

	Conditions	Compliance			
Sl. No.	SPECIFIC CONDITIONS				
1.	SPECIFIC CONDITIONS         Gas produced during testing shall be flared with appropriflaring booms.         The flare system shall be designed as per good oil field practiand Oil Industry Safety Directorate (OISD) guidelines. The state height shall be provided as per the regulatory requirements a emissions from stacks will meet the MOEF/CPCB guidelines.         Ambient air quality shall be monitored near the closest hum settlements as per the National Ambient Air Quality Emiss Standards issued by the Ministry vide G.S.R. No. 826(E) da 16 <sup>th</sup> November, 2009 for PM <sub>10</sub> , PM <sub>2-5</sub> ,SO <sub>2</sub> , NO <sub>X</sub> , CO, CH <sub>4</sub> , F Non-methane HC etc.         Mercury shall also be analyzed in air, water and drill cuttint twice during drilling period.         Approach road shall be made pucca to minimize generation suspended dust.         The company shall make the arrangement for control of non-methane the control of non-methane the state of the state	Noted and would be complied with.			
2.	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.	Flare system design and stack height will meet the OISD guidelines. Flare stack emission monitoring will also be carried out as per Environment (Protection) Rules, 1986 for oil drilling industry during flaring of gases during drilling phase.			
3.	Ambient air quality shall be monitored near the closest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November, 2009 for PM <sub>10</sub> , PM <sub>2.5</sub> ,SO <sub>2</sub> , NO <sub>X</sub> , CO, CH <sub>4</sub> , HC, Non-methane HC etc.	ission dated Regular Monthly Ambient Air Quality is carried out at IOC-Khambel-1			
4.	Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.	ngs Drilling activities for 2nd well are scheduled to start in 2nd quarter of 2013-14, These conditions would be complied. Mercury analysis report for air and drill cuttings for IOC-Khambel-1 attached as <b>Annexure-2</b> .			
5.	Approach road shall be made pucca to minimize generation of suspended dust.	To be taken up during construction phase based on evaluation of the condition of approach road to drill sites. Additionally dust generation will be minimized by water sprinkling (if required)			
6.	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.	The DG sets with appropriate acoustic enclosures and adequate stack height as required under the guidelines for stack height for DG sets published by CPCB in emission regulations, Part IV, COINDS/26/1986/87 would be commissioned in drilling campaign.			



		Silent enclosed DG set is installed at IOC-Khambel-1. Regular DG set stack analysis is carried out at IOC-Khambel-1 and the report of same is attached as <b>Annexure-3</b> .
7.	Total water requirement shall not exceed 40 $m^3/day$ and prior permission shall be obtained from the concerned agency.	Noted and would be complied with. Presently for IOC-Khambel-1 tanker water is used for domestic purpose.
8.	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.	Noted and would be complied during drilling activities. For exploratory well IOC-Khambel-1, waste water generated during drilling is collected in impervious HDPE lined pits. Portable ETP is installed at drill site for treatment of waste water generated during drilling activities.
9.	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 will be disposed in authorized TSDF. Noted and would be complied during drilling activities.
10.	Good sanitation facility should be provided at the drilling site. As proposed, domestic sewage shall be disposed off through modular STP.	Sufficient number of portable toilet are provided at drill site and waste water is being treated through septic tank-soak pit
11.	Oil spillage 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	Oil spill response scheme has been prepared and implemented onsite. Onsite spill kits has been provided to avoid minor spills. Additionally proper measures will be taken care to fulfill the condition. Noted and would be complied during drilling activities.



	recyclers.	
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.	Noted. Adequate measures will be 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. 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.	Noted and would be complied during drilling activities. Fire fighting equipments and personal protective equipments are provided at the site. Comprehensive HSE manual is being prepared for the drilling activities and same is being 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 has been 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.	Noted. Adequate measures will be 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 is installed at IOC-Khambel-1. Details of blow out preventer (BOP) system used for each hole section is attached as Annexure-4.         For the remaining wells the same shall be installed at commencement of drilling.
17.	Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.	Emergency Response Plan is prepared based on the guidelines by OISD, DGMS and Govt. of India. ERP is followed during drilling operations.



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.	
19.	Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.	Noted. Adequate measures will be taken to comply with the guidelines.
20.	In case the commercial viability of the project is established, the Company shall prepare a detailed plan for development of oil and gas fields and obtain fresh environmental clearance from the Ministry.	Noted and Accepted.
21.	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.
22.	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.	Noted. Adequate measures will be taken to comply with the guidelines.
23.	Company shall ensure good housekeeping at the drilling site.	IOC is ensuring good housekeeping at the drilling site.
24.	Company shall prepare project specific environmental manual and a copy shall be made available at the drilling site for the compliance.	IOC is has prepared project specific environmental manual for ongoing drilling campaign as well as ensuring compilation of the same during drilling operations.
25.	Company shall adopt Corporate Environment Policy as per the Ministry's O.M. No. J- 11013/41/2006-IA.II(I) dated 26 <sup>th</sup> April, 2011 and implemented.	Environment Policy of IOC is attached as Annexure-5.



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.						
2.	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.	regarding any modification in the project will be taken.					
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).	DG sets with acoustic enclosures would be installed at site. Location of DG set installation will be selected so as to be away from nearest habitation. Further vehicular movement will be minimizing through optimum use of them. Noise Level Monitoring report is attached as <b>Annexure-6</b> .					
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.						



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 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.	Complied. Regular monitoring for ambient air quality has been carried out at IOC-Khambel-1 Noted. Adequate measures will be taken to comply with the guidelines during the drilling operations of remaining exploratory wells.
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.	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; further proper measures will be taken care to fulfill the condition.
9.	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental	Complied for the previous financial year 2011-12. The environmental statement for the financial year ending 31/3/2013 (2012-13) in Form-V is attached as <b>Annexure-8</b> .



	conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.	
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 atwWebsite 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.	Complied. Information regarding EC accorded for the project was published in news papers in English as well as Vernacular languages. Newspapers clips are attached as <b>Annexure-9</b> .
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 22.09.2009 for the period of four years. The copy of the same is attached as <b>Annexure-10</b> .

Remarks: 1. Environmental Clearance granted for drilling activities of five wells in NELP-VII Block-CB-ONN-2005/2 is attached as Annexure-11.

2. Consent to Establish (CTE) granted by Gujarat Pollution Control Board (GPCB) for the project is attached as Annexure-12.



Annexure 1 Monthly Ambient Air Quality data





			An	ABIENT AIR SAMPL	E ANALYSIS REPOR	RI				
	erence No.			/ARAM/13/665A						
Client Name & Address.			Indian oil Co Indian Oil Bha	Indian oil Corporation Ltd., Indian Oil Bhavan, 1 , Shri Aurobindo Amrg , 7 <sup>th</sup> floor, Yusuf sarai,						
Тура	e of Sample:		Ambient Air A	Aonitoring for PN	10, PM2.5, , SO2, NC	x , O3, NH3, HC, NMHC, CO &	lead			
Pac	king & Seal :					us Solution in Bottles & air sar				
Sam	pling Procedu	ire:	IS: 5182 (P-14)	2000, CPCB Guid	elines and as per	client's monitoring requireme				
Clier	nt's Reference	:	-	24-Hour for Gases.						
Sample Location & position(GL or height from Ground level)			Height from G	npany's main Offi round level- 3 Me	ce ters					
	of Sampling:		23/10/12	Period	24 HRS.					
Representatives Present: Monitoring Equipment Details		Lab: Mr. Sunil       Client: Mr. Santanu Samanata         Respirable Dust Sampler- APM 460 BL - 411 & Fine Particulate Attachment         Calibration Date : 23/02/2012, Due Date : 22/02/2013								
		ent Details	Respirable Dus Calibration Do	t Sampler- APM 4 te : 23/02/2012, D	60 BL - 411 & Fine	Particulate Attachment				
Sr.		UNIT	Respirable Dus Calibration Da	t Sampler- APM 4 te : 23/02/2012, D Results- Locatio	ue Date : 22/02/2	Particulate Attachment 013				
Sr. No.	TEST	UNIT	L1- Khambel	Results- Locatio	ue Date : 22/02/2	Particulate Attachment 2013 TEST METHOD	Permissible limits			
Sr. No.	TEST PM10	UNIT µg/m <sup>3</sup>	L1- Khambel	Results- Locatio	ue Date : 22/02/2 ns L3- Near Company's main Office 99	TEST METHOD	limits			
Sr. No.	PM10 PM2.5	UNIT <u>µg/m<sup>3</sup></u> µg/m <sup>3</sup>	L1- Khambel 93 71	Results- Locatio	Ue Date : 22/02/2 ns L3- Near Company's main Office 99 58	1013 TEST METHOD	limits 100.0			
Sr. No. 1. 2. 3.	PM10           PM2.5           SO2	<b>UNIT</b> <u>µg/m<sup>3</sup></u> µg/m <sup>3</sup>	L1- Khambel 93 71 4.83	Results- Locatio	Ue Date : 22/02/2 ns L3- Near Company's main Office 99 58 6.90	IS:5182 (P-23) 2006 Fine Particulate Sampler	limits 100,0 60.0			
Sr. No. 1. 2. 3. 4.	PM10           PM2.5           SO2           NOx	<u>UNIT</u> <u>µg/m<sup>3</sup></u> µg/m <sup>3</sup> µg/m <sup>3</sup>	L1- Khambel 93 71 4.83 10.85	Ite:         23/02/2012, D           Results- Locatio           L2-           Adivada           60           21           5.52           11.30	Ue Date : 22/02/2 ns L3- Near Company's main Office 99 58 6.90 12.01	TEST METHOD           IS:5182 (P-23) 2006           Fine Particulate Sampler           IS: 5182 (P-2) 2001	100.0 60.0 80.0			
Sr. No. 1. 2. 3. 4. 5.	PM10 PM2.5 SO2 NOx Ozone	<b>UNIT</b> <u>µg/m<sup>3</sup></u> µg/m <sup>3</sup>	L1- Khambel 93 71 4.83	Results- Locatio	Ue Date : 22/02/2 ns L3- Near Company's main Office 99 58 6.90	IS:5182 (P-23) 2006           Fine Particulate Sampler           IS: 5182 (P-2) 2001           IS: 5182 (P-2) 2001           IS: 5182 (P-6) 2006	100.0 60.0 80.0 80.0			
Sr. No. 1. 2. 3. 4. 5. 6.	PM10 PM2.5 SO2 NOx Ozone Ammonia	UNIT µg/m <sup>3</sup> µg/m <sup>3</sup> µg/m <sup>3</sup> µg/m <sup>3</sup> µg/m <sup>3</sup>	L1- Khambel 93 71 4.83 10.85 4.42 5.05	Ite:         23/02/2012, D           Results- Locatio           L2-           Adivada           60           21           5.52           11.30	Ue Date : 22/02/2 ns L3- Near Company's main Office 99 58 6.90 12.01	IS:5182 (P-23) 2006           Fine Particulate Sampler           IS:5182 (P-2) 2001           IS:5182 (P-2) 2001           IS:5182 (P-9) 1974           Method by James	100.0 60.0 80.0			
Sr. No. 1. 2. 3. 4. 5. 6. 7.	PM10 PM2.5 SO2 NOx Ozone Ammonia HC	UNIT µg/m <sup>3</sup> µg/m <sup>3</sup> µg/m <sup>3</sup> µg/m <sup>3</sup> µg/m <sup>3</sup> µg/m <sup>3</sup>	L1- Khambel 93 71 4.83 10.85 4.42 5.05 ND	Ite : 23/02/2012, D           Results- Locatio           L2-           Adivada           60           21           5.52           11.30           8.60           6.20           ND	Ue Date : 22/02/2 ns L3- Near Company's main Office 99 58 6.90 12.01 7.46	IS:5182 (P-23) 2006           Fine Particulate Sampler           IS:5182 (P-2) 2001           IS:5182 (P-2) 2001           IS:5182 (P-2) 2004           IS:5182 (P-6) 2006           IS:5182 (P-9) 1974           Method by James           Lodge	limits 100.0 60.0 80.0 80.0 100.0 400.0			
Sr. No. 1. 2. 3. 4. 5. 6. 7. 8.	TEST         PM10         PM2.5         SO2         NOx         Ozone         Ammonia         HC         NMHC	UNIT µg/m <sup>3</sup> µg/m <sup>3</sup> µg/m <sup>3</sup> µg/m <sup>3</sup> µg/m <sup>3</sup> µg/m <sup>3</sup> µg/m <sup>3</sup>	L1- Khambel 93 71 4.83 10.85 4.42 5.05 ND ND ND	Ite : 23/02/2012, D           Results- Locatio           L2-           Adivada           60           21           5.52           11.30           8.60           6.20           ND           ND           ND	Ue Date : 22/02/2 ns L3- Near Company's main Office 99 58 6.90 12.01 7.46 7.30	IS:5182 (P-23) 2006           Fine Particulate Sampler           IS:5182 (P-2) 2001           IS:5182 (P-2) 2001           IS:5182 (P-2) 2001           IS:5182 (P-6) 2006           IS:5182 (P-9) 1974           Method by James           Lodge           GC Method	100.0 60.0 80.0 100.0 400.0 NS			
Sr. No. 1. 2. 3. 4. 5. 6. 7.	PM10 PM2.5 SO2 NOx Ozone Ammonia HC	UNIT µg/m <sup>3</sup> µg/m <sup>3</sup> µg/m <sup>3</sup> µg/m <sup>3</sup> µg/m <sup>3</sup> µg/m <sup>3</sup>	L1- Khambel 93 71 4.83 10.85 4.42 5.05 ND	Ite : 23/02/2012, D           Results- Locatio           L2-           Adivada           60           21           5.52           11.30           8.60           6.20           ND	Ue Date : 22/02/2 ns L3- Near Company's main Office 99 58 6.90 12.01 7.46 7.30 ND	IS:5182 (P-23) 2006           Fine Particulate Sampler           IS:5182 (P-2) 2001           IS:5182 (P-2) 2001           IS:5182 (P-2) 2004           IS:5182 (P-6) 2006           IS:5182 (P-9) 1974           Method by James           Lodge	limits 100.0 60.0 80.0 80.0 100.0 400.0			

