



# Petronet LNG Limited

GIDC Industrial Estate, Plot No. 7/A, Dahej,  
Taluka : Vagra, Dist. Bharuch (Gujarat) - 392130 (India)  
Tel. : 02641 - 670200 / 257  
www.petronetlng.com  
CIN: L74899DL 1998PLCO93073  
GST No. : 24AAACP8148D1ZM

REF: PLL/DHJ/HSE/MoEF/2022/04

Date: 22<sup>nd</sup> January 2022

To,

The Director (Environment)  
Forests & Environment Department,  
Government of Gujarat,  
Block No. 14, 8<sup>th</sup> Floor, Sachivalaya,  
Gandhinagar – 382 010

Sub : Half-yearly Compliance Report with respect to conditions stipulated by Ministry of Environment & Forests, Govt. of India and Department of Forests, Govt. of Gujarat for Construction of LNG Import Terminal (Phase-I) at Dahej, Gujarat by M/s Petronet LNG Ltd as on 31<sup>st</sup> Dec 2021

Ref : (a) J-17011/11/2000-IA-III Dated 27<sup>th</sup> December, 2000  
(b) ENV-10-2000-181-PI Dated 29<sup>th</sup> September, 2000

Dear Sir,

The half yearly compliance report as on 31<sup>st</sup> Dec 2021 with respect to conditions stipulated by Ministry of Environment & Forests, Govt. of India and Department of Forests, Govt. of Gujarat for construction of LNG Import Terminal (Phase-I) at Dahej, Gujarat by M/s Petronet LNG Ltd is enclosed.

Thanking you,  
Yours faithfully,  
For Petronet LNG Limited

  
S B Singh  
ED (Plant Head)

Encl.: As above

**Copy to:-**

Director,  
Ministry of Env., Forest and Climate Change  
Indira Paryavaran Bhawan,  
Jorbagh Road,  
New Delhi – 110 003

Deputy Director General of Forests (C),  
Ministry of Env., Forest and Climate Change  
Regional Office, Western Region,  
E-5, Kendriya Paryavaran Bhavan,  
Link Road No. 3,  
Bhopal – 462 016

Unit Head - Bharuch Division  
Gujarat Pollution Control Board  
Paryavaran Bhavan, Sector-10 A  
GANDHINAGAR – 382 010 (Gujarat)

Regional Officer  
Gujarat Pollution Control Board  
C-1/119/3, GIDC, Phase – 2 , Narmadanagar  
Bharuch – 392015 (Gujarat)

MoEF& CC  
Integrated Regional office  
Room No 407& 409  
Sector 10A  
A Wing Aranya Bhawan  
Gandhinagar-382010

**Regd. Off.:**

World Trade Centre, First Floor, Babar Road,  
Barakhamba Lane, New Delhi-110 011 (INDIA)  
Tel.: 011 - 23472525, 23411411 Fax : 23472550

**Kochi Site :**

Survey No. 347, Puthuvypu  
P.O. 682508, Kochi (INDIA)  
Tel.: 0484-2502268

**HALF YEARLY COMPLIANCE REPORT**  
**(FOR THE PERIOD JULY 21 TO DEC 21) TO THE CONDITION MENTIONED IN**  
**MOE&F LETTER NO. J-17011/11/2000-1A-III DATED 27<sup>TH</sup> DECEMBER, 2000**  
**(For PHASE I) AS ON 31.12.2021**

Point-wise compliance statement for the subject environmental clearance is as below:

	<b><u>CONDITIONS</u></b>	<b><u>STATUS</u></b>
<b>(A)</b>	<b><u>Special Conditions:</u></b>	
i	Necessary approval for diversion of 10.5 ha forest land involved in project shall be obtained under the provisions of the forest (conservation) act, 1980 and a copy furnished to this ministry prior to commencement of construction site.	Complied. The compliance report submitted vide our letter no. PLL/ND/D7/2K1 dated 6 <sup>th</sup> September 2001.  Facilities such as LNG storage and re-gasification construction completed and plant is under operation since April-2004.
ii	The plant layout shall be so planned to ensure that no portion of LNG storage and re-gasification facilities fall within CRZ I (1).The final layout plan along with demarcation of CRZ area and their classification shall be submitted to this ministry commencement of construction site.	Complied Facilities such as LNG storage and re-gasification construction completed and plant is under operation since April-2004. Layout plan submitted with our letter no. PLL/ND/D-7/2K1 dated 16th August 2001.
iii	No change in the scope of work shall be made without prior approval of this ministry.	Complied. Construction works completed without any change in the scope of works.
iv	No dredging (capital or maintenance) shall be carried out in the project. If at any stage, necessary of dredging is felt, specific approval for the same shall be obtained.	Complied No dredging work carried out during the project.  Facilities such as LNG storage and re-gasification construction completed and plant is under operation since April-2004.
v	A proper location map clearly showing the various project activities with respect to high tide line (duly demarked by one of the authorized agencies)	Complied The location map, prepared by M/s National Institute of Oceanography, showing various project with respect to

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	and the corresponding CRZ classification of the area shall be furnished within one month.	high tide line and the corresponding CRZ classification of the area was submitted vide our letter No PLL/ND/D-7/2K1 Dated 16th August 2001.
vi	A quantitative risk analysis of the LNG terminal associated facilities shall be carried out taking into account the worst case scenario and based on firmed up engineering design. The report should be submitted within 6 months. The central control room should be located well outside the risk zone.	Complied  The quantitative risk analysis (QRA) report submitted vide our letter No PLL/ND/D-7/2K2 dated 18th January 2002. The control room is located outside the risk zone.
vii	Based on risk analysis, Disaster Management plan should be prepared and submitted to this ministry within 6 months.	Complied  The disaster management plan was submitted vide our letter no PLL/ND/D-7/2K2 dated 18th January 2002.  ERDMP plan is approved from DMI, Bhopal and valid till 29.12.2022. Please Refer Annexure – IV for valid ERDMP certificate
viii	A clarification may be obtained from state pollution control board to the effect that the NOC issued by them is for entire project and not restricted to two storage tanks. This may be provided within one month.	Complied  Gujarat Pollution Control Board (GPCB) vide their letter no BRCK-NOC-S/40(1948)6721 dated 15th February, 2001 have clarified that the NOC granted by the Board is in respect of the entire LNG project (LNG receipt, storage, re-gasification) including the following components:-  (i) Construction of Jetty (ii) LNG Storage Tanks (2 Nos.) (iii) Pumping & re-gasification facilities (iv) Utilities  GPCB have been further informed vide their letter no PC/BRCH-CCA-611 that the NOC granted by them is also for two additional storage tank in Phase-II.  Please Refer Annexure – V for GPCB

