#### PLL/DHJ/MoEF/009

The Director (Environment)
Forests & Environment Department,
Government of Gujarat,
Block No. 14, 8<sup>th</sup> Floor, Sachivalaya,
Gandhinagar – 382 010
(Fax No.: 079-23252156)

Kind Attn.: Shri Hardik Shah

Subject: 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 Setting up of Standby LNG jetty at Dahej, District Bharuch in Gulf of Khambhat, Gujarat

as on 31st December, 2013

Ref : (a) J-17011/11/2000-IA-III dated 14<sup>th</sup> Nov, 2008

(b) ENV-10-2004-117-E dated 05<sup>th</sup> Sep, 2008

Dear Sir,

The Compliance report as on December 31, 2013 with respect to conditions stipulated by Ministry of Environment & Forests, Govt. of India and Department of Forests, Govt. of Gujarat for Setting up of Standby LNG jetty at Dahej, District Bharuch in Gulf of Khambhat, Gujarat is enclosed.

With regards,

S. Baitalik (Projects)

Encl.: As above

Copy to:-

Director,
Ministry of Environment & Forest,
Paryavaran Bhawan,
CGO Complex, Lodhi Road,
New Delhi – 110 003

Joint Director (S)
Ministry of Environment & Forests,
Regional Office, Western Region,
Kendriya Paryavaran Bhavan,
Link Road No. 3,
Bhopal – 462 016

#### CC to:

- CEO & MD For kind info. Please
- Director (Technical)
- President (Technical)
- Sr. VP (Projects)
- Vice President (Plant Head)

Half Yearly Compliance Report with respect to conditions stipulated by Ministry of Environment & Forests, Government of India and Department of Forests, Government of Gujarat for setting up of standby LNG jetty at Dahej, District Bharuch in Gulf of Khambhat, Gujarat as on 31.12.2013

COMPLIANCE REPORT TO THE CONDITION MENTIONED IN MOE&F LETTER NO. J-17011/11/2000-IA-III, DATED: 14TH NOVEMBER, 2008.

#### (A) Specific Conditions:

i) Adequate safety measures for the offshore structure and ship navigation shall be taken in view of the high current in the area.

All safety measures taken during Design Stage.

ii) The shore line changes in the area shall be monitored periodically.

Periodically monitoring is being done.

iii) The recommendation of the Scour study shall be incorporated in the design.

Incorporated in Design.

- iv) The recommendations of the risk assessment shall be implemented. Any change in the design of the project shall come before the committee for seeking necessary approval.
   Implemented.
- v) Mangrove plantation to be done in consultations with the GEER/GEC of Forest Department, a detailed plan shall be submitted within six months from the date of receipt of this letter.

Following Mangrove Plantation Completed/under progress along the Gujarat Coast in consultation with GEC & Forest Dept.:

a. Completed : 650 Hectares (2009-10, 2010-11, 2011-12, 2012-13)

b. Under Progress: 200 Hectares (2013-14) in consultations with Forest Dept.
c. Proposed : 200 Hectares (2014-15) in consultations with Forest Dept.

vi) It shall be ensured that during construction and post construction of the proposed jetty the movement fishermen vessels of the local communities are not interfered with.

Agreed.

vii) Relocation of the fishermen community shall he done strictly in accordance with the norms prescribed by the State Government. The relocated fishermen community shall be provided with all facilities including health care. education, sanitation and livelihood.

Noted.

maileim.

viii) Marine ecology monitoring shall be done regularly during construction of Breakwater and dredging operation.

#### Construction of break water / Dredging operation is not envisaged

ix) Regular monitoring of air quality shall be done in the settlement areas around the project site and appropriate safeguard measures shall be taken to ensure that the population is not subjected to higher levels of air pollution.

Air quality monitoring is being done and its report is attached as Annexure-I to this report.

x) Sewage arising in the port area shall be disposed off after adequate treatment to conform to the standards stipulated by Gujarat State Pollution Control Board and shall be utilized/re-cycled for gardening, plantation and irrigation.

Sewage treatment plant is considered in Port Area.

xi) Adequate plantation shall be carried out along the roads of the Port premises and a green belt shall be developed.

