



Petronet LNG Limited

Survey No. 347, Puthuvypu P.O.

Kochi - 682 508, India.

Tel: +91-484-2502259 Fax: +91-484-2502264

www.petronetlng.com

CIN L74899DL1998PLC093073

PAN: AAACP8148D. GST: 32AAACP8148D1ZP

PLL/KOCHI/MOEF/2019-20/04

22nd May, 2019

Additional Principal Chief Conservator of Forests (C)

Ministry of Environment, Forest and Climate Change,
Regional Office (SZ),
Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road,
Koramangala II Block,
Bangalore – 560034.

Sub: Compliance report to Environment Clearance for dredging for the purpose of creating an approach channel for LNG Import Terminal at Puhuvypu, Kochi

Ref: Environment Clearance No: J-16011/26/2001-IA-III vide your letters dated 16th November, 2010

Sir

The six monthly compliance report for the above clearance is attached for the period ending 31st March 2019.

Thanking You,

With Regards

(T. N. Neelakantan)

Sr. Vice President (Plant Head)

CC:

- 1) The Chief Environmental Engineer,
Kerala State Pollution Control Board,
Gandhinagar, Kochi – 682 020.



Registered & Corporate Office:

World Trade Centre, First Floor, Babar Road, Barakhamba Lane, New Delhi- 110 001 (INDIA)
Tel: +91-11-23411411 / 23472525 Fax: +91-11-23472550

Dahej LNG Terminal:

GIDC Industrial Estate, Plot No. 7/A, Dahej Taluka: Vagra, Dist. Bharuch - 392130 (Gujarat)
Tel: +91-2641-257249 Fax: +91-2641-257252

COMPLIANCE REPORT TO YOUR ORDER DT. 16TH NOVEMBER 2010

SPECIFIC CONDITIONS:

- i. The total quantity of the dredged material of 35,00,000 cu.m shall be dumped at the specified offshore dumping site of Cochin Port at outer sea, about 15.6 km from the shore.

The dredging work has been completed. Material were dumped as per above direction.

- ii. The approach channel shall be properly demarcated with lighted buoys for safe navigation and adequate traffic control guidelines shall be framed. The fishermen shall be suitably educated and informed about the traffic guidelines.

The approach channel has been clearly marked with lighted buoys in association with Cochin Port. Cochin port trust provides Vessel Traffic Management Service (VTMS) to all vessels within port area.

- iii. The material dredged by cutter suction dredger will be used for land development work and for beach nourishment approved by Cochin Port Trust. Dredged material from Trailer Suction Dredger will be dumped at the specified offshore dumping site of Cochin Port at outer sea, about 15.6 km from the shore.

The materials dredged from Cutter suction Dredger were dumped on the western side of the terminal as per the instruction of Cochin Port Trust; this area has been allocated by Cochin Port Trust for dumping.

The Dredged material from Trailer Suction Dredger was dumped at the designated dumping site of Cochin Port at outer sea, about 15.6 km from the shore.

- iv. 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.

PLL has set up Environment Management Cell under Sr. Vice President – (Plant Head), other members of the team includes GM (Operations & Maintenance), Head of Operation department, C&P (Contracts & Procurement) department, Technical department, HSE department, Civil Department, Lab operation & a representative from HR department for effective implementing the stipulated environment safeguards. A copy of the latest SOP of the Environment Management Cell has already been submitted along with the six monthly compliance report for the period ending March-2018.

- v. 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.

In FY 2014-2015 Petronet LNG Ltd, Kochi, arrived at an agreement with Kerala State Social Forestry for a mangrove afforestation project in Ernakulum district, the total cost of the project is 71.05 lakhs. Till date, Petronet LNG Limited have already transfer fund of Rs.60.00 lakh for the Mangrove Afforestation Project which is entitled "Project for Mangrove afforestation in Ernakulam district" All

details with regard to this project has already been submitted along with six monthly compliance report dated 03th March-2015; and the latest progress report of the project is enclosed as Annexure#1.

PLL has also developed green belt along the periphery boundary wall. Green belt is about 10.48% of total area of our site.

- vi. The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purpose.