is: Not specified Place: Surat

## For Detox Corporation Pvt. Ltd

(Autho. Signatory)

Note:

Date:18/11/12

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TUTION.	PREVEN	12					Det			
102	GT		AMB	SIENT AIR SA	MPLE A	NALYSIS REPO				
Refere	ence No.	4	DCPL/IOCL /A	RAM/13/76	1A		Corporatio	on Pvt. Ltd		
	Name & Add	ress.	Indian oil Corp Indian Oil Bhav 1 , Shri Aurobin Yusuf sarai, New Delhi- 110	/an, ido Amrg , 3 )016	<sup>7th</sup> floor					
Туре о	of Sample:		Ambient Air Mo	onitoring fo	r PM10	, PM2.5, , SO2, NO	Dx , O3, NH3, HC, NMHC, CO &	lead		
Packi	ng & Seal :		Filter Paper pa bladder	cked in pla	stic en	velopes , Gase	ous Solution in Bottles & air sar	nple in		
Samp	ling Procedure	•:	IS: 5182 (P-14) 2 for Dust and 24			lines and as pe	r client's monitoring requirem	ents- 24-Hour		
Client	's Reference:									
Sample Location & position(GL or height from Ground level)		t from	L1- Khambel L2- Adivada L3 – Near Company's main Office Height from Ground level- 3 Meters							
Date a	of Sampling:						24 HRS.	24 HRS		
	sentatives Pre	sent:	Lab: Mr. Sunil				Client: Mr. Santanu Samanata			
Monite	oring Equipme	ent Details	Respirable Dus Calibration Da				ne Particulate Attachment 2/2013			
Sr.	TEST	UNIT		Results- L	ocation	าร				
No.			L1- Khambel	L2- Adiva	da	L3- Near Company main Offic		Permissible limits		
1.	PM10	µg/m³	89	48		79	IS:5182 (P-23) 2006	100.0		
2.	PM2.5	µg/m <sup>3</sup>	60	18		54	Fine Particulate Sampler	1		
3.	SO <sub>2</sub>	µg/m <sup>3</sup>	6.71	5.23		7.31	IS: 5182 (P-2) 2001	80.0		
4.	NOx	µg/m <sup>3</sup>	13.32	10.90		14.60	IS: 5182 (P-6) 2006	80.0		
5.	Ozone	µg/m³	5.80	8.26		9.31	IS: 5182( P-9) 1974	100.0		
6.	Ammonia	µg/m³	5.10	3.75		6.12	Method by James Lodge	400.0		
7.	HC	µg/m <sup>3</sup>	ND	ND		ND	GC Method	NS		
8.	NMHC	µg/m <sup>3</sup>	ND	ND		ND	GC Method	NS		
9.	co	mg/m <sup>3</sup>	0.432	0.459	,	0.610	GC Method	4.0		
10.	Lead	µg/m³	ND	ND		ND	IS: 5182(P-22) 2004	1.0		

ND: Not Detected ; NS: Not Specified Place: Surat

For Detox Corporation Pvt. Ltd (Autho. Signatory)

?

Date:05/12/12

Note:

(1) The results pertain to tested items only.

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02/04-04-2005 Regd. Office : 3rd Floor, K.G.Chambers, Udhna Darwaja Ring Road, Surat - 395 002. Phone : 91 - 261 - 2351248, 2346181, Fax : 2354068 E-Mail : info@detoxcorp.com, www.detoxcorp.com

LUTION	PREVENTION						Det	NK	
102	ST ST		AMI	BIENT AIR	SAMPLE A	NALYSIS REPOR			
Refere	ence No.		DCPL/IOCL /	RAM/13/	774A		Corporation	1 Pvt. Ltd	
	Name & Add	lress.	Indian oil Corp Indian Oil Bha 1 , Shri Aurobir Yusuf sarai, New Delhi- 110	van, Ido Amrg			2.		
Туре о	of Sample:		Ambient Air M	onitoring	for PM10	PM2.5, , SO2, NC	$_{\rm x}$ , O <sub>3</sub> , NH <sub>3</sub> , HC, NMHC, CO & le	ad	
Packi	ng & Seal :		Filter Paper po bladder	icked in p	plastic env	elopes , Gasec	ous Solution in Bottles & air samp	ble in	
Samp	ling Procedure	<b>:</b> :				ines and as per	client's monitoring requiremen	ts- 24-Hour	
Client	's Reference:		-						
Sample Location & position(GL or height from Ground level)		L1- Khambel L2- Adivada L3 – Near Company's main Office Height from Ground level- 3 Meters							
Date a	of Sampling:		18/12/12 Period of Sampling 24 HRS.						
Repre	sentatives Pre	sent:	Lab: Mr. Sunil Client: Mr. Santanu Samanata						
Monite	oring Equipme	ent Details				0 BL - 411 & Fin ve Date : 22/02/	e Particulate Attachment 2013		
Sr.	TEST	UNIT		<b>Results-</b>	Location	s			
No.			L1- Khambel	L' Adiv	2- rada	L3- Near Company's main Office		Permissibl e limits	
1.	PM10	µg/m <sup>3</sup>	82		0	95	IS:5182 (P-23) 2006	100.0	
2.	PM <sub>2.5</sub>	µg/m <sup>3</sup>	50		6	49	Fine Particulate Sampler	60.0	
3.	SO <sub>2</sub>	µg/m <sup>3</sup>	4.44	6.		5.28	IS: 5182 (P-2) 2001	80.0	
4. 5.	NO <sub>x</sub> Ozone	µg/m <sup>3</sup> µg/m <sup>3</sup>	12.01 9.81		.74 97	16.16	IS: 5182 (P-6) 2006 IS: 5182( P-9) 1974	80.0 100.0	
5. 6.	Ammonia	µg/m <sup>3</sup>	2.95		30	4.09	Method by James Lodge	400.0	
7.	HC	µg/m <sup>3</sup>	ND	N		ND	GC Method	+00.0 NS	
8.	NMHC	μg/m <sup>3</sup>	ND	N		ND	GC Method	NS	
9.	со	mg/m <sup>3</sup>	0.439	0.4		0.581	GC Method	4.0	
10.	Lead	µg/m <sup>3</sup>	ND	N		ND	IS: 5182(P-22) 2004	1.0	

ND: Not Detected ; NS: Not Specified Place: Surat

For Detox Corporation Pvt. Ltd

1 . .

(Autho. Signatory)

Note:

Date:30/12/12

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LUTION	PREVENTION					Dote			
100	To and the second		AM	BIENT AIR SA	MPLE ANALYSIS REPO				
Refe	rence No.		DCPL/IOCL /A	RAM/13/849	A	Corporation	Put Ite		
Clier	nt Name & Ad	ldress.	Indian oil Corpo Indian Oil Bhav 1 , Shri Aurobina Yusuf sarai, New Delhi- 1100	an, do Amrg , 7 <sup>#</sup>					
Туре	of Sample:		Ambient Air Mo	onitoring for	PM10, PM2.5, , SO2, NO	Dx , O3, NH3, HC, NMHC, CO & lec	nd		
Pack	ing & Seal :		Filter Paper pac bladder	cked in plast	ic envelopes , Gase	ous Solution in Bottles & air sample	e in		
Sam	oling Procedu	re:		000, CPCB G Hour for Ga	Guidelines and as pe	r client's monitoring requirements	s- 24-Hour		
Clien	t's Reference:		-						
Sample Location & position(GL or height from Ground level)				L1-Khambel					
Date	of Sampling:		19/01/13		eriod of Sampling	24 HRS.			
Repre	esentatives Pre	esent:	Lab: Mr. Sunil Client: Mr. Santanu Samanata						
Monit Detai Remo		UNIT	Respirable Dust Sampler- APM 460 BL - 411 & Fine Particulate Attachment Calibration Date : 23/02/2012, Due Date : 22/02/2013  Results- Locations						
No.	DAA		L1- Khambel	L2- Adivad	la L3- Near Company main Offic		Permiss ible limits		
2.	PM10 PM2.5	µg/m <sup>3</sup> µg/m <sup>3</sup>	72 23	44		IS:5182 (P-23) 2006	100.0		
3.	SO <sub>2</sub>	µg/m <sup>3</sup>	3.94	7.10	60	Fine Particulate Sampler	60.0		
4.	NO <sub>x</sub>	µg/m <sup>3</sup>	9.89	15.04	9.47	IS: 5182 (P-2) 2001	80.0		
5.	Ozone	µg/m <sup>3</sup>	6.40	11.85		IS: 5182 (P-6) 2006	80.0		
6.	Ammonia	µg/m <sup>3</sup>	3.93	6.89	4.69	IS: 5182( P-9) 1974	100.0		
7.	HC	µg/m <sup>3</sup>	ND	ND		Method by James Lodge	400.0		
8.	NMHC	µg/m <sup>3</sup>	ND	ND	ND	GC Method	NS		
9.	СО	mg/m <sup>3</sup>	0.450	0.518	0.628	GC Method	NS		
10.	Lead	µg/m <sup>3</sup>	ND	ND	0.828	GC Method IS: 5182(P-22) 2004	4.0		
	ND: Not Dete Place: Sur Date:04/02	at	ot Specified			For Detox Corporation Pvt. Ltd (Auto. Signatory)	1.0		

