

	Conditions	Compliance
Sl. No.	SPECIFIC CONDITIONS	
1.	Gas produced during testing shall be flared with appropriate flaring booms.	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.	Complied.  Regular Monthly Ambient Air Quality is carried out at IOC-Khambel-1 and the data are attached as <b>Annexure-1</b> .  For remaining wells, Drilling activities are scheduled to start in 2nd quarter of 2013-14 and accordingly monitoring plan shall be commenced.
4.	Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.	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 is 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 <sup>3</sup> /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 <b>Annexure-4.</b> 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.	Noted. Adequate measures will be taken to comply with the guidelines.
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 <b>Annexure-5</b> .



Sl. No.	GENERAL CONDITIONS	
51. 110.	GENERAL CONDITIONS	
1.	The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any other statutory authority.	Needful will be done as per the guidelines provided by the Gujarat Pollution Control Board (GPCB), State Government and any other authority.
2.	No further expansion or modification in the project shall be carried out without prior approval of the Ministry of 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.	Ministry of Environment & Forests will be informed and prior approval 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.	Monitoring from MoEF approved lab (Detox Corporation) is being carried out as per site requirement. Details in this regard is attached as <b>Annexure-7.</b>



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 <sub>10</sub> , SO <sub>2</sub> , NO <sub>X</sub> , 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





D-#				ABIENT AIR SAMPLI	THUNE TOIS KEI OF				
ret	erence No.			'ARAM/13/665A					
	ent Name & A	ddress.	Indian oil Corporation Ltd., Indian Oil Bhavan, 1 , Shri Aurobindo Amrg , 7 <sup>th</sup> floor, Yusuf sarai, New Delhi- 110016						
Тур	e of Sample:		Ambient Air N	Monitoring for PM	10, PM <sub>2.5,</sub> , SO <sub>2</sub> , NO	x , O3, NH3, HC, NMHC, CO &	lead		
Pac	king & Seal :					us Solution in Bottles & air san			
Sam	pling Procedu	ire:				client's monitoring requireme			
			for Dust and 2	4-Hour for Gases.	emies and as per	client's monitoring requireme	ents- 24-Hour		
Clie	nt's Reference		= -						
posil Grou	ple Location & tion(GL or heig and level)	tht from	Height from G						
	of Sampling:		23/10/12 Period of Sampling			24 HRS.			
Repr	esentatives Pre	esent:	Lab: Mr. Sunil Client: Mr. Santanu Samanata						
Moni	itoring Equipm	ent Details	Respirable Dus Calibration Da	Respirable Dust Sampler- APM 460 BL - 411 & Fine Particulate Attachment Calibration Date: 23/02/2012, Due Date: 22/02/2013					
	TEST	UNIT	Paculla Las III						
Sr.	1531	Oldi	1	Results-Location	ns				
No.			L1- Khambel	L2- Adivada	L3- Near Company's	TEST METHOD	Permissible limits		
No.	PM <sub>10</sub>	µg/m³	Khambel 93	L2- Adivada	L3- Near		limits		
No.	PM10 PM2.5	µg/m³	93 71	L2- Adivada 60 21	L3- Near Company's main Office	IS:5182 (P-23) 2006	limits 100.0		
No.  1. 2. 3.	PM <sub>10</sub> PM <sub>2.5</sub> SO <sub>2</sub>	µg/m³ µg/m³ µg/m³	93 71 4.83	60 21 5.52	L3- Near Company's main Office	IS:5182 (P-23) 2006 Fine Particulate Sampler	100.0 60.0		
No.  1. 2. 3. 4.	PM <sub>10</sub> PM <sub>2.5</sub> SO <sub>2</sub> NO <sub>x</sub>	µg/m³ µg/m³ µg/m³	93 71 4.83 10.85	60 21 5.52	L3- Near Company's main Office 99	IS:5182 (P-23) 2006 Fine Particulate Sampler IS: 5182 (P-2) 2001	100.0 60.0 80.0		
No.  1. 2. 3. 4. 5.	PM <sub>10</sub> PM <sub>2.5</sub> SO <sub>2</sub>	µg/m³ µg/m³ µg/m³	93 71 4.83	60 21 5.52	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-6) 2006	100.0 60.0 80.0 80.0		
No.  1. 2. 3. 4. 5. 6.	PM10 PM2.5 SO2 NOx Ozone Ammonia	рд/m <sup>3</sup> рд/m <sup>3</sup> рд/m <sup>3</sup> рд/m <sup>3</sup> рд/m <sup>3</sup>	93 71 4.83 10.85	60 21 5.52	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-6) 2006 IS: 5182( P-9) 1974 Method by James	100.0 60.0 80.0		
No.  1. 2. 3. 4. 5. 6.	PM10 PM2.5 SO2 NOx Ozone Ammonia	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>	93 71 4.83 10.85 4.42	60 21 5.52 11.30 8.60	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-6) 2006 IS: 5182 (P-9) 1974 Method by James Lodge	100.0 60.0 80.0 80.0 100.0 400.0		
No.  1. 2. 3. 4. 5. 6.	PM10 PM2.5 SO2 NOx Ozone Ammonia HC NMHC	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>	93 71 4.83 10.85 4.42 5.05	60 21 5.52 11.30 8.60	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-6) 2006 IS: 5182( P-9) 1974 Method by James Lodge GC Method	100.0 60.0 80.0 80.0 100.0 400.0		
No.  1. 2. 3. 4. 5. 6.	PM10 PM2.5 SO2 NOx Ozone Ammonia	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>	93 71 4.83 10.85 4.42 5.05 ND	60 21 5.52 11.30 8.60 6.20	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-6) 2006 IS: 5182 (P-9) 1974 Method by James Lodge	100.0 60.0 80.0 80.0 100.0 400.0		

Place: Surat

For Detox Corporation Pvt. Ltd

Date:18/11/12

Note:

(1) The results pertain to tested items only.