Budget allocated for environment safeguard will not be diverted for other purposes.

GENERAL CONDITIONS:

- 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 damage to the environment.

We have completed the construction and commissioning of our plant. During both the phases, adequate provisions were provided to avoid any damage to the environment.

- ii. Full support shall be extended to the officers of this Ministry/Regional Office at Bengaluru 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.

PLL will extend full support to the officers of this ministry's Regional Office, Bengaluru and the officers of the Central and State Pollution Control Board during the inspection for monitoring purpose by furnishing full details and action plans including the action taken reports in respect of mitigate measures and other environmental protection activities.

- iii. A Six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bengaluru regarding the implementation of the stipulated conditions.

PLL is submitting required six monthly monitoring reports to the Regional Office of MoEF, Bengaluru.

- 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.

PLL will comply with additional conditions, if any suggested by the ministry or any other competent authority in writing.

- 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.

PLL is aware about the rights of the ministry and have noted this condition.

- 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.

PLL has not carried out any deviation or alteration in the project. PLL will comply with this requirement and will take permit from the Ministry prior to any deviation, alteration and modification in the project.

- 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.

PLL had already informed the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project vide letter dated 5th Sept-2008, from Director (Technical) addressed to Additional Director, MoEF, Delhi and copy marked to regional officer.

- viii. A copy of the clearance letter shall be marked to concern Panchayat/Local NGO, if any, from whom any suggestion/representation has been made received while processing the proposal.

No specific suggestion/representation has been made/received from any authority while processing the proposal.

- ix. Kerala Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's Office/Tahsildar's office for 30 days.

Action need to be taken by State Pollution control board.

Thanking You,

With Regards



(T. N. Neelakantan)

Sr. Vice President (Plant Head)

SOCIAL FORESTRY

Ernakulam Division

&

LNG Petronet

PROJECTS



No. E2-461/18

Office of Assistant Conservator of Forests
Social Forestry Division, Ernakulam
Manimala Road, Edappally
Ph:0484 2344761
Email: acf.sf-ekm.for@kerala.gov.in

Date: 06..12..2018

From

Assistant Conservator of Forests
Social Forestry
Ernakulam.

To

The Vice President (O & M)
Petronet LNG Limited

Sir,

Sub: Project on mangrove afforestation in Ernakulam
District - progress report - reg.

Ref: That office letter no. PLL/KOCHI/HSE/13-14/C2.

I am submitting herewith the progress report for mangrove afforestation project funded by Petronet LNG Limited as on 31.03.2018 for your kind perusal and necessary action. The Malippuram mangrove park has been inaugurated and functioning very well. I request your goodself to kindly deposit the next installment of the project fund so that we can continue ^{the}~~our~~ project.

Yours faithfully,



Assistant Conservator of Forests

Report of mangrove afforestation project in Ernakulam District Kerala as on 01.12.2016 to 31.03.2018 & 01.04.2018 to

History of the project

As the coastal area of the Kerala, the Ernakulam district coastal region also blessed with natural heritage of mangroves were severely damaged and destructed for various reasons such as development project, the density of population and shottage of land for newly construction of houses, changing in lifestyle, lack of information to maintain the importance of mangroves and eco system etc. By the improvement of the coastal mangrove ecosystem through the afforestation project we can maintain our coastal area better. Petronet LNG limited has provided financial assistance to Kerala Forest Department through the implementation of the project called "Mangrove afforestation in Ernakulam District" . This project implemented by Social Forestry Division Ernakulam and the major work done by the project are

- 1 Planting of mangroves
- 2 protection of mangrove by taking up habitat improvement programmes.
- 3 Establishment of mangrove information centre (Mangrove park) etc.

Implementation of the project

First installment of the project Rs. 30 lakhs was handed over to Kerala Forest Department on 16.03.2015 and 15 lakhs 2nd installment was handed over on 16.06.2017.

lucy

I. Planting operation of 2017-18

Forest Department raised mangrove seedlings suitable to the locality and carried out planting through the local people especially Fisherman community with the help of ward members and Kudumbasree.

