



Hindustan Oil Exploration Company Limited

'Lakshmi Chambers', 192, St. Mary's Road, Alwarpet, Chennai - 600 018. INDIA.

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E-mail: contact@hoec.com • Website: www.hoec.com CIN: L11100GJ1996PLC029880

Ref: HOEC/MOEF/PY-1/2024/04/05

Dated: 29th April 2024

To
Joint Director,
Integrated Regional Office
Ministry of Environment, Forest, and Climate Change
1st Floor, Additional Office Block for GPOA
Shastri Bhawan, Haddow's Road
Nungambakkam – Chennai – 600006

Kind Attn: Joint Director

Dear Sir,

- Sub** : **Submission of Six-monthly compliance report for the period October 2023 to March 2024 as per the Environmental Clearance issued by MoEF J-11011/183/2011 IA II (I) dated October 12, 2011.**
- Ref** : **Environmental Clearance from MoEF for drilling of one infill development well in Offshore Block PY -1, Cauvery Basin, Off the coast of Tamil Nādu vide file no: J-11011/183/2011 IA II (I) dated October 12, 2011.**

Ministry of Environment & Forests has kindly granted Environmental Clearance for drilling of one infill development well in Offshore Block PY -1, Cauvery Basin, off the coast of Tamil Nādu vide **file no: J-11011/183/2011 IA II (I) dated October 12, 2011**. Pursuant to this EC the Company has completed the drilling activity during the period October 2012.

We are pleased to submit Compliance Report with detailed information about the status of compliance pursuant to Environmental Clearance referenced above.

If any additional information / clarification required, we will be happy to provide the same.

Thanking you,
For Hindustan Oil Exploration Company Limited.,



G. Janakiraman
Head - HSE

Enclosures:

1. Compliance Report to the Environmental Clearance issued by MoEF for the period of October 2023 to March 2024.
2. Copy of Advertisement published in the newspaper.
3. Copy of NOC obtained from Tamil Nādu Pollution Control Board.
4. Copy of EC issued by MoEF J-11011/183/2011 IA II (I) dated October 12, 2011.
5. Copy of Hazardous waste authorization letter obtained during the drilling campaign.
6. Copy of Environment monitoring for the period of October 2012 conducted by NABL Accredited laboratory.

Compliance Report for Environmental Clearance F. No. J-11011/183/2011-IA II (I) dated October 12, 2011

Six Monthly Compliance Report for the period October 2023 to March 2024

A. SPECIFIC CONDITIONS:		
Sl. No	Condition of Environment Clearance	Compliance Status
(i)	All the specific conditions and general conditions specified in the environmental clearance accorded vide Ministry's letter no. J-11011/368/2005-IA II (I) dated 29 th May, 2006, J-11011/98/2007-IA-II (I) dated 6 th July 2007 and CRZ clearance vide Ministry's letter no. J-11011/103/2009-IA-II (I) dated 1 st April 2009 shall be implemented	All the conditions stipulated in Environment clearance have been followed and implemented as per recommendations issued by Ministry of Environment and forest.
(ii)	Company shall obtain No Objection Certificate (NOC) from the Tamilnadu Pollution Control Board (TNPCB) prior to start the drilling activity and a copy shall be submitted to the Regional Office of the MoEF	No Objection Certificate (NOC) received from Tamilnadu Pollution Control Board (TNPCB), copy of the proof is enclosed Annexure - 3
(iii)	As proposed, direction well method technique shall be used for drilling. The infill development well shall be drilled from the existing platform.	As per Environment clearance conditions well drilled using directional well drilling technique from the existing platform without extending the footprint.
(iv)	Only high efficiency DG set with adequate stack height and modern emission control equipment and low Sulphur clean diesel should be used. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution	6 DG Sets of 5,000 HP (i.e. 3750 KW) are engaged during the drilling campaign. Out of these 4 DG sets were utilized for power while other 2 DG sets are placed as standby. High efficiency DG set with adequate stack height with proper acoustic enclosure have been provided during the time of drilling the well. Offshore drilling completed during October 2012 and DG set demobilized along with rig.
(v)	Total water requirement from sea water source shall not exceed 69.15 m ³ /day and prior permission shall be obtained from the Competent Authority for the drawl of water. Only water-based mud system shall be used. No Chromium based fluid shall be used as the drilling fluid	The condition recommended by Ministry of Environment and forest has been followed and complied during offshore drilling campaign October 2012 and only water-based drilling mud were used for the top & reservoir sections. Water was used for following purpose: <ul style="list-style-type: none"> •Drilling mud preparation: 35 KLD •Potable water/Sanitation: 14.15 KLD, sea water is treated in de-salination plant available on the rig •Fire services and others (such as deck cleaning): 20 KLD, water is used for fire services, deck cleaning, etc as and when required. As recommended, no chromium-based fluid used.



(vi)	No spent synthetic based mud and material will be discharged into sea. Water based drilling mud (WBM, 150 m ³ /well) shall be discharged to the sea after proper dilution as per E(P) Rules vide GSR 546 (E) dated 30 th August, 2005	No spent synthetic based mud and material are discharged into sea during offshore drilling campaign October 2012. The water-based mud discharged to the sea
(vii)	The company shall ensure that there shall be no impact on flora fauna due to drilling of wells in the offshore sea. The company shall monitor the petroleum hydrocarbons and heavy metals concentration in the marine fish species regularly and submit report to the Ministry.	As the Company is producing natural gas, heavy metals are not generated during drilling campaign October 2012
(viii)	Treated wastewater (produced water or formation water or sanitary sewage) shall comply with the marine disposal standards notified under the Environment (Protection) Act, 1986. Residual Chlorine shall not exceed 1 mg/l before disposal.	The condition recommended by Ministry of Environment and forest has been followed and complied during offshore drilling campaign October 2012 and onshore facility equipped with the produced water treatment facilities are designed as per the relevant standards; notified Residual Chlorine is not exceeding 1 mg/l before disposal.
(ix)	The drill cutting (DC) wash water shall be treated to conform to limits notified under the Environment (Protection) Act, 1986 before disposal into the sea. The treated effluent shall be monitored regularly.	The condition recommended by Ministry of Environment and forest has been followed and complied during offshore drilling campaign October 2012 and the drill cutting (DC) disposed as per international good practices.
(x)	All the guidelines shall be followed for the disposal of solid waste; drill cutting and drilling fluids for onshore and offshore drilling operation notified vide GSR.546 (E) dated 30 th August 2005. Different types of wastes shall be kept segregated.	Authorization obtained from TNPCB for disposal through authorized agency under Hazardous Wastes (Management, Handling and Transboundary Movement) Rules 1989. Copy of authorization letter enclosed as Annexure - 5
(xi)	High efficiency equipment shall be used to separate solids, hydrocarbons and water such as shale shakers with improved capacity to filter smaller solids, low shear pumps for use in produced water shall be employed	The condition recommended by Ministry of Environment and forest has been followed and complied during drilling campaign October 2012. The rig engaged during the drilling campaign had the inbuilt facility of shale shakers with capacity to filter smaller solids, low shear pumps for use in produced water. The mud is filtered at shale shaker using a fine mesh and washed and discharged as per stipulated norms.
(xii)	Good bookkeeping practices shall be put in place to manage wastes such as waste tracking program viz. identify where and when the waste was generated, the type of waste and its volume, the disposal method and its location, and the personnel responsible for the waste Management	The company has followed its waste management program and complied during offshore drilling campaign October 2012. Offshore Installation Manager held the responsibility of waste management.
(xiii)	A waste minimization plan shall be prepared and followed through proper inventory management following best practices in drilling operations, good housekeeping practices and optimized equipment maintenance schedules.	Best practices in drilling operations followed with good housekeeping practices. The housekeeping is an essential element in our operation which all are followed on daily basis during the