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TUTION,	PREVENTON	na I sa a s			9	Deta	X		
Ŷ	ST ST			BIENT AIR SAMPLE	ANALYSIS REPOR				
Refe	ence No.		DCPL/IOCL //	ARAM/13/61A		Corporation	Pvt. Ltd		
	t Name & Ad	dress.	Yusuf sarai, New Delhi- 110	van, ndo Amrg , 7 <sup>th</sup> floc 0016					
Туре	of Sample:		Ambient Air M	onitoring for PM1	0, PM2.5, , SO2, NO,	, O3, NH3, HC, NMHC, CO & let	ad		
	ing & Seal :		bladder			us Solution in Bottles & air samp			
Samp	oling Procedur	e:	IS: 5182 (P-14) for Dust and 2	2000, CPCB Guide 4-Hour for Gases.	elines and as per	client's monitoring requirement	s- 24-Hour		
Clien	l's Reference:		-						
Sample Location & position(GL or height from Ground level)			L1- Khambel L2- Adivada L3 – Near Company's main Office Height from Ground level- 3 Meters						
Date	of Sampling:		19/02/13 Period of Sampling 24 HRS.						
Repre	sentatives Pre	sent:	Lab: Mr. Sunil Client: Mr. Santanu Samanata						
Monit	oring Equipme	ent Details	Respirable Dus Calibration Da	t Sampler- APM 40 te : 23/02/2012, D	50 BL - 411 & Fine Ue Date : 22/02/2	Particulate Attachment			
Sr.	TEST	UNIT		<b>Results-Location</b>			Permissi		
No.			L1- Khambel	L2- Adivada	l.3- Near Company's main Office	TEST METHOD	ble limits		
1	PM10	µg/m <sup>3</sup>	75	48	97	IS:5182 (P-23) 2006	100.0		
2.	PM <sub>2.5</sub>	µg/m <sup>3</sup>	51	20	49	Fine Particulate Sampler	60.0		
3. 4.	SO <sub>2</sub> NO <sub>x</sub>	$\mu g/m^3$	4.24	6.90	8.09	IS: 5182 (P-2) 2001	80.0		
<u>4.</u> 5.	Ozone	µg/m <sup>3</sup>	11.30 7.67	14.33	17.16	IS: 5182 (P-6) 2006	80.0		
6.	Ammonia	µg/m <sup>3</sup>	4.83	8.22	10.22	IS: 5182( P-9) 1974	100.0		
7.	HC	µg/m <sup>3</sup>	4.83 ND	6.49 ND	5.00	Method by James Lodge	400.0		
8.	NMHC	µg/m <sup>3</sup>	ND	ND ND	ND ND	GC Method	NS		
	CO	mg/m <sup>3</sup>	0.498	0.508	1	GC Method	NS		
9.	00	ing/iii-	0.470	0.306	0.612	GC Method	4.0		

ND: Not Detected ; NS: Not Specified Place: Surat

For Detox Corporation Pvt. Ltd (Autho. Signatory)

Date:02/03/13

Note:

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02/04-04-2009

LUTION	PREVEN					9	Dota	
AMBIENT AIR SAMPLE ANALYSIS REPORT								
Reference No. DCPL/IOCL /ARAM/13/47A						Corporation	Pvt. Ltd	
	Name & Ado	dress.	Indian oil Corr Indian Oil Bha 1 , Shri Aurobir Yusuf sarai, New Delhi- 110	ivan, ndo Amrg 0016	, 7 <sup>th</sup> floo			
Туре	of Sample:		Ambient Air M	Nonitoring f	or PM1	0, PM2.5, , SO2, NOx	, O <sub>3</sub> , NH <sub>3</sub> , HC, NMHC, CO & leo	bd
Packi	ng & Seal :		Filter Paper po bladder	acked in pl	astic en	velopes , Gaseou	s Solution in Bottles & air sampl	e in
Samp	ling Procedur	e:	IS: 5182 (P-14) for Dust and 2			elines and as per c	lient's monitoring requirement	s- 24-Hour
Client	's Reference:		-					
Sample Location & position(GL or height from Ground level)			L1- Khambel L2- Adivada L3 – Near Company's main Office Height from Ground level- 3 Meters					
Date	of Sampling:		23/03/13 Period of Sampling 24 HRS.					
Repre	sentatives Pre	sent:	Lab: Mr. Sunil			Clier	t: Mr. Santanu Samanata	
Monit	oring Equipme	ent Details				60 BL - 411 & Fine Je Date : 03/03/20	Particulate Attachment	
Sr.	TEST	UNIT		Results-				Permissi
No.			L1- Khambel	L2· Adivo		L3- Near Company's main Office	- TEST METHOD	ble limits
1.	PM10	µg/m <sup>3</sup>	76	38		89	IS:5182 (P-23) 2006	100.0
2.	PM2.5	µg/m <sup>3</sup>	62	25		71	Fine Particulate Sampler	60.0
3.	SO <sub>2</sub>	µg/m <sup>3</sup>	2.96	7.9		10.06	IS: 5182 (P-2) 2001	80.0
4.	NOx	µg/m <sup>3</sup>	10.60	13.83		16.15	IS: 5182 (P-6) 2006	80.0
5.	Ozone	µg/m <sup>3</sup>	6.81	8.0		10.22	IS: 5182( P-9) 1974	100.0
6.	Ammonia	µg/m <sup>3</sup>	3.98	4.5		5.05	Method by James Lodge	400.0
7.	HC	μg/m <sup>3</sup>	ND	ND		ND	GC Method	NS
<u>8.</u> 9.	NMHC	μg/m <sup>3</sup>	ND	ND		ND	GC Method	NS
<u>9.</u> 10.	CO Lead	mg/m <sup>3</sup>	0.512	0.45		0.645	GC Method	4.0
10.	Leuu	µg/m³	ND	ND		ND	IS: 5182(P-22) 2004	1.0

ND: Not Detected ; NS: Not Specified Place: Surat

For Detox Corporation Pvt. Ltd (Autho. Signatory)

Date:16/04/13

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02/04-04-2009



# Annexure 2 Mercury analysis reports for air and drill cuttings

NUTUN	REVENTOZ		ANY DOLLAR CONTR		Det	
0	- 6 <sup>T</sup>		AMBIE	ENT AIR SAMPLE ANALYSIS REPO		
Refere	nce No.		DCPL/IOCL /AR	AM/13/774A	Corporatio	on Pvt. Ltd.
Client	Client Name & Address. Indian oil Corporation Ltd., Indian Oil Bhavan, 1 , Shri Aurobindo Amrg , 7 <sup>th</sup> floor, Yusuf sarai, New Delhi- 110016					
Туре с	of Sample:		Ambient Air Mor	nitoring for Mercury		
Packir	Packing & Seal :       Filter Paper packed in plastic envelopes,					
Sampl	ing Procedure	e:	IS: 5182 (P-14) 20 for Dust.	00, CPCB Guidelines and as p	er client's monitoring requiren	nents- 24-Hour
Client'	s Reference:		-			
Sampl	e Location &	position	L3 – Near Compo	any's main Office		
Date o	of Sampling:		18/12/12	Period of Sampling	24 HRS.	
Repres	sentatives Pre	sent:	Lab: Mr. Sunil	C	l Client: Mr. Santanu Samanata	1
Monito	oring Equipme	ent Details	Respirable Dust S 22/02/2013	Sampler- APM 460 BL - 411 Ca	libration Date : 23/02/2012, D	ue Date :
Sr.	TEST	UNIT		Results- Locations		
No.			L3- Near Company's main Office		TEST METHOD	Permissible limits
1.	Mercury	µg/m³		ND	AAS Method	NS

ND: Not Detected ; NS: Not Specified

Place: Surat

For Detox Corporation Pvt. Ltd

(a...)

### Date:30/12/12

(Autho. Signatory)

#### Note:

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	Mud Sa	mple_Analysis Report COTPOTATION		
1.	Reference No.	DCPL/ IOCL/ ARSM/13/2A		
2.	Client :Name & Address	Indian oil Corporation Ltd., Indian Oil Bhavan,		
		1 , Shri Aurobindo Amrg , 7 <sup>th</sup> floor, Yusuf sarai,		
- 1		New Delhi- 110016		
3.	3. Sampling Plan: Packing & Marking : Collected in plastic containers as per			
		Sample Code ( L1 to L4)		
4.	Type of Sample: Grab /	Grab		
	Composite			
5.	Source of Sample Collection:	Drilling Mud		
6.	Client's Reference	-		
7.	Sample collected by	Mr. Sunil		
8.	Time of sampling	-		
9.	Date of sampling	19/01/13		
10.	Place of sampling : Locations	L1- Before Spud		
	20 3008	L2- 1 <sup>st</sup> Section Complete – 255 m		
		L3- 2 <sup>nd</sup> Section Start – 260 m		
		L4- 2 <sup>nd</sup> Section Complete – 1030 m		

### **Results:**

No.	Parameters	Units	RESULTS			
	rarameters	Onits	L1	L2	L3	L4
1.	Mercury	mg/kg	ND	1.26	0.48	ND
Place: S	urat			For Detox Corpor	ation Pvt. Ltd	

#### Date: 04/02/13

#### Note:

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Doc. No dT/OP/WSA/07

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Technical Manager



Annexure 3 Analysis report of stack for D.G set





			STACK SAMPLE ANALYSIS REPORT		
Refe	rence No.		DCPL/IOCL/ARSM/13/		
Clier	nt Name & Addı	ess.	Indian oil Corporation Ltd., Indian Oil Bhavan, 1 , Shri Aurobindo Amrg <sup>*</sup> , 7 <sup>th</sup> floor, Yusuf sarai, New Delhi- 110016		
Туре	of Sample:		Stack emission monitoring for PM, SO <sub>2</sub> ,	NOx, HC, VOC	
Pack	ing Procedure	•	Filter thimbles packed in plastic envelo Bottles, Gases in Bladder and activate	opes and Gaseous Solution in ed Charcoal tubes.	
Samp	oling Procedure	:	IS: 11255 (P-3) 1985, CPCB Guidelines f	or Stack Monitoring.	
Clien	t's Reference:		-		
Sample Source:			Exhaust Stack Attached To L1: DG Set – 1		
Moni	loring Equipme	nt Details	Stack Kit- APM 625-602 Calibration Date : 27/03/2012, Due Date : 26/03/2013		
Date	of Sampling:		20/11/12		
Repre	esentatives Pres	ent:	Lab: Mr. Sunil Clie	ent: Mr. Santanu Samanata	
Sr. No.	TEST	UNIT	Results	Permissible	
NO.			L1 *	Limits	
1.	Temp.	°C	318.0	-	
2.	PM	mg/m <sup>3</sup>	35.0	150.0	
3.	SO <sub>2</sub>	ppm	6.75	100.0	
4.	NOx	ppm	2.44	50.0	
5.	HC	mg/m <sup>3</sup>	ND	NS	
6.	VOC	mg/m <sup>3</sup>	ND	NS	
	VOC			N	