Plantation is planned after completion of Jetty Project.

xii) There shall be no withdrawal of ground water in CRZ area, for this project.

Noted & complied.

xiii) Specific arrangements for rain water harvesting shall be made in the project design and the rain water so harvested shall be optimally utilized. Details in this regard shall be furnished to this Ministry's Regional Office at Bhopal within 3 months.

The LNG Jetty is being set up very near to the coast line at Dahej where water table is very high. Moreover the sea water is brackish in that area. Preliminary investigation indicates that it might not be feasible to carry out rain water harvesting in this area. The process water requirement in LNG terminal at Dahej is NIL. The sanitary waste water in being used for green belt purpose.

 ${f xiv}$ ) Land reclamation shall be carried out only to the extent that it is essential for this project.

Noted and complied.

xv) No product other than those permissible in the Coastal Regulation Zone Notification, 1991 shall be stored in the Coastal Regulation Zone area.

Noted and complied.

mailalil

#### **B. General Conditions:**

(i) Construction of the proposed structures, if any in the Coastal Regulation Zone area shall be undertaken meticulously conforming to the existing Central/local rules and regulations including Coastal Regulation Zone Notification 1991 & its amendments. All the construction designs / drawings relating to the proposed construction activities must have approvals of the concerned State Government Departments / Agencies.

#### Agreed and all necessary approvals taken for Jetty Project.

(ii) Adequate provisions for infrastructure facilities such as water supply, fuel, sanitation etc. shall be ensured for construction workers during the construction phase of the project so as to avoid felling of trees/mangroves and pollution of water and the surroundings.

#### Complied as per Statutory requirement.

(iii) The project authorities must make necessary arrangements for disposal of solid wastes and for the treatment of effluents by providing a proper wastewater treatment plant outside the CRZ area. The quality of treated effluents, solid wastes and noise level etc. must conform to the standards laid down by the competent authorities including the Central/State Pollution Control Board and the Union Ministry of Environment and Forests under the Environment (Protection) Act, 1986, whichever are more stringent.

No effluent treatment plant in CRZ area. Noise level and Ground water monitoring is being done and its report is attached as Annexure-II & Annexure-III to this report.

(iv) The proponent shall obtain the requisite consents for discharge of effluents and emissions under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (prevention and Control of Pollution) Act, 1981 from the Gujarat Pollution Control Board before commissioning of the project and a copy of each of these shall be sent to this Ministry.

Necessary approval has been taken for existing terminal. Copy attached as Annexure-IV to this report.

(v) The sand dunes, corals and mangroves, if any, on the site shall not be disturbed in any way.

#### Agreed.

(vi) A copy of the clearance letter will be marked to the concerned Panchayat / local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.

Noted.

Bartalile

(vii) The funds earmarked for environment protection measures shall be maintained, in a separate account and there shall be no diversion of these funds for any other purpose. A year-wise expenditure on environmental safeguards shall be reported to this Ministry's Regional Office at Bhopal and the State Pollution Control Board.

Complied.

Rs 33.22 Lacs spent for development of green belt and mangrove plantation during the year 2009-2010.

Rs 50 Lacs spent for development of Green belt and Mangrove plantation during the year 2010-2011

Rs 93.31 Lacs spent for development of Green belt. /Mangrove plantation during the year 2011-2012

Rs 109.57 Lacs spent for development of Green belt. /Mangrove plantation during the year 2012-2013

Of Budgeted Rs. 129.80 Lacs for development of Green Belt and Mangrove Plantation during the year 2013-14, till 31.12.2013, Rs. 62.00 Lac spent for development of Green Belt and Mangrove Plantation and Rs. 67.80 budgeted for development of Green Belt and Mangrove Plantation during balance period of the year F.Y. 2013-14.

(viii) Full support shall be extended to the officers of this Ministry's Regional Office at Bhopal and the officers of the Central and Sate 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 mitigate measures and other environmental protection activities.

#### Agreed.

(ix) In case of deviation or alteration in the project including the implementing agency, a fresh reference shall be made to this Ministry for modification in the clearance conditions or imposition of new ones for ensuring environmental protection.

Noted & Agreed.

(x) This Ministry reserves the right to revoke this clearance, if any of the conditions stipulated are not complied with to the satisfaction of this Ministry.