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O ST	AMBIEN1	AIR SAMPLE ANALYSIS REPO				
Reference No.	DCPL/IOCL /ARAN	M/13/761A	Corporation Pvt. Ltd			
Client Name & Address.	Indian oil Corporal Indian Oil Bhavan, 1 , Shri Aurobindo / Yusuf sarai, New Delhi- 110016	Amrg , 7 <sup>th</sup> floor,				
Type of Sample:	Ambient Air Monito	oring for PM <sub>10</sub> , PM <sub>2.5</sub> , , SO <sub>2</sub> , N	O <sub>x</sub> , O <sub>3</sub> , NH <sub>3</sub> , HC, NMHC, CO & lead			
Packing & Seal :	Filter Paper packed in plastic envelopes , Gaseous Solution in Bottles & air sample in bladder					
Sampling Procedure:	IS: 5182 (P-14) 2000 for Dust and 24-Ho	CONTRACTOR OF THE CONTRACTOR O	er client's monitoring requirements- 24-Hour			
Client's Reference:						
Sample Location & position(GL or height from Ground level)	L1- Khambel L2- Adivada L3 – Near Compan Height from Groun					
Date of Sampling:	20/11/12	Period of Sampling	24 HRS.			
Representatives Present:	Lab: Mr. Sunil		Client: Mr. Santanu Samanata			
Monitoring Equipment Details	A STATE OF THE PARTY OF THE PAR	Respirable Dust Sampler- APM 460 BL - 411 & Fine Particulate Attachment Calibration Date: 23/02/2012, Due Date: 22/02/2013				

			Calibration Da	ie . 23/02/2012, D	ue Dale . 22/02/20	13	
Sr.	TEST	UNIT		Results- Location			
No.			L1- Khambel	L2- Adivada	L3- Near Company's main Office	TEST METHOD	Permissible limits
1.	PM10	µg/m³	89	48	79	IS:5182 (P-23) 2006	100.0
2.	PM <sub>2.5</sub>	µg/m³	60	18	54	Fine Particulate Sampler	60.0
3.	SO <sub>2</sub>	µg/m³	6.71	5.23	7.31	IS: 5182 (P-2) 2001	80.0
4.	NOx	µg/m³	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/m³	ND	ND	ND	GC Method	NS
8.	NMHC	μg/m³	ND	ND	ND	GC Method	NS
9.	СО	mg/m <sup>3</sup>	0.432	0.459	0.610	GC Method	4.0
10.	Lead	μg/m <sup>3</sup>	ND	ND	ND	IS: 5182(P-22) 2004	1.0

ND: Not Detected; NS: Not Specified

Place: Surat

For Detox Corporation Pvt. Ltd

Date:05/12/12

Note:

(1) The results pertain to tested items only.

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Rev./ Date 02/04 04 200

(Autho. Signatory)

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Phone: 91 - 261 - 2351248, 2346181, Fax: 2354068 E-Mail: info@detoxcorp.com, www.detoxcorp.com



00	C ST		AM	BIENT AIR	SAMPLE A	NALYSIS REPOR			
Refere	ence No.		DCPL/IOCL /	ARAM/13	/774A		Corporation	Pvt. Ltd	
Client	Name & Ado	tress.	Indian oil Corporation Ltd., Indian Oil Bhavan, 1 , Shri Aurobindo Amrg , 7 <sup>th</sup> floor, Yusuf sarai, New Delhi- 110016						
Туре	of Sample:		Ambient Air M	Nonitoring	for PM <sub>10</sub> ,	PM <sub>2.5.</sub> , SO <sub>2</sub> , NO <sub>3</sub>	$_{c}$ , O <sub>3</sub> , NH <sub>3</sub> , HC, NMHC, CO & le	ad	
Packir	ng & Seal :		Filter Paper po bladder	acked in p	olastic env	elopes , Gaseo	us Solution in Bottles & air samp	le in	
Sampl	ling Procedure	e:	IS: 5182 (P-14) for Dust and 2			nes and as per	client's monitoring requiremen	ts- 24-Hour	
Client	's Reference:		-						
positio	le Location & on(GL or heigh d level)	nt from	L1- Khambel L2- Adivada L3 - Near Company's main Office Height from Ground level- 3 Meters						
Date o	of Sampling:		18/12/12 Period of Sc			9505	24 HRS.		
Repre	sentatives Pre	sent:	Lab: Mr. Sunil Client			nt: Mr. Santanu Samanata			
Monito	oring Equipme	ent Details				BL - 411 & Fine e Date : 22/02/2	Particulate Attachment 2013		
Sr.	TEST	UNIT		Results-	- Locations				
No.			L1- Khambel		2- /ada	L3- Near Company's main Office	TEST METHOD	Permissibl e limits	
1.	PM <sub>10</sub>	μg/m³	82	5	50	95	IS:5182 (P-23) 2006	100.0	
2.	PM <sub>2.5</sub>	μg/m³	50		26	49	Fine Particulate Sampler	60.0	
3.	SO <sub>2</sub>	μg/m³	4.44		41	5.28	IS: 5182 (P-2) 2001	0.08	
4.	NOx	μg/m³	12.01		.74	16.16	IS: 5182 (P-6) 2006	0.08	
5.	Ozone	μg/m³	9.81		97	10.18	IS: 5182( P-9) 1974	100.0	
6.	Ammonia	µg/m³	2.95	6.	30	4.09	Method by James Lodge	400.0	

ND: Not Detected; NS: Not Specified

 $\mu g/m^3$ 

 $\mu g/m^3$ 

mg/m<sup>3</sup>

µg/m³

Place: Surat

For Detox Corporation Pvt. Ltd

IS: 5182(P-22) 2004

GC Method

GC Method

GC Method

Date:30/12/12

(Autho. Signatory)

NS

NS

4.0

1.0

#### Note:

HC

**NMHC** 

CO

Lead

7.

9.

10.

(1) The results pertain to tested items only.