Sl.No.	Name of place and status of land	Species planted	No. of seedlings
1	Wetland area near Valappu beach	<i>Bruguiera gimorrhiza</i>	1350
2	Narakal Fish Farm	Do	1100
3	Kadamakudy	Do	1000
4	21 flowerpot at Malipuram mangrove park	do	21

2. Protection of existing mangroves by taking up habitat improvement programme

Sl. No.	Date	Venue	Topic	Name of faculty	No. of participants
1	08.03.18	Kuzhuppilly GP ward.I	Importance of mangrove and how nurseries arising	Mathews Puthusserry & Murukesan	53
2	18.03.18	Malipuram Mangrove park and chappa beach	Awareness class of mangroves and cleaning of the mangrove park and Chappa beach	Mathews Puthusserry	82

3. Establishment of Mangrove information centre (Mangrove Park)

A mangrove information centre was developed in two acre mangroves forest owned by fisheries Department adjacent to Malipuram Fish Farm where a large number of people are visited everyday as part of Eco Tourism. The mangrove park is on the way to the Malipuram fish farm. This park will give good information on ecologically

See

importance of mangrove ecosystem and necessity for conserving mangrove forests. This park is opened to the public with a wide range of information about the importance of mangrove forests and its ecosystem on 02.09.2017 by Hon' ble Vypin MLA. Sri. S. Sharma with the presence of Hon 'ble' Senior Managing Director of LNG Petronet and staff..In this park people can enjoy the beauty of mangroves and also can collect the details of plants , animals, birds found in the mangroves will be exhibited scientifically inside the park. Two team of Range Officers trainees from Deradun are visited in this park after the inauguration, and they can collect wide range of information from this park.

Activities of 2017-18

Expenditure incurred from 01.12.2016 to 31.03.2017 & 01.04.2017 to 31.03.2018

Sl.No.	Particulars of work	Quantity
1	Planting and maintenance cost of seedlings	3471
2	Conducting awareness classes and cleaning of mangrove park etc	2 class
3	The beautification work such as landscaping, Thatching hut, Artistic painting , Construction of foot bridge, Construction of walkway , Construction of Ticket counter, Flooring of tiles, construction of artistic bench, awareness board with sculpture of birds, crocodile leopard . Signages and opening ceremony of the Malipuram Mangrove Park	

Expenditure and photo graphs of the projects for the financial year 2017-18 are enclosed along with this report

See

Progress report of mangrove afforestation and protection Project funded by Petronet LNG limited from 01.04.2017 to 31.03.2018

Total outlay of project : 71.50 Lakhs
 Amount deposited in A/c. : 45 Lakhs
 Expenditure from 31/03/2018 : 44.57 Lakhs