		offshore drilling campaign October 2012
(xiv)	Only essential rig personnel shall be on board the rig. An Emergency Response Plan and health, safety and environment (HSE) system shall be installed. Geo-hazard and geotechnical studies shall be carried out to ensure safe drilling operations	The personnel on board are tracked daily, the rig engaged during offshore drilling campaign October 2012 has its own Emergency Response Plan and health, safety and environment (HSE) system. Geo-hazard and geotechnical studies are carried out before commencement of the project.
(xv)	All the hazardous waste generated at the rig /offshore facility shall be properly treated, transported to onshore and disposed of in accordance with the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008. No Waste oil shall be disposed off into sea. Waste /used oil shall be sold to MoEF / CPCB authorized recyclers / re-processors only	The condition recommended by Ministry of Environment and forest has been followed and complied during offshore drilling campaign October 2012 by obtaining the authorization from Tamilnadu Pollution Control Board for collection / treatment / storage and disposal of hazardous waste through authorized agency under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 1989.
(xvi)	The company shall also undertake conservation measures to protect the marine animals/biota in the region	The condition recommended by Ministry of Environment and forest has been followed and complied during offshore drilling campaign October 2012 before release of water into the sea.
(xvii)	The International "Good Practices" adopted by the Petroleum Industry viz international norms to safeguard the coastal and marine biodiversity shall be implemented by the company.	International "Good Practices" adopted by the Petroleum Industry are followed. Awareness program through induction session for all employees were conducted to safeguard the coastal and marine biodiversity.
(xviii)	Requisite infrastructure facilities shall be provided near the offshore installations so that booms and skimmers / chemical dispersants could be deployed immediately in case of oil leakage from the installations. Efforts shall be made to curtail the oil slick within 500 meters of the installation and accordingly, action plan and facilities to check the oil slick beyond 500 meters should be provided.	The company has procured booms and skimmers / chemical dispersants from Lamor Corporation and complied during drilling campaign October 2012. HOEC has Oil Spill Contingency Plan in place to tackle oil spill incidents.
(xix)	Approval from DG shipping / Ministry of Defense under the Merchant Shipping Act prior to commencement of the drilling operations shall be obtained. At least 30 days prior to the commencement of drilling, the exact location should be intimated to the Director General of Shipping, Mumbai and the Company shall abide by any direction he may issue regarding ensuring the safety of navigation in the area.	Complied by obtaining prior clearances from DG Shipping, ODAG / NAVY for various vessels used as part of the project by the statutory authorities
(xx)	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 standards stipulated by MOEF/CPCB	The condition recommended by Ministry of Environment and forest has been followed and complied during drilling campaign October 2012
(xxi)	The design, material of construction, assembly, inspection, testing and safety aspects of operation and maintenance of pipeline and transporting the natural gas/ oil shall be	Complied with the following ASME/ANSI B 31.8/B31.4 and OISD standard 141 as applicable.



	governed by ASME/ANSI B 31.8/B31.4 and OISD standard 141.	
(xxii)	The project authorities shall install SCADA system with dedicated optical fiber-based telecommunication link for safe operation of the pipeline and leak detection system. Intelligent pigging facility shall be provided for the entire pipeline system for internal corrosion monitoring. Coating and impressed current cathodic protection system shall be provided to prevent external corrosion.	The condition recommended by Ministry of Environment and forest has been followed and complied during drilling campaign October 2012 Leak detection system in place, pipeline not passed through residential area, no additional sectionalizing valves provided. Intelligent pigs are launched for internal corrosion monitoring of pipeline. Cathodic system in place for the protection of the pipeline during production phase.
(xxiii)	The project proponent shall also comply with the environmental protection measures and safeguards recommended in the EIA/EMP/RA/NIO report.	The condition recommended by Ministry of Environment and forest has been followed and complied during drilling campaign October 2012
(xxiv)	On completion of activities, the well shall be either plugged and suspended (if the well evaluation indicates commercial quantities of hydrocarbon) or killed and permanently abandoned with mechanical plugs and well cap. If well is suspended, it shall be filled with a brine solution containing small quantities of inhibitors to protect the well. The position at the end of the activities should be communicated in detail to the Ministry indication the steps taken i.e., whether all the wells are plugged or abandoned, and precautions taken.	The drilled wells connected to the existing sun platform and producing marginal gas and condensate. The wells are adequately protected with automatic pressure control and safety shutdown valves.
(xxv)	Recommendations mentioned in the Risk Assessment & Consequence Analysis and Disaster Management Plan should be followed.	The condition recommended in the Risk Assessment & Consequence Analysis and Disaster Management Plan has been followed and complied during drilling campaign October 2012 and continued following during the production phase as per recommendation by MoEF
(xxvi)	Full drawings and details of Blow Out Preventor to encounter well kick due to high formation presence, if encountered, shall be submitted to the Ministry within 3 months of the issue of environment clearance.	The condition recommended by Ministry of Environment and forest has been followed and complied during drilling campaign October 2012
(xxvii)	Petroleum & Natural Gas (Safety in Offshore Operations) Rules, 2008 of OISD shall be strictly adhered during / production	Adherence of Petroleum & Natural Gas (Safety in Offshore Operations) Rules, 2008 of OISD recommended by Ministry of Environment and forest has been followed and complied during drilling campaign October 2012
(xxviii)	Adequate funds both recurring and non-recurring shall be earmarked to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.	An adequate budgetary provision for funding HSE activities exists and is given the highest priority as per Company HSE Policy.
(xxix)	A brief report on environmental status & safety related information generated and measures taken as well as frequency of such reporting to the higher Authority shall	The condition recommended by Ministry of Environment and forest has been followed and complied during drilling