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		Letter no PC/BRCH-CCA-611
ix	The details of the facilities to be provided by the company to the local population may be furnished within one month.	Complied The details were provided vide our letter no PLL/ND/D-7/2K2 dated 18th January 2002.
x	The project proponent should be make specific arrangement for rainwater harvesting in the project design and the rainwater so harvested should be optimally utilized.	The LNG terminal has been set-up very near to the coastline at Dahej, where water table is very high. Moreover the seawater is brackish in that area. Investigations indicates that it might not be feasible to carry out rainwater harvesting in this area,  The process water requirement in LNG terminal at Dahej is NIL.
xi	All the conditions stipulated by the Forest and Environment Department of Gujarat vide their letter no.ENV-10-2000-181-P1 dated 29 <sup>th</sup> September 2000 should be effectively implementer.	Complied Status is enclosed as Annexure –I.
xii	All the conditions stipulated by Gujarat Pollution Control Board in their NOC should be effectively implemented	Complied. All the condition of NOC are complied. Consolidated Consent and Authorization obtained under Water Act 1974, Air act 1981 and Environment (Protection) Act vide GPCB consent order No 3936 dated 28th September 2004.
xiii	The jetty will be constructed on piles to enable the free flow of water across the jetty.	Complied  The confirmation regarding construction of jetty on piles has already been sent vide letter no. PLL/ND/D-7/2K2 dated 18th January 2002.

xiv	The construction of material shall be obtained only from approved quarries. In case new quarries need to be opened up specific approval for the same shall be obtained.	Complied Facilities such as LNG storage and re-gasification construction completed and plant is under operation since April-2004.
(B)	GENERAL CONDITION	
i	Construction of the proposed structures should be undertaken meticulously conforming to the existing central/local rules and regulations including CRZ notification 1991 & its amendments. All the construction designs / drawings relating to proposed construction activities must have approval of the concerned state government department / agencies.	Complied. All the required statutory approval were obtained  The construction and commissioning of the facilities at Dahej completed and the plant is operational since April-2004.
ii	The proponent shall ensure that a result of the proposed construction, ingress of the saline water in to the ground water does not take place. Piezometer for this purpose at appropriate locations on the project site.	Complied.  During construction no water was drawn from ground & no ingress of saline water took place. Piezometers are installed and regular ground water analysis done from GPCB approved agency. Please Refer Annexure – II for Environment monitoring data.
iii	Handling, manufacturing, storage and transportation of all hazardous chemicals should be carried out in accordance with MSIHC rule 1989 and subsequent amendments. All the approvals from state & central nodal agencies including OISD chief controller of explosives, chief inspectorate of factories must be obtained. A comprehensive contingency plan in collaboration with the concerned authorities must be formulated before commissioning of the project to meet any eventuality in case of an accident.	Complied.  All relevant approvals of state and central nodal agencies, DISH, CCOE, CIF for construction and operation of the facilities are in place. Emergency response plan is in place and updated periodically. Please Refer Annexure – IV for valid ERDMP certificate
iv	A well-equipped laboratory with suitable instruments to monitor the quality of air and water shall be set up so as to ensure that the quality of ambient air and water conforms to prescribed standards. They will also be equipped with qualified manpower including a marine biologist so that marine water quality is regularly monitored in order to ensure that the marine life is not adversely affected as a result of implementation of the said project. The quality of ambient air and	Complied  Environment monitoring is being carried out through GPCB approved outsourcing agencies as per GPCB guidelines. Analytical report is enclosed as Annexure- II.  Dahej, Sea water is not being used for vaporizers or any other purpose. Instead, air heaters using atmospheric air is being

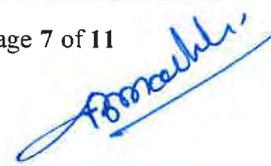
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	water shall be monitored periodically in all seasons and the results should be properly maintained and for the inspection of the concerned pollution agencies. The periodic monitoring reports at least once in 6 months must be sent to this ministry (Regional office at Bhopal) and SPCB.	used for vaporizing the LNG. Since there is no intake of sea water and out flow of water into the sea, hence it is felt that a marine biologist may not be required.
v	Adequate provisions for instrumentation facilities such as water supply, fuel for cooking, sanitation etc. must be provided for the laborer during the construction period to avoid the damage to the environment. Colonies for the laborers should not be located in the CRZ area. It should also be ensured that the construction workers do not cut trees including mangroves for fuel wood purpose.	Complied  All welfare facilities were given to labors during project stage.  The construction and commissioning of the facilities at Dahej completed and plant is already operational since April-2004.
vi	To prevent discharge of sewage and other liquid wastes into the water bodies, adequate system for collection and treatment of wastes must be provided. No sewage and other liquid wastes without treatment should be allowed to enter in to water bodies.	Complied. Domestic wastes are treated in STP and soak pits. 100 KLD STP plant is commissioned.
vii	Appropriate facility should be created for the collection of solid & liquid wastes generated the barges/ vessels and their safe treatment and disposal should be ensured to avoid possible contamination of the water bodies.	Complied  Contracts for engaging the vessel stipulate that the vessels comply with these requirements including MARPOL. Besides LNG vessel is berthed for 24 hours only and it is equipped with incinerator and sewage treatment.
viii	Necessary navigational aids such as channel markers should be provided to prevent accidents. Internationally recognized safety standards shall be applied in case of barge/ vessel movement.	Complied.  Necessary navigational aids have been provided and all safety measures as per international standards are being followed in case of vessel movement.
ix	The project authorities should take appropriate community development and welfare measures for the villagers in the vicinity of the project site, including drinking water facilities. A separate fund should be allocated for this purpose.	Complied Compliance report is attached as Annexure III