ND

ND

0.439

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ND

ND

0.461

ND

ND

ND

0.581

ND

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Rev./ Date 02/04-04-2009

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AMBIENT AIR SAMPLE ANALYSIS REPO

Refe	ence No.		DCPL/IOCL /ARAM/13/849A Corporation Pvt. Ltd						
4	† Name & Ac	ldress.	Indian oil Corporation Ltd., Indian Oil Bhavan, 1 , Shri Aurobindo Amrg , 7 <sup>th</sup> floor, Yusuf sarai, New Delhi- 110016						
Туре	of Sample:				r PM10, P	M <sub>2.5.</sub> , SO <sub>2</sub> , NO <sub>x</sub> ,	O <sub>3</sub> , NH <sub>3</sub> , HC, NMHC, CO & lea	d	
	ing & Seal :		Filter Paper pad bladder	cked in pla	stic enve	lopes , Gaseous	Solution in Bottles & air sample	in	
Samp	oling Procedu	re:	IS: 5182 (P-14) 2 for Dust and 24	000, CPCB -Hour for G	Guidelin ases.	es and as per cli	ent's monitoring requirements	- 24-Hour	
Clien	's Reference:	:	-		177				
positi Groui	ole Location & on(GL or heignd level)		L1- Khambel L2- Adivada L3 – Near Company's main Office Height from Ground level- 3 Meters						
Date	of Sampling:		19/01/13		Period o	f Sampling	24 HRS.		
Repre	sentatives Pro	esent:	Lab: Mr. Sunil Client:				: Mr. Santanu Samanata		
Monit Detai	oring Equipm s	ent	Respirable Dust Sampler- APM 460 BL - 411 & Fine Particulate Attachment Calibration Date: 23/02/2012, Due Date: 22/02/2013						
Rema	rks:								
Sr.	TEST	UNIT		Results- Le	ocations				
No.			L1- Khambel	L2- Adivo		L3- Near Company's main Office	TEST METHOD	Permiss ible limits	
1.	PM10	µg/m³	72	44		80	IS:5182 (P-23) 2006	100.0	
2.	PM <sub>2.5</sub>	μg/m³	23	19		60	Fine Particulate Sampler	60.0	
3.	SO <sub>2</sub>	μg/m³	3.94	7.10	)	9.47	IS: 5182 (P-2) 2001	80.0	
4.	NOx	µg/m³	9.89	15.0		17.06	IS: 5182 (P-6) 2006	80.0	
5.	Ozone	μg/m <sup>3</sup>	6.40	11.8	5	8.18	IS: 5182( P-9) 1974	100.0	
6.	Ammonia	μg/m³	3.93	6.89		4.69	Method by James Lodge	400.0	
7.	HC	μg/m³	ND	ND		ND	GC Method	NS	
8.	NMHC	µg/m³	ND	ND		ND	GC Method	NS	

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

CO

Lead

mg/m<sup>3</sup>

μg/m³

For Detox Corporation Pvt. Ltd

IS: 5182(P-22) 2004

GC Method

Date:04/02/13

Note:

(1) The results pertain to tested items only.

0.450

ND

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0.518

ND

0.628

ND

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Ring Road, Surat - 395 002.

Phone: 91 - 261 - 2351248, 2346181, Fax: 2354068 E-Mail: info@detoxcorp.com, www.detoxcorp.com

NS

4.0

1.0

Branch Office:

9

10.

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100	ST ST		AM	BIENT AIR SAMPLE	ANALYSIS REPOR	Jer !			
Refer	ence No.		DCPL/IOCL //	ARAM/13/61A		Corporation	Pvt. Ltd		
	t Name & Ad	ldress.	Indian oil Corporation Ltd., Indian Oil Bhavan, 1 , Shri Aurobindo Amrg , 7 <sup>th</sup> floor, Yusuf sarai, New Delhi- 110016						
Туре	of Sample:		Ambient Air M	onitoring for PM	10, PM2.5. , SO2, NO	$\rho_{x}$ , $O_{3}$ , $NH_{3}$ , $HC$ , $NMHC$ , $CO$ & led	ad		
Packing & Seal :			Filter Paper po bladder	acked in plastic e	nvelopes , Gaseo	ous Solution in Bottles & air sampl	e in		
Sampling Procedure:			IS: 5182 (P-14) 2000, CPCB Guidelines and as per client's monitoring requirements- 24-Hour for Dust and 24-Hour for Gases.						
Client's Reference:			-						
Sample Location & position(GL or height from Ground level)				npany's main Offi round level- 3 Me					
Date o	of Sampling:		19/02/13		Period of Sampling 24 HRS.				
Repre	sentatives Pre	esent:	Lab: Mr. Sunil Client:			ent: Mr. Santanu Samanata			
	oring Equipm	ent Details	Respirable Dust Sampler- APM 460 BL - 411 & Fine Particulate Attachment Calibration Date : 23/02/2012, Due Date : 22/02/2013						
Sr.	TEST	UNIT	Results- Locations				Permissi		
No.			L1- Khambel	L2- Adivada	I.3- Near Company's main Office	·	ble limits		
1	DM	1 2	7	73/707					

		Company of the Compan		10			
Sr.	TEST	UNIT	Results- Locations				Permissi
No.			L1- Khambel	L2- Adivada	I.3- Near Company's main Office	TEST METHOD	ble limits
1	PM10	μg/m³	75	48	97	IS:5182 (P-23) 2006	100.0
2.	PM <sub>2.5</sub>	µg/m³	51	20	49	Fine Particulate Sampler	60.0
3.	SO <sub>2</sub>	µg/m³	4.24	6.90	8.09	IS: 5182 (P-2) 2001	80.0
4.	NOx	µg/m³	11.30	14.33	17.16	IS: 5182 (P-6) 2006	80.0
5.	Ozone	μg/m <sup>3</sup>	7.67	8.22	10.22	IS: 5182( P-9) 1974	100.0
_ 6.	Ammonia	µg/m³	4.83	6.49	5.00	Method by James Lodge	400.0
7.	HC	µg/m³	ND	ND	ND	GC Method	NS
8.	NMHC	µg/m³	ND	- ND	ND	GC Method	NS
9.	CO	mg/m <sup>3</sup>	0.498	0.508	0.612	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

Date:02/03/13

For Detox Corporation Pvt. Ltd

(Autho. Signatory)

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Ring Road, Surat - 395 002.