ND- Not detected , NS- Not Specified

#### **Place: Surat**

## For Detox Corporation Pvt. Ltd.,

Date: 5/12/12 Note:

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Technical Manager





			STACK SAMPLE ANALYSIS REPORT	Corporatio	
Reference No.			DCPL/IOCL/ARSM/13/23A		
Client Name & Address.			Indian oil Corporation Ltd., Indian Oil Bhavan, 1 , Shri Aurobindo Amrg <sup>®</sup> , 7 <sup>th</sup> floor, Yusuf sarai, New Delhi- 110016		
Туре	of Sample:		Stack emission monitoring for PM, SO	2, NOX, CO,	
Packi	ng Procedure	e :	Filter thimbles packed in plastic enve in Bottles, Gases in Bladder and activ	lopes and Gaseous Solution rated Charcoal tubes.	
Samp	ling Procedur	e:	IS: 11255 (P-3) 1985, CPCB Guidelines	for Stack Monitoring.	
Client	's Reference:				
Sample Source:			Exhaust Stack Attached To L1: DG Set – 1		
Monite	oring Equipm	ent Details	Stack Kit- APM 625-602 Calibration Date : 27/03/2012, Due Date : 26/03/2013		
Date o	of Sampling:		19/02/13		
Repre	sentatives Pre	esent:	Lab: Mr. Sunil Cl	ient: Mr. Santanu Samanata	
Sr.	TEST	UNIT	Results	Permissible	
No.			LI	Limits	
1,	Temp.	°C	295.0	-	
2.	PM	mg/m <sup>3</sup>	42.0	150.0	
3.	SO <sub>2</sub>	ppm	9.62 100.0		
4.	NOx	ppm	4.15 50.0		
5.	HC	mg/m <sup>3</sup>	ND	NS	
6.	VOC	mg/m <sup>3</sup>	ND	NS	

ND- Not detected , NS- Not Specified **Place: Surat** 

## For Detox Corporation Pvt. Ltd.,

**Technical Manager** 

Date: 02/03/13

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## AMBIENT AIR SAMPLE ANALYSIS REPORT

ce No.		DCPL/IOCL /ARA	DCPL/IOCL /ARAM/13/774A				
ame & Ado	dress.	Indian oil Corporation Ltd., Indian Oil Bhavan, 1 , Shri Aurobindo Amrg , 7 <sup>th</sup> floor, Yusuf sarai,					
Sample:							
& Seal :		Air sample in cha	rcoal tube		9		
Sampling Procedure: IS: 5182 (P-14) 2000, CPCB Guidelines							
eference:		-					
Location &	position	L1 – Near diesel st	orage facility		<u></u>		
ampling:		18/12/12 Period of Sampling 60 mins.					
tatives Pres	sent:	Lab: Mr. Sunil Client: Mr. Santanu Samanata					
g Equipme	nt Details			9/2013			
TEST	UNIT	Re	sults- Locations	nt Na ala ana ana ana ana ana ana ana ana an			
		L1-		TEST METHOD	Permissible limits		
. VOC μg/m <sup>3</sup> ND			GC - Method	NS			
	ame & Ado Sample: & Seal : Procedure eference: Location & ampling: tatives Pres g Equipme TEST	ame & Address. Sample: & Seal : 9 Procedure: eference: Location & position ampling: tatives Present: 9 Equipment Details TEST UNIT	ame & Address. Indian oil Corpord Indian Oil Bhavar 1 , Shri Aurobindo Yusuf sarai, New Delhi- 11001 Ambient Air Monir & Seal : Air sample in chair procedure: IS: 5182 (P-14) 200 eference: - Location & position ampling: 18/12/12 tatives Present: Lab: Mr. Sunil g Equipment Details Handy Air Sample Calibration Date : TEST UNIT Re	ame & Address.       Indian oil Corporation Ltd., Indian Oil Bhavan, 1, Shri Aurobindo Amrg, 7th floor, Yusuf sarai, New Delhi- 110016         ample:       Ambient Air Monitoring for VOC         & Seal :       Air sample in charcoal tube         g Procedure:       IS: 5182 (P-14) 2000, CPCB Guidelines         eference:       -         Location & position       L1 – Near diesel storage facility         ampling:       18/12/12         tatives Present:       Lab: Mr. Sunil         g Equipment Details       Handy Air Sampler- PEMHAS1B         Calibration Date : 01/10/2012, Due Date : 30/0         TEST       UNIT	ame & Address. Indian oil Corporation Ltd., Indian oil Bhavan, 1 , Shri Aurobindo Amrg , 7th floor, Yusuf sarai, New Delhi- 110016 Ambient Air Monitoring for VOC & Seal : Air sample in charcoal tube g Procedure: IS: 5182 (P-14) 2000, CPCB Guidelines eference: - Location & position L1 – Near diesel storage facility ampling: 18/12/12 Period of Sampling 60 mins. Lab: Mr. Sunit Client: Mr. Santanu Samanata g Equipment Details Handy Air Sampler- PEMHAS1B Calibration Date : 01/10/2012, Due Date : 30/09/2013 TEST UNIT Results- Locations TEST METHOD		

ND: Not Detected ; NS: Not Specified

Place: Surat

For Detox Corporation Pvt. Ltd

Date:30/12/12

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Annexure 4 Blow out Preventer system



## **Blow Out Preventer Configuration**

		Flow Nipple
		Annular BOP 2M
		Double Ram BOP, 2M ( pipe top and blind bottom)
		Drilling Spool, 21.1/4" 2M top & bottom flange x 2 side
BOP 21.1/4" stack		outlets
(17.1/2" Hole)	:	Spacer Spool 21.1/4" 2M x 21.1/4" 2M
		Spacer Spool 21.1/4" 2M x 21.1/4" 2M (Optional )
		DSA (21.1/4" 2M x 20.3/4" 3M)
		20"Casing Head Housing (20.3/4" 3M), -To land
		13.3/8"Csg)
		Annular BOP, 5,000 psi (bottom flange 13.5/8" 10M)
		Double Ram BOP 10,000 psi (pipe ram top and blind ram
		bottom)
		Single Ram BOP 10,000 psi
BOP 13.5/8" stack	:	Drilling Spool 13.5/8" 10M x 13.5/8" 10M
(12.1/4" hole)		DSA 13.5/8" 10M x 13.5/8" 5M
		Spacer Spool 13.5/8" 5M x 13.5/8" 5M
		1 <sup>st</sup> Casing Head Spool 13.5/8" 5M x 20.3/4" 3M (To Land
		9.5/8" Csg.)
		20" Casing Head Housing (From previous stage)
		Annular BOP, 5M (bottom flange 13.5/8" 10M)
		Double Ram BOP 10M (pipe ram top and blind ram
		bottom) Single Ram BOP 10M
		Drilling Spool 13.5/8" 10M x 13.5/8" 10M
BOP 13.5/8" stack	:	DSA 11" 5M x 13.5/8" 10M
(8.1/2" hole)	•	$2^{nd}$ Casing Head Spool 13.5/8" 5M x11"5M(To Land 7"
		casing.)
		1 <sup>st</sup> Csg Head Spool 13.5/8" 5M x 20.3/4" 3M (From
		Previous)
		Casing Head Housing (20.3/4" 3M) (From previous stage)
		Tubing Head Spool, 11" 5M x 11" 5M with Tbg Hanger &
For Well Cap for Re-entry arrangment		сар
		2 <sup>nd</sup> Casing Head Spool 13.5/8" 5M x11"5M
is we cap to be chery anangment		1 <sup>st</sup> Csg Head Spool 13.5/8″ 5M x 20.3/4″ 3M
		Casing Head Housing (20.3/4" 3M)



Annexure 5 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 6 Noise Level monitoring report





## Noise Sample Analysis Report

Ref. No. Name of the party

Address

Sample collected on Sample Source Noise level Meter No Calibration date Calibrated By : DCPL/IOCL /ARNM/13/173A : Indian Oil Corporation Ltd.,

: Indian Oil Bhavan

1 , Shri Aurobindo Marg ,

7<sup>th</sup> Floor, Yusuf Sarai, New Delhi

: 18/12/12

: Noise Sample

: Sound Level Meter (C-80646)

: 13-12-12 Calibration Validity: 12-07-13

: National Center for Quality Calibration, Ahmedabad.

No.	Locations	Daytime Noise Level - dB(A) Leq	Day time Permissible Limits for Ambient Air Quality Standards in respect to Noise – dB(A) Leq
1.	Main road (Adiwada Village)	44.3	
2.	Ambient Location (Adiwada)	49.8	-
3.	Aanganwadi (Khambel)	42.3	Residential Area – 55 dB(A)
4.	Ambient Location (Khambel)	44.1	1
5.	Nr.Company main office	57.7	
6.	Nr.Drilling	67.9	
7.	Nr.Security Office	52.2	Industrial Area 75 dB(A)
8.	Nr. Cementing Unit	61.1	
9.	Nr.DG sets.	68.9	

Place: Surat

#### Date: 30.12.2012 Note:

(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/NAR/09

## Technical Manager

For Detox Corporation Pyt. Ltd.,

Rev./Date. 00/015-04-2007

Branch Office : Rishabh Corner, Plot No.: 93, Sector - 8, Gandhidham, Kutch. Telefax : +91 2836 - 228337 E-mail : detox\_kandla@hotmail.com



Annexure 7 Certificate of Accreditation रजिस्ट्री सं॰ डी॰ एल॰-33004/99

REGD. NO. D. L.-33004/99

HRE Gazette of India

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii) PART II—Section 3—Sub-section (ii) प्राधिकार से प्रकाशित PUBLISHED BY AUTHORITY

सं. 1409] No. 1409] नई दिल्ली, मंगलवार, जुलाई 13, 2010/आषाढ़ 22, 1932 NEW DELHI, TUESDAY, JULY 13, 2010/ASADHA 22, 1932

पर्यावरण और वन मंत्रालय

अधिसुचना

नई दिल्ली, 13 जुलाई, 2010

का.आ. 1662(अ).—केन्द्रीय सरकार, पर्यावरण (संरक्षण) नियम, 1986 के नियम 10 के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 12 की उप-धारा (1) के खण्ड (ख) और धारा 13 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, नीचे दी गई सारणी के स्तंभ (2) में विनिर्दिष्ट प्रयोगशालाओं को उक्त अधिनियम और उसके अधीन बनाए गए नियमों के अधीन ऐसी प्रयोगशालाओं को सौंपे गए कृत्यों के क्रियान्वित करने के लिए पर्यावरणीय प्रयोगशालाओं के रूप में और स्तंभ (3) में विनिर्दिष्ट व्यक्तियों को, उक्त अधिनियम की धारा 11 के अधीन सशक्त अधिकारियों को पूर्वोक्त सारणी के स्तंभ (4) में विनिर्दिष्ट अवधि के लिए भेजे गए वायु, जल, मृदा या अन्य पदार्थों के नमूनों का विश्लेषण करने के प्रयोजनों के लिए सरकारी विश्लेषक के रूप में मान्यता प्रदान करती है और उस प्रयोजन के लिए भारत सरकार के पर्यावरण और वन मंत्रालय की अधिसूचना सं. का.आ. 1174(अ), तारीख 18 जुलाई, 2007 में निम्न्लिखित और संशोधन करती है, अर्थात् :--

