

	<b>Conditions</b>	<b>Compliance</b>
<b>Sl. No.</b>	<b>SPECIFIC CONDITIONS</b>	
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.  Ambient Air Quality Monitoring was carried out at IOC-Kalri-1 and the report of the same was submitted with previous compliance report.  <b>Monthly Ambient Air Quality monitoring at IOC-Jitoda-1 is in progress and report would be submitted in next compliance report.</b>
4.	Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.	Mercury analysis was carried out at IOC-Kalri-1 and the report of the same was submitted with previous compliance report.  <b>Mercury analysis in air, water and drill cuttings for IOC-Jitoda-1 is in progress and report would be submitted in next compliance report.</b>
5.	Approach road shall be made pucca to minimize generation of suspended dust.	Noted and would be complied with.
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.	Silent enclosed DG set was installed at IOC-Kalri-1. Regular DG set stack analysis was carried out at IOC-Kalri-1.  <b>Regular DG set stack monitoring at IOC-Jitoda-1 is in progress and report would be submitted in next compliance report.</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.
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 wells IOC-Khambel-1, IOC-Kalri-1 and IOC-Jitoda-1, waste water generated during drilling was collected in impervious HDPE lined pits. Portable ETP was installed at drill site for treatment of waste water generated during drilling activities of the wells, IOC-Khambel-1, IOC-Kalri-1 and IOC-Jitoda-1.
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 are being disposed through agency with authorized TSDF membership.
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 has been 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 was installed at IOC-Khambel-1, IOC-Kalri-1 and IOC-Jitoda-1. Details of blow out preventer (BOP) system used for each hole section is attached as <b>Annexure-1</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.

## 7<sup>th</sup> Compliance Report for the NELP-VII Block CB-ONN-2005/2, Cambay Basin Gujarat



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 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-2</b> .

Sl. No.	GENERAL CONDITIONS	
1.	The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any other statutory authority.	Needful 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.	Noted. Adequate measures will be taken to comply with the guidelines.
4.	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).	Noise Level Monitoring was carried out at IOC-Khambel-1 & IOC-Kalri-1 and the report of the same was submitted with previous compliance report.  <b>Noise level Monitoring at IOC-Jitoda-1 is in progress and report would be submitted in next compliance report.</b>
5.	A separate Environmental Management Cell equipped with full	Monitoring from MoEF approved lab (Detox Corporation) is being

	fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.	carried out as per site requirement. Details in this regard are attached as <b>Annexure-3.</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.	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	The environmental statement for the financial year ending 31/3/2014 (2013-14) in Form-V has been submitted to the Gujarat Pollution Control Board as well as same has been uploaded along with the status of

	prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.	compliance of environmental conditions in the IOC website .
10.	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the GPCB and may also be seen at Website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> . 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-4</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-5</b> .

**Remarks :** 1. Environmental Clearance granted for drilling activities of five wells in NELP-VII Block-CB-ONN-2005/2 is attached as **Annexure-6**.

2. Consent to Establish (CTE) granted by Gujarat Pollution Control Board (GPCB) for the project is attached as **Annexure-7**.



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*Annexure 1*  
*Blow out Preventer system*



**Blow Out Preventer Configuration**

<p>BOP 21.1/4" stack (17.1/2" Hole)</p>	<p>:</p>	<p>Flow Nipple Annular BOP 2M Double Ram BOP, 2M ( pipe top and blind bottom) Drilling Spool, 21.1/4" 2M top &amp; bottom flange x 2 side outlets 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)</p>
<p>BOP 13.5/8" stack (12.1/4" hole)</p>	<p>:</p>	<p>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 Drilling Spool 13.5/8" 10M x 13.5/8" 10M 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)</p>
<p>BOP 13.5/8" stack (8.1/2" hole)</p>	<p>:</p>	<p>Annular BOP, 5M (bottom flange 13.5/8" 10M) Double Ram BOP 10M (pipe ram top and blind ram bottom) Single Ram BOP 10M Drilling Spool 13.5/8" 10M x 13.5/8" 10M DSA 11" 5M x 13.5/8" 10M 2<sup>nd</sup> Casing Head Spool 13.5/8" 5M x 11" 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)</p>
<p>For Well Cap for Re-entry arrangement</p>		<p>Tubing Head Spool, 11" 5M x 11" 5M with Tbg Hanger &amp; cap 2<sup>nd</sup> Casing Head Spool 13.5/8" 5M x 11" 5M 1<sup>st</sup> Csg Head Spool 13.5/8" 5M x 20.3/4" 3M Casing Head Housing (20.3/4" 3M)</p>