	be submitted to this Ministry and its Regional Office at Bangalore.	campaign October 2012
(xxx)	Company shall prepare project specific environmental manual and a copy should be made available at the drilling site for the compliance.	The condition recommended by Ministry of Environment and forest has been followed and complied during drilling campaign October 2012
(xxxi)	Company shall adopt Corporate Environment Policy as per the Ministry's O.M. No. J-11013/41/2006-IA II (I) dated 26 th April 2011 and implemented.	Health & Safety policy and a dedicated Environmental policy has been framed to adopt and implement the recommendation by Ministry of Environment and forest as per the Ministry's O.M. No. J-11013/41/2006-IA II (I) dated 26 th April 2011.
B.	GENERAL CONDITIONS:	
Sl. No	Condition of Environment Clearance	Compliance Status
(i)	The project authority must strictly adhere to the stipulations made by the Tamilnadu Pollution Control Board (TNPCB), State Government and any other statutory authority.	Obtained prior approvals from statutory authorities before commencement of operations.
(ii)	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	No expansion or modification in the plant was carried out. The drilling project was executed during October 2012 as per the plan submitted without any deviation.
(iii)	The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended on 3 rd October 1994 and 6 th January 2000. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc, must be obtained wherever applicable	The condition complied for clearance / approvals obtained for inspection wherever applicable.
(iv)	The overall noise levels in and around the rig area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc, on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz, 75 dBA (daytime) and 70 DBA (night time)	The acoustic hoods, silencers, enclosures etc are inbuilt in the generators installed in the rig and the noise level are maintained as per the EPA Rules, 1989.
(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	At PY-1 project HOEC has set up a lab to carry out tests; and additional tests are carried out by Government accredited third parties for carrying out 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	A copy of clearance letter earlier (during 2011-12) sent to the Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body etc as per the conditions.



	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 respective Regional Office of the MoEF, the respective Zonal Office of CPCB and the TNPCB. The criteria pollutant levels namely; PM10, SO2, NOX, HC (Methane & Non – Methane), VOCs (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	The status of compliance report has been uploaded in the company website in the following link. http://www.hoec.com/disclosures-and-reports/ Regular samples are collected by MoEF accredited laboratory during October 2012 offshore drilling campaign, copy of a report enclosed as Annexure -6 .
(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 TNPCB. The Regional Office of this Ministry / CPCB / TNPCB shall monitor the stipulated conditions.	The condition recommended by Ministry of Environment and forest has been followed and complied regular submission of six-monthly compliance reports are being submitted to the regional office of MoEF / TNPCB
(ix)	The environmental statement for each financial year ending 31 st March in Form – V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MoEF by e-mail.	The condition recommended by Ministry of Environment and forest has been followed and complied with by submitting the environmental statement in Form – V.
(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 Tamilnadu Pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in . This should 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 should be forwarded to the Regional Office	The condition recommended by Ministry of Environment and forest has been followed and complied. As a documentary proof the copy of the advertisement is enclosed for your reference.
(xi)	Project authorities shall inform the regional office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	The date of financial closure of our company is 31 st of March every year. The EC granted is for drilling a well at offshore, hence land development work is not applicable.



மாலை மலர்

இந்தியாவின் **No.1** மாலை நாளிதழ்
MAALAI MALAR

திருச்சி 10-1-2012 (சேவ்வாய்கிழமை) 8 பக்கம் 400 காசு ★ மலர் 35 இதழ் 27

ராமேசுவரம் கோவிலுக்கு வந்த

இன்ஸ்பெக்டர் மோதி பலி செய்து கொண்டாரா?

பாலில் இன்ஸ்பெக்டர் கோபாலகிருஷ்ணன் (பலது43) என்பது தெரிய வந்தது. இதைப்போல அவரது உடலை பிரதேபரிசோதனை நாள்க்கு மதுரை அரசு மூலப்பத்திரிக்கு அனுப்பி வைத்தனர்.

தற்கொலையா? சில மாதங்களுக்கு முன்பு இன்ஸ்பெக்டர் கோபாலகிருஷ்ணன் நகர குற்றப் பிரிவில் பணிபுரிந்தார். பின்னர் காத்திருப்போர் பட்டியலில் வைக்கப்பட்ட கோபாலகிருஷ்ணன் சில

வாசகர்களுக்கு முன்பு செல்லும் இன்ஸ்பெக்டராக (பொறுப்பு) பணியாற்றி வந்தார். இந்த நிலையில் தான் இன்று ரெயில் மோதி பலியாகி உள்ளார்.

கோபாலகிருஷ்ணன் தற்கொலை செய்து கொள்ளுமா? என்ற கோணத்திலும் போலீசார் விசாரணை நடத்தி வருகிறார்கள். ரெயில் மோதி இன்ஸ்பெக்டர் பலியான சம்பவம் மதுரையில் பெரும் பரபரப்பு ஏற்படுத்த உள்ளது.

public notice

Customers and public in general are hereby informed that the Cover Note leafs bearing number 111000257287, 111000276615, 111000313356-111000313360 of our company (Reliance General Insurance Co. Ltd.), has been reported lost/misplaced and intimation given to Police authorities.