उक्त अधिसूचना से संलग्न सारणी में :—(i) क्रम संख्यांक 12 और 21 और उससे संबंधित प्रविष्टियों के स्थान पर निम्नलिखित क्रम संख्यांक और प्रविष्टियां रखी जाएंगी, अर्थात् :—

		Alton			
क्रम सं.	प्रयोगशाला का नाम	सरकारी विश्लेषणकर्ता का नाम	से लागू और तक विधिमान्य		
(1)	(2)	(3)	(4)		
"12	मैसर्स होराईजन सर्विस (इन्वायरमैंटल एंड सेफ्टी), 39, श्यामसुन्दर सोसायटी, नियर महात्रे ब्रिज, पुणे–411033 (महाराष्ट्र)	<ul> <li>(1) श्री कुणाल मनोहर नरगोलकर</li> <li>(2) डॉ अर्चना वय्कोले</li> <li>(3) श्री अमित आनंद पाटकी</li> </ul>	13-7-2010 से 12-7-2015		
21	मैसर्स चौकसी लैबोरेट्रीज लि. 6/3, मनोरमागंज, इंदौर – 452001 (मध्य प्रदेश)	<ul><li>(1) श्री सुनील चौकसी</li><li>(2) श्री केविश व्यास</li><li>(3) श्रीमति शैला देशपांडे</li></ul>	13-7-2010 से 12-7-2015"		

मारणी

2678 GI/2010

(1)

## THE GAZETTE OF INDIA: EXTRAORDINARY

 (ii) क्रम संख्या 81 और उससे संबंधित प्रविष्टियों के पश्चात् निम्नलिखित क्रम संख्या और प्रविष्टियां अन्त:गपित की जाएंगी अर्थात :---

क्रम सं.	प्रयोगशाला का नाम	सरकारी विश्लेषणकर्ता का नाम	से लागू और तब विधिमान्य
(1)	(2)	(3)	(4)
"82	मैसर्स एनर्जी एंड रिसोर्सिज इंसटीच्यूट, 6 सी, दरबारी सेठ ब्लॉक इंडिया हैबिटेट सेंटर कॉम्प्लेक्स, लोदी रोड, नई दिल्ली-110003	(1) श्री अंशुमान (2) श्री आर. सुरेश (3) श्री वेद प्रकाश शर्मा	13-7-2010 से 12-7-2015
83	मैसर्स हरियाणा टेस्ट हाउस एंड कंसल्टेंसी सर्विसेज, 50-सी, सेक्टर 25, भाग-II, हुड्डा पानीपत–132104 (हरियाणा)	<ol> <li>(1) श्री एम. एल. दुआ</li> <li>(2) श्री टी. एल. मेहता</li> <li>(3) सुश्री दीपा सरदाना</li> </ol>	13-7-2010 से 12-7-2015
84	मैसर्स डीटाक्स कॉर्पोरेशन प्राइवेट लिमिटेड, तीसरी मंजिल, के. जी. चेम्बर्स, गुजरात समाचार प्रेस के सामने, रिंग रोड, सूरत–395002 (गुजरात)	(1) श्री अमित रोनोसे (2) श्री जितेन्द्र खसकिया (3) डॉ. भावना मेहरा	13-7-2010 से 12-7-2015
85.	मैसर्स थापर सेन्टर फॉर इन्डस्ट्रीअल रिसर्ज डेवेलप्मेंट (टीसीआईआरडी) थापर टेक्नालोजी कैम्पस, पोस्ट बाक्स नं. 68, भद्सोन रोड पटियाला-147001 (पंजाब)		13-7-2010 : 12-7-2015 "

[फा. सं. क्यू-15018/7/203-सीपीडब्ल्यू]

रजनीश दुइं संयुक्त सचिव

टिप्पण :---मूल अधिसूचना भारत के राजपत्र, असाधारण में संख्यांक का.आ. 1174(अ), तारीख 18 जुलाई, 2007 द्वारा प्रकाशत की गई थी और अधिसूचना सं. का.आ. 1539(अ), तारीख 13 सितम्बर, 2007, का.आ. 1811(अ), तारीख 24 ज़क्तूबर, 2007, का.आ. 55(अ), तारीख 9 जनवरी, 2008, का.आ. 428(अ), तारीख 4 मार्च, 2008, का.आ. 865(अ), तारीख 11 राग्रेल, 2008, का.आ. 1894(अ), तारीख 31 जुलाई, 2008, का.आ. 2728(अ), तारीख 25 नवम्बर, 2008, का.आ. 1356(र), तारीख 27 मई, 2009, का.आ. 1802(अ), तारीख 22 जुलाई, 2009 और का.आ. 2399(अ), तारीख 18 सितम्बर, 2009 और हा.आ. 3122(अ), तारीख 7 दिसम्बर, 2009 और का.आ. 3123(अ), तारीख 7 दिसम्बर, 2009 और का.आ. 142(अ), तारीख 21 जनवरी, 2010 और का.आ. 619(अ), तारीख 19 मार्च, 2010 द्वारा उसमें पश्चातवर्ती संशोधन किए गए।

#### MINISTRY OF ENVIRONMENT AND FORESTS

### NOTIFICATION

#### New Delhi, the 13th July, 2010

S.O. 1662(E).—In exercise of the powers conferred by clause (b) of sub-section (1) of Section 12 and Section 13 of the Environment (Protection) Act, 1986 (29 of 1986) read with rule 10 of the Environment (Protection) Rules, 1986, the Central Government hereby recognizes the laboratories specified in column (2) of the Table given below as environmental laboratories to carry out the functions entrusted to such laboratories under the said Act and rules made thereunder, and the persons specified in column (3) as Government Analysts for the purposes of analysis of samples of air, water, soil or other substances sent for analysis by the Central Government or the officer empowered under Section 11 of the said Act, for a period specified in column (4) of the Table aforesaid, and for that purpose makes the following furtheramendments in the notification of the Government of India in the Ministry of Environment and Forests, number S.O. 1174 (E), dated the 18th July, 2007, namely :—

In the Table appended to the said notification :---

(i) for serial numbers 12 and 21 the entries relating thereto, the following serial numbers and entries shall be inserted, namely :---

2

#### [भाग II-खण्ड 3(ii)]

भारत का राजपत्र : असाधारण

#### TABLE

Sl. No.	Name of the Laboratory	Name of the Government Analyst	Recognition with effect from and valid up to
(1)	(2)	(3)	(4)
"1?	M/s. Horizon Services (Environmental and Safety), 39, Shyamsunder Society Near Mhatre Bridge, Pune-411033 (Maharashtra)	<ol> <li>(1) Shri Kunal Manohar Nargolkar</li> <li>(2) Dr. Archana Waykole</li> <li>(3) Shri Amit Anand Patki</li> </ol>	13-7-2010 to 12-7-2015
21	M/s. Choksi Laboratories Ltd., 6/3, Manoramaganj, Indore-452001 (Madhya Pradesh)	<ol> <li>Shri Sunil Choksi</li> <li>Shri Kavish Vyas</li> <li>Mrs. Shaila Deshpande</li> </ol>	13-7-2010 to 12-7-2015"

(ii) after serial number 81 and the entries relating thereto, the following serial number and entries shall be inserted, namely :---

Sl. No.	Name of the Laboratory	Name of the Government Analyst	Recognition with effect from and valid up to
(1)	(2)	(3)	(4)
"82	M/s. The Energy and Resources Institute, 6C, Darbari Seth Block, India Habitat Centre Complex, Lodhi Road, New.Delhi-110003	<ol> <li>Mr. Anshuman</li> <li>Mr. R. Suresh</li> <li>Mr. Ved Prakash Sharma</li> </ol>	13-7-2010 to 12-7-2015
83	M/s. Haryana Test House and Consultancy Services, 50-C, Sector-25 Part-II HUDA, Panipat-132104 (Haryana)	<ol> <li>(1) Shri M.L. Dua</li> <li>(2) Shri T.L. Mehta</li> <li>(3) Ms. Deepa Sardana</li> </ol>	13-7-2010 to 12-7-2015
84	M/s. Detox Corporation Pvt. Ltd., 3rd Floor, K.G. Chambers, Opp. Gujarat Samachar Press, Ring Road, Surat-395002 (Gujarat)	<ol> <li>Mr. Amit Renose</li> <li>Mr. Jitendra Khasakia</li> <li>Dr. Bhavna Mehra</li> </ol>	13-7-2010 to 12-7-2015
85	M/s. Thapar Centre for Industrial Research & Development (TCIRD) Thapar Technology Campus Post Box No. 68, Bhadson Road Patiala-147001 (Punjab)	<ol> <li>Dr. Akepati Sivaram Reddy</li> <li>Shri J. Nagendra Babu</li> <li>Shri Mukesh Agarwal</li> </ol>	13-7-2010 to 12-7-2015"

### [F.No. Q.15018/7/2003-CPW]

#### RAJNEESH DUBE, Jt. Secy.

Note :— The principal notification was published in the Gazette of India, Extraordinary vide number S.O. 1174(E), dated the 18th July, 2007 and subsequently amended vide Notification numbers S.O. 1539(E), dated the 13th September, 2007, S.O. 1811(E), dated the 24th October, 2007, S.O. 55 (E), dated 9th January, 2008, S.O. 428(E), dated the 4th March, 2008, S.O. 865(E), dated the 11th April, 2008, S.O. 1894(E) dated the 31st July, 2008, S.O. 2728(E), dated the 25th November, 2008, S.O. 1356(E), dated the 27th May, 2009, S:O.1802 (E), dated 22nd July, 2009 and S.O. 2399(E), dated the 18th September, 2009 and S.O. 3122(E), dated the 7th December, 2009, S.O. 142(E), dated the 21st January, 2010, S.O. 619(E), 19th March, 2010.

Printed by the Manager, Government of India Press, Ring Road, Mayapuri, New Delhi-110064 and Published by the Controller of Publications, Delhi-110054.



# NABL **National Accreditation Board for Testing and Calibration Laboratories**

Department of Science & Technology, India

# **CERTIFICATE OF ACCREDITATION**

# **ANALYTICAL LABORATORY, DETOX CORPORATION PVT. LTD.**

has been assessed and accredited in accordance with the standard

# **ISO/IEC 17025:2005**

"General Requirements for the Competence of Testing & Calibration Laboratories"

# for its facilities at 3rd Floor, K.G. Chambers, Udhna Darwaja, Ring Road, Suraf

# in the field of CHEMICAL TESTING

(You may also visit NABL website www.nabl-india.org to view the scope of accreditation)

**Certificate Number** 

T-1635

**Issue Date** 

21/12/2011



20/12/2013 Valid Until

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the additional requirements of NABL.