Noted & Agreed.

(xi) This Ministry or any other competent authority may stipulate any other additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.

Noted & Agreed.

Bailelile.

(xii) The project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen at Website of the Ministry of Environment & Forests at littp://www.envfornic.in. The advertisement shall be made within 7 days from the date of issue of the clearance letter and a copy of the same shall be forwarded to the Regional Office of this Ministry at Bhopal.

#### Complied.

(xiii) The Project proponents shall inform the Regional Office at Bhopal 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.

Noted for compliance.

(xiv) Any appeal against this environmental 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.

Bartalille

### Compliance to conditions as conveyed by Department of Forests & Environment, Govt. of Gujarat, Letter No. ENV-10-2004-117-E, dated: September 5, 2008.

1. The provisions of CRZ notification of 1991 and subsequent amendments issued from time to time shall be strictly adhered to by PLL.

#### Noted.

2. All necessary permissions from different Government Departments / Agencies shall be obtained by PLL before commencing the expansion activities.

All approvals from different Government Departments will be taken before commissioning.

3. No effluent or sewage shall be discharged into the sea / creek or in the CRZ area and shall be treated to confirm the norms prescribed by the Gujarat Pollution Control Board and would be reused / recycled within the plant premises.

#### Noted and complied.

4. All the recommendations and suggestion given by the NIOT and WAPCOS in their Environment Impact Assessment reports shall be implemented strictly.

#### Noted.

5. The cost of the external agency that may be appointed by this department for supervision / monitoring of the project activities during construction / operational phases shall be paid by PLL.

#### Noted and agreed.

6. The PLL shall have to contribute financially for any common study or project that may be proposed by this Department for environmental management / conservation / improvement for the Gulf of Khambhat or for Dahej region.

#### Agreed.

7. The construction debris and any other type of waste shall not be discharged into the sea / creak or in CRZ areas. The debris shall be removed from construction site immediately after construction is over.

#### Agreed.

mailalile 1

8. The construction camps shall be located outside the CRZ area and the construction labor shall be provided with necessary amenities, including sanitation, water supply and fuel and it shall be ensured that the environmental conditions are not deteriorated by construction labor

Noted & complied.

9. The PLL shall prepare and regularly update its local oil Spill Contingency plan and Disaster Management Plan in consonance with National Oil Spill and Disaster Contingency Plan

Complied for operation of Existing LNG Terminal facilities.

10. The Gujarat Maritime Board shall initiate for the Vessel Traffic Management System for the Gulf of Khambhat and would work out the modus operandi for cost sharing by different players in the Gulf including PLL. The PLL shall contribute for the same as may be decided by Gujarat Maritime Board.

Gujarat Maritime Board has established VTS System and PLL is complying all norms as per Gujarat Maritime Board.

#### General Conditions:

11. The ground water shall not be tapped to meet with the water requirements in any case.

#### Agreed

12. The PLL shall take up massive mangrove plantation activities in 100 ha. of area on Gujarat Coast line as well as greenbelt development activities in consultation with the Gujarat Institute of Desert Ecology / Forest department.

Following Mangrove Plantation Completed/under progress along the Gujarat Coast in consultation with GEC & Forest Dept.:

a. Completed : 650 Hectares (2009-10, 2010-11, 2011-12, 2012-13)

b. Under Progress: 200 Hectares (2013-14) in consultations with Forest Dept. c. Proposed : 200 Hectares (2014-15) in consultations with Forest Dept.

13. The PLL shall have to contribute financially for taking up the socio-economic upliftment activities in this region in consultation with the Forest and Environment Department and the District Collector / District Development Officer.

PLL is taking active part in consultation with District Collector in CSR projects.

Bouldille

14. Environmental Audit report indicating the changes, if any with respect to the baseline quality, in the coastal and marine environmental shall be submitted every year.

#### Noted.

15. A six monthly report on compliance of the conditions mentioned in this letter shall have to be furnished by the PLL on regular basis to this Department.

#### Noted for compliance.

16. Any other condition that may be stipulated by this Department from time to time for environmental protection / management purpose shall also have to be complied with by the PLL.

Noted.

