



IndianOil

विपणन विभाग
Marketing Division

इंडियन ऑयल कॉर्पोरेशन लिमिटेड

Indian Oil Corporation Limited

कोच्चिन एल पी जी आयात टर्मिनल

Cochin LPG Import Terminal

इंडेन मौन्ड, निकट वइपिन प्रकाशस्तंभ

Indane Mound, Near Vypin Light House

पुतुवइपु पी ओ/Puthuvypu P.O., 682 508, कोच्चि/Kochi

Phone: 0484-2496001

Ref: CLIT/ MoEF

Date: 01.10.2016

To

The Director,

Ministry of Environment and Forests,

Regional Office (Southern Zone)

Kendriya Sadan, 4th Floor, E&F Wings,

17th Main Road, 2nd Block,

Koramanagala, Bangalore – 560034

Sir,

Sub: Submission of Half Yearly Environmental Clearance Compliance Reports (April'16 – September'16)

Ref: Environmental Clearance: F. No. 11-21/2010-IA.III dated 05.07.2010

We are enclosing herewith the Half Yearly Environmental Clearance Compliance Report for the period April'16 to September'16 as per the Environmental Clearance granted to our Cochin LPG Import Terminal project, Puthuvypeen, Kerala.

Thanking You,

Yours Sincerely,

For Indian Oil Corporation Limited,

DGM (LPG-Project)

Encl: Part I & II (Half Yearly Compliance Status reports)

CC: The Member Secretary, Kerala State Pollution Control Board, Pattom P.O., Thiruvananthapuram-695004.

PART I

Compliance Status of Conditions of Environmental Clearance

F. No. 11-21/2010-IA.III dated 05.07.2010

Monitoring Period (April'16 – September'16)

1	Name of the Project	Cochin LPG Import Terminal
2	Clearance No. & date	F. No. 11-21/2010-IA.III dated 05.07.2010
3	Address of the Contact Person	DGM (LPG-Project) Cochin LPG Import Terminal Indian Oil Corporation Limited Indane Mound Road, Near Vypin Light House, Puthuvypu P.O, Kochi-682508, Kerala Mobile: 09497715448 Phone: 0484-2496001 E-mail: dhanapandians@indianoil.in



PART II


Sr. No.	Part A: Specific Conditions	Status of Compliance
I	Clearance/NOC shall be obtained from Petroleum & Explosives Safety Organization (PESO).	Approval from PESO obtained (Copy enclosed).
li	Necessary Safety measures shall be incorporated conforming to the standards	Safety measures as per OISD standards are incorporated.
lii	All the issues raised in the public hearing shall be incorporated and complied with strictly	Being complied.
lv	No construction works other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.	Noted and will be Complied.
V	The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.	Environment Management Cell is setup and it is headed by Dy. General Manager (LPG-Project) & the Cell is monitoring the implementations of environmental safe guards. The project is in the construction stage. After commissioning of the project the Environment Management Cell will be reconstituted with a qualified Environmental member.
Vi	The project proponent shall take up mangrove plantation/ green belt in the project area, wherever possible. Adequate budget shall be provided in the Environment Management Plan for such mangrove development.	As per safety & security norms, Mangrove Plantation cannot be done inside the plant as it would affect the visibility. Therefore on safety & security point of view it is not feasible to plant mangroves inside the plant premises. However, efforts are made to earmark area for mangrove plantation outside project premises in consultation with Cochin Port Trust.
Vii	The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.	Rs 25 lakhs per annum has been provided for implementing the conditions stipulated by the MoEF and the State Government and shall not be diverted for any other purpose.
Sr. No.	Part B General Conditions	Status of Compliance
I	Adequate provision for infrastructure facilities including water supply fuel and sanitation must be ensured for construction workers during the construction phase of the project to avoid any damage to the environment	Being complied.
li	Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.	being complied.
lii	Full support shall be extended to the	Being complied.