Our Company will not be responsible for any kind of liability arising out of misuse of the above mentioned Cover Note series. Anybody in possession of these Cover Note Books may please contact Reliance General Insurance Co. Ltd. on 022-3999 8282 (charges apply)

RELIANCE
General Insurance

HOEL HINDUSTAN OIL EXPLORATION COMPANY LIMITED
Lakshmi Chambers, 192, St. Mary's Road, Alwarpet, Chennai - 600 018

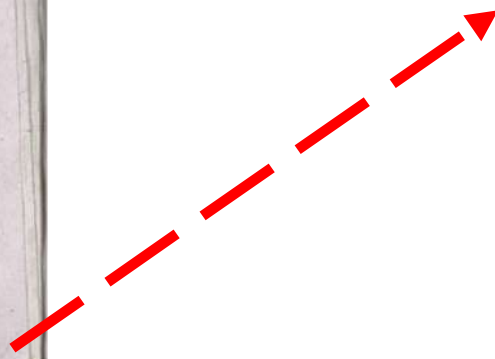
NOTICE OF ENVIRONMENTAL CLEARANCE BY MOEF, GOI FOR OFFSHORE DRILLING OF ONE INFILL DEVELOPMENT WELL IN PY - 1 BLOCK, CAUVERY BASIN, OFF THE COAST OF TAMILNADU

The Ministry of Environment and Forests had accorded Environmental clearance for drilling of one infill development well in offshore Block PY - 1, Cauvery Basin, off the coast of Tamilnadu vide no.: J-11011/183/2011-IA-II (I) dated October 12, 2011. The copy of the said clearance letter is available at Company's Offices and at the office of the Tamilnadu Pollution Control Board, and may also be seen at the website of the Ministry of Environment and Forest at <http://envfor.nic.in>

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Lakshmi Chambers, 192, St. Mary's Road, Alwarpet, Chennai - 600 018

NOTICE OF ENVIRONMENTAL CLEARANCE BY MOEF, GOI FOR OFFSHORE DRILLING OF ONE INFILL DEVELOPMENT WELL IN PY - 1 BLOCK, CAUVERY BASIN, OFF THE COAST OF TAMILNADU

The Ministry of Environment and Forests had accorded Environmental clearance for drilling of one infill development well in offshore Block PY - 1, Cauvery Basin, off the coast of Tamilnadu vide no.: J-11011/183/2011-IA-II (I) dated October 12, 2011. The copy of the said clearance letter is available at Company's Offices and at the office of the Tamilnadu Pollution Control Board, and may also be seen at the website of the Ministry of Environment and Forest at <http://envfor.nic.in>



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ராமேசுவரம் கோவிலுக்கு வந்த

இளை கலெக்டர் மகேஸ்வரி வழங்கிய காட்சி.

மதுரையில்

இன்ஸ்பெக்டர் மோதி பலி செய்து கொண்டாரா?

கோபால் இன்ஸ்பெக்டர்
கோபால் கிருஷ்ணன்
வயது 43 என்பது தெரிய
பந்தது.

இதையடுத்து அவரது
உடலை பிரேத பரிசோதனை
களைக்கு மதுரை அரசு
ஆஸ்பத்திரிக்கு அனுப்பி
வைத்தனர்.

தற்கொலையா?

சிலமாதங்களுக்கு முன்பு
இன்ஸ்பெக்டர் கோபால்
கிருஷ்ணன் நகர குற்றப்
பிரிவில் பணிபுரிந்தார்.
பின்னர் காத்திருப்போர்
பட்டியலில் வைக்கப்பட்ட
கோபால் கிருஷ்ணன் சில

வாரங்களுக்கு முன்பு செல்
லூர் இன்ஸ்பெக்டராக
(பொறுப்பு) பணியாற்றி
வந்தார். இந்த
நிலையில்தான் இன்று
ரெயில் மோதி பலி யாகி
உள்ளார்.

கோபால் கிருஷ்ணன்
தற்கொலை செய்து கொண்
டாரா? என்ற கோணத்
திலும் போலீசார் விசா
ரணை நடத்தி வருகிறார்
கள். ரெயில் மோதி இன்ஸ்பெ
க்டர் பலியான சம்பவம்
மதுரையில் பெரும்
பரபரப்பு ஏற்படுத்தி
உள்ளது.

இவா கல்லூராகு சைக்
கிளில் செல்வது வழக்கம்.
அதன்படி நேற்று காலை
தீபா கல்லூரிக்கு சைக்கிளில்
சென்றார். அப்போது ஒரு
கார் பின் தொடர்ந்து
வந்தது.

திடீர் என அந்த கார்
சைக்கிளை மறித்தது. காரில்
இருந்து இறங்கிய மர்ம
நபர்கள் தீபாவை அலாக்காக
தூக்கினர். பின்னர் காரில்
தூக்கி போட்டு கடத்தி
சென்றனர்.

கடத்தல்

அதிர்ச்சி அடைந்த
தீபா கூச்சல் போட்டார்.
ஆனால் மர்ம நபர்கள்
கார் கண்ணாடிகளை மூடி
இருந்ததால் அலறல் சத்தம்
கேட்கவில்லை. உடனே தீபா
புத்திசாலி தனமாக தாயார்
பானுமதியிடம் ஒரு கும்பல்
தன்னை சைக்கிளோடுகடத்தி
செல்வதாக செல்போனில்
கூறினார்.

பதறி போன பானுமதி
இதுகுறித்து கும்பகோணம்
போலீசில் புகார் செய்தார்.

public notice

Customers and public in
general are hereby informed
that the Cover Note leafs
bearing number
111000257287, 111000276615,
111000313356-111000313360
of our company (Reliance
General Insurance Co. Ltd.),
has been reported
lost/misplaced and intimation
given to Police authorities.

Our Company will not be
responsible for any kind of
liability arising out of misuse
of the above mentioned Cover
Note series. Anybody in
possession of these Cover
Note Books may please
contact Reliance General
Insurance Co. Ltd. on
022-3989 8282 (charges apply)

RELIANCE

General Insurance

H O E HINDUSTAN OIL EXPLORATION COMPANY LIMITED
Lakshmi Chambers, 192, St. Mary's Road, Alwarpet, Chennai - 600 018

NOTICE OF ENVIRONMENTAL CLEARANCE BY MOEF, GOI FOR OFFSHORE
DRILLING OF ONE INFILL DEVELOPMENT WELL IN PY - 1 BLOCK,
CAUVERY BASIN, OFF THE COAST OF TAMILNADU

The Ministry of Environment and Forests had accorded Environmental clearance for drilling of
one infill development well in offshore Block PY-1, Cauvery Basin, off the coast of Tamilnadu vide
no.: J-11011/183/2011-IA-II (I) dated October 12, 2011. The copy of the said clearance letter is
available at Company's Offices and at the office of the Tamilnadu Pollution Control Board, and
may also be seen at the website of the Ministry of Environment and Forest at <http://envfor.nic.in>



TAMIL NADU POLLUTION CONTROL BOARD

From

Dr. S.Balaji, M.E. (PH), Ph.D.,
Member Secretary,
Tamilnadu Pollution Control Board,
76, Mount Salai, Guindy,
Chennai-600 032.