Martality

# **ANNEXURE-I**

# **AMBIENT AIR QUALITY STATUS REPORT**

All units are in μg/Nm³.

	SPM SO <sub>x</sub> NO <sub>x</sub>	GPCB norms 200 80 80	Jan-13 119.00 6.95 15.99	May-13 191.00 11.41 12:17	Aug-13 110.00 7.15 11.52	Nov-13 146.00 11.20 12.73
8	0.	GPC	_	2	က	4



## **ANNEXURE - II**

## NOISE LEVEL REPORT

ů	rocition	<u>2</u>	:	July, 20	13	August, 2013	013	September, 2013	2013	October, 2013	2013	November, 2013	er, 2013	December, 2013	, 2013
5		5	5	Date & Time	용	Date & Time	qp	Date & Time	ф	Date & Time	ą	Date & Time	ą	Date & Time	ą
-	1 Precast Yard	decibel	Day-75 db Night-70db	Day-75 db 05.07.2013 Night-70db at 2130 Hrs.	63	08.08.2013 at 2100 Hrs.	88	02.09.2013 at 2000 Hrs	65	03.10.2013 at 2300 Hrs	63	03.11.2013 at 1200 Hrs	63	05.12.2013 at 1100 Hrs	65
2	Samrat Barge	decibel	decibel   Day-75 db   11.07.2013   Night-70db   at 1100 Hrs.	Day-75 db 11.07.2013 Night-70db at 1100 Hrs.	89	15.08.2013 at 2130 Hrs.	29	12.09.2013 at 1100 Hrs	20	07.10.2013 at 1400 Hrs	20	04.11.2013 at 1100 Hrs	74	10.12.2013 at 0300 Hrs	65
က	Batching Plant	decibel	Day-75 db Night-70db	decibel Day-75 db 09.07.2013 Night-70db at 1500 Hrs.	20	13.08.2013 at 2010 Hrs.	63	09.09.2013 at 0830Hrs	20	08.10.2013 at 0900 Hrs	72	07.11.2013 at 0900 Hrs	78	28.12.2013 at 1700 Hrs	99
4	4 Unloading Platform	decibel	Day-75 db Night-70db	decibel Day-75 db 15.07.2013 Night-70db at 2100 Hrs.	65	15.08.2013 at 2130 Hrs.	62	19.09.2013 at 1000 Hrs	89	11.10.2013 at 1700 Hrs	69	11.11.2013 at 1200Hrs	64	11.12.2013 at 1400 Hrs	89
5	Fabrication Yard	decibel	decibel Day-75 db 03.07.2013 Night-70db at 0900 Hrs.	Day-75 db 03.07.2013 Night-70db at 0900 Hrs.	72	05.08.2013 at 1100 Hrs.	75	05.09.2013 at 1200Hrs	89	30.10.2013 at 1000 Hrs	71	13.11.2013 at 1000 Hrs	73	24.12.2013 at 2300 Hrs	50

Note: Ear protection devides are provided at above referred places

William Con

# **ANNEXURE - III**

# **GROUND WATER QUALITY STATUS REPORT**

Sr.no.	Parameter	Unit	Limit as per IS 3025 (Part- I)	July, 13	Aug, 13	Sept, 13	Oct, 13	Nov, 13	Dec, 13
4	РН	•	6.5-8.5	6.65	8.25	8.43	8.46	7.8	7.91
2	Total Dissloved Solids (TDS)	mg/L	Max 500	7812	974	744	446	546	2604
m	Chlorides as CL	mg/L	Max 250	3499	274	168	82	136	1020
4	Sulphate as SO4	mg/L	Max 200	728	42.57	13	23.74	10	210
5	Oil & Grease	mg/L	Max 0.05	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05	< 0.05
9	Phenolic Compound	mg/L	Max.0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
7	Zinc as Zn	mg/L	Max 5	0.11	0.062	0.13	1.06	1.58	1,318
œ	Lead as Pb	mg/L	Max 0.05	< 0.005	< 0.005	< 0.005	0.022	0.02	< 0.005
6	Cyanide as CN	mg/L	Max 0.05	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
10	Flouride as F	mg/L	Max 01	< 0.01	< 0.01	< 0.01	0.28	< 0.01	< 0.01
11	Copper as Cu	mg/L	Max 0.05	< 0.013	< 0.013	< 0.013	0.027	0.047	0.057
12	Pesticide	mg/L	ΪŻ	*QN	*QN	ND*	ND*	ND*	ND*
13	Mercury as Hg	mg/L	Max 0.001	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025
	ND*: Not detected								

Mr or Tentim

#### **ANNEXURE-IV**



#### **GUJARAT POLLUTION CONTROL BOARD** Paryavaran Bhavan

Sector-10-A, Gandhinagar - 382 010.