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x	The quarrying material required for the construction purposes shall be obtained only from the approved quarries/borrow areas. Adequate safeguard measures shall be taken to ensure that the overburden and rocks at quarry site do not find their way into water bodies.	Complied. Facilities such as LNG storage and re-gasification construction completed and plant is under operation since April-2004.
xi	The dredging operation to be undertaken with the prior approval of the ministry, shall be executed with appropriated safeguard measures to prevent turbidity conditions in consultation with the expert agencies such CWPRS/NIO	Complied No dredging work carried out during the project.  Facilities such as LNG storage and re-gasification construction completed and plant is under operation since April-2004.
xii	For employing unskilled, semiskilled and skilled workers for the project, preferences shall be given to local people.	Complied  PLL has recruited fair number of local people. For ancillary and support functions as security services, firefighting, and green belt maintenance etc. PLL is giving preference to local people.
xiii	The recommendation made in the environment management plan and disaster management plan, as contained in the EIA and risk analysis reports of the project shall be effectively implemented.	Complied. All the recommendation of risk analysis and EIA are complied.  Emergency response plan is in place and updated periodically. Please Refer Annexure – IV for valid ERDMP certificate
xiv	A separate environment management cell with suitably qualified staff to carry out various environment related functions should be set up under the charge of senior executive who will report directly to the chief executive of the company.	Complied. Health safety and environment management cell exists at site. Total three HSE persons are employed headed by Sr. Manager in HSE dept. Head HSE is directly report to plant head and occupier of company.
xv	The project affected people, if any should be properly compensated and rehabilitated	Complied
xvi	The funds earmarked for environment protection measures should be maintained in the separate account and there should be no diversion of these funds for any other purpose. A year-wise	Noted for compliance. Rs. 105 Lac spent for development of Green Belt during the year 2004-05.  Rs. 33.22 Lac spent for development

	<p>expenditure on environmental safeguards should be reported to the ministry.</p>	<p>of Green Belt and Mangrove Plantation during the year 2009-10.</p> <p>Rs. 50 Lac spent for development of Green Belt and Mangrove Plantation during the year 2010-11.</p> <p>Rs 93.31 Lacs spent for development of Green Belt and Mangrove plantation during the year 2011-2012</p> <p>Rs. 109.57 Lac spent for development of Green Belt and Mangrove Plantation during the year 2012-13.</p> <p>Rs. 95.20 Lac spent for development of Green Belt and Mangrove Plantation during the year 2013-14.</p> <p>Rs 81.68 Lacs spent for development of Green Belt and Mangrove plantation during the year 2014-15.</p> <p>Rs 42.20 Lacs spent for development of Green belt and Mangrove plantation during the year 2015-16.</p> <p>Rs. 77.96 Lacs spent for development of Green Belt and Mangrove Plantation during the year 2016-17.</p> <p>Rs. 71.08 Lacs spent for development of Green Belt and Mangrove Plantation during the year 2017-18.</p> <p>Rs. 60.93 Lacs spent for development of Green Belt and Mangrove Plantation during the year 2018-19.</p> <p>Rs. 51.10 Lacs spent for development &amp; maintenance of Green Belt during the year 2019-20.</p> <p>Rs. 78.96 Lacs spent for development &amp; maintenance of Green Belt during the year 2020-21.</p> <p>Rs. 58.39 Lacs spent for development &amp; maintenance of Green Belt during the year 2021-22 (For period April 21 to December 21).</p>
<p>xvii</p>	<p>Full support should be extended to the officers of this ministry's regional office at Bhopal and the officers of the central and state pollution control boards by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigative measures and other environmental protection activities.</p>	<p>Complied</p> <p>PLL is committed to provide full support during site inspection of statutory agency and required data are provided.</p>



xviii	In case of deviation or alteration in the project including the implementing agency, a fresh reference should be made to the ministry or modification in the clearance conditions or impositions of new ones for ensuring environmental protection. The project pronouncements should be responsible for implementing the suggested safeguard measures.	No deviation or alternation during the project  Facilities such as LNG storage and re-gasification construction completed and plant is under operation since April-2004.
xix	The ministry reserves the right to revoke this clearance, if any of re condition stipulated or not complied with to the satisfaction of this ministry.	Agree No Such case till date
xx	The ministry or any other competent authority may stipulate any other additional conditions subsequently if deemed necessary for environmental protection which shall be complied with	Agree
xxi	The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language on the locality concerned informing that the project has been accorded environmental clearance and copies of clearance letters are available with state pollution control board and may also been at web site of the ministry of environment & forest at <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a>	Complied.  Facilities such as LNG storage and re-gasification construction completed and plant is under operation since April-2004.
xxii	The project proponents should 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 the land development work.	Complied. Project is now completed. Plant is under operation since April-2004.

**ANNEXURE-I**

**Compliance to conditions as conveyed by Department of Forests & Environment,  
Govt. of Gujarat, Letter No. ENV-10-2000-181-P1, Dated 29<sup>th</sup> September, 2000**

**As On 31.12.2021**

Point-wise compliance statement for the subject environmental clearance is as below:

<b><u>SR. NO.</u></b>	<b><u>CONDITIONS</u></b>	<b><u>STATUS</u></b>
1	No activity shall be commenced before obtaining the necessary permissions under the forest (Conservation) Act.	<b>Complied</b>
2	The applicant shall not tap the groundwater in any case	<b>Complied</b> <b>No ground water tapping in the terminal</b>
3	The applicant shall implement all the suggestions/recommendations given by the NIO in their rapid Marine Environment Impact Assessment Report.	<b>Agreed &amp; complied</b> <b>All the recommendation are complied</b>
4	The applicant shall appear and submit the comprehensive Marine EIA report including the study for the long term impacts due to construction of breakwater and jetty, before commencing the project activities	<b>Complied</b> <b>The clarifications were provided vide our letter ref PLL/ND/D-7/2KI dated 5TH February 2001.</b>
5	The applicant shall implement all the suggestions/recommendations given by the ONGC and the WAPCOS in their comprehensive EIA Report	<b>Complied</b> <b>All the recommendation are complied</b>
6	The applicant shall submit the detailed Risk assessment Report containing the worst case scenario and detailed Oil Spill Contingency Plan before commissioning the project and shall implement all the suggestions/recommendations given in the report.	<b>Complied</b> <b>QRA study was done and all recommendation are implemented</b>
7	The applicant shall adhere to the provisions of National Oil Spill and Disaster Management Plan and shall install all necessary facilities and equipment for controlling and combating the oil spill, before commissioning the operation	<b>Complied</b> <b>Valid Oil spill contingency plan and ERDMP are available and periodically updated.</b> <b>Please Refer Annexure – IV for valid ERDMP certificate</b>

