.
- 14. The applicant shall however, not without the prior consent to operate of the Board bring into use any new or altered outlet for the discharge of effluent or gaseous emission or sewage waste from the proposed industrial plant. The applicant is required to make applications to this Board for this purpose in the prescribed forms under the provisions of the Water Act-1974, the Air Act-1981 and the Environment (Protection) Act-1986.
- 15. The applicant also comply with the General conditions as per Annexure I attached herewith (No.1 to 38) (whichever applicable).
- 16. The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels:

Between 6 A.M. and 10 P.M.: 75 dB (A) Between 10 P.M. and 6 A.M.: 70 dB (A)

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- 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

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Copy of Consent to Operate (CTO)





GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN Sector-10-A, Gandhinagar-382 021. Website: www.gpcb.gov.in

By R.P.A.D.

In exercise of the power conferred under section-25of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution) Act-1981 and Authorization under rule 3(c) & 5(5) of the Hazardous Waste (Management and Handling and Trans boundary Movement) Rules '2008 framed under the E (P) Act-1986. This Board is empowered to grant CC&A.

And whereas Board has received consolidated consent application Inward No.88007, Dated:07/01/2015 for the consolidated consent and authorization (CC & A) of this Board under the provisions / rules of the aforesaid Acts. Consent & Authorization is hereby granted as under.

CONSENT AND AUTHORISATION:

(Under the provisions / rules of the aforesaid environmental acts)
To.

M/s. Indian Oil Corporation Ltd. (Block Cb-Onm-2005/7) onshore, Karjan (Total 175 Sq. M Area Block), Drilling Well, Karjan, Near Karjan village-391240 Tal:Karjan, Dist: Vadodara.

- Consent Order No.: AWH-68947, Date of issue 06/01/2015.
- The consent shall be valid up to 05/01/2020 for the use of outlet for the
 discharge of treated effluent & air emission and to operate exploratory
 wells/plant as under:-

Sr. No.	Product	Quantity	
1.	Exploratory Wells	5 Nos.	

- 1. Specific Condition:
- 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.I-11011/279/2011-LA 11(1) datad.07/06/2013.
- Applicant shall obtain prior permission of other competent authorities as required.

2. CONDITIONS UNDER WATER ACT:-

2.1 The quantity of trade effluent from the factory shall not exceed 10 KL/day. The entire effluent shall be evoparated & there shall be no discharge of any industrial effluent into an expiroment like river, drain etc.

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- 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.
- 3. CONDITIONS UNDER THE AIR ACT:
- 3.1. The following shall be used as flue in D.G. Set.

Sr. No.	Fuel	Quantity
	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.

	Stack Attached To	Stack	Parameter	Permissible
Sr.		Height		Limit
No				
1.	D.G. Set (500	11	Particulate Matter	
	KVA)	Meter	SO ₂	№ 100 ppm
2	D.G. Set (100	11	NO _x	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.

than the sweet venty small her of	sector the territoring to	VI3.
Parameter	Permissible Limit	Permissible Limit 24
	Annual	Hrs. Average
Particulate matter-10[PM10]	60Microgram/NM ³	100Microgram /NM ³
Particulatematter _{2.5} [PM2.5]	40Microgram/NM3	60 Microgram /NM ³
Oxides of Sulphur	50Microgram/NM3	80 Microgram /NM ³
Oxides of Nitrogen	40Microgram/NM ³	80 Microgram /NM ³

- 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





GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN Sector-10-A, Gandhinagar-382 021. Website : www.gpcb.gov.in

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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 6 a.m. and 10 p.m, and nighttime is reckoned between 10 p.m, and 6 a.m.

- 4.6. D.G.Set standards:- The flue gas emission through stack attached to D.G. Set shall conform to the following standards.
 - a) The minimum height of stack to be provided with each of the generator set shall be H=h + 0.2 (KVA) ^{1/2}, where H= Total stack height in meter, h= height of the building in meters where or by the side of which the generator set is installed.
 - Noise from DG set shall be controlled by providing an acoustic enclosure or by treating the room acoustically, at the users end.
 - c) The accustic enclosure or acoustic treatment of the room shall be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on the higher side (if the actual ambient noise is on the higher side, it may not be possible to check the performance of the acoustic enclosure/ acoustic treatment. Under such circumstances the performance may be checked for noise reduction up to actual ambient noise level, preferably, in the night time). The measurement for insertion loss may be done at different points at 0.5 m from the acoustic enclosure/room, and the averaged.
 - The D.G. Set shall be provided with proper exhaust muffler with insertion loss of minimum 25 dB (A).
 - e) All efforts shall be made to bring down the noise level due to the D.G.Set, outside the premises, within the ambient noise requirements by proper sitting and control measures.
 - f) Installation of a D.G.Sct must be strictly in compliance with the recommendations of the D.G.Set manufacturer.
 - g) A proper routine and preventive maintenance procedure for the D.G.Set should be set and followed in consultation with the DG Set manufacture which would bein prevent noise levels of the DG Set from deteriorating with use.
 - GENERAL CONDITIONS:
 - 5.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.
 - 5.2 Applicant shall also comply with the general conditions given in annexure-1.
 - AUTHORISATION FOR THE MANAGEMENT & HANDLING OF HAZARDOUS WASTES Form-2 (See rule 5 (4)).
 - 6.1 Number of authorization: AWH-68947, Date of issue: 06/01/2015.

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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.

I di.F	Tal. Natjan, Dist. Vadodara.						
Sr.	Waste	Quantity	Sch-L	Facility			
No		i	L., .	L			
1.	Drilling Mud	3200	2.3	Collection, Storage &			
ļ	and Other	MT/Y		Disposal.			
i	Drilling wastes	L	<u> </u>				
2.	Used Oil		5.1	Collection, Storage,			
!	Ì	i		treatment & Disposal by			
				selling to registered			
	! !	<u> </u>	<u>L</u>	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 constitute 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 14th 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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PARYAVARAN BHAVAN Sector-10-A, Gandhinagar-382 021 Website : www.gpcb.gov.in

in the plant, including waste water and air emissions and solid hazardous waste generated within the factory premises.

6.6.9 Industry shall submit annual report within 15 days and sub squinty by 31st January every year.

6.6.10 Industry shall have to manage waste oil, discarded containers etc., process waste as per Amended Rules – 2008 and shall apply Authorization / submit details for all applicable waste as per Amended Rules 2008 with 15 days.

6.6.11 Industry shall not recycle the waste falling under Scheudle-4 of the Authorization Hazardous waste Rules-2008, till they obtain registration as a recycler from CPCB / GPCB.

> For and on behalf of Gujarat Pollution Control Board

> > (Dipali Tank) Unit Head

NO.GPCB/CCA-VRD-1615(2)/ID: 42847/

Date: __/__/2014

Issued To:
M/s. Indian Oil Corporation Ltd.
(Block Cb-Onm-2005/7) onshore,
Karjan (Total 175 Sq. M Area Block),
Drilling Well, Karjan, Near Karjan village-391240
Tal:Karjan, Dist: Vadodara.

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