Fax: (079) 23232156

Website: www.gpcb.gov.in

By R.P.A.D.

In exercise of the power conferred under section-25of the Water (Prevention and Control of Pollution )Act-1974. under section-21 of the Air (Prevention and Control of Pollution) Act-1981 and Authorization under "Hazardous Waste (Management, Handling & Transboundary Movement) Rule-2008.

And whereas Board has received consolidated application dated 16/3/2009 and inward no. 6697 for the consolidated consent and authorization (CC & A) of this Board under the provisions / rules of the aforesaid Acts Consent & Authorization is hereby granted as under.

CONSENT AND AUTHORISATION:

(under the provisions / rules of the aforesaid environmental acts )

M/s. PETRONET LNG LTD., PLOT NO.7/A, GIDC DAHEJ, TAL. YAGRA, GIDC ESTATE, BHARUCH, DIST: BHARUCH.

- Consent Order No.: AWH-33649, date of Issue
- The consent under Water Act -1974 shall be valid up to 15/3/2014 & The consent under Air Act 1981, Authorization under Environment (Protection) Act. 1986 shall be valid up to 15/3/2014 to operate industrial plant for manufacture of the following products

Sr. No.	Product	Max. Quantity MT/Month
1	Regasified LNG(RLNG)	417000 MT/Month (Phase-I)
2	Regasified LNG (RLNG)	417000 MT/Month (Phase-II)

#### SPECIFIED CONDITION:

- 1)) Applicant shall strictly comply the Environmental Clearance condition no. J-17011/11/2000-IA-III, dated 27/12/2000
- 2) Applicant shall strictly comply the Environmental Clearance condition no. J-17011/11/2000-IA-III, dated 23/11/2005
- 3) Applicant shall strictly comply the CRZ Clearance condition REF NO. ENV-10-2000-181-Pl, dated 15/11/2000 4) Applicant shall strictly comply the CRZ Clearance condition REF NO. ENV/10-2004-117-P. dated 28/12/2005

#### CONDITION UNDER THE WATER ACT: 3.

- There shall be no generation of the industrial effluent from the manufacturing process and other ancillary industrial operations & Unit shall strickly adhere to Zero discharge.
- The quantity of total water consumption shall not exceed 10.6 KL/Day ( break up as below) 3.2
  - a) Domestic 10.6 KL/Day
  - b) Industrial Nil
- 3,3, The quantity of domestic waste water (sewage) shall not exceed 8600 Lit/day
- Domestic waste water shall be disposed off through soak pit / septic tank system. 3.4

#### CONDITIONS UNDER THE AIR ACT: 4.

The following shall be used as fuel. 4.1



### GUJARAT POLLUTION CONTROL BOARD Paryavaran Bhavan

Sector-10-A, Gandhinagar - 382 010. Fax: (079) 23232156

Website: www.gpcb.gov.in

Sr. No.	Fuel in Gas turbine Generators	Quantity	
In Gas	turbine Generators (3 #)		
1	Regasified LNG (RLNG)	4.5 MT/hr.	
In subn	nerged combustion Vaporizes (2 #)		
2.	Regasified LNG (RLNG)	4.5 T/hr.	