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*Annexure 2*  
*Environment Policy*



# IndianOil

## **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.



**IndianOil**

*Annexure 3*  
*Certificate of Accreditation*



# भारत का राजपत्र

## The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)  
PART II—Section 3—Sub-section (ii)  
प्राधिकार से प्रकाशित  
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नई दिल्ली, मंगलवार, जुलाई 13, 2010/आषाढ़ 22, 1932

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पर्यावरण और वन मंत्रालय

अधिसूचना

नई दिल्ली, 13 जुलाई, 2010

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

## सारणी

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

(ii) क्रम संख्या 81 और उससे संबंधित प्रविष्टियों के पश्चात् निम्नलिखित क्रम संख्या और प्रविष्टियां अन्तर्गमित की जाएंगी अर्थात् :—

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

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

रजनीश दुर्ग 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 नवम्बर, 2007, का.आ. 55(अ), तारीख 9 जनवरी, 2008, का.आ. 428(अ), तारीख 4 मार्च, 2008, का.आ. 865(अ), तारीख 11 अप्रैल, 2008, का.आ. 1894(अ), तारीख 31 जुलाई, 2008, का.आ. 2728(अ), तारीख 25 नवम्बर, 2008, का.आ. 1356(र), तारीख 27 मई, 2009, का.आ. 1802(अ), तारीख 22 जुलाई, 2009 और का.आ. 2399(अ), तारीख 18 सितम्बर, 2009 और का.आ. 3122(अ), तारीख 7 दिसम्बर, 2009 और का.आ. 3123(अ), तारीख 7 दिसम्बर, 2009 और का.आ. 142(अ), तारीख 21 जनवरी, 2010 और का.आ. 619(अ), तारीख 19 मार्च, 2010 द्वारा उसमें पश्चात्पूर्वी 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 further amendments 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)
12	M/s. Horizon Services (Environmental and Safety), 39, Shyamsunder Society Near Mhatre Bridge, Pune-411033 (Maharashtra)	(1) Shri Kunal Manohar Nargolkar (2) Dr. Archana Waykole (3) Shri Amit Anand Patki	13-7-2010 to 12-7-2015
21	M/s. Choksi Laboratories Ltd., 6/3, Manoramaganj, Indore-452001 (Madhya Pradesh)	(1) Shri Sunil Choksi (2) Shri Kavish Vyas (3) Mrs. Shaila Deshpande	13-7-2010 to 12-7-2015"

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

Sl. No.	Name of the Laboratory	Name of the Government Analyst	Recognition with effect from and valid up to
(1)	(2)	(3)	(4)
82	M/s. The Energy and Resources Institute, 6C, Darbari Seth Block, India Habitat Centre Complex, Lodhi Road, New Delhi-110003	(1) Mr. Anshuman (2) Mr. R. Suresh (3) Mr. Ved Prakash Sharma	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)	(1) Shri M.L. Dua (2) Shri T.L. Mehta (3) Ms. Deepa Sardana	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)	(1) Mr. Amit Renose (2) Mr. Jitendra Khasakia (3) Dr. Bhavna Mehra	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)	(1) Dr. Akepati Sivaram Reddy (2) Shri J. Nagendra Babu (3) Shri Mukesh Agarwal	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.



**IndianOil**

*Annexure 4*  
*Newspapers clips for EC copy*

**IndianOil**

(નિરીક્ષણ અને ઉત્પાદન)  
શહેર ખબર (પબ્લિક નોટિસ)

આ સાથે મે. ઇન્ડિયન ઓઇલ કોર્પોરેશન લિમિટેડ (આઈઓસીએલ) દ્વારા જાણ કરવામાં આવે છે કે પાટણ અને મહેસાણા જિલ્લાઓમાં આવેલા અમારા પ્રોજેક્ટ "ઓનશો ઓઇલ એન્ડ ગેસ એક્સપ્લોરેશન ઈન એનઈએલપી-VII બ્લોક CB-ONN-2005/2 એટ કેમ્બે બેસીન" માનનીય પર્યાવરણ અને વન મંત્રાલય (MoEF), ભારત સરકાર દ્વારા એન્વાયરમેન્ટલ ક્લિયરન્સ (પર્યાવરણીય અનુમતિ) મેળવી લીધેલ છે. એન્વાયરમેન્ટલ ક્લિયરન્સ લેટર (પર્યાવરણીય અનુમતિ પત્ર) ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડ (જીપીસીબી) પાસે ઉપલબ્ધ છે અને ક્ષેત્ર MoEF ની વેબસાઈટ <http://envfor.nic.in> પર દેખાય.