To

The Chairman,
Tamil Nadu Coastal Zone Management
Authority and Principal Secretary,
Government of Tamil Nadu,
Environment and Forests (Ec-3) Department,
Secretariat,
Chennai – 600 009.

Lr.No.T.3/TNPCB/F.15178/CUD/W&A/2013-1 Dt.01.02.2013.

Sir,

Sub: TNPC Board – Industries – M/s.Hindustan Oil Exploration Company Ltd., Exploration of Oil and Gas at the block py-1– located in the Northern offshore part of the Cauvery Basin in Water depths ranging from 40m to 250m in South Coast India, Coast of Tamilnadu - Drilling of one infill development well in offshore block py-1 Cauvery Basin, off Cuddalore – To consider the NOC for the new well in existing platform – reg.

Ref: No.11-103/2009-IA-III, GoI, MoEF dt.1.4.2010.

The original projects contain 2exploratory and 3 development wells for oil and gas exploratory for which Environmental Clearance under CRZ as well as EIA Notification were obtained.

The unit has already completed 3development and the 2 exploratory wells are yet to be drilled. At this juncture, the unit has proposed to convert one exploratory well into infill development well within the same block.

The unit has applied for NOC from MoEF for the change of plan and accordingly the MoEF has issued NOC to the unit for the changed drilling plan vide

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel :22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpceb@md3.vsnl.net.in www.tnpceb.gov.in

Lr.No.F.No.J-11011/183/2011-IA II(1) dt.12.10.11 – the both clearance issued under EIA Notification and CRZ Notification.

Earlier Board has taken a decision to not to insist NoC from TNPC Board as the site falls offshore and the Board has communicated on no request of 'NOC' to the unit vide Board letter dt.12.09.2005.

Moreover the revised CRZ Notification 2011 has clearly indicated that the territorial water upto 12 Nautical miles is covered under CRZ and the same may be taken up for implementation of provision of Water (P&CP) Act, 1974 and Air (P&CP) Act 1981.

The TNPC Board has no jurisdiction for issue of NOC. The matter concerns offshore drilling related issues for which Tamil Nadu Coastal Zone Management Authority is the authority for considering the unit request. Hence Tamil Nadu Coastal Zone Management Authority may consider this request.

This is submitted for information and further necessary action please.

The receipt of this letter may be acknowledged.

Encl.: CRZ clearance of py-1 offshore platform.

P. V. Sub
5/2/2013

for MEMBER SECRETARY

Copy to:

1. The DEE, TNPC Board,
Cuddalore.
2. The Director,
Environment Department,
Government of Tamilnadu,
Chennai-9.
3. The Joint Managing Director,
M/s.Hindustan Oil Exploration Company Ltd.,
Lakshmi Chambers,
192, St.Marys Road,
Alwarpet, Chennai-600 018.

05-2-13

F. No. J-11011/183/2011-IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

HOEC
Received

17 OCT 2011

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi – 110 003

E-mail : pb.rastogi@nic.in

Telefax : 011: 2436 7668

Dated 12th October, 2011

To,

Shri Manish Maheshwari
Joint Managing Director
M/s Hindustan Oil Exploration Company Limited
'Lakshmi Chambers', 192, St.Mary's Road, Alwarpet,
Chennai - 600 018, Tamil Nadu

E-mail : contact@hoec.com/mbalaji@hoec.com/manish@hoec.com; FaxNo.: 044-66229012

Subject : Drilling of One Infill Development Well in Offshore Block PY-1, Cauvery Basin, Off the Coast of Tamil Nadu by M/s Hindustan Oil Exploration Company Limited - Environmental Clearance reg.

Ref. : Your letter no. HOEC/PY1/ENV/2011309 dated 15th March, 2011.

Sir,

Kindly refer your letter dated 15th March, 2011 alongwith project documents including Form I, Terms of References, Pre-feasibility Report and subsequent submission of additional information vide letter dated 22nd May, 2011 regarding above mentioned project.

2.0 The Ministry of Environment & Forests has examined your application. It is noted that proposal is for the drilling of one infill development well in offshore Block PY-1, Cauvery Basin, off the coast of Tamil Nadu. Main aim of drilling is to reach upto gas production capacity because there is reduction in gas production from the existing 3 production wells in the PY-1 field due to natural depletion. Environmental clearance was accorded by the Ministry vide letter no. J-11011/368/2005-IA(II)(I) dated 29th May, 2006 for offshore drilling of 2 exploratory and 3 development wells for oil and gas exploration. So far, only 3 development wells have been drilled and 2 exploratory wells are yet to be drilled. Therefore, one exploratory well will be converted into in-fill development well because same drilling process is involved in the both type of well. Proposed infill producer well lies within 12 nautical miles of the HTL. Surface coordinates of the proposed well is Latitude: 11° 30' 06.038" N, Longitude: 79° 56' 03.092 E. Coordinates of the block are:

3.0

Point	Latitude	Longitude
A	11° 31'16" N	79° 52'51" E
B	11° 33'31" N	79° 55'05" E
C	11° 29'53" N	80° 00'00" E
D	11° 26'48" N	79° 57'20" E

Existing drilling platform will be used for drilling and additional well will be drilled by using horizontal directional drilling techniques. No additional offshore footprint other than sub-sea drilling will be installed. Environmental clearance for installation of PY-1 platform, pipeline, gas processing (90 MMSCFD) and oil condensate processing unit (1600 BPD) was accorded vide Ministry's letter.

no.J-11011/98/2007-IA(II) (I) dated 6th July, 2007. CRZ clearance for laying of a pipeline from PY-1 offshore platform to the onshore gas processing plant at Village Pilliaperumalnattur, District Nagapattinam, Tamil Nadu was also accorded vide Ministry's letter no. 11-103/2009-IA-III dated 1st April, 2010. Total project cost is Rs. 189.00 Crores.

4.0 Air emissions from D.G. sets will be controlled by providing adequate stack height. Total water requirement from sea water source through desalination plant at rig for drilling mud preparation will be 69.15 m³/day. Water based mud (WBM) will be used for the drilling at top and reservoir sections. Drill cuttings will be separated from mud and washed drill cutting will be discharged as per MoEF's Notification issued by G.S.R 546 (E) dated 30th August, 2005. Domestic sewage will be treated in sewage treatment plant (STP). The waste oil and oily waste generated from the equipments on board will be brought onshore and sent to authorized recycler/re-processor.