Phone: 91 - 261 - 2351248, 2346181, Fax: 2354068 E-Mail: info@detoxcorp.com, www.detoxcorp.com



0	To T		AM	BIENT AIR	SAMPLE	ANALYSIS REPORT			
Reference No. DCPL/IOCL /ARAM/13/47A					Corporation	Pvt. Ltd			
Clien	Name & Ade	dress.	Indian oil Cor Indian Oil Bha 1 , Shri Aurobi Yusuf sarai, New Delhi- 11	ıvan, ndo Amrç		or,			
Туре	of Sample:		Ambient Air M	onitoring	for PM <sub>1</sub>	o, PM <sub>2.5,</sub> , SO <sub>2</sub> , NO <sub>3</sub>	, O <sub>3</sub> , NH <sub>3</sub> , HC, NMHC, CO & led	ad	
Packi	ng & Seal :		Filter Paper po	acked in p	olastic en	velopes, Gaseou	us Solution in Bottles & air sampl	e in	
Sampling Procedure: IS: 5182 (P-14) 2000, CPCB Guidelines and as per client's monitoring for Dust and 24-Hour for Gases.					client'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			A CONTRACTOR OF THE CONTRACTOR	24 HRS.		
Repre	sentatives Pre	esent:	Lab: Mr. Sunil			Clie	nt: Mr. Santanu Samanata		
Monit	oring Equipme	ent Details	Respirable Dus Calibration Do	st Sample ate :04/03	r- APM 40	60 BL - 411 & Fine Ue Date : 03/03/20	Particulate Attachment		
Sr.	TEST	UNIT			- Locatio			Permissi	
No.			L1- Khambel	Adiv	2- vada	L3- Near Company's main Office	TEST METHOD	ble limits	
1.	PM10	µg/m³	76		18	89	IS:5182 (P-23) 2006	100.0	
2.	PM <sub>2.5</sub>	µg/m³	62		25	71	Fine Particulate Sampler	60.0	
3.	SO <sub>2</sub>	µg/m³	2.96		99	10.06	IS: 5182 (P-2) 2001	80.0	
4.	NO <sub>x</sub>	μg/m³	10.60		.83	16.15	IS: 5182 (P-6) 2006	80.0	
5.	Ozone	µg/m³	6.81		02	10.22	IS: 5182( P-9) 1974	100.0	
6.	Ammonia	μg/m <sup>3</sup>	3.98		59	5.05	Method by James Lodge	400.0	
7	HC	ua/m3	ND	N.I	D	ND	10011111		

ND: Not Detected; NS: Not Specified

 $\mu g/m^3$ 

 $\mu g/m^3$ 

mg/m<sup>3</sup>

µg/m³

ND

ND

0.512

ND

Place: Surat

Date:16/04/13

For Detox Corporation Pvt. Ltd

IS: 5182(P-22) 2004

GC Method

GC Method

GC Method

(Autho. Signatory)

NS

NS

4.0

1.0

#### Note:

HC

**NMHC** 

CO

Lead

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ND

ND

0.459

ND

ND

ND

0.645

ND

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# Annexure 2 Mercury analysis reports for air and drill cuttings



7	O.								
00	ST ST		AMBIENT	AIR SAMPLE ANALYSIS REPO					
Refere	nce No.		DCPL/IOCL /ARAM,	/13/774A	Corporatio	n Pvt. Ltd.			
Client	Name & Ade	dress.	Indian oil Corporation Indian Oil Bhavan, 1 , Shri Aurobindo An Yusuf sarai, New Delhi- 110016						
Туре	of Sample:		Ambient Air Monitor	ing for Mercury					
Packi	ng & Seal :		Filter Paper packed in plastic envelopes,						
Sampling Procedure:			IS: 5182 (P-14) 2000, CPCB Guidelines and as per client's monitoring requirements- 24-Hour for Dust.						
Client	s Reference:		-						
Sampl	e Location &	position	L3 - Near Company	's main Office					
Date o	of Sampling:		18/12/12	Period of Sampling	24 HRS.				
Representatives Present:			Lab: Mr. Sunil Client: Mr. Santanu Samanata						
Monito	oring Equipm	ent Details	Respirable Dust Sam 22/02/2013	npler- APM 460 BL - 411 Cali	ibration Date : 23/02/2012, Du	e Date :			
Sr.	TEST	UNIT	Res	ults- Locations					
No.			Near Con	L3- npany's main Office	TEST METHOD	Permissible limits			

ND: Not Detected; NS: Not Specified

µg/m³

Place: Surat

For Detox Corporation Pvt. Ltd

AAS Method

Date:30/12/12

(Autho. Signatory)

NS

#### Note:

Mercury

(1) The results pertain to tested items only.

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ND

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Detex

	Mud Sa	mple Analysis Report COPPORTION
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, New Delhi- 110016
3.	Sampling Plan: Packing & Marking :	Collected in plastic containers as per IS – 3025 (P – 1) , Sample Code ( L1 to L4)
4.	Type of Sample: Grab / Composite	Grab
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 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		L1	L2	L3	L4
1.	Mercury	mg/kg	ND	1.26	0.48	ND

Place: Surat

For Detox Corporation Pvt. Ltd

Technical Manager

Date: 04/02/13

Note:

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Annexure 3
Analysis report of stack for D.G set





			STACK SAMPLE ANALYSIS REPORT	Corporation			
Refere	ence No.		DCPL/IOCL/ARSM/13/				
Client Name & Address.			Indian oil Corporation Ltd., Indian Oil Bhavan, 1 , Shri Aurobindo Amrg , 7 <sup>th</sup> floor, Yusuf sarai,				
			New Delhi- 110016				
Type	of Sample:		Stack emission monitoring for PM, SO <sub>2</sub> , NC	Dx, HC,VOC			
Packi	ng Procedur	e:	Filter thimbles packed in plastic envelopes and Gaseous Solution in Bottles, Gases in Bladder and activated Charcoal tubes.				
Samp	ling Procedu	re:	IS: 11255 (P-3) 1985, CPCB Guidelines for Stack Monitoring.				
Client	's Reference:	Election 1	-				
Sampl	le Source:		Exhaust Stack Attached To L1: DG Set – 1				
Monitoring Equipment Details			Stack Kit- APM 625-602 Calibration Date: 27/03/2012, Due Date: 26/03/2013				
Date o	of Sampling:		20/11/12				
Repres	sentatives Pre	esent:	Lab: Mr. Sunil Client:	Mr. Santanu Samanata			
Sr.	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/m³	ND	NS			
6.	VOC	mg/m³	ND.	NS			
D 11.							