વધુ વિગતો માટે મુલાકાત લો: [www.iocl.com](http://www.iocl.com)



GUJARAT SAMACHAR 30/11/2011

**IndianOil**

(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.iocl.com](http://www.iocl.com) for more details.

TIMES OF INDIA -  
AHMEDABAD EDITION  
30/11/2011

Always  
Received.  
GPCB  
7/12/11

**IndianOil**

(મીસિંગ અને ઉત્પાદન)  
કાઉન્ટન (પબ્લિક નોટિસ)

આ સાથે મે. ઇન્ડિયન ઓઇલ કોર્પોરેશન લિમિટેડ (આઈઓસીએલ) દ્વારા જાણ કરવામાં આવે છે કે પાટણ અને મહેસાણા જિલ્લાઓમાં આવેલા અમારા પ્રોજેક્ટ "ઓનશો ઓઇલ એન્ડ ગેસ એક્સપ્લોરેશન ઈન એનઈએલપી-VII બ્લોક CB-ONN-2005/2 એટ કમ્બે બેસીન" માનનીય પર્યાવરણ અને વન મંત્રાલય (MoEF), ભારત સરકાર દ્વારા એન્વાયરમેન્ટલ ક્લિયરન્સ (પર્યાવરણીય અનુમતિ) મેળવી લીધેલ છે. એન્વાયરમેન્ટલ ક્લિયરન્સ લેટર (પર્યાવરણીય અનુમતિ પત્ર) ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડ (જીપીસીબી) પાસે ઉપલબ્ધ છે અને કદાચ MoEF ની વેબસાઇટ <http://envfor.nic.in> પર દેખાય.

વધુ વિગતો માટે મુલાકાત લો: [www.iocl.com](http://www.iocl.com)

↑  
GUJARAT SPNACHAR 30/11/2011

**IndianOil**

(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.iocl.com](http://www.iocl.com) for more details.

TIMES OF INDIA -  
AHMEDABAD EDITION  
30/11/2011

*Received  
7/12/11  
GPCB  
Mehsana*



**IndianOil**

*Annexure 5*  
*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 **22 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. & Date	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.

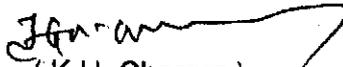
(d) The IOCL shall take preventive measures against the hazard of fire under ground and/or on the surface and shall keep such equipment, supplies and means to extinguish the fire at all times and shall pay such compensation to the third party and/or Government as may be determined in case damage due 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-affected 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, Rajkot.
- Shri B.K. Dutta, Under Secretary to the GOI, Ministry of Petroleum & Natural Gas, Shastri Bhavan, New Delhi.
- Shri V.S. Okhde, Executive Director (E&P), Indian Oil Corporation Ltd., Indian Oil Bhavan, No. 1, Sri Aurobindo Marg, Yusuf Sarai, New Delhi-110016
- The Select file.

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

Points	Latitude			Longitude		
	Degree	Minutes	Seconds	Degree	Minutes	Seconds
A	23	44	26.6	72	3	50.6
B	23	44	36.42	72	8	53.76
C	23	43	33	72	9	35
D	23	43	24.73	72	9	13.91
W	23	42	43.94	72	7	34.4
X	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