- 4.2 The applicant shall install & operate a comprehensive adequate air pollution in order to achieve prescribed norms control system so as to achieve standards.
- 4.2.1. The flue gas emission through stack attached to Gas Turbine Generator shall conform to the following standards:

Stack No.	Stack Attached To	Stack Height in Meter	Air Pollution Control System	Parameter	Permissible Limit
k,	Gas Turbine Generator (GTG) G-301A	30	Low NO, Burners	Particulate matter SO <sub>2</sub> NO <sub>3</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm
2	GTG - 301 B	30	Low NO, Burners	Particulate matter SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm
2.	GTG - 301 B	30	Low NO <sub>x</sub> Burners	Particulate matter SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm
3.	GTG - 301 C	30	Low NO <sub>s</sub> Burners	Particulate matter SO <sub>2</sub> NO <sub>3</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm
4.	Submerged Combustion Vaporizer (SCV0 E-10CA	10	Water Injection System	Particulate matter SO <sub>2</sub> NO,	150 mg/NM <sup>3</sup> 100 ppm 50 ppm
5.	SCV-E 106 B	10	Water Injection System	Particulate matter SO <sub>2</sub> NO,	150 mg/NM <sup>3</sup> 100 ppm 50 ppm
6.	Flare stack	40	3	Particulate matter SO <sub>2</sub> NO <sub>3</sub>	150 mg/NM <sup>1</sup> 100 ppm 50 ppm
				1	

- 4.2.2 There shall be no process emission from the manufacturing process as well as any other ancillary process.
- 4.2.3. The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder.

PARAMETER	PERMISSIBLE LIMIT
Suspended Particulate Matter	_ 500 microgram per cubic meter
Oxides Of Sulphur	120 microgram per cubic meter
Oxides Of Nitrogen	120 microgram per cubic meter
Hydrocarbon	160 microgram per cubic meter
Flammable gases	Absent

- 4.2.4. The applicant shall operate industrial plant / air pollution control equipment very efficiently and continuously so that the gaseous emission always conforms to the standards specified in condition no.4.2.1. & 4.2.3. above
- 4.2.5. The consent to operate the industrial plant shall lapse if at any time the parameters of the gaseous emission are not within the tolerance limits specified in the condition no.4.2.1 & 4.2.3, above.



### GUJARAT POLLUTION CONTROL BOARD Paryavaran Bhavan

Sector-10-A, Gandhinagar - 382 010. Fax: (079) 23232156

Website: www.gpcb.gov.in

- 4.3 The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1,S-2,etc,and these shall be painted/displayed to facilitate identification.
- The Industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75dB(a) during day time and 70 dB(A) during night time. Daytime is reckoned in between 6a.m. and 10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.
- 5 GENERAL CONDITIONS: -
- 5.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.
- 5.2 Applicant shall also comply with the general conditions given in annexure I.
- 5.3 Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Court's order in W.P. No.657 of 1995 dated 14<sup>th</sup> October 2003.
- 5.4 Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous waste generated within the factory premises
- 5.5. Adequate fire fighting systems and rapid foam should be stored at a site. Unmanned house shall be provided. Adequate storage for cooling, washing and fire fighting shall be provided.
- 5.6. Automatic continuous monitoring system to detect the gas in the ambient air within premises shall be installed. It should be attached to audiovisuals alarm system.
- 5.7. Proper and quick communication system must be available during transfer between port terminal and storage site
- 5.8 Adequate safety precautions like self-contained breathing apparatus, full face shield, fire resistance suit etc. shall be used by the operators.
- 5.9. Mock drill shall be carried out in presence of CFI/CCE atleast once in six months as per Hazardous Chemicals Rules.
- 5.10 Level control and overfill protection system shall be provided power generation shall be provided.
- 5.11. All electrical installation shall be flame proof and standard power generation shall be provided
- 5.12. All SRVS and vent valves shall be connected to scrubbing system to avoid formation of vapour clouds.
- 5.13. Pumping and distribution of chemicals from and to the tank should be at a controlled rate and at a permissible temperature to avoid creation of vaccum, pressure, thermal stresses or static charge.
- 5.14. The water requirement for construction as well as instrumentation shall be met from GIDC and sea water. No fresh water from surface of ground shall be used.
- 6. AUTHORISATION FOR THE MANAGEMENT & HANDLING OF HAZARDOUS WASTES Form-2 (See rule 3 (c) & 5 (5))

Form for grant of authorization for occupier or operator handling hazardous waste

- 6.1 Number of authorization : AWII-33649 Date of issue:
- 6.2 M/s<sub>0</sub> PETRONET LNG