ND- Not detected , NS- Not Specified

Place: Surat

For Detox Corporation Pvt. Ltd.,

Technical Manager

Date: 5/12/12

Note

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		1	STACK SAMPLE ANALYSIS REPORT	Corporation			
Refere	ence 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:	1 a	Stack emission monitoring for PM, SO <sub>2</sub> , I	NOx, CO,			
Packir	ng Procedure	<b>:</b>	Filter thimbles packed in plastic envelopes and Gaseous Solution in Bottles, Gases in Bladder and activated Charcoal tubes.				
Sampl	ling Procedur	e:	IS: 11255 (P-3) 1985, CPCB Guidelines fo	or Stack Monitoring.			
Client'	's Reference:						
Sampl	le Source:	Source: Exhaust Stack Attached To L1: DG Set – 1					
Monito	oring Equipme	ent Details	Stack Kit- APM 625-602 Calibration Date : 27/03/2012, Due Date : 26/03/2013				
Date o	of Sampling:		19/02/13				
Repres	sentatives Pre	esent:	Lab: Mr. Sunil Clier	nt: Mr. Santanu Samanata			
Sr.	TEST	UNIT	Results	Permissible			
No.			11	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.,

Date: 02/03/13

**Technical Manager** 

#### Note:

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	AMBIENT	AIR SAMPLE ANALYSIS REPO	Corporatio	n Pvt. Ltd		
Reference No.	DCPL/IOCL /ARAN	M/13/774A				
Client Name & Address.	Indian oil Corporation Ltd., Indian Oil Bhavan,  1 , Shri Aurobindo Amrg , 7 <sup>th</sup> floor, Yusuf sarai, New Delhi- 110016					
Type of Sample:	Ambient Air Monito	oring for VOC	* * * * * * * * * * * * * * * * * * * *			
Packing & Seal :	Air sample in charc	oal tube		2		
Sampling Procedure:	IS: 5182 (P-14) 2000, CPCB Guidelines					
Client's Reference:	-					
Sample Location & position	L1 – Near diesel stor	rage facility				
Date of Sampling:	18/12/12	Period of Sampling	60 mins.			
Representatives Present:	Lab: Mr. Sunil	C	lient: Mr. Santanu Samanata			
Monitoring Equipment Details	Handy Air Sampler- PEMHAS1B Calibration Date : 01/10/2012, Due Date : 30/09/2013					
Sr. TEST UNIT	Results- Locations		TEST METHOD	Permissible		
		L1-		limits		
1. VOC µg/m³	ND		GC - Method	NS		

ND: Not Detected; NS: Not Specified

Place: Surat

For Detox Corporation Pvt. Ltd

Date:30/12/12

Note:

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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
BOP 13.5/8" stack		Drilling Spool 13.5/8" 10M x 13.5/8" 10M
(8.1/2" hole)	:	DSA 11" 5M x 13.5/8" 10M
		2 <sup>nd</sup> 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 &
		cap
For Well Cap for Re-entry arrangment		2 <sup>nd</sup> Casing Head Spool 13.5/8" 5M x11"5M
		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

: DCPL/IOCL /ARNM/13/173A : Indian Oil Corporation Ltd.,

Address

: Indian Oil Bhavan

1, Shri Aurobindo Marg, 7th Floor, Yusuf Sarai,

New Delhi

Sample collected on

Sample Source

Noise level Meter No

Calibration date Calibrated By

: 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) Leg	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	
5.	Nr.Company main office	57.7	
6.	Nr.Drilling	67.9	1776
7.	Nr.Security Office	52.2	Industrial Area – 75 dB(A)
8.	Nr. Cementing Unit	61.1	madsing Aled = 75 dB(A)
9.	Nr.DG sets.	68.9	

Place: Surat

For Detox Corporation Pyt. Ltd.,

**Technical Manager** 

Date: 30.12.2012

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E-mail: detox\_kandla@hotmail.com

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



Annexure 7
Certificate of Accreditation



#### **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

#### अधिसूचना

नई दिल्ली, 13 जुलाई, 2010

का.आ. 1662(अ).—कंन्द्रीय 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 शिक्तयों 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 अविध 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 निम्नलिखित 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, अर्थात :—

#### सारणी

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) श्रीमित शैला देशपांडे</li></ul>	13-7-2010 से 12-7-2015"

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

क्रम सं.	प्रयोगशाला का नाम	सरकारी विश्लेषणकर्ता का नाम	से लागू और तब विधिमा	न्य
(1)	(2)	(3)	(4)	
"82	मैसर्स एनर्जी एंड रिसोर्सिज इंसटीच्यूट, 6 सी, दरबारी सेठ ब्लॉक इंडिया हैबिटेट सेंटर कॉम्प्लेक्स, लोदी रोड, नई दिल्ली-110003	<ol> <li>श्री अंशुमान</li> <li>श्री आर. सुरेश</li> <li>श्री वेद प्रकाश शर्मा</li> </ol>	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>श्री एम. एल. दुआ</li> <li>श्री टी. एल. मेहता</li> <li>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)	<ul><li>(1) श्री अमित रोनोसे</li><li>(2) श्री जितेन्द्र खसिकया</li><li>(3) डॉ. भावना मेहरा</li></ul>	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 दुदं संयुक्त सचिव