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8	The applicant shall participate financially for the Regional Environment Impact Assessment of the Dahej region.	<b>Agreed</b> PLL agree to participate for the Regional Environment Impact Assessment of the Dahej region.
9	The applicant shall bear the cost of the external agency appointed by this department for carrying out supervisor and/or monitoring of the construction and/or operation activities.	<b>Complied.</b> PLL agree to born cost of external agency appointed by this department <b>The construction has been completed and the terminal commenced commercial operations from 9th April 2004.</b>
10	The camps of the construction labors shall be kept outside the CRZ area.	<b>Complied</b> <b>The construction has been completed and the terminal commenced commercial operations from 9th April 2004.</b>
11	The applicant shall ensure that free flow of water is not hampered due to any project activities.	<b>Complied</b> <b>Water flow was not hampered due to project activities</b> <b>The construction has been completed and the terminal commenced commercial operations from 9th April 2004.</b>
12	The applicant shall ensure that there will be no disposal of sullage and sewage generated from construction camps, surface run-off from construction sites, and grease spillage from construction equipment into the sea or the CRZ area.	<b>Complied</b> <b>There were no waste disposal into sea or the CRZ area during project stage.</b>
13	The applicant shall carry out mangrove plantation in consultation with forest department	<b>Complied</b> Total 1150 Ha mangrove plantation were completed till date. <b>Please Refer Annexure – VI for mangroov plantation details.</b>
14	The applicant shall carry out the monitoring of the various environmental parameters in consultation with Gujarat pollution control Board/Forest and Environment Department.	<b>Complied</b> Monthly environment monitoring is done through GPCB approved agency as per GPCB guideline

		Please Refer Annexure – II for Environment monitoring data.
15	The Gujarat Maritime Board shall prepare the detailed Traffic Control Management Plan for the Dahej port and the gulf of Khambhat in consultation with respective port companies including PLL, Indian Petrochemicals Corporation Limited and would made effective before commissioning of the activities of the PLL.	<b>Complied</b> <b>Gujarat Maritime Board has established VTS System and PLL is complying all norms as per Gujarat Maritime Board.</b>
16	The applicant shall actively participate in the vessel Traffic Management System (VTMS) to be developed for the Gulf of Khambhat.	<b>Complied</b> <b>Gujarat Maritime Board has established VTS System and PLL is complying all norms as per Gujarat Maritime Board.</b>
17	The applicant shall implement socio-economic upliftment programme in consultation with District Collector/DDO	<b>Complied</b> <b>Please Refer Annexure – III for details CSR activities.</b>
18	No construction activities shall be commenced before obtaining all necessary clearances under various acts/ rules from different Govt. department /agencies.	<b>Complied</b> <b>All required permission were taken from Govt agency.</b>
19	Any other conditions as may be stipulated by this department from time to time.	<b>Complied</b>

## ANNEXURE - II - ENVIROMENT DATA

### AMBIENT AIR QUALITY STATUS REPORT

All units are in  $\mu\text{g}/\text{m}^3$ .

Sr.no.	Month	PM10		PM2.5		SOx		NOx		HC as Methane CH <sub>4</sub>	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
	NAAQ norms	100 $\mu\text{g}/\text{m}^3$		60 $\mu\text{g}/\text{m}^3$		80 $\mu\text{g}/\text{m}^3$		80 $\mu\text{g}/\text{m}^3$		Absent	
1	Jan-21	64.00	94.00	21.00	36.00	9.60	18.60	11.60	21.30	BDL	BDL
2	Feb-21	62.00	96.00	18.00	34.00	9.80	18.60	11.60	22.80	BDL	BDL
3	Mar-21	72.00	97.00	22.00	48.00	9.80	18.40	12.40	22.40	BDL	BDL
4	Apr-21	74.00	96.00	22.00	34.00	10.20	18.70	12.30	21.40	BDL	BDL
5	May-21	72.00	96.00	21.00	36.00	10.60	21.10	13.10	24.10	BDL	BDL
6	Jun-21	66.00	88.00	18.00	33.00	10.60	18.40	14.60	22.60	BDL	BDL
7	Jul-21	62.00	88.00	16.00	28.00	11.60	18.40	12.10	21.60	BDL	BDL
8	Aug-21	60.00	79.00	18.00	28.00	11.40	19.20	14.10	21.60	BDL	BDL
9	Sep-21	62.00	78.00	14.00	26.00	10.10	18.50	11.60	19.60	BDL	BDL
10	Oct-21	62.00	81.00	16.00	28.00	11.10	21.40	14.50	22.80	BDL	BDL
11	Nov-21	62.00	86.00	20.00	28.00	11.80	21.10	14.60	25.60	BDL	BDL
12	Dec-21	64.00	88.00	21.00	34.00	10.30	17.80	13.10	21.10	BDL	BDL
	Range (Jan-21 to Dec 21)	60-97		14-48		9.6-21.4		11.6-25.6		BDL	

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## STACK EMISSION AIR QUALITY STATUS REPORT

Sr.no.	Month	GTG		
		SPM	SO <sub>x</sub>	NO <sub>x</sub>
GPCB norms		150 mg/NM <sup>3</sup>	100 ppm	50 ppm
1	Jan-21	BDL	BDL	27.20
2	Feb-21	BDL	BDL	19.60
3	Mar-21	BDL	BDL	16.40
4	Apr-21	BDL	BDL	17.60
5	May-21	BDL	BDL	21.40
6	Jun-21	Not monitored due to non operational GTGs		
7	Jul-21	Not monitored due to non operational GTGs		
8	Aug-21	Not monitored due to non operational GTGs		
9	Sep-21	Not monitored due to non operational GTGs		
10	Oct-21	Not monitored due to non operational GTGs		
11	Nov-21	Not monitored due to non operational GTGs		
12	Dec-21	Not monitored due to non operational GTGs		
	Range (Jan-21 to Dec-21)	BDL	BDL	16.4-27.2