S. DHANAPANDIAN
 Deputy General Manager (LPG-Project)
 Cochin LPG Import Terminal Project
 Indian Oil Corporation Limited

PART II

	officers of this Ministry /Regional Office at Bangalore by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.	
iv	Ministry of Environment & Forests or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.	Noted. Additional conditions if any will be complied.
V	The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry	Noted.
Vi	In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment and Forests.	Noted.
Vii	The project proponents 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 start of land development work.	The date of financial closure and final approval of the project is 01.07.2015. Land development commenced on 12 th October 2010 as informed vide letter CLIT/ADMN/ST/01 dated 22.11.2010 (Copy enclosed).
Viii	A copy of the clearance letter shall be marked, to concerned Panchayat/local NGO, if any, from whom any suggestion/ representation has been made received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	Copy of Environment Clearance letter has been marked to Elankunnapuzha Panchayat and also uploaded in India oil Corporation's web site.
ix	Kerala Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's Office/Tehsildar's office for 30 days.	Not applicable.
X	These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution). Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification 1994, including the amendments and rules made thereafter.	Noted
xi	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil	The following approvals have already been obtained. i) Consent to Establish from Kerala


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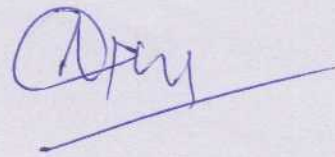
	Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities:	State Pollution Control Board ii) approval from Petroleum and Explosives Safety Organization (PESO) iii) Approval from Cochin port trust (CoPT), Local administrative authority iv) Factories & Boilers Department v) Fire & Rescue department, Govt of Kerala
Xii	The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Kerala State Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in . The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bangalore.	Press advertisement published on 19 th July, 2010 in "Mathrubhumi" (Malayalam) newspaper and "The New Indian Express" (English), copy submitted to MoEF, Regional office Bangalore vide our letter ref: CLIT/ADMN/ST/01 dated 21 st July, 2010 (Copy Enclosed).
Xiii	Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.	Noted
Xiv	Any appeal against this Clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.	Noted
Xv	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/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	Complied.
Xvi	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional	Being complied.



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	Office of MoEF, the respective Zonal Office of CPCB and the SPCB	
xvii	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 EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	Environmental statement for the financial year 2015-16 in form-V along with the status of compliance of EC conditions sent to KSPCB has been forwarded to MoEF, Southern Regional Office vide letter ref CLIT/MoEF dated 14.06.2016 (copy enclosed)



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Cochin LPG Import Terminal Project
Indian Oil Corporation Limited

TEST REPORT

Test Report No: SEANN/1607/R372	Date: 03.08.2016	Page 1 of 1
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CUSTOMER DETAILS

Customer Name & Address	M/s Indian Oil Corporation Ltd Cochin LPG Import Terminal project, Puthuvypu, Ernakulam District
Customer Reference	---

SAMPLE DETAILS

Source of Sample	Ambient Air	Sample Received On	28.07.2016
Location of Monitoring	Terminal Project West Main gate	Sample Code	SEANN/1607/S228
Date of Monitoring	27.07.2016	Sampled By	By Laboratory
Sampling Procedure	IS 5182 part V & XIV	Test Started On	28.07.2016
Humidity	77 %	Test Completed On	01.08.2016

SL NO	TEST PARAMETER	TEST METHOD	UNIT	RESULT	NAAQ STANDARD
01	Particulate Matter (PM ₁₀)	IS 5182 Part 23: RA 2012	µg/m ³	42.7	100
02	Particulate Matter (PM _{2.5})	EPA 40 CFR Part 50 appendix - L	µg/m ³	19.6	60.0
03	Sulphur Dioxide (SO ₂)	IS 5182 Part 2: RA 2012	µg/m ³	< 2.0	80.0
04	Oxides of Nitrogen (NO ₂)	IS 5182 Part 6: RA 2012	µg/m ³	< 2.0	80.0
05	Volatile Organic Compound (VOC)	EPA Method	µg/m ³	< 10.0	---

End of Report

For and on behalf of
Standard^S Environmental & Analytical Laboratories


Authorized Signatory

Rija Joseph
Technical Mannager

TEST REPORT

Test Report No: SEANN/1607/R373	Date: 03.08.2016	Page 1 of 1
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<u>CUSTOMER DETAILS</u>			
Customer Name & Address		M/s Indian Oil Corporation Ltd Cochin LPG Import Terminal project, Puthuvypu, Ernakulam District	
Customer Reference		---	
<u>SAMPLE DETAILS</u>			
Source of Sample	Ambient Air	Sample Received On	28.07.2016
Location of Monitoring	Terminal Project South East	Sample Code	SEANN/1607/S229
Date of Monitoring	27.07.2016	Sampled By	By Laboratory
Sampling Procedure	IS 5182 part V & XIV	Test Started On	28.07.2016
Humidity	77 %	Test Completed On	01.08.2016