टिप्पण :—मूल अधिसूचना भारत के राजपत्र, असाधारण में संख्यांक का.आ. 1174(अ), तारीख 18 जुलाई, 2007 द्वारा प्रकशित की गई थी और अधिसूचना सं. का.आ. 1539(अ), तारीख 13 सितम्बर, 2007, का.आ. 1811(अ), तारीख 24 अक्तूबर, 2007, का.आ. 55(अ), तारीख 9 जनवरी, 2008, का.आ. 428(अ), तारीख 4 मार्च, 2008, का.आ. 865(अ), तारीख 12 क्लूबर, 2008, का.आ. 1894(अ), तारीख 31 जुलाई, 2008, का.आ. 2728(अ), तारीख 25 नवम्बर, 2008, का.आ. 1356(इ), 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. 3123(अ), तारीख 7 दिसम्बर, 2009 और का.आ. 142(अ), तारीख 21 वनवरी, 2010 और का.आ. 619(अ), तारीख 19 मार्च, 2010 द्वारा उसमें पश्चात्वर्ती 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:—

		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>Shri Kunal Manohar Nargolkar</li> <li>Dr. Archana Waykole</li> <li>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"
inserted	(ii) after serial number 81 and the entries, namely:—	s relating thereto, the following serial n	umber and entries shall be
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>Shri M.L. Dua</li> <li>Shri T.L. Mehta</li> <li>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 and No. S.O. 3123(E), dated the 7th December, 2009, S.O. 142(E), dated the 21st January, 2010, S.O. 619(E), 19th March, 2010.



# 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



Valid Until

20/12/2013

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 No.: A

# 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/ : Hridesh Baindail

occupier of the industry operation
Or process.

Dy. General Manager (E&P)
7<sup>th</sup> Floor, Indian Oil Bhavan

7<sup>th</sup> Floor, Indian Oil Bhavan No. 1, Sri Aurobindo Marg

Yusuf Sarai,

New Delhi – 110016

(ii) Industry category : Oil & Gas Exploration

Primary – (STC Code) 13 Secondary – (STC Code) 131

(iii) Production capacity Units : Nil (Exploratory Drilling)

(iv) Year of establishment : 1964

(v) Date of the last Environmental : 2<sup>nd</sup> Environment statement

Statement submitted (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	
	Year	Year	
	(1)	(2)	
Nil	Nil	Nil	

#### (2) Raw Material Consumption : Nil

Name of raw materials	Name of Products	Consumption of raw materials per unit of output	
Name of faw materials		During the previous Financial Year	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)

	Quantity of	Concentration of	Percentage of
Pollutants	pollutants	pollutants in	variation from
Tonatants	discharged	discharges	prescribed standards
	(mass/day)	(mass/volume)	with 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 Financial Year	During the current 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
(c) (1) Quantity recycled or re- utilised within the unit (2) Sold	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.

9999999999

# PART-I

Any other particulars for improving the quality of the environment.

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

Name: Hridesh Baindail

Chamidail

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



Annexure 9
Newspapers clips for EC copy



(નિશ્તિણ અને ઉત્પાદન) જાહે ખબ (પબ્લિક નોટિસ)

ખા સાથે મે. ઇન્ડિયન ઓઇલ કોર્પોશન લિમિટે: (આઈઓસીએલ) દ્વા જાણ કવામાં આવે છે કે પાટણ અને મહેસાણા જિલ્લાઓમાં આવેલા અમાં પ્રોજેક્ટ "ઓનશો ઓઈલ એન્ડ ગેસ એક્સપ્લોશન ઈન એનઈએલપી-VII બ્લોક CB-ONN-2005/2 એટ કેમ્બે બેશીન" માનનીય પર્યાવણ અને વન મન્ત્રાલય (MOEF), ભાત સકા દ્વા એન્વાયમેન્ટલ ક્લિયન્સ (પર્યાવણીય અનુમતિ) મેળવી લીધેલ છે. એન્વાયમેન્ટલ ક્લિયન્સ લેટ (પર્યાવણીય અનુમતિ) ગુજાત પ્રદૂષણ નિયંત્રણ બોર્ડ (જીપીસીબી) પાસે ઉપલબ્ધ છે અને કદાય MOEF ની વેબસાઈટ http://envfornic.in-પ્રદેખાય.

ત્રધુ વિગતો માટે મુલાકાત લો: www.tocl.com

GUJARAT SAMACHAR 30/11/2011





(Exploration & Production)
Public Notice

It is hereby informed by M/s: Indian Oil Corporation Limited (IOCL); that our project "Onshore Oil and Gas Exploration in NELP-VII-Block CB-ONN-2005/2 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.

Visit: www.locl.com for more details.

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વધુ વિગનો માટે મુલાકાત લો: www.ioci.com

GUJARAT SAMACHAR 30/11/2011



It is hereby informed by M/s. Indian Oil Corporation Limited (IOCL) that our project "On shore 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 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.

Visit: www.iocl.com for more details.

TIMES OF INDIA-AHMEDABAD EDITION 30/11/2011

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# 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

# ORDER:

In exercise of the powers conferred by Rule 5(1) (ii) of the Petroleum and Natural Gas Rules, 1959, the Government of Gujarat is pleased to Grant a Petroleum Exploration License to 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.	Amount Rs.	Head of Account
1	2	3	4	5
1,	Security Deposit, Deposited in S.B.I., Gandhinagar.	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.

- 5 -5

(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.

- (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,

(K.H. Chorera)

Under Secretary to Government, Energy and Petrochemicals Department.

To,

- The District Collector, Dist.Mehsana
- The Director of Petroleum, Gandhinagar.
- The Accountant General, Ahmedabad.
- The Accountant General, Raikot.
- 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.