5.0 The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 24th meetings held during 22nd – 23rd June, 2011.

6.0 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.

7.0 EIA/EMP report preparation and public hearing were exempted as per para 7 (ii) of EIA Notification, 2006.

8.0 Since the proposal involves drilling of one in-fill development well instead exploratory well, the Ministry has no objection for of conversion of one exploratory well into in-fill development well subject to strict compliance of the following specific and general conditions:

A. SPECIFIC CONDITIONS :

- i. All the specific conditions and general conditions specified in the environmental clearance accorded vide Ministry's letter no. J-11011/368/2005-IA-II(I) dated 29th May, 2006, J-11011/98/2007-IA-II(I) dated 6th July, 2007 and CRZ clearance vide Ministry's letter no. J-11011/103/2009-IA-II(I) dated 1st April, 2009 shall be implemented.
- ii. Company shall obtain No Objection Certificate (NOC) from the Tamil Nadu Pollution Control Board (TNPCB) prior to start the drilling activity and a copy shall be submitted to the Regional Office of the MOEF.
- iii. As proposed, direction well method technique shall be used for drilling. The infill development well shall be drilled from the existing platform.
- iv. Only high efficiency DG set with adequate stack height and modern emission control equipment and low sulphur clean diesel should be used. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
- v. Total water requirement from sea water source shall not exceed 69.15 m³/day and prior permission shall be obtained from the Competent Authority for the drawl of water. Only water based mud system shall be used. No Chromium based fluid shall be used as the drilling fluid.
- vi. No spent synthetic based mud and material will be discharged into sea. Water based drilling mud (WBM, 150 m³/well) shall be discharged to the sea after proper dilution as per E(P) Rules vide G.S.R 546(E) dated 30th August, 2005. ✓

- 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 TNPCB 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.

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

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

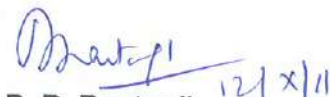
11.0 The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public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



(Dr. P. B. Rastogi)
Director

Copy to:

1. The Principal Secretary, Department of Environment, Ground Floor, Panagal Buildings 1, Jeenis Road, Saidapet, Chennai - 600 015.
2. The Chief Conservator of Forests, Regional Office (Southern Zone, Bangalore) Kendriya Sadan, 4th Floor, E&F Wing, II Block Koramangala, Bangalore-560034.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Tamil Nadu Pollution Control Board, Corporate Office, 76, Anna Salai, Guindy, Chennai - 600 032.
5. Adviser, IA II(I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Guard File/Monitoring File/Record File.



(Dr. P. B. Rastogi)
Director

xxxi. Company shall adopt Corporate Environment Policy as per the Ministry's O.M. No. J-11013/41/2006-IA.II(I) dated 26th April, 2011 and implemented.

B. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the Tamil Nadu Pollution Control Board (TNPCB), 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 respective Regional Office of the MOEF, the respective Zonal Office of CPCB and the TNPCB. The criteria pollutant levels namely; PM₁₀, SO₂, NO_x, HC (Methane & Non-methane), VOCs (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- 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 TNPCB. The Regional Office of this Ministry / CPCB / TNPCB shall monitor the stipulated conditions.
- ix. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail. ✓

- xix. Approval from DG Shipping under the Merchant Shipping Act prior to commencement of the drilling operations shall be obtained. At least 30 days prior to the commencement of drilling, the exact location shall be intimated to the Director General of Shipping and the Company should abide by any direction he may issue regarding ensuring the safety of navigation in the area.
- xx. 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 standards stipulated by MOEF/CPCB.
- xxi. The design, material of construction, assembly, inspection, testing and safety aspects of operation and maintenance of pipeline and transporting the natural gas/oil shall be governed by ASME/ANSI B 31.8/B31.4 and OISD standard 141.
- xxii. The project authorities shall install SCADA system with dedicated optical fibre based telecommunication link for safe operation of pipeline and Leak Detection System. Intelligent pigging facility shall be provided for the entire pipeline system for internal corrosion monitoring. Coating and impressed current cathodic protection system shall be provided to prevent external corrosion.
- xxiii. The project proponent shall also comply with the environmental protection measures and safeguards recommended in the EIA/EMP/RA/NIO report.
- xxiv. On completion of activities, the well shall be either plugged and suspended (if the well evaluation indicate commercial quantities of hydrocarbon) or killed and permanently abandoned with mechanical plugs and well cap. If well is suspended, it shall be filled with a brine solution containing small quantities of inhibitors to protect the well. The position at the end of the activities should be communicated in detail to the Ministry indicating the steps taken i.e. whether all the wells are plugged or abandoned and precautions taken.
- xxv. Recommendations mentioned in the Risk Assessment & Consequence Analysis and Disaster Management Plan shall be followed.
- xxvi. Full drawings and details of Blow Out Preventor to encounter well kick due to high formation presence, if encountered, shall be submitted to the Ministry within 3 months of the issue of environment clearance.
- xxvii. Petroleum & Natural Gas (Safety in Offshore Operations) Rules, 2008 of OISD shall be strictly adhered during drilling/production.
- xxviii. Adequate funds both recurring and non-recurring shall be earmarked to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government alongwith the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.
- xxix. A brief report on environmental status & safety related information generated and measures taken as well as frequency of such reporting to the higher Authority shall be submitted to this Ministry and its Regional Office at Bangalore.
- xxx. Company shall prepare project specific environmental manual and a copy should be made available at the drilling site for the compliance. ✓