SL NO	TEST PARAMETER	TEST METHOD	UNIT	RESULT	NAAQ STANDARD
01	Particulate Matter (PM ₁₀)	IS 5182.Part 23: RA 2012	µg/m ³	60.0	100
02	Particulate Matter (PM _{2.5})	EPA 40 CFR Part 50 appendix - L	µg/m ³	30.4	60.0
03	Sulphur Dioxide (SO ₂)	IS 5182 Part 2: RA 2012	µg/m ³	5.10	80.0
04	Oxides of Nitrogen (NO ₂)	IS 5182 Part 6: RA 2012	µg/m ³	9.20	80.0
05	Volatile Organic Compound (VOC)	EPA Method	µg/m ³	< 10.0	---

End of Report

For and on behalf of
Standard^S Environmental & Analytical Laboratories


Authorized Signatory

Rija Joseph
Technical Mannager

Standard^S Environmental & Analytical Laboratories

Accreditation and Approval: NABL as per ISO 17025: 2005 & "A" Grade laboratory of KSPCB

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 20 67 24 02
Web: www.sealabs.in, E-mail: seaalab@gmail.com, info@sealabs.in

TEST REPORT

Test Report No: SEANN/1607/R374	Date: 03.08.2016	Page 1 of 1
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<u>CUSTOMER DETAILS</u>			
Customer Name & Address		M/s Indian Oil Corporation Ltd Cochin LPG Import Terminal project, Puthuvypu, Ernakulam District	
Customer Reference		---	
<u>SAMPLE DETAILS</u>			
Source of Sample	Ambient Air	Sample Received On	28.07.2016
Location of Monitoring	Terminal Project East side	Sample Code	SEANN/1607/S230
Date of Monitoring	27.07.2016	Sampled By	By Laboratory
Sampling Procedure	IS 5182 part V & XIV	Test Started On	28.07.2016
Humidity	77 %	Test Completed On	01.08.2016

SL NO	TEST PARAMETER	TEST METHOD	UNIT	RESULT	NAAQ STANDARD
01	Particulate Matter (PM ₁₀)	IS 5182 Part 23: RA 2012	µg/m ³	60.0	100
02	Particulate Matter (PM _{2.5})	EPA 40 CFR Part 50 appendix - L	µg/m ³	40.2	60.0
03	Sulphur Dioxide (SO ₂)	IS 5182 Part 2: RA 2012	µg/m ³	6.50	80.0
04	Oxides of Nitrogen (NO ₂)	IS 5182 Part 6: RA 2012	µg/m ³	11.3	80.0
05	Volatile Organic Compound (VOC)	EPA Method	µg/m ³	< 10.0	---

End of Report

For and on behalf of
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Authorized Signatory

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Technical Mannager

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TEST REPORT

Test Report No: SEANN/1607/R375	Date: 03.08.2016	Page 1 of 1
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<u>CUSTOMER DETAILS</u>			
Customer Name & Address		M/s Indian Oil Corporation Ltd Cochin LPG Import Terminal project, Puthuvypu, Ernakulam District	
Customer Reference		---	
<u>SAMPLE DETAILS</u>			
Source of Sample	Ambient Air	Sample Received On	28.07.2016
Location of Monitoring	Terminal Project North side	Sample Code	SEANN/1607/S231
Date of Monitoring	27.07.2016	Sampled By	By Laboratory
Sampling Procedure	IS 5182 part V & XIV	Test Started On	28.07.2016
Humidity	77 %	Test Completed On	01.08.2016

SL NO	TEST PARAMETER	TEST METHOD	UNIT	RESULT	NAAQ STANDARD
01	Particulate Matter (PM ₁₀)	IS 5182 Part 23: RA 2012	µg/m ³	39.5	100
02	Particulate Matter (PM _{2.5})	EPA 40 CFR Part 50 appendix - L	µg/m ³	16.7	60.0
03	Sulphur Dioxide (SO ₂)	IS 5182 Part 2: RA 2012	µg/m ³	< 2.0	80.0
04	Oxides of Nitrogen (NO ₂)	IS 5182 Part 6: RA 2012	µg/m ³	< 2.0	80.0
05	Volatile Organic Compound (VOC)	EPA Method	µg/m ³	< 10.0	---