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

······································		Latitude			Longitude			
Points	Degree	Minutes	Seconds	Degree	Minutes	Seconds		
A	23	44	26.6	72	3	50.6		
В	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		
Х	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		
A	23	44	26.6	72	3	50.6		

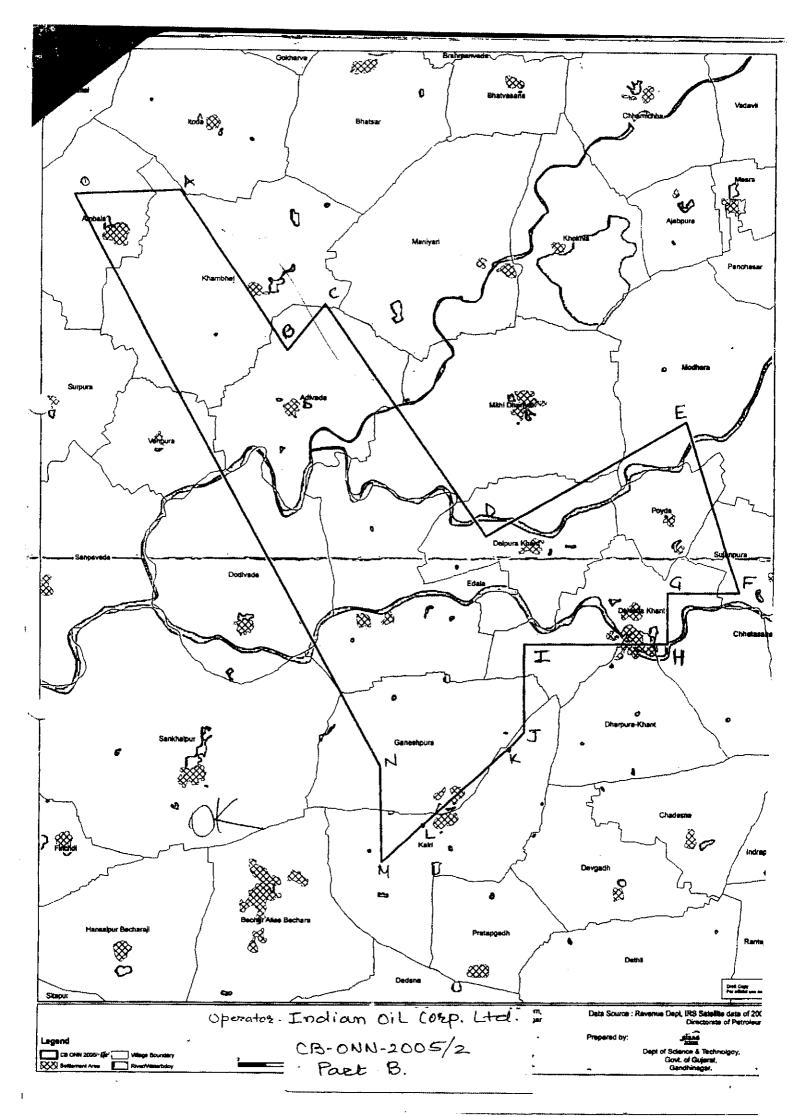
Co-ordinates of CB-ONN-2005/2 Part A Excluded

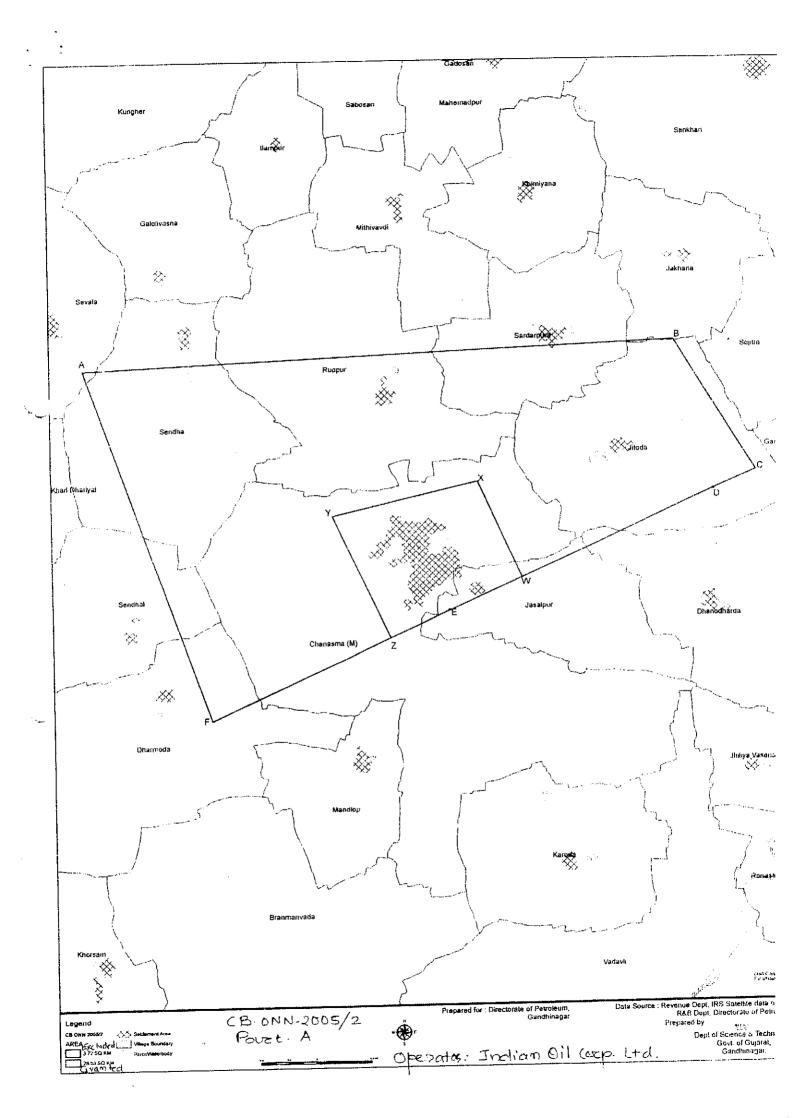
· · · · · · · · · · · · · · · · · · ·		Latitude		Longitude			
Points	Degree Minutes		Seconds	Degree	Minutes	Seconds	
W	23	42	43.94	72	7	34.4	
Х	23	43	29.91	72	7	12.85	
Υ	23	43	14.05	72	5	57.31	
Z	23	42	16.42	72	6	26.184	
E	23	42	30	72	7	0	
W	23	42	43.94	72	7	34.4	

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		
В	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		
K	23	31	31	72	5	20		
<u>L</u>	23	30	40.3	72	4	19.1		
М	23	30	20	72	3	55		
N	23	31	18	72	3	54		
0	23	37	0	72	0	34		
Α	23	37	2.5	72	1	45		

Total Area Granted for PEL 77.68 Sq Kms.