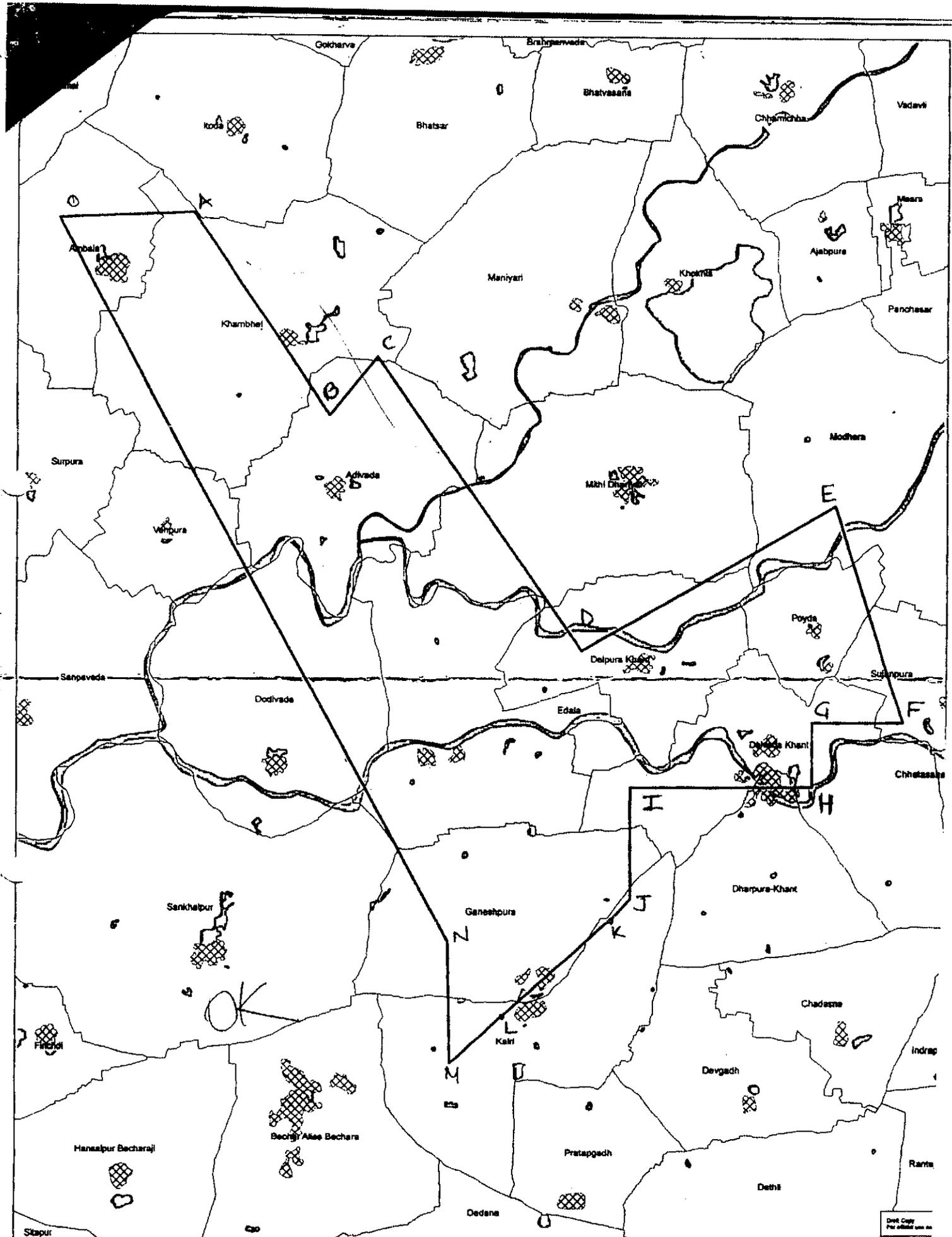
**Co-ordinates of CB-ONN-2005/2 Part A Excluded**

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

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

Points	Latitude			Longitude		
	Degree	Minutes	Seconds	Degree	Minutes	Seconds
A	23	37	2.5	72	1	45
B	23	35	26	72	2	54.36
C	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
H	23	32	30	72	7	0
I	23	32	30	72	5	27
J	23	31	38	72	5	27
K	23	31	31	72	5	20
L	23	30	40.3	72	4	19.1
M	23	30	20	72	3	55
N	23	31	18	72	3	54
O	23	37	0	72	0	34
A	23	37	2.5	72	1	45

**Total Area Granted for PEL 77.68 Sq Kms.**



Operator - Indian Oil Corp. Ltd.

m.  
jar

Data Source : Revenue Dept, IRS Satellite data of 20X  
Directorate of Petroleum

Prepared by:

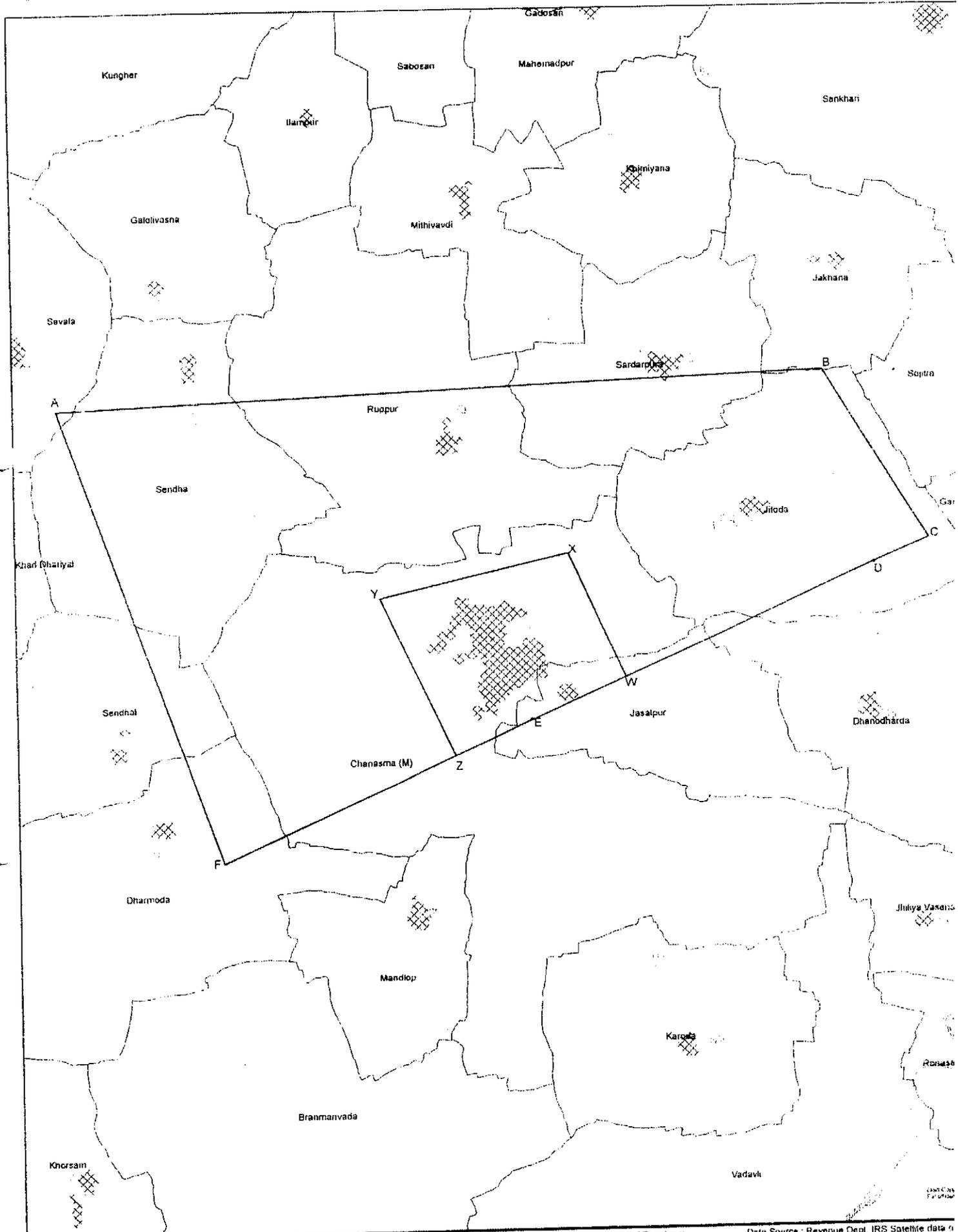
Dept of Science & Technology,  
Govt. of Gujarat,  
Gandhinagar.

- Legend**
- CB ONN 2005/2
  - Village Boundary
  - Settlement Area
  - River/Waterbody



CR-ONN-2005/2  
Part B.

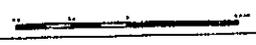
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For official use only



**Legend**  
 CB ONN 2005/2  
 AREA: 577.50 KM<sup>2</sup>  
 28.51.50 N  
 74.00 E

Settlement Area  
 Village Boundary  
 River/Waterbody

CB-ONN-2005/2  
 Part - A



Operator: Indian Oil Corp. Ltd.

Prepared for: Directorate of Petroleum, Gandhinagar

Data Source: Revenue Dept, IRS Satellite data  
 R&B Dept, Directorate of Petri

Prepared by  
 Dept of Science & Techn  
 Govt. of Gujarat,  
 Gandhinagar.