**BDL: Below Detection Level.**

*Samuel*

### NOISE LEVEL REPORT

Sr.no.	Location	Unit	Limit	Jan-21		Feb-21		Mar-21		Apr-21		May-21		Jun-21		Jul-21		Aug-21		Sep-21		Oct-21		Nov-21		Dec-21	
				L <sub>day</sub>	L <sub>night</sub>																						
1	North	decibel	Day-75 db Night-70db	66	56	64	54	66	58	68	56	64	54	68	56	67	55	65	54	68	56	65	58	68	52	71	55
2	East	decibel	Day-75 db Night-70db	64	54	66	52	63	56	66	54	68	52	64	54	68	52	70	56	64	54	68	55	67	54	67	56
3	West	decibel	Day-75 db Night-70db	71	55	68	58	64	55	62	58	66	55	62	58	66	56	68	53	62	58	66	56	62	55	69	58
4	South	decibel	Day-75 db Night-70db	68	52	62	56	62	54	64	55	62	56	66	55	64	54	63	50	66	52	62	54	64	56	68	54

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**GROUND WATER QUALITY STATUS REPORT**

Sr.no.	Parameter	Unit	Mar-21		Jun-21		Sep-21		Dec-21	
			GW1	GW2	GW1	GW2	GW1	GW2	GW1	GW2
1	Temperature	*C	30	30	32	32	29	29	29	29
2	PH	-	8.7	8.74	8.11	8.23	8.22	8.26	8.57	8.52
3	Total Dissolved Solids (TDS)	mg/L	2780	2910	2910	2640	1840	860	2360	2490
4	Chlorides as CL	mg/L	614.8	595	629.8	419.8	289.9	131.9	469.8	459.8
5	Sulphate as SO <sub>4</sub>	mg/L	112	555	222	463	227	109.6	392	430.5
6	BOD (5 days @ 20°C)	mg/L	BDL	BDL	4	4	7	3	8	7
7	COD	mg/L	BDL	4.1	20.5	20.5	28.6	16.3	32.3	28.3
8	Oil & Grease	mg/L	BDL							
9	Phenolic Compound	mg/L	BDL							
10	Zinc as Zn	mg/L	BDL							
11	Total Chromium as Cr <sup>+3</sup>	mg/L	BDL							
12	Lead as Pb	mg/L	BDL							
13	Cyanide as CN	mg/L	BDL							
14	Flouride as F	mg/L	3	3.45	2.1	2.35	1.02	0.77	1.32	1.54
15	Copper as Cu	mg/L	BDL							
16	Insecticide	mg/L	Absent							
17	Pesticide	mg/L	BDL							
18	Mercury as Hg	mg/L	BDL							
<b>ND*: Not detected</b>										

*Borealis*

**MARINE WATER QUALITY STATUS REPORT**

Sr.no.	Parameter	Unit	Mar-21	Jun-21	Sep-21	Dec-21
			MW	MW	MW	MW
1	Temperature	*C	30	32	28	28
2	PH	-	7.81	7.58	7.8	7.53
3	Color	Co-pt	120	80	80	60
4	Total Suspended Solids	mg/L	720	1500	880	2324
5	Total Dissolved Solids (TDS)	mg/L	31240	28410	29796	27944
6	Chlorides as CL	mg/L	18744.1	14392.7	15236.4	18494.2
7	Sulphate as SO4	mg/L	2640	3613	2738	2213
8	BOD (5 days @ 20°C)	mg/L	12	42	52	25
9	COD	mg/L	42.5	145.2	164	81.6
10	Oil & Grease	mg/L	BDL	BDL	BDL	BDL
11	Phenolic Compound	mg/L	BDL	BDL	BDL	BDL
12	Zinc as Zn	mg/L	0.067	0.074	0.089	0.082
13	Total Chromium as Cr+3	mg/L	0.051	0.063	0.075	0.069
14	Lead as Pb	mg/L	BDL	BDL	BDL	BDL
15	Cyanide as CN	mg/L	BDL	BDL	BDL	BDL
16	Flouride as F	mg/L	2.1	2.16	1.2	2.6
17	Copper as Cu	mg/L	BDL	BDL	BDL	BDL
18	Insecticide	mg/L	N.D.	N.D.	N.D.	N.D.
19	Pesticide	mg/L	Absent	Absent	Absent	Absent
20	Mercury as Hg	mg/L	BDL	BDL	BDL	BDL
21	Hexavalent Chromium as Cr+6	mg/L	BDL	BDL	BDL	BDL
22	Nickel as Ni	mg/L	0.091	0.084	0.093	0.075
<b>ND*: Not detected</b>						

*Amal*

## ANNEXURE –III

### CSR DETAILS

PLL has constructed a temple at the site for the local people and has contributed towards infrastructure in the area for roads and drinking water.

Community development and welfare measures are taken. Village Luwara has been jointly adopted along with another nearby industry, as directed by PCPIR Welfare Society. Separate fund allocated for CSR.

Some of the schemes completed/under progress are Health Center (construction & operation), drainage and provision of street lights at Village Luwara. Rupees 75 lakh contributed to PCPIR Welfare Society. Two ladies from Luwara village sponsored for nursing course at Vidhyadeep Community college, Bharuch. Sponsored construction of Sanitation scheme at village Muller. Active participation in other Government initiated community development programs.

Installed 10 nos. Emergency solar lighting at prominent places in village Luwara. Donated Rs.1 lac for Bharuch District Civic centre development. Participated in Govt. scheme on KanyaKelvani. Installation of drainage crossings to remove accumulated water at 4 locations within the village Luwara at a cost of Rs. 0.8 lacs. Construction of approach road in village Lakhigaon, Dahej.

PLL has sponsored 'Mataria Talav drinking water project' of the Bharuch Municipality Corporation. This project is for the supply of sweet drinking water from the Narmada River to the residents of Bharuch city. MD&CEO handed over cheque for Rs. 25 Lacs to the Collector, Bharuch on 13/06/2011 and further, PLL added Rs. 20 Lacs for the 'Mataria Talav drinking water project'

PLL installed 50 nos. Emergency solar lighting at prominent places in village Luwara & 10 nos. Emergency solar lighting at prominent places in village Lakhigam of Vagra Taluka in Bharuch District. Provided School Bus to Primary School at Lakhigam Village and also running Primary Health Center at Luwara Village. PLL constructed Bus-stand and extended Gram Panchayat Bhavan building at Luwara Village.

PLL installed 25 Nos. of Solar lights at prominent places in village Lakhigam and Luwara. Contributed Rs. 20 Lakhs in Akshay Patra mid-day meal scheme at villages in and around Dahej location. Also, contributed Rs. 10.00 Lakhs in Gujarat Lion Conservation Society towards procurement of Vehicle.