- vii. The Company shall ensure that there shall be no impact on flora fauna due to drilling of wells in the offshore sea. The company shall monitor the petroleum hydrocarbons and heavy metals concentration in the marine fish species regularly and submit report to the Ministry.
- viii. Treated wastewater (produced water or formation water or sanitary sewage) shall comply with the marine disposal standards notified under the Environment (Protection) Act, 1986. Residual Chlorine shall not exceed 1 mg/l before disposal.
- ix. The drill cutting (DC) wash water shall be treated to conform to limits notified under the Environment (Protection) Act, 1986 before disposal into sea. The treated effluent shall be monitored regularly.
- x. All the guidelines shall be followed for the disposal of solid waste, drill cutting and drilling fluids for onshore and offshore drilling operation notified vide GSR.546(E) dated 30th August, 2005. Different types of wastes shall be kept segregated.
- xi. High efficiency equipment shall be used to separate solids, hydrocarbons and water such as shale shakers with improved capacity to filter smaller solids, low shear pumps for use in produced water shall be employed.
- xii. Good book keeping practices shall be put in place to manage wastes such as waste tracking program viz. identify where and when the waste was generated, the type of waste and its volume, the disposal method and its location, and the personnel responsible for the waste management.
- xiii. A waste minimization plan shall be prepared and followed through proper inventory management following best practices in drilling operations, good house keeping practices and optimized equipment maintenance schedules.
- xiv. Only essential rig personnel shall be on board the rig. Emergency Response Plan and health, safety and environment (HSE) system shall be installed. Geo-hazard and geotechnical studies shall be carried out to ensure safe drilling operations.
- xv. All the hazardous waste generated at the rig/offshore facility shall be properly treated, transported to on shore and disposed of in accordance with the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008. No waste oil shall be disposed off into sea. Waste/used oil shall be sold to MoEF/CPCB authorized recyclers/re-processors only.
- xvi. The company shall also undertake conservation measures to protect the marine animals/biota in the region.
- xvii. The International 'Good Practices' adopted by the Petroleum Industry viz International norms to safeguard the coastal and marine biodiversity shall be implemented by the company.
- xviii. Requisite infrastructure facilities shall be provided near the offshore installations so that booms and skimmers/chemical dispersants could be deployed immediately in case of oil leakage from the installations. Efforts shall be made to curtail the oil slick within 500 meters of the installation and accordingly, action plan and facilities to check the oil slick beyond 500 meters should be provided. ✓



TAMIL NADU POLLUTION CONTROL BOARD

BY RPAD

Proc.No.T 3/ TNPCBd/ F.29111/RL/HWM/Amend/NGT/ 2013 Dated: 11.1.2013

Sub:- TNPCBd - Industries - M/S. Hindustan Oil exploration company Ltd,PY 1,Onshore Gas Terminal,Pillaiperumanallur Village,Tranqubar Taluk,Nagapattinam District - Accumulated waste - Amendment to the Hazardous Authorisation - Issued – Reg.

1.Proc. No. T5/Pet/HWM/F-29111/NGT/09 Dated 17.12.2009

Ref:- 2. Unit Letter Dated 9.12.2012

Tamilnadu Pollution Control Board had issued the Authorization to the unit of M/S. Hindustan Oil exploration company Ltd,PY 1,Onshore Gas Terminal,Pillaiperumanallur Village,Tranqubar Taluk,Nagapattinam District in the proceedings first cited and requested for amendment vide reference 2nd cited under the Hazardous Wastes (Management, Handling and Transboundary movement) Rules 2008 to handle hazardous wastes under 2.1 and 2.3. which has also to be included for handling and disposal. to the unit in the Authorization No.3561 dated: 17.12.2009 and to handle hazardous wastes as specified below:

Hence, it is hereby decided to amend the Authorization in TNWML, Gummidipoondi, Thiruvallur District for the included quantity of 2.1 and 2.3 along with the existing hazardous wastes 5.1 and 5.2 quantity as below

Annexure-I

Sl No	Details of process generating hazardous waste as listed in column 2 of Schedule 1 of the amended rules / class of waste as per Schedule 2	Details of Waste Stream as indicated in column 3 of Schedule 1 / identity of waste as per Schedule 2	Quantity generated / handled per year	Activity for which authorization is issued
1	5. Industrial operations Using mineral/ synthetic oil As lubricant in Hydraulic systems or Other applications	5.1 Used/Spent oil 5.2 Waste Oil	6.3T/Yr 7KL/Yr 20Mt/Yr	Collection, Storage, disposal to authorized agency.

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpcb@md3.vsnl.net.in www.tnpcb.gov.in

Sl No	Details of process generating hazardous waste as listed in column 2 of Schedule 1 of the amended rules / class of waste as per Schedule 2	Details of Waste Stream as indicated in column 3 of Schedule 1 / identity of waste as per Schedule 2	Quantity generated / handled per year	Activity for which authorization is issued
2.	2.0 Drilling operation For oil and gas production	2.1 Drill cuttings Containing oil. 2.3 Drilling mud And other drilling Wastes (One time disposal)	45T/Yr 50T/Yr	Collection Storage, Disposal to TSDF. for incineration

All the other conditions stipulated in the Authorization No.3561 dated: 17.12..2009 remain unaltered.

The receipt of the proceedings shall be acknowledged.

Sd/-xxxxxxx
Member Secretary.

To

The Joint Managing Director,
M/S. Hindustan oil exploration company Ltd,
PY 1. Onshore Gas Terminal,
Pillaiperumanallur Village,
Tranqubar Taluk,
Nagapattinam District.

P. Shankar
22/11/2013
For Member Secretary,



Alfa Enviro Laboratory Services

(An ISO 9001: 2008 Certified Laboratory with ISO / IEC 17025 : 2005 NABL Accreditation)

No. 18/11, S.V.P. Nagar, 1st Floor, Arumbakkam, Chennai - 600 106. Tel / Fax : 044-4555 4554. E-mail: test@aelabs.in

TEST REPORT

REPORT No.	20122437	REPORT DATE	12/10/2012		
Customer Name & Address	M/s.Hindustan Oil Exploration Company Ltd,, Lakshmi Chambers, No:192,St.Mary's Road, Alwarpet, Chennai-600 018, India.				
Sample Description	Ambient Air Quality	Ambient Temperature	33°C		
		Relative Humidity	66 %		
Predominant Wind Direction	SW to NE	Wind Speed	4.1Kmph		
Time of Monitoring	0900Hrs to 1700 Hrs	Date of Sampling	08/10/2012		
Sampled by	AELS	Analysis Commenced on	08/10/2012		
Sampling Site	Pillaiperumalnallur,Thirukkadaiyur	Analysis Completed on	12/10/2012		
Location	Near Fire Station Area				
S.No	Parameters	Method of Reference	Units	Results	TNPSB Limits (As Per Consent order)
1.	Particulate Matter 2.5	CEPA – ARB- SOP- MLD 055	µg/m ³	8.2	60
2.	Particulate Matter 10	IS:5182 (Part 23) (Reaff 2006)	µg/m ³	51.4	100
3.	Sulphur Dioxide (SO ₂)	IS:5182 (Part 2) (Reaff 2006)	µg/m ³	6.8	80
4.	Nitrogen Dioxide (NO ₂)	IS 5182 (Part 6) 2006	µg/m ³	15.3	80
5.	Lead as Pb	IS:5182 (Part 22) (Reaff 2009)	µg/m ³	< 0.5	1.0
6.	Carbon monoxide as(CO)	IS:5182 (Part 10) (Reaff 2009)	mg/m ³	BDL (DL :1.15)	4.0
			For Alfa Enviro Laboratory Services		