Signed for and on behalf of NABL

Anuja Anand Convenor

Anil Relia Director

Dr T. Ramasami Chairman



Annexure 8 Environmental Statement - Form-V FORM – V (See Rule 14)

From :

## **Indian Oil Corporation Limited**

To, Gujarat Pollution Control Board Sector 10-A Gandhi Nagar – 382 043

## **ENVIRONMENTAL STATEMENT** for the financial year ending the 31<sup>st</sup> March 2013

## PART – A

(i)	Name and address of the owner/ occupier of the industry operation or process.	:	Hridesh Baindail Dy. General Manager (E&P) 7 <sup>th</sup> Floor, Indian Oil Bhavan No. 1, Sri Aurobindo Marg Yusuf Sarai, New Delhi – 110016
(ii)	Industry category Primary – (STC Code) Secondary – (STC Code)	:	Oil & Gas Exploration 13 131
(iii)	Production capacity Units	:	Nil (Exploratory Drilling)
(iv)	Year of establishment	:	1964
(v)	Date of the last Environmental Statement submitted	:	2 <sup>nd</sup> Environment statement (Project got EC on 16 <sup>th</sup> August 2011)

## PART – B

Water and Raw Material Consumption : Nil – Drilling activities started in first quarter of 2013-14.

 (1) Water Consumption m<sup>3</sup>/day Process Cooling

Domestic

	Process water consumption per unit of product output		
Name of Products	During the previous Financial	During the current Financial	
Name of Floudets	Year	Year	
	(1)	(2)	
Nil	Nil	Nil	

## (2) Raw Material Consumption : Nil

Name of raw materials	Name of Products	Consumption of raw r output During the previous Financial Year	naterials per unit of During the current Financial Year
Nil	Nil	Nil	Nil

Industry may use codes if disclosing of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

## PART – C Pollution discharged to environment / unit of output (Parameter as specified in the consent issued)

Pollutants	Quantity of pollutants discharged (mass/day)	Concentrationofpollutantsindischarges(mass/volume)	Percentageofvariationfromprescribed standardswith reasons
(a) Water	Nil	Nil	Nil
(b) Air	Nil	Nil	Nil

## PART – D HAZARDOUS WASTES

[As specified under Hazardous Wastes (Management and Handling) Rules, 1989]

	Total Quantity (Kg.)	
Hazardous Wastes	During the previous	During the current
	Financial Year	Financial Year
(a) From Process	Nil	Nil
(b) From pollution control facilities	Nil	Nil

## PART – E Solid Wastes

	Total Quantity (Kg.)	
Solid Wastes	During the previous	During the current
	Financial Year	Financial Year
(a) From Process		
	Nil	Nil
(b) From pollution control facilities	Nil	Nil
<ul><li>(c) (1) Quantity recycled or re- utilised within the unit</li><li>(2) Sold</li></ul>	Nil	Nil
(3) Disposed	Nil	Nil
	Nil	Nil

## PART - F

Please specify the characterisations (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Drilling activities are started in first quarter of 2013-14. No hazardous as well as solid wastes generated in the financial year 2012-13.

## PART – G

Impact of the pollution abatement measures taken on conservation of natural resources and or the cost of production

N/A as drilling activities started in first quarter of 2013-14.

## PART – H

Additional measures/investment proposal for environmental protection including abatement of pollution/prevention of pollution.

No activities during financial year 2012-13.

## PART – I

Any other particulars for improving the quality of the environment.

(Signature of a person carrying out an industry-operation or process)

Chamidais

Name : Hridesh Baindail

Designation : Dy. General Manager (E&P)

Address : 7<sup>th</sup> Floor, Indian Oil Bhavan No. 1, Sri Aurobindi Marg Yusuf Sarai New Delhi – 110 016

Page 4 of 4

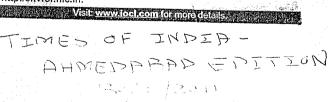


Annexure 9 Newspapers clips for EC copy

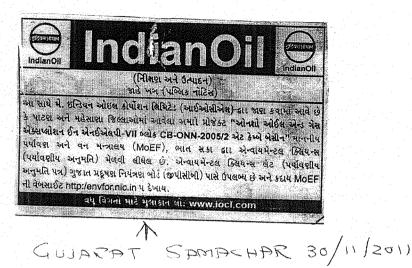




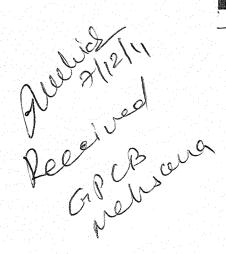
our project "Onshore Oil and Gas Exploration in NELP-VII Block CB-ONN-2005/2 at Cambay Basin" located at Patan and Mehsana Districts" has been accorded Environmental Clearance by Honourable Ministry of Environment and Forests (MoEF), Government of India. The copies of the environmental clearance letter are available with the Gujarat Pollution Control Board (GPCB) and may also be seen at MoEF Website at http:/envfor.nic.in.



And and a second









Annexure 10 Petroleum exploration License Grant of Petroleum Exploration Licence for the Block CB-ONN-2005/2 (NELP-VII), area measuring 77.68 Sq.Km, in Mehsana Dist.

## Government of Gujarat, Energy & Petrochemicals Department, No. PEL-10-2009-101-E, Sachivalaya, Gandhinagar. Dated the **2** 2 SEP 2009

# Read: (1) IOCL Letter No:E&P/CO/51 dated 05.01.09,

## (2) Ministry of Petroleum and Natural Gas letter No. 0-19018/12/2008-ONG.I dated 01.12.2008

## <u>ORDER:</u>

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 the IOCL 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 77.68 Sq.Km. for the Block CB-ONN-2005/2 (NELP-VII) in Mehsana Dist. (enclosed PEL map and list latitude-longitude).

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

(a) If any minerals are found during the exploration work, the IOCL should bring them to the notice of State Government with full particulars available with them.

(b) The IOCL has deposited security deposit prescribed in Rule 13 of the Petroleum & Natural Gas Rules, 1959. The IOCL 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. i	Dated 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.	08-01-2009	Rs.29,050/-	0853, Mines & Minerals, (e) Mineral Concession fee and royalty. Receipts under Petroleum & Natural gas Rules, 1959.

(c) The IOCL shall immediately on demand submit to the State Government and the Director of Petroleum confidentially a full report of the Geological 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. 5555

(d) The IOCL 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 thereunder 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 VA/VP 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.

- 5 -

- (13) Security to its employees both at the project sites and en-route in insurgency-effected areas will be the responsibility of the Licensee.
- (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 & intact.
- (24) No work shall be carried out as to damage public interest in any form.
- (25) No existing infrastructure (Private & Public), underground utility and human beings to be harmed.
- (26) Licensee shall execute a separate lease deed in respect of such other covenants, terms and conditions as per the prescribed format.
- (27) Infringement of any one or more of the conditions enumerated above shall automatically render this PEL null and void abintio.

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

forw

(K.H. Chorera) Under Secretary to Government, Energy and Petrochemicals Department.

Τo,

-

- The District Collector, Dist.Mehsana
- 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.

- 6 -

		Latitude		Longitude			
Points	Degree	Minutes	Seconds	Degree	Minutes	Seconds	
<u>A</u>	23	44	26.6	72	3	50.6	
<u> </u>	23	44	36.42	72	8	53.76	
С	23	43	33	72	9	35	
D	23	43	24.73	72	9	13.91	
W	23	42	43.94	72	7	34.4	
<u> </u>	23	43	29.91	72	7	12.85	
Y	23	43	14.05	72	5	57.31	
Z	23	42	16.42	72	6	26.184	
F	23	41	38.3	72	4	54.21	
Α	23	44	26.6	72	3	50.6	

## Co-ordinates of CB-ONN-2005/2 Part A Granted

., ,

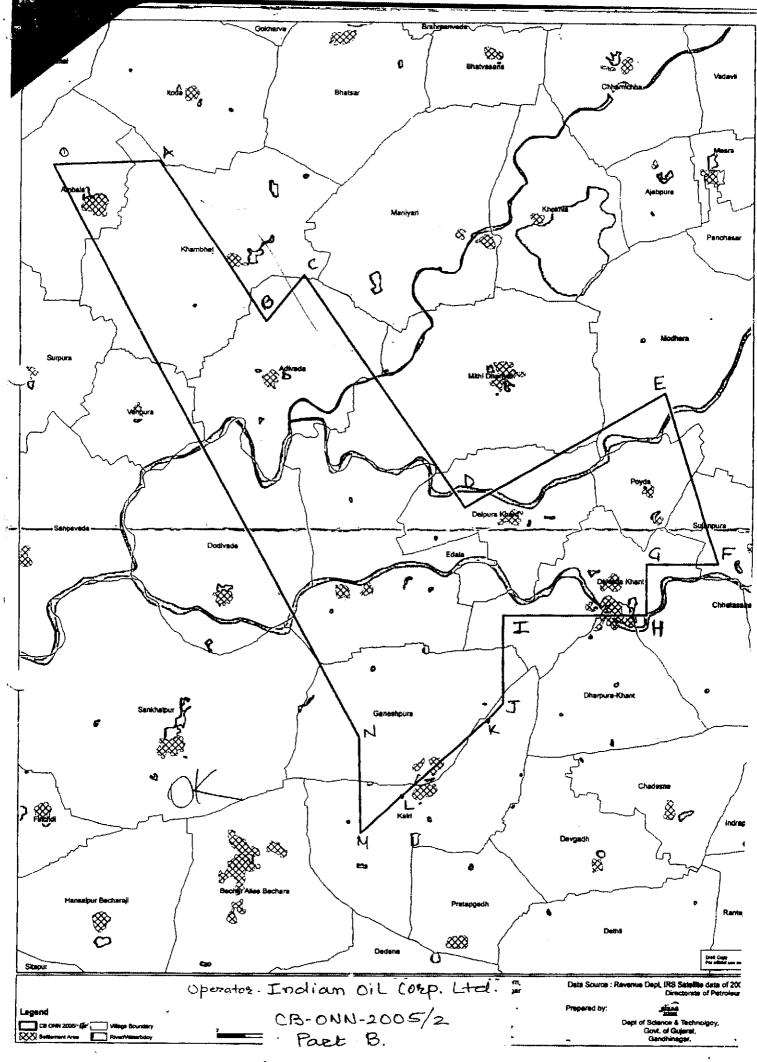
# Co-ordinates of CB-ONN-2005/2 Part A Excluded

	Latitude		Longitude			
Points	Degree	Minutes	Seconds	Degree	Minutes	Seconds
W	23	42	43.94	72	7	34.4
<u> </u>	23	43	29.91	72	7	12.85
Y	23	43	14.05	72	5	57.31
Z	23	42	16.42	72	6	26.184
E	23	42	30	72	7	0
W	23	42	43.94	72	7	34.4