Primary health services to Luvara village, Gynec health and Pulse Polio campaign (Pakhajan PHC). PLL supported noble cause of Construction of Storm water drainage at Shraavan Chokdi to Jambusar by pass (over bridge) in Bharuch. This project is executed under District Collector office.

Request from CDHO (Chief District Health Officer) was received to participate in various health initiatives. PLL agreed during meeting with DM to provide the ambulance for PHC, Pakhajan Village of Vagra Taluka. PLL is supporting Luvara School for reference books, uniform, school picnic and creating awareness on environment, health, safety and security aspects through various programs regularly, rewarding bright students etc. PLL celebrated Shala Pravesh Utsav at Luvara School and distributed tool box to children.

Bharuch has problem of solid waste management and garbage disposal. To improve on cleanliness of the town, PLL is supporting initiative of GREEN BHARUCH CLEAN BHARUCH by donating two dumper placer worth Rs. 23.94 Lakh.

Due to delay in recruitment of teachers, primary schools in and around Dahej has 40% teaching staff. To support education by deploying young educated teachers, PLL sponsored 14 teachers in 4 schools of villages of Dahej, Lakhigam and Luvara.

PLL constructed 11houses of homeless tribes in Luvara village at a cost of 25 Lakh. PLL initiated drive to make Luvara open defecation free by sponsoring toilets for 172 houses at a cost of Rs. 17.2 Lakh.

As a part of initiate for Swachh Bharat Abhiyan, PLL constructed five toilet blocks for school at Lakhigam, Luvara, Ambetha, Jageshwar & Dahej. Also, PLL has constructed 91 Toilet blocks at an estimated expenditure of Rs. 172 Lakhs for various schools in fifteen district of Assam in co-ordination with Rashtriya Madhiyamik Siksha Abhiyan (RMSA).

Cancer screening done (Pep and Breast) for female above 18 years at Luvara village. Establishment of equipment for Ultra Sonography Ward done at General/Civil Hospital, Bharuch. Motivational Awards (Academics and punctuality), School kit and reference books given for Luvara School students. Nutrition and clothing kit (105 nos.) was given to under nourished baby and mother.

PLL has sponsored Drawing competition, Educational tour and uniform distribution at Primary School Luvara. PLL sponsored Medical Equipment such as Eye sight testing, ECG Machine, Spirometer, Pulse Oxymeter etc. to Luvara Primary Health Centre. PLL also celebrated Swatch Bharat Pakhwada during 16th June, 2016 to 30th June, 2016 in co-ordination and consultation with neighboring villages, communities, schools etc.



The launch of Project Vidhyagam was organized in Luwara Primary School wherein a classroom library for std. 7 & 8 students is setup. About 130 books (syllabus and general reading including comics, biographies, story books, general knowledge, science fiction in Gujarati, Hindi and English language) has been kept in the library. The idea behind this project is that students develop interest in reading and thus studying. The PLL Disha Ladies Club organized for food and distribution of educational kits for 65 girls in the Orphanage in Bharuch on 11th Sept 2016. A focused group discussion on importance of hygiene and cleanliness was organized by Ladies club members as well.

Roofing item worth Rs. 2 Lacs was provided to the Gram Panchayat Office of Luwara Village for construction of house for 10 tribal families living below the poverty line. This material consisted of cement roof, channel, and hooks. It is expected that the construction of houses will be done by mid-January 2017.

Petronet LNG Limited celebrated the World Sight Day on 13th October 2016 by organizing the Eye Screening Camp for contractual labor at the company premises. The camp was organized in association with Wockhardt Foundation and about 200 labor and 60 employees participated in the same. During the camp; 125 specs and 60 unit of drops were distributed to beneficiaries based on assessment by Doctors.

On the occasion of 147th birth anniversary of Father of Nation Shri Mahatma Gandhi Health and Hygiene talk, Swachhta Selfie Campaign, Drawing Competition at Govt. High School, Lakhigam and other activities were organized as part of Swachh Bharat Abhiyaan.

It is observed that there is a shortage of regular teachers in local schools and severely hampering the quality of education of poor children in schools. To mitigate this problem, PLL has started supporting para teachers in local school and ensuring improvement in quality of education in local schools.

PLL CSR team participated in world school day celebration on 23 March, 2017. As a part of celebration PLL has distributed Uniforms to Std. 8th Students. It was decided to provide two pair of uniforms to all students in school. The uniforms were prepared by Sardar Mahila Vikas Mandal a group of tribal women for employment generation and livelihood opportunity. PLL provided work order worth of Rs. 2,23,980/-

As the students studying in primary schools are coming from BPL and poor families, most of the families are not able to afford educational tours for their children. Every year school is organizing such tour sponsored by PLL. Students will get exposures to various places and gain experience. About 150 students get benefit of this tour and



places covered like Dwarka, Somnath, Porbandar, Smruti Mandir, Naheru Planetorium, Sasan Gir etc.

PLL had sponsored community mass marriage of weaker community, participated in Shala Pravesh Utsav 2017, planted 150 of trees in nearby villages, distributed food packages during water logging observed at nearby villages, supported empowerment of Special children, engaged contractor for repair and maintenance of Toilets in nearby School, arranged sessions for awareness on solid waste management at school.

PLL supported 10th Special Olympics, Bharuch in January, 2018, sponsored project "Kaushal Setu" Skill Development Program with CIPET, Ahmedabad and trained 100 underprivileged youth, supported educational tour for Primary School of Luvara Village, provided para-teachers at school of nearby villages, sponsored community mass marriage of weaker community, supported "Startup Village" project towards Rural Youth Entrepreneurship Development Program, Supporting Swachh Bharat Abhiyan by District Administration Bharuch (Heritage Walk).

PLL signed MoA with Samagra Shiksha Abhiyan, Department of Education, Govt. of Gujarat on 23rd Jan. 2019 at Govt. Primary School, Luvara village for the Development of Primary School at Luvara Village. PLL supported District Level Special Olympics Games which was organized on 23rd February 2019. Around 250 special children, 150 volunteers including PLL volunteers and coaches participated during the event.

*(July, 2019 to Dec. 2019)*

PLL has signed MoU with ALIMCO to provide Aids and Equipment to disables of Bharuch District. PLL has signed MoU with Wockhardt Foundation to run Mobile Medical Unit (MMU) in nearby villages of PLL plant area. PLL has signed MoU with NHFDC to provide skill training to disable youth of Bharuch District. PLL has supported relief camp for affected community near Lakhigam during monsoon season.