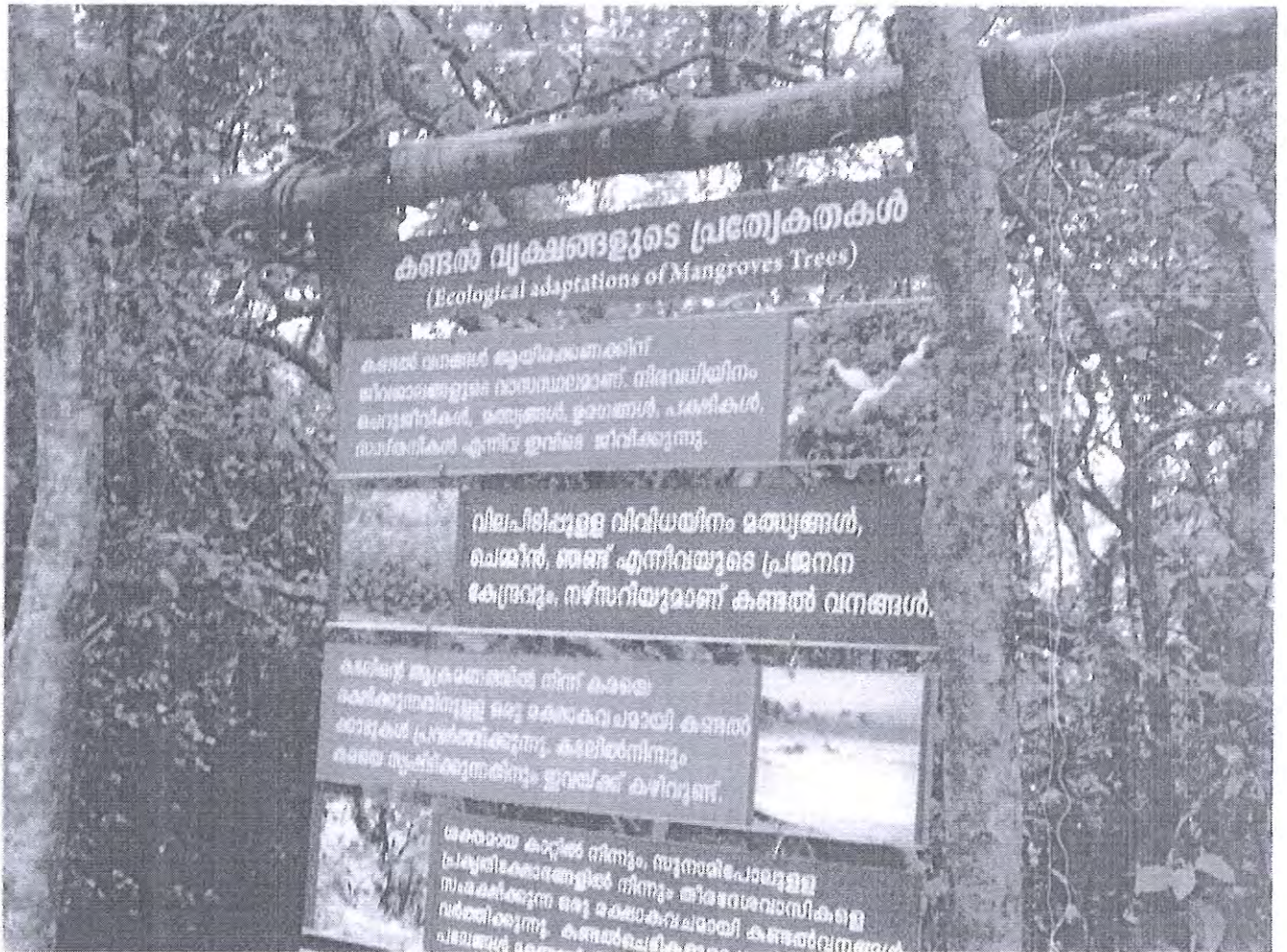
Physical

Sl.No.	Particulars of work 2017-18					Remarks
	Name of work	Qty.	Name of work	Qty.	Expenditure incurred	
1	Production of mangrove seedlings	12500 Nos.	Production of mangrove seedlings	3000	74948	
2	Planting of mangrove seedlings	12971 Nos.	Planting of 15000 mangroves at Kadekurisu River Bit I, Bit II, Pasuvekkar Fish farm, Vijaan Canal, Anjilithara areas, Kadamakkudy, Sreevaraham fish farm Kumbalangi, Njarackal Fish Farm & Valappu Beach wetland	3471	351311	4700 seedlings raised under forest department scheme
3	Habitat improvement including climber cutting, waste and plastic removal etc.	3 sites	Habitat improvement works done at Kumbalangi, Kadekurisu & Malippuram	3 sites	5000	
4	General awareness & extension activities	32 nos.	Awareness class, seminar etc. and other extension activities	15 awareness classes 2 Seminars and procurements of documentisation and aids	71850	

5	Signages	24 nos.	Acrilic board for mangrove conservation message, board of mangrove areas etc.	6 nos.	63100
6	Silvi-fisheries	LS	Silvi-fisheries	0	0
8	Incentives to existing mangrove owners	LS	Mangrove planting in private land and incentives by supplying fishes	Nil	0
7&9	Eco tourism activities involving the local community and other entry point activities	LS	A mangrove information centre has developed at Malippuram owned by Fisheries Department Mangrove area (2 Acre) Construction of walk way,bridges, entrance arch, toilet, information centre and ticket counter Etc.	1 nos.	886582
10	Over head charges and other office expences	LS	TA of staff and other office expences	LS	6279
11			Engaging Man Mazdoor for conducting survey of Mangrove areas in Emakulam District	LS	0
TOTAL					1459070