# 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) - 91. S.Jm CGO Complex, Lodhi Road

New Delhi – 110 003

E-mail: pb.rastogi@nic.in Telefax: 011: 2436 7668

Dated 16th August, 2011

KW23/8/2011

To,

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,

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 Km² 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			PART-B	
POINT	LATITUDE	LONGITUDE	POINT	LATITUDE	LONGITUDE
A.	23 <sup>0</sup> 44'26.6"	72 <sup>0</sup> 03'50,6"	Α	23 <sup>0</sup> 37'2.50"	72 <sup>0</sup> 01'45.00"
B.	23 <sup>0</sup> 44'36.42"	72 <sup>0</sup> 08'53.76"	В	23 <sup>0</sup> 35'26.0"	72°.2'54.36"
C	23 <sup>0</sup> 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"
D .	23 <sup>0</sup> 43'24.73"	72 <sup>0</sup> 09'13.91"	D	23 <sup>0</sup> 33'34.63"	72 <sup>0</sup> 05'02.34"
W	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"
Х	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"
Υ	23 <sup>0</sup> 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"
Z	23 <sup>0</sup> 42'16.42"	72 <sup>0</sup> 06'26.18"	Н	23°32'30.00"	72 <sup>0</sup> 07,'00.00"

F	23 <sup>0</sup> 41''38.30"	72 <sup>0</sup> 04'54.21"	l i	23 <sup>0</sup> 32'30.00"	72 <sup>0</sup> 05'27.00"
			J	23 <sup>0</sup> 31'38.00"	72 <sup>0</sup> 05'27.00"
-			K	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 m³/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.
- 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>2.5</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 m³/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.
- x. Good sanitation facility should be provided at the drilling site. As proposed, domestic sewage shall be disposed off through modular STP.
- 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<sub>2</sub>S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H<sub>2</sub>S detectors in locations of high risk of exposure along with self containing breathing apparatus.
- xv. The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and its Regional Office at Bhopal.
- xvi. Blow Out Preventor (BOP) system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.
- xvii. Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.
- 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.

- viii. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the GPCB. The Regional Office of this Ministry / CPCB / GPCB shall monitor the stipulated conditions.
- ix. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.
- x. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the GPCB and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office.
- xi. Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.
- 8.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 9.0 The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- 10.0 The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous 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, 8<sup>th</sup> 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.

7. Guard File/Monitoring File/Record File.

(Dr. P. B. Rastogi)



Annexure 12 Consent to Establish copy

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

TO. M/s. INDIAN OIL CORPORATION I TO On shore oil and gas exploration. CB-ONN-2005/2, CB-ONN-2005/2 (PART-B)-384 210. TA.BECHARAJI. DIST. MEHSANA

NO: GPCB/ID .36739 /CCA/MH- 536/ 1096 40

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

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

The 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	l
1	DIESEL	6.0	4
	i	KI/DAV	ı

 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 mt.	Perameters	Permissible limit
1	D. G. Set	11	Particulate matter	150 mg/NM <sup>3</sup>
	(500 KVA) (2 NOS.)	dice selling	SO <sub>2</sub> NG <sub>4</sub>	100 ppm 50 ppm

- There shall be no process emission from the manufacturing process and other ancillary emission.
- Stack monitoring facilities like port hole, 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				
	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 25)	40 Microgram/M3	60 Microgram/M3			
SO <sub>2</sub>	50 Microgram/M <sup>3</sup>	80 Microgram/M <sup>3</sup>			
NOx	40 Microgram/M <sup>8</sup>	80 Microgram/M <sup>3</sup>			
Hydrocarbon		160 Microgram/M3			

 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 Lof 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 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 1980.
- The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following sevels:

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.
- 19. If it is established by any competent authority that the damage is caused due to their industrial activities to any person or his pitiperty. 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.

For and on behalf of GUJARAT POLLUTION CONTROL BOARD

(T.B.SHAH)

ENVIRONMENTAL ENGINEER



PARYAVARAN BHAVAN

Sector 10-A, Gandhinagar 382010

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

"Consent to Establish" (CTE)

CTE NO. 46673

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

Dt 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 Control of Pollution) Act1974, 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, 
TA:CHANASMA, DIS- PATAN 2) IOC-CB-05-02-D,RUPPURA/SEDHAI, TA: CHANASMA DIS-PATAN for the 
manufacturing of the following items. The Validity period of the order will be Five years i.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.
- In case of any spilage/leakage of Oil, Bjoremadiation shall be carried out.
- 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.
- 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.
  - Sewage shall be disposed of through septic tank/soak pit system.

#### **CONDITIONS UNDER AIR ACT 1981:**

S.	The following shall b	e used as	fuel in Hot Air	Generator & Dg set.	
		Sr.No.	Fuel	Quantity	
		1	Diesel	6.0 KL/Day	i

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

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The flue gas emission through stack shall conform to the following standard website: www.gpcb.gov.in

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

- 8. There shall be no process emission from the manufacturing process and other ancillary operation.
- 9. 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/M³	
Particulate Matter- 2.5 (PM <sub>2.5</sub>		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>	

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

#### CONDITIONS UNDER HAZARDOUS WASTE:

- 12. 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-
- 12.3 The applicant shall obtain membership of common Hazardous waste incinerator for L 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:

- 13. 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.
- 15. 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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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.

7. 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)

- 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 compensation as determined by 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

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