**IndianOil**

*Annexure 6*  
*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  
CGO Complex, Lodhi Road  
New Delhi - 110 003

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

To, *MA 23/8/2011*  
Shri Hridesh Baidail, Chief Manager (E&P)  
M/s Indian Oil Corporation Limited  
7<sup>th</sup> Floor, Indian Oil Bhavan  
Sri Aurobindo Marg, Yusuf Sarai  
New Delhi- 110 016

E-mail : [baidailH@indianoil.co.in](mailto:baidailH@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 24<sup>th</sup> 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 Km<sup>2</sup> Patan District & Mahesana District 49.00 Sq. Km). 120 mx100 m lease area will be required for each well. No land will be acquired for temporary drilling activities during exploratory phase. No forest land, wild life, coastal areas are involved. No Reserve forests exist within the entire block boundary. No eco-sensitive areas are located in the block. Wetland at village Maniary (3.9 km, S) is located within 10 kms. Total project cost for 5 wells is Rs. 170.00 Crores. Following are the coordinates of the block of Cambay Basin (CB-ONN-2005/2):

PART-A			PART-B		
POINT	LATITUDE	LONGITUDE	POINT	LATITUDE	LONGITUDE
A.	23°44'26.6"	72°03'50.6"	A	23°37'2.50"	72°01'45.00"
B.	23°44'36.42"	72°08'53.76"	B	23°35'26.0"	72°2'54.36"
C	23°43'33.00"	72°09'35.00"	C	23°35'53.65"	72°03'18.73"
D	23°43'24.73"	72°09'13.91"	D	23°33'34.63"	72°05'02.34"
W	23°42'43.94"	72°07'34.4"	E	23°34'42.92"	72°07'12.30"
X	23°43'29.91"	72°07'12.85"	F	23°33'00.00"	72°07'47.20"
Y	23°43'14.05"	72°05'57.31"	G	23°33'00.00"	72°07'00.00"
Z	23°42'16.42"	72°06'26.18"	H	23°32'30.00"	72°07'00.00"

F	23°41'38.30"	72°04'54.21"	I	23°32'30.00"	72°05'27.00"
			J	23°31'38.00"	72°05'27.00"
			K	23°31'31.00"	72°05'20.00"

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

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

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

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

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

**A. SPECIFIC CONDITIONS :**

- i. Gas produced during testing shall be flared with appropriate flaring booms.
- ii. The flare system shall be designed as per good oil field practices and Oil Industry Safety Directorate (OISD) guidelines. The stack height shall be provided as per the regulatory requirements and emissions from stacks will meet the MOEF/CPCB guidelines.
- iii. Ambient air quality shall be monitored near the closest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 for PM<sub>10</sub>, PM<sub>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 m<sup>3</sup>/day and prior permission shall be obtained from the concerned agency.
- viii. The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards. ✓

- ix. Drilling wastewater including drill cuttings wash water shall be collected in disposal pit lined with HDPE lining evaporated or treated and shall comply with the notified standards for on-shore disposal. The membership of common TSDF shall be obtained for the disposal of drill cuttings and hazardous waste. Otherwise, secured land fill shall be created at the site as per the design approved by the CPCB and obtain authorization from the SPCB. Copy of authorization or membership of TSDF shall be submitted to Ministry's Regional Office at Bhopal.
- 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>, 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.

- 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*  
(Dr. P. B. Rastogi)  
Director

Copy to:

1. The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 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*  
(Dr. P. B. Rastogi)  
Director



**IndianOil**

*Annexure 7*  
*Consent To Establish copy*



# GUJARAT POLLUTION CONTROL BOARD

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

CTE NO. 46340

"Consent to Establish" (NOC)

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

13/4/2012

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

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

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

Sir,

Without prejudice to the powers of this Board under the Water (Prevention and Control of Pollution) Act-1974, the Air Act-1981 and the Environment (Protection) Act-1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that this Board grants Consent to Establish (NOC) for DRILLING OF EXPLORATORY WELL situated at location (1) at WELL NO. IOCB-03, Adiwada-Khambhel Road, Vill. Khambhel, Ta. Becharaji, Dist. Mehsana and location (2) at WELL NO. IOCB-4, Kalri-Dalpura Road, Vill. Kalri, 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, Bioremediation shall be carried out
3. In case of any spillages / leakages on land site, restoration job shall be carried out immediately.
4. Frequent inspection and monitoring of oil carrying pipeline shall be carried out to final out any leakage.
5. In case of any leakages / spillages, Environment damage study shall be carried out.