End of Report

For and on behalf of
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Authorized Signatory

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Technical Mannager

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TEST REPORT

Test Report No: SEANN/1607/R376	Date: 03.08.2016	Page 1 of 1
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<u>CUSTOMER DETAILS</u>	
Customer Name & Address	M/s Indian Oil Corporation Ltd Cochin LPG Import Terminal Project, Puthuvypu, Ernakulam District
<u>SAMPLE DETAILS</u>	
Source of Sample	Ambient Sound
Test Parameter	Ambient Sound Level (Leq)
Date of Monitoring	27.07.2016

SL NO	MONITORING LOCATIONS	UNIT	RESULT	KSPCB LIMIT
01	Project Terminal - 1 M away from the Near West side Boundary	dB (A)	34.8	55.0
02	Project Terminal - 1 M away from the Near South East side Boundary	dB (A)	35.2	
03	Project Terminal - 1 M away from the Near East side Boundary	dB (A)	33.4	
04	Project Terminal - 1 M away from the Near North side Boundary	dB (A)	30.3	

End of Report

For and on behalf of
Standard^S Environmental & Analytical Laboratories


Authorized Signatory

Rija Joseph
Technical Manager

ANNEXURE

ENVIRONMENTAL STATEMENT FORM-V
(See rule 14)

Environmental Statement for the financial year ending with 31st March

PART-A

- i. Name and address of the owner/ occupier of the industry operation or process. Indian Oil Corporation Limited, Cochin LPG Import Terminal, Indane Mound, Near Vypeen Light House, Pathuvypeen, Cochin - 682020
- ii. Industry category - Production of Liquefied and Gaseous Fuels (19201)
- iii. Production capacity - 0.6 Million Metric Ton per Annum
- iv. Year of establishment - Under Construction
- v. Date of the last environmental statement submitted.

PART -B

Water and Raw Material Consumption:

- i. Water consumption in m³/d
- | | |
|----------|---------|
| Process | : Nil |
| Cooling | : Nil |
| Domestic | : 0.945 |



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Name of Products	Process water consumption per unit of products	
	During the previous financial year	During the current financial year
1. Not Applicable (Construction Phase)	Not Applicable (Construction Phase)	Not Applicable (Construction Phase)

ii. Raw material consumption

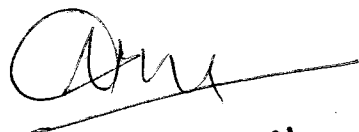
Name of raw materials*	Name of Products	Consumption of raw material per unit of output	
		During the previous financial year	During the current financial year
Nil (Construction Phase)	Nil (Construction Phase)	Nil (Construction Phase)	Nil (Construction Phase)

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

PART-C

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

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentration of Pollutants discharged (mass/volume)	Percentage of variation from prescribed standards with reasons.
(a) Water	Nil (Construction Phase)	Nil (Construction Phase)	Nil
(b) Air	Nil (Construction Phase)	Nil (Construction Phase)	Nil



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PART-D

HAZARDOUS WASTES

(as specified under Hazardous Wastes (Management & Handling Rules, 1989).

Hazardous Wastes	Total Quantity (Kg)	
	During the previous financial year	During the current financial year
1. From Process	Nil	Nil
2. From Pollution Control Facilities	Nil (Construction Phase)	Nil (Construction Phase)

PART - E

SOLID WASTES:

Solid Wastes	Total Quantity (Kg)	
	During the previous financial year	During the current financial year
a. From process	Nil (Construction Phase)	Nil (Construction Phase)
b. From Pollution Control Facility	Nil (Construction Phase)	Nil (Construction Phase)
c. Quantity recycled or re-utilised within the unit.	Nil (Construction Phase)	Nil (Construction Phase)

PART - F

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

- Not Applicable (Construction Phase)

PART-G

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.



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PART - H

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

- Implementation of Rain Water Harvesting for conservation & improvement of ground water potentiality.

PART - I

MISCELLANEOUS:

Any other particulars in respect of environmental protection and abatement of pollution.

- Nil


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