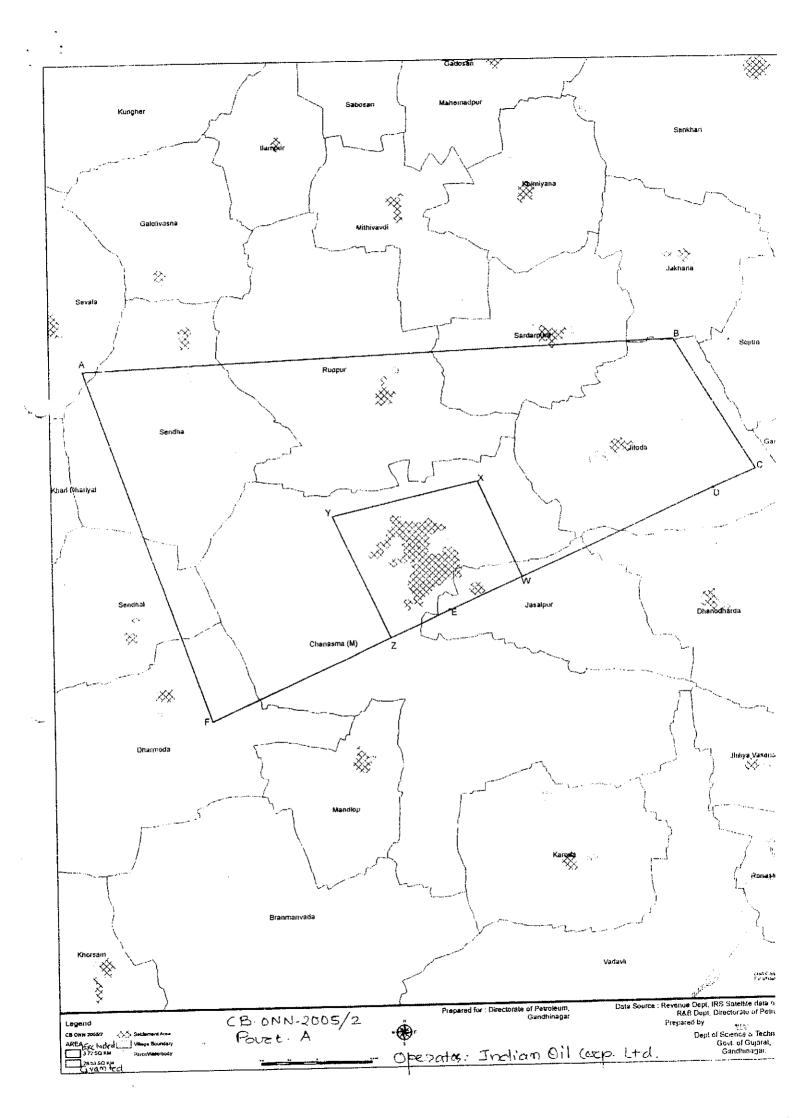
## Co-ordinates of CB-ONN-2005/2 Part B Granted

·····	Latitude			Longitude		
Points	Degree	Minutes	Seconds	Degree	Minutes	Seconds
A	23	37	2.5	72	1	45
B	23	35	26	72	2	54.36
С	23	35	53.65	72	3	18.73
D	23	33	34.63	72	5	2.34
E	23	34	42.92	72	7	12.3
F	23	33	0	72	7	47.2
G	23	33	0	72	7	0
Н	23	32	30	72	7	0
<u> </u>	23	32	30	72	5	27
J	23	31	38	72	5	27
<u> </u>	23	31	31	72	5	20
L	23	30	40.3	72	4	19.1
M	23	30	20	72	3	55
<u>N</u>	23	31	18	72	3	54
0	23	37	0	72	0	34
A	23	37	2.5	72	1	45

Total Area Granted for PEL 77.68 Sq Kms.



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Annexure 11 Environmental Clearance copy

F. No. J-11011/255/2010- IA II (I) Government of India Ministry of Environment and Forests (I.A. Division)

> Paryavaran Bhawan M(EW) - A.S. jar CGO Complex, Lodhi Road

KW 23/8/2011

E-mail : pb.rastogi@nic.in Telefax : 011: 2436 7668 Dated 16<sup>th</sup> August, 2011

Shri Hridesh Baindail, Chief Manager (E&P) M/s Indian Oil Corporation Limited 7th Floor, Indian Oil Bhavan Sri Aurobindo Marg, Yusuf Sarai New Delhi- 110 016

E-mail : baindailH@indianoil.co.in; Fax: 91-11-126512611

Subject: Drilling Activities (5 Wells) for On-Shore Oil and Gas Exploration in NELP-VII Block-CB-ONN-2005/2 at Cambay Basin, Mehsana & Patan, Gujarat by M/s Indian Oil Corporation Ltd. - Environmental Clearance reg. Ref. :

Your letter no. E&P/CO/162 dated 24th March, 2011.

Sir,

To.

Kindly refer your letter dated 24<sup>th</sup> March, 2011 alongwith project documents including Form I, Terms of References, Pre-feasibility Report, EIA/EMP Report alongwith Public Hearing Report regarding above mentioned project.

2.0 The Ministry of Environment & Forests has examined your application. It is noted that proposal is for drilling activities (5 wells) for on-shore oil and gas exploration in NELP-VII Block-CB-ONN-2005/2 at Cambay Basin, Mehsana & Patan, Gujarat by M/s Indian Oil Corporation Ltd. Production Sharing Contract (PSC) is signed between GOI and IOCL on 22<sup>nd</sup> December, 2008 and Petroleum Exploration License (PEL) in September, 2009 is also issued by the Government of Gujarat. Project will involve drilling of 4 exploration wells at 3,400 m depth in Phase-I and 1 exploration well at 3,400 m depth in Phase-II within licensed area of 77.68 sq. km. (i.e. 28.68 Km<sup>2</sup> Patan District & Mahesana District 49.00 Sq. Km). 120 mx100 m lease area will be required for each well. No land will be acquired for temporary drilling activities during exploratory phase. No forest land, wild life, coastal areas are involved. No Reserve forests exist within the entire block boundary. No eco-sensitive areas are located in the block. Wetland at village Maniary (3.9 km, S) is located within 10 kms. Total project cost for 5 wells is Rs. 170.00 Crores. Following are the coordinates of the block of Cambay Basin (CB-ONN-2005/2):

PART-A		1. A.A	PART-B	
LATITUDE	LONGITUDE	POINT	LATITUDE	LONGITUDE
23 <sup>°</sup> 44'26.6"	72 <sup>0</sup> 03'50,6"	Α	23°37'2.50"	72 <sup>°</sup> 01'45.00"
23 <sup>0</sup> 44'36.42"	72 <sup>0</sup> 08'53.76"	В	23 <sup>0</sup> 35'26.0"	72 <sup>°</sup> .2'54.36"
23°43'33.00"	72 <sup>0</sup> 09'35.00"	С	23 <sup>0</sup> 35'53.65"	72 <sup>0</sup> 03'18.73"
23 <sup>°</sup> 43'24.73"	72 <sup>0</sup> 09'13.91"	<b>D</b>	23 <sup>0</sup> 33'34.63"	72 <sup>0</sup> 05'02.34"
23 <sup>0</sup> 42'43.94"	72 <sup>0</sup> 07'34.4"	E	23 <sup>0</sup> 34'42.92"	72 <sup>0</sup> 07'12.30"
23 <sup>0</sup> 43'29.91"	72 <sup>0</sup> 07'12.85"	F	23 <sup>0</sup> 33'00.00"	72 <sup>0</sup> 07'47.20"
23°43'14.05"	72 <sup>0</sup> 05'57.31"	G	23 <sup>0</sup> 33'00.00"	72 <sup>0</sup> 07'00.00"
23 <sup>°</sup> 42'16.42"	72 <sup>0</sup> 06'26.18"	H	23 <sup>0</sup> 32'30.00"	72°07,'00.00"
	LATITUDE 23°44'26.6" 23°44'36.42" 23°43'33.00" 23°43'24.73" 23°43'24.73" 23°43'29.91" 23°43'14.05"	LATITUDE         LONGITUDE           23°44'26.6"         72°03'50.6"           23°44'36.42"         72°08'53.76"           23°43'33.00"         72°09'35.00"           23°43'24.73"         72°09'13.91"           23°42'43.94"         72°07'34.4"           23°43'29.91"         72°07'12.85"           23°43'14.05"         72°05'57.31"	LATITUDE         LONGITUDE         POINT           23°44'26.6"         72°03'50.6"         A           23°44'36.42"         72°08'53.76"         B           23°43'33.00"         72°09'35.00"         C           23°43'24.73"         72°09'35.00"         C           23°42'43.94"         72°09'13.91"         D           23°43'29.91"         72°07'34.4"         E           23°43'14.05"         72°05'57.31"         G	LATITUDELONGITUDEPOINTLATITUDE23°44'26.6"72°03'50.6"A23°37'2.50"23°44'36.42"72°08'53.76"B23°35'26.0"23°43'33.00"72°09'35.00"C23°35'53.65"23°43'24.73"72°09'13.91"D23°33'34.63"23°42'43.94"72°07'34.4"E23°34'42.92"23°43'29.91"72°07'12.85"F23°33'00.00"23°43'14.05"72°05'57.31"G23°33'00.00"

1

23 <sup>0</sup> 41''38.30"	72°04'54.21"	<u> </u>	23°32'30.00"	72 <sup>0</sup> 05'27.00"
23 41 30.30	12 04 34.21		23°31'38.00"	72°05'27.00"
		К	23 <sup>0</sup> 31'31.00"	72 <sup>0</sup> 05'20.00"

3.0 Air emissions from D.G. sets will be controlled by providing adequate stack height. Gas production during testing will be flared. Water requirement from the Narmada Canal/Ponds/ ground water source will be 40 m<sup>3</sup>/day/well. The wastewater generated will be collected in the waste water storage pits and will be recycled and reused. Water Based Drilling Mud will be used for drilling of wells. Drill cuttings and Drilling mud (800 MT each well) will be stored in HDPE lined pit. Drill cuttings will be treated and disposed as per CPCB guidelines. Domestic sewage will be treated in modular sewage treatment plant (STP). Waste/used oil will be sold to authorized recyclers / re-processors.

4.0 The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 12<sup>th</sup> & 24<sup>th</sup> meetings held during 15<sup>th</sup>-16<sup>th</sup> July, 2010 and 22<sup>nd</sup> – 23<sup>rd</sup> June, 2011 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 centre level.

6.0 Public hearing was held on 29<sup>th</sup> January, 2011.

7.0 The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006 subject to strict compliance of the following specific and general conditions:

### A. SPECIFIC CONDITIONS :

i.

Gas produced during testing shall be flared with appropriate flaring booms.

- ii. 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.
- iii. Ambient air quality shall be monitored near the closest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 for PM<sub>10</sub>, PM<sub>25</sub>, SO<sub>2</sub>, NO<sub>X</sub>, CO, CH<sub>4</sub>, HC, Non-methane HC etc.
- iv. Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.
- v. Approach road shall be made pucca to minimize generation of suspended dust.
- vi. 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.
- vii. Total water requirement shall not exceed 40 m<sup>3</sup>/day and prior permission shall be obtained from the concerned agency.
- viii. 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.

- ix. 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.
  - Good sanitation facility should be provided at the drilling site. As proposed, domestic sewage shall be disposed off through modular STP.

х.

- xi. Oil spillage scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- xii. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30<sup>th</sup> August, 2005.
- xiii. The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- xiv. The company shall develop a contingency plan for  $H_2S$  release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal  $H_2S$  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. Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.
- xx. In case the commercial viability of the project is established, the Company shall prepare a detailed plan for development of oil and gas fields and obtain fresh environmental clearance from the Ministry.

- xxi. 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.
- xxii. 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.
- xxiii. Company shall ensure good housekeeping at the drilling site.
- xxiv. Company shall prepare project specific environmental manual and a copy shall be made available at the drilling site for the compliance.
- xxv. Company shall adopt Corporate Environment Policy as per the Ministry's O.M. No. J-11013/41/2006-IA.II(I) dated 26<sup>th</sup> April, 2011 and implemented.

### B. GENERAL CONDITIONS:

i.