#### CONDITIONS UNDER WATER ACT 1974:

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

Tishu Jha *Clean Gujarat Green Gujarat*

**CONDITIONS UNDER AIR ACT 1981:**

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

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

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

Sr. No.	Stack attached to	Stack Height in mt.	Parameters	Permissible limit
1	D. G. Set (500 KVA) (2 NOS.)	11	Particulate matter SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm

8. There shall be no process emission from the manufacturing process and other ancillary emission.
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 <sub>10</sub> )	60 Microgram/M <sup>3</sup>	100 Microgram/M <sup>3</sup>
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>
Hydrocarbon	---	160 Microgram/M <sup>3</sup>

11. All measures for the control of environmental pollution 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-2008.

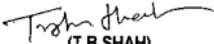
*Tom Jhu*

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

**GENERAL CONDITION :**

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 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.
17. The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels:  
Between 6 A.M. and 10 P.M.: 75 dB(A)  
Between 10 P.M. and 6 A.M.: 70 dB(A)
18. Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.
19. 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.
20. 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



# GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector 10-A, Gandhinagar 382010

Phone : (079) 23226295

Fax : (079) 23232156

website : www.gpcb.gov.in

"Consent to Establish"(CTE)

CTE NO. 46673

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

04 8/5/2012

TO,  
M/S I.O.C. LTD  
EXPLORATORY WELL,  
NEAR CHANASMA 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) Act-1974, the Air Act-1981 and the Environment (Protection) Act-1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that this Board grants **Consent to Establish (NOC)** for **DRILLING OF EXPLORATORY WELL** situated at location-1) IOC-CB-05-02-C,SARDARPURA/GASTADANA, TA:CHANASMA, DIS: PATAN 2) IOC-CB-05-02-D,RUPPURA/SEDHAL, TA: CHANASMA DIS:PATAN for the manufacturing of the following items. **The Validity period of the order will be Five years i.e. up to 20/12/2016**

**SPECIFIC CONDITION:**

1. You shall obtained amendment from the MOEF regarding the Latitude & Longitude of both the wells.
2. Unit shall comply all the conditions mentioned the environmental clearance issued by MOEF vide its letter F.No.J-11011/255/2010 IA II (I) dated 16/8/2011.
3. In case of any spillage/leakage of Oil, Bjoremadiation shall be carried out
4. In case of any spillage/leakage on land site, restoration job shall be carried out immediately.
5. Frequent inspection and monitoring of oil carrying pipeline shall be carried out to final out any leakage.
6. In case of any leakages/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 **6200 lit/day**.
2. The quantity of the industrial effluent discharged from the manufacturing process and other ancillary operations shall be Nil as the entire generated effluent shall be collected in HDPE lined & impervious pit for solar evaporation.
3. The quantity of the domestic waste water (sewage) shall not exceed **1500 lit/day**.
4. Sewage shall be disposed of through septic tank/soak pit system.

**CONDITIONS UNDER AIR ACT 1981:**

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

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

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

*Clean Gujarat Green Gujarat*

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



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7. The flue gas emission through stack shall conform to the following standards.

Stack No.	Stack to attached	Stack height in Meter	Air Pollution Control Measures	Parameter	Permissible Limit
1.	D.G.Set stand by (500 KVA) (2 Nos)	11	---	Particulate Matter SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 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 <sub>10</sub> )	60 Microgram/M <sup>3</sup>	100 Microgram/M <sup>3</sup>
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 pollution 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-2008.
- 12.3 The applicant shall obtain membership of common Hazardous waste incinerator for I of incinerable waste.
- 12.4 The applicant shall provide temporary storage facilities for each type of Hazardous waste as per Hazardous waste (Management, Handling & Trans boundary movement)Rule-2008.

### GENERAL CONDITION :

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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# GUJARAT POLLUTION CONTROL BOARD

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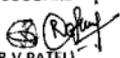
Fax : (079) 23232156

website : [www.gpcb.gov.in](http://www.gpcb.gov.in)

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.

17. The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels:  
Between 6 A.M. and 10 P.M.: 75 dB(A)  
Between 10 P.M. and 6 A.M.: 70 dB(A)
18. Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.
19. 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.
20. 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

  
(R.V.PATEL)

ENVIRONMENTAL ENGINEER

*Clean Gujarat Green Gujarat*

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