*(Jan.2020 to June 2020)*

PLL has conducted assessment camps at Jambusar and Vagra Taluka of Bharuch Distrcit to Aids and Equipment to disables. Kaushal Setu Skill Training with CIPET Ahmedabad 78 candidates have completed the training and 90% of them got job with the salary range of Rs. 9000 to Rs. 12000. PLL has conducted District Level Special Olympics in parnership with Kalrav Trusy Bharuch and Special Olympics, Gujarat. As a part of COVID-19 pendemic response, PLL has contributed Rs. 34.00 lakhs to



**Distrcit Health Office, Bharuch to proquire PPE Kits, Masks and Senitise materils for COVID-19 worriers. PLL has provides 4300 nos. of Ration kits worth of Rs. 25.00 lakhs to Migrant Labours, and Poor Families of nearby villages. Petronet LNG Limited (PLL) under its CSR initiatives aims at distributing 1,00,000 face masks to the migrant labor communities, slum dwellers, nearby hospitals, local police authorities & Government Offices to combat COVID-19 in the Bhaurch District of Gujarat.**

**(July 2020 to December 2020)**

**PLL has supported Construction of Priamry School, at Luvara village worth of Rs. 1,71 Crore. Construction is about to complete by March, 2021. PLL has distributed aids and equipment to about 250 disable beneficiaries at Jambusar and Vagra Taluka of Bharuch District. As a part of COVID-19 pandemic response, in addition to supporting District Health Office (CDHO) and Distributing Rations Kits to to Migrant Labours, and Poor Families of nearby villages, PLL has prepared 1,00,000 cotton masks through Women SHGs of Bharuch Distrcit. About 80 women got indirect employment during pandemic through this initiative. These masks were distributed among local communities of nearby villages, health workers, labour community, Nagarpalika Sawachhta Karmchari, Special Children and their families, Vegetable vendors, Local Police authorities, Government Offices, Security Guards, PLL employees also participated in mask distribution initiative. These masks were made of Cotton considering it environment aspect for reusable and bio-degradable properties.**

**(January, 2021 to June, 2021)**

**PLL/PLF has signed agreement with Wockhardt Foundation to run Mobile Medical Unit (MMU) in nearby villages of PLL plant area. This MMU is providing its services to nearby villages like Lakhigam, Navi Nagari, Luvara, Jageshwar, Ambetha. More than 5500 patients have been benefited during last six months. PLL/PLF has signed agreement with NHFDC to provide skill training to disable youth of Bharuch District. First batch of 30 candidate started from April, 2021. . PLL/PLF has signed agreement with MOKSHDA to install environment friendly green crematorium system to reduce excessive use of wood. The works are under progress, Construction of Govt. Primary School at Luvara village with 12 classrooms and modern amenities worth of Rs .1.71 Crs. and Construction of 24 Nos. of widow quarters for BSF worth of Rs. 5.87 Crs. are going to completed by end of July, 2021. PLL/PLF skill training partner CIPET, Ahmedabad has completed skill training of 75 candidates and remaining 25 candidates are under progress. Candidate have secured job of Rs. 10,000 per month to Rs. 15,000 per month post completion of training programme. Most of the CSR projects got delayed due COVID-19 restrictions.**

*Amal*

**(July, 2021 to December, 2021)**

**PLL/PLF has signed agreement with Wockhardt Foundation to run Mobile Medical Unit (MMU) in nearby villages of PLL plant area. This MMU is providing its services to nearby villages like Lakhigam, Navi Nagari, Luvara, Jageshwar, Ambetha. More than 8500 patients have been benefited during last six months. PLL/PLF has signed agreement with NHFDC to provide skill training to disable youth of Bharuch District. First batch of 30 candidate started from April, 2021 and second batch of 20 candidates started in August, 2021 and both batches have been completed during December, 2021. PLL/PLF has signed agreement with MOKSHDA to install environment friendly green crematorium system to reduce excessive use of wood. The works are under progress, Construction of Govt. Primary School at Luvara village with 12 classrooms and modern amenities worth of Rs .1.71 Crs. and Construction of 24 Nos. of widow quarters for BSF widow's worth of Rs. 5.87 Crs. are completed. PLL/PLF skill training partner CIPET, Ahmedabad has completed skill training of 93/100 candidates. Candidate have secured job of Rs. 10,000 per month to Rs. 15,000 per month post completion of training programme. PLL has signed agreement with Bharuch Nagarpalika to provide support for Disaster Management and Swachh Bharat Abhiyan, Bharuch Nagarpalika would procure one fire tender and Road sweeping machine with the financial support of Rs. 1.93 Cr. under PLL CSR Initiatives. PLL has signed an agreement with Gujarat CSR Authority (GCSRA) for construction of Panchayat Bhavan at Lakhigam village. PLL has supported Development of Green Zone beneath newly constructed flyover bridge at Bharuch City.**

*Bharuch*



**DISASTER MANAGEMENT INSTITUTE (DMI), BHOPAL**  
(An ISO 17020:2012 Accredited Institute)

# ERDMP CERTIFICATE

This certificate has been awarded to

**M/s Petronet LNG Limited**

GIDC Industrial Estate, Plot No. 7/A,  
Dahej Dist. Bharuch (Gujrat) 392130 (India)

In recognition of the entity's "*Emergency Response & Disaster Management Plan*" which complies with the requirements of

PNGRB Notification G.S.R. 39(E) PNGRB "Codes of Practices for Emergency Response and Disaster Management Plan (ERDMP) Regulations, 2010"

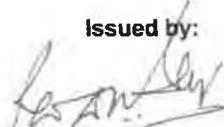


Certificate Number:  
1615/ERDMP-126/Petronet LNG Limited/  
Gujrat/2018-19

Date of Issue  
30.12.2019

Expiry Date:  
29.12.2022

Issued by:

  
Dr. Rakesh Dubey  
Director



ANNEXURE IV

*Handwritten signature*



**GUJARAT POLLUTION CONTROL BOARD**

Paryavaran Bhavan

Sector-10-A, Gandhinagar - 382 002

Phone : 23222756, 23222095, 23222096

Gram : CLEANWATER, Fax : (079) 23232156

Website : www.gpcb.gov.in

NO. PC/BRCH-CCA-611/ 2004/ 333

To,  
M/s. PETRONET LNG LTD.,  
PLOT NO. 7/A,  
GIDC DAHEJ,  
TAL. VAGRA,  
DIST. BHARUCH.