Devi
 ASST. CONSERVATOR OF FORESTS
 SOCIAL FORESTRY FRINGULAM



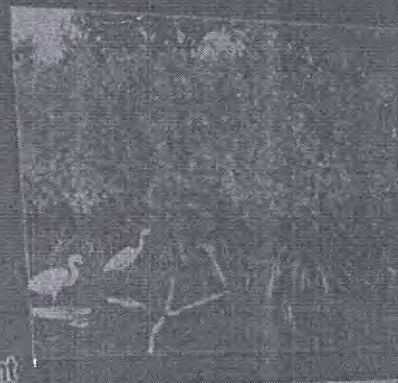






കണ്ടൽ വനങ്ങൾ എങ്ങനെ നമ്മൾ സംരക്ഷിക്കണം?

- കണ്ടൽ വനങ്ങൾ ആയിരക്കണക്കിന് ജീവജാലങ്ങളുടെ വാസസ്ഥലമാണ്. നിരവധിയിലധികം ജന്തുജീവികൾ, മത്സ്യങ്ങൾ, ഉരഗങ്ങൾ, പക്ഷികൾ, സസ്തനികൾ എന്നിവ ഇവിടെ ജീവിക്കുന്നു.
- വിലപിടിപ്പുള്ള വിവിധയിനം മത്സ്യങ്ങൾ, ചെമ്മീൻ, തേങ്ങ് എന്നിവയുടെ പ്രാഥമികതന്തു. തദ്ദേശവാസികൾ കണ്ടൽ വനങ്ങൾ കടലിന്റെ ആക്രമണത്തിൽ നിന്ന് കരയെ രേഖിക്കുന്നതിനുള്ള ഒരു ശക്തകമ്പമായി കണ്ടൽ വനങ്ങൾ പ്രവർത്തിക്കുന്നു. കടലിൽനിന്നും കരയെ സ്വീകരിക്കുന്നതിനും ഇവയ്ക്ക് കഴിവുണ്ട്.
- ശക്തമായ കാറ്റിൽ നിന്നും, സൂനാമിപ്പാലുവെ പ്രദേശങ്ങളിൽ നിന്നും തീരസംരക്ഷണത്തിനും കണ്ടൽ വനങ്ങൾ ഒരു രക്ഷാകമ്പമായി കണ്ടൽ വനങ്ങൾ വർത്തിക്കുന്നു. കണ്ടൽ വനങ്ങൾ കണ്ടൽ വനങ്ങൾ കണ്ടൽ വനങ്ങൾ ശക്തമായ വേരുകൾ ഉണ്ടാക്കിയിട്ടുള്ളതുകൊണ്ട് തടയുന്നു.
- കായലുകളിൽ അടിഞ്ഞുകൂടുന്ന അപകടകാരികളായ മത്സ്യമൃഗങ്ങളെയും ലോഹപദാർത്ഥങ്ങളെയും കണ്ടൽ വനങ്ങൾ വലിച്ചെടുത്ത് തലം ശുദ്ധീകരിക്കുന്നതിനു സഹായിക്കുന്നു.
- ചിലയിനം കണ്ടൽ വൃക്ഷങ്ങൾ വേലിനിർമ്മാണം, വിട നിർമ്മാണം, കാലിത്തീറ്റ, വിനക് എന്നിവയ്ക്കായി ഉപയോഗിക്കുന്നു.
- പട്ടണപ്രദേശത്തെ അന്തരീക്ഷ മലിനീകരണം കുറയ്ക്കുവാനും വായു പ്രദാനം ചെയ്യുന്നു.
- കണ്ടൽ വനങ്ങൾ ഇടയോടടുപ്പത്തിൽ എടുക്കുന്നതുകൊണ്ട് ഒരു സൗഖ്യമാണ്.



Mangrove Afforestation Project
funded by
Petronet LNG Ltd.
Social Forestry, Ernakulam, Kerala Forest Department