[Signature]
Authorized Signatory

Note:
BDL: Below Detection Limit
DL: Detection Limit

****End of Report****
Page 01 of 01

S. SIVAKUMAR
Manager - Water & Environment

'Environmental Quality is Our Motto'

Note : The results listed here with are only for the items tested. Endorsement of test item is neither inferred nor implied. This report in full or part shall not be used for any promotional activity or publicity purpose without written consent by us. Unless specifically requested by the customer the test items will not be retained for more than 15 days from the date of issue of the test report. Under no circumstances lab accepts any liability for loss/damage caused by use or misuse of test report. Liability is limited to proven will full negligence and will in no case be more than the invoiced amount.



Alfa Enviro Laboratory Services

(An ISO 9001: 2008 Certified Laboratory with ISO / IEC 17025 : 2005 NABL Accreditation)

No. 18/11, S.V.P. Nagar, 1st Floor, Arumbakkam, Chennai - 600 106. Tel / Fax : 044-4555 4554. E-mail: test@aelabs.in

TEST REPORT

REPORT No.	20122440	REPORT DATE	12/10/2012		
Customer Name & Address	M/s.Hindustan Oil Exploration Company Ltd,, Lakshmi Chambers, No:192,St.Mary's Road, Alwarpet, Chennai-600 018, India.				
Sample Description	Stack Emission Quality Monitoring	Make:	Cummins		
		Tag No:	GTI-X-6510B		
Sampling Site	Pillaiperumalnallur,Thirukkadaiyur				
Name of the Stack	GG -1 (1160 Kva)	Date of Sampling	08/10/2012		
Sampled by	AELS	Test Completed on	12/10/2012		
S.No	Descriptions	Method of Reference	Units	Results	TNPSB Limit
1.	Stack Diameter	---	m	0.725	--
2.	Ambient Temperature	---	°C	34	--
3.	Stack Temperature	---	°C	426	--
4.	Flue Gas Velocity	IS:11255(Part 3) 2008	m/sec	9.3	--
5.	Volume of Gas Emission	IS:11255(Part 3) 2008	Nm ³ /hr	13814	--
6.	Particulate Matter (PM)	IS:11255(Part 1) Reaff.2003	mg/ Nm ³	34.6	150
7.	Sulphur Di-Oxide (SO ₂)	IS:11255(Part 2) Reaff.2003	mg/ Nm ³	5.2	--
8.	Nitrogen Di-Oxide (NO ₂)	IS:11255(Part 7) 2005	mg/ Nm ³	102.8	--
9.	Carbon-dioxide (CO ₂)	IS:13270 (Reaff.2003)	%(v/v)	6.0	--
10.	Oxygen (O ₂)	IS:13270 (Reaff.2003)	%(v/v)	12.8	--
11.	Carbon Monoxide (CO)	IS:13270 (Reaff.2003)	%(v/v)	< 0.2	--



For Alfa Enviro Laboratory Services



Authorized Signatory

Remarks: There is no limit for stack emission as per TNPSB Standards

****End of Report****

Page 01 of 01

S. SIVAKUMAR
Manager - Water & Environment

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Alfa Enviro Laboratory Services

(An ISO 9001: 2008 Certified Laboratory with ISO / IEC 17025 : 2005 NABL Accreditation)

No. 18/11, S.V.P. Nagar, 1st Floor, Arumbakkam, Chennai - 600 106. Tel / Fax : 044-4555 4554. E-mail: test@aelabs.in

TEST REPORT

REPORT No.	20122442	REPORT DATE	12/10/2012
Customer Name & Address	M/s.Hindustan Oil Exploration Company Ltd,, Lakshmi Chambers, No:192,St.Mary's Road, Alwarpet, Chennai-600 018, India.		
Sample Description	Noise Level Monitoring		
Sampling Site	Pillaiperumalnallur,Thirukkadaiyur		
Sampled by	AELS	Time of Monitoring	1430 Hrs to1630 Hrs
Date of Monitoring	08/10/2012	Test Completed on	12/10/2012
Sl.No.	Sampling Location	Noise Value dB(A)	Average Noise Value dB(A)
1.	Near Admin Building	52.1,49.3,48.2,49.8,50.7.	50.0
2.	Fire Water Pump House Area	53.1,51.8,52.7,53.6,52.9.	52.8
3.	Near Power House Area	52.6,53.3,52.9,51.7,53.0.	52.7
4.	Slug Catcher Area	51.3,50.2,52.8,51.9,50.6	51.4
TNPCCB Limits (As Per Consent order)		Day Time 55.0 dB(A)	
For Alfa Enviro Laboratory Services			



[Handwritten Signature]

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****End of Report****
Page 01 of 01

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TEST REPORT

REPORT No.	20122444	REPORT DATE	12/10/2012		
Customer Name & Address	M/s.Hindustan Oil Exploration Company Ltd,, Lakshmi Chambers, No:192,St.Mary's Road, Alwarpet, Chennai-600 018, India.				
Sample Description	STP OUTLET WATER	Method of Sampling	AELS/TM /SOP/001		
Description of the Sample	Clear Liquid	Date of Sampling	08/10/2012		
Sampled by	AELS	Commenced On	08/10/2012		
Sampling Site	Pillaiperumalnallur,Thirukkadaiyur	Test Completed on	12/10/2012		
S.No	Description	Method of Reference	Units	Results	TNPCB Norms
1.	pH @ 25°C	IS 3025 (part 11) (Reaff 2006)	---	7.5	5.5 – 9.0
2.	Total Suspended Solids	IS 3025 (part 17) (Reaff. 2006)	mg/L	5	100
3.	Biochemical Oxygen Demand (3 days incubation @27°C)	IS 3025 (part 44) (Reaff.2009)	mg/L	13	20
					For Alfa Enviro Laboratory Services



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****End of Report****

Page 01 of 01

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