- 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 (daytime) and 70 dBA (nighttime).
- 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, 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.
- vii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the GPCB. The criteria pollutant levels namely; PM<sub>10</sub>, SO<sub>2</sub>, NOx, HC (Methane & Non-methane), VOCs (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

- viji. 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.
- 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.
- The Project Proponent shall inform the public that the project has been accorded Х. 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.

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

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

The above conditions shall be enforced, inter-alia under the provisions of the Water 10.0 (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules

(Dr. P. B. Rastogi) Director

Copy to:

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

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7. Guard File/Monitoring File/Record File.

(Dr. P. B. Rastogi)

Director



Annexure 12 Consent to Establish copy



## 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"(NOC)

CTE NO. 46340

13/4/2012

NO: GPCB/ID .36739 /CCA//MH- 536/ 109640

TO.

M/s, INDIAN OIL CORPORATION | TD On shore oil and gas exploration.

- CB-ONN-2005/2, CB-ONN-2005/2 (PART-B)-384 210.
- TA.BECHARAJI.

DIST. MEHSANA

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

REF: Your application No. 52534 dated. 21/12/11

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 DRILLING OF EXPLORATORY WELL situated at location (1) at WELL NO. IOCB-03, , Adiwada-Khambhel Road, Vill. Khambhel, Ta. Becharali, Dist. Mehsana and location (2) at WELL NO. IOCB-4, Kairi-Delpura Road, VIII. Kairi, Ta Becharaji, Dist. Mehsana . The Validity period of the order will be Five years i.e. up to 20/12/2016.

#### SPECIFIC CONDITIONS :-

- 1. Unit shall comply all conditions mentioned in environmental clearance issued by MOEF vide its letter F.NO. J - 11011 /255/2010 IA U (I), dated 16/08/2011 .
- 2. In case of spillage / leakage of Oil, Bjoremediation shall be carried out
- 3. In case of any spillages / leakages on land site, restoration job shall be carried out immediately.
- Frequent inspection and monitoring of oil carrying spipeline shall be carried out to final out any leakage.
- In case of any leakages / spillages, Environment damage study shall be carried out.

#### CONDITIONS UNDER WATER ACT 1974:

- 1. The quantity of the industrial effluent to be generated from the manufacturing process and other ancillary industrial operations shall not exceed 17, 000 lits/day.
- 2. The quantity of the industrial effluent discharged from the manufacturing process and other ancillary operations shall be Nil as the entire generated effluent shall be collected in HDPE lined & impervious pit for solar evaporation.
- The quantity of the domestic waste water (sewage) shall not exceed 1,500 lits/day.
- Sewage shall be disposed of through septic tank/soak pit system.

The Har-Clean Gujarat Green Gujarat

dppcctegrant 3/15/2012

#### CONDITIONS UNDER AIR ACT 1981:

The following shall be used as fuel in D.G.Set.

Sr. No.	Fuel	Quantity	
1	DIESEL	6.0	9
		KL/DAY	

- 6. The applicant shall install & operate air pollution control system in order to achieve norms prescribed below.
- 7. The flue gas emission through stack shall contain to the following standards:

Sr. No.	Stack attached to	Stack Height in str	Peramotors	Permissible limit
1	D. G. Set (500 KVA)	11	Particulate matter	150 mg/NM <sup>3</sup> 100 ppm
	(2 NOS.)	Sec. 12	NO,	50 ppm

- There shall be no process emission from the manufacturing process and other ancillary emission.
- Stack monitoring facilities like port hold, platform/ladder etc., shall be provided with stacks/ vents chinney in order to facilitate sampling of gases being emitted into the atmosphere.
- Ambient air quality within the premises of the industry shall conform to the following standards :-

PARAMETERS	PERMISSIBLE LIMIT				
	Annos	24 Hrs Average			
Particulate Matter-10 (PM 10)	60 Microgram/M <sup>3</sup>	100 Microgram/M <sup>3</sup>			
Particulate Matter- 2.5 (PM 25)	40 Misrogram/M <sup>3</sup>	60 Microgram/M <sup>3</sup>			
SO <sub>2</sub>	50 Microgram/M <sup>3</sup>	80 Microgram/M <sup>3</sup>			
NOx	40 Microgram/M <sup>e</sup>	80 Microgram/M <sup>3</sup>			
Hydrocarbon		160 Microgram/M <sup>3</sup>			

 All measures for the control of environmental pollution shall be provided before commencing production.

#### CONDITIONS UNDER HAZARDOUS WASTE :

- The unit shall comply the MoEF guideline GSR 549(E) dated 30/8/2005 for disposal of drill cutting waste and other solid waste generated during drilling / cutting activity
- 12.1 Applicant shall have to comply with provisions of Hazardous Waste (Management, Handling & Trans boundary movement) Rule;2008.
  - 12.2 The applicant shall obtain membership of common TSDF site for disposal of Hazardous. Waste as categorized in Hazardous Waste (Management, Handling & trans boundary movement) Rule 2008.

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- 12.3 The applicant shall obtain membership of common Hazardous. Waste incinerator for I of incinerable waste.
- 12.4 The applicant shall provide temporary storage facilities for each type of Hazardous. Waste as per Hazardous Waste (Management, Handling & Trans boundary movement) Rule-2008.

#### GENERAL CONDITION :

- 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.
- 14. 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 harre and address of the new owners/ partners/ directors/proprietor should immediately be intimated to the Board.
- 16. The applicant shall however, not without the prior consent 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.
- 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)

- 18 Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.
- If it is established by any competent authority that the damage is caused due to their industrial activities to any person, or his pipperty in that case they are obliged to pay the compensation as determined by the competent authority.
- The applicant shall not carried out any activities or projects listed in schedule of the new EIA Notification dated 14/09/06 requiring prior Environment Clearance.

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For and on behalf of GUJARAT POLLUTION CONTROL BOARD

> (T.B.SHAH) ENVIRONMENTAL ENGINEER

> > dopecteorant 3/15/2012

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

PARYAVARAN BHAVAN

Sector 10-A, Gandhinagar 382010

Phone : (079) 23226295 Fax : (079) 23232156 website : www.gpcb.gov.in

"Consent to Establish"(CTE)

CTE NO. 46673

NO: GPCB/CCA/PTN-74/ID 36745/ 111620

3+ 815/2012

TO, M/S I.O.C. LTD EXPLORATORY WELL, NEAR CHANSMA VILLAGE- 384220, TAL: CHANASMA DIST-PATAN

> SUB: Consent to Establish (CTE) under Section 25 of Water Act 1974 and Section 21 of Air Act 1981 REF: Your application No.52536 dated. 21/12/2011

Sir,

Without prejudice to the powers of this Board under the Water (Prevention and Controio for 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 DRILLING OF EXPLORATORY WELL situated at location-1) IOC-CB-05-02-C\_SARDARPURA/GASTADANA, TACHANASMA, DIS: PATAN 2) IOC-CB-05-02-D,RUPPURA/SEDHAL, Ta: CHANASMA DIS:PATAN for the manufacturing of the following items. The Validity period of the order will be Five years it.e. up to20/12/2016

#### SPECIFIC CONDITION:

- 1. You shall obtained amendment from the MOEF regarding the Latitude & Longitude of both the wells.
- Unit shall comply all the conditions mentioned the environmental clearance issued by MOEF vide its letter F.No.J-11011/255/2010 IA II (I) dated 16/8/2011.
- 3. In case of any spilage/leakage of Oil, Bjoremadiation shall be carried out.
- 4. In case of any spilage/leakage on land site, restoration job shall be carried out immediately.
- 5. Frequent inspection and monitoring of oil carrying pipeline shall be carried out to final out any leakage.
- 6. In case of any leakages/spilages, Environment damage study shall be carried out.

#### CONDITIONS UNDER WATER ACT 1974:

- The quantity of the industrial effluent to be generated from the manufacturing process and other ancillary industrial operations shall not exceed 6200 Lit/day.
- The quantity of the industrial effluent discharged from the manufacturing process and other ancillary
  operations shall be Nill as the entire generated effluent shall be collected in HDPE lined & impervious pit for
  solar evaporation.
- 3. The quantity of the domestic waste water (sewage) shall not exceed 1500 lit/day.
- 4. Sewage shall be disposed of through septic tank/soak pit system.

#### CONDITIONS UNDER AIR ACT 1981:

5. The following shall be used as fuel in Hot Air Generator & Dg set.

Sr.No.	Fuel	Quantity	
1	Diesel	6.0 KL/Day	

 The applicant shall install & operate air pollution control system in order to achieve norms prescribed below.

## <sup>8</sup>Clean Gujarat Green Gujarat

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



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

PARYAVARAN BHAVAN

Sector 10-A, Gandhinagar 382010

Phone : (079) 23226295 Fax : (079) 23232156

7. The flue gas emission through stack shall conform to the following standards www.gpcb.gov.in

Stack No.	Stack attached to	Stack height in Meter	Air Pollution Control	Parameter	Permissible Limit
			Measures	1	
1.	D.G.Set stand by (500 KVA) (2 Nos)	11		Particulate Matter	150 mg/NM <sup>3</sup>
				SO <sub>2</sub>	100 ppm
				NOx	50 ppm

- 8. There shall be no process emission from the manufacturing process and other ancillary operation.
- 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.
- 10. Ambient air quality within the premises of the industry shall conform to the following standards:-

PARAMETERS	PERMISSIBLE LIMIT			
	Annual			24 Hrs Average
Particulate Matter-10 (PM 10)		60	Microgram/M <sup>3</sup>	100 Microgram/M <sup>3</sup>
Particulate Matter- 2.5 (PM 2.5 )		40	Microgram/M <sup>3</sup>	60 Microgram/M <sup>3</sup>
SO <sub>2</sub>		50	Microgram/M <sup>3</sup>	80 Microgram/M <sup>3</sup>
NO <sub>x</sub>		40	Microgram/M <sup>3</sup>	80 Microgram/M <sup>3</sup>

 All measures for the control of environmental pollution shall be provided before commencing production.

#### CONDITIONS UNDER HAZARDOUS WASTE :

- The unit shall comply the MOEF guideline GSR 549(E) dated 30/8/2005 for disposal of drill cutting waste and other solid waste generated during drilling/cutting activity.
- 12.1 Applicant shall have to comply with provisions of Hazardous waste (Management, Handling & Trans boundary movement)Rule-2008.
- 12.2 The applicant shall obtain membership of common TSDF site for disposal of Hazardous, waste as categorized in Hazardous waste (Management, Handling & Trans boundary movement)Rule-2008.
- 12.3 The applicant shall obtain membership of common Hazardous waste incinerator for I of incinerable waste.
- 12.4 The applicant shall provide temporary storage facilities for each type of Hazardous waste as per Hazardous waste (Management, Handling & Trans boundary movement)Rule-2008.

#### **GENERAL CONDITION:**

- 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.
- 14. 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.
- 16. The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gaseous emission or sewage waste from the

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#### GUJARAT POLLUTION CONTROL BOARD PARYAVABAN BHAVAN

PARTAVARAN BHAVAN

Sector 10-A, Gandhinagar 382010

Phone : (079) 23226295 Fax : (079) 23232156 website : www.gpcb.gov.in

proposed industrial glant. 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.

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

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

- Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.
- 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 competent authority.
- The applicant shall not carry out any activities or projects listed in schedule of the new EIA Notification dated 14/09/06 requiring prior Environment Clearance.

For and on behalf of GUJARAT POLLUTION CONTROL BOARD

ENVIRONMENTAL ENGINEER

### Clean Gujarat Green Gujarat

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