SUB : NOC Amendment.

- REF : 1) This office letter dated 02/02/2000 & 15/02/2001.  
2) Environmental Clearance issued by MOEF dated 27/12/2000.  
3) Your letter No. PLL/DLT/GPCB/ Consent/2004/02, dated 23/07/2004.

Sir,

We are in receipt of your above reference letter and have noted the contents therein. In this connection, please note that the NOC Amended by the board is also in respect of the entire LNG project including the two additional storage tanks of phase-II. However, Environmental Clearance Certificate granted by Ministry of Environment & Forests is for phase-I only. Therefore unit shall have to obtain a necessary clearance from Ministry of Environment & Forests, before starting any activity related to phase-I project. Other all conditions as stipulated in above referred NOC will remain unchanged.

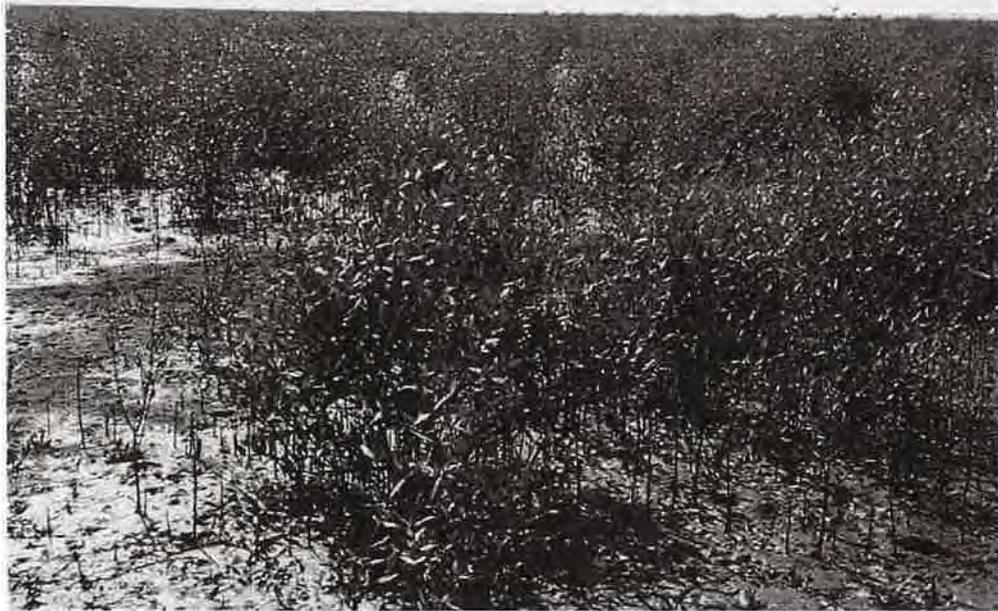
For and on behalf of  
GUJARAT POLLUTION CONTROL BOARD

( V.R. PATEL )  
ENVIRONMENTAL ENGINEER

*Patel*

ANNEXURE VI

**Mangroves planted in 50 ha. area at NADA Coast during 2009-10**



Ramabali.

**Mangroves planted in 100 ha. area at Ankalva Coast during 2010-11**



*Tomalis*

**Mangroves planted in 200 ha. area at Ankalva Coast during 2011-12**



*Tamasha*

**Mangroves planted in 200 ha. area at Ankalva Coast during 2012-13**



*Ankalva*

**Mangroves planted in 100 ha. area at Bhavnagar Coast during 2012-13**



*Tomulu*

**Mangroves planted in 200 ha. area at Bhavnagar Coast during 2013-14**



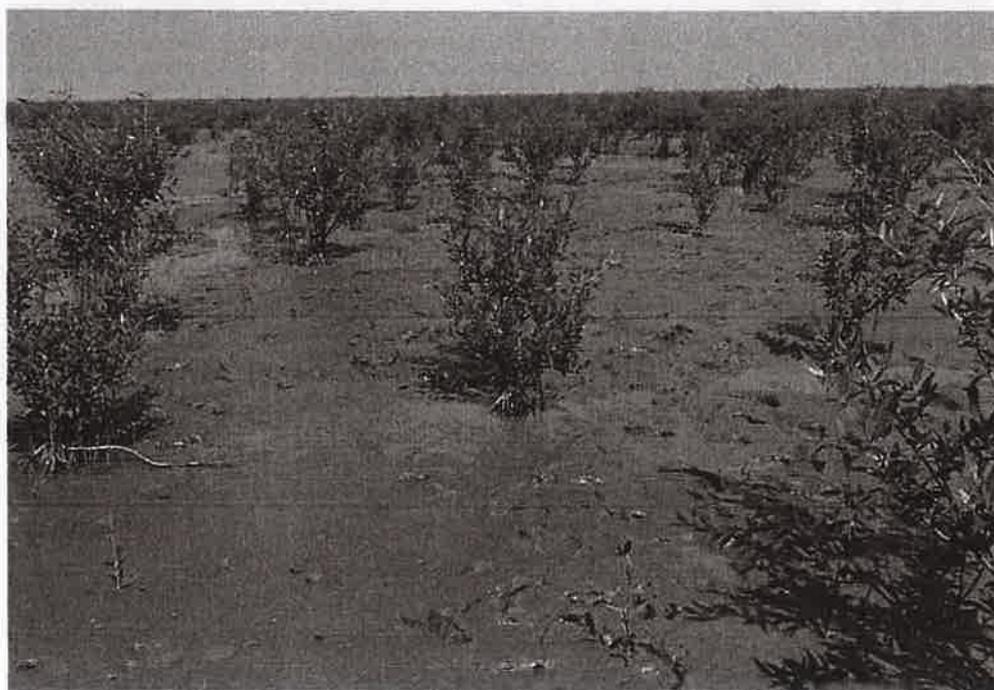
*Amal*

**Mangroves planted in 200 ha. area at Bhavnagar Coast during 2014-15**



*Somali*

**Mangroves planted in 50 ha. area at at Kentiyajal Coast during 2014-15**



*Amal*

**Mangroves planted in 50 ha. area at Gadhula, Talaja Coast during 2016-17**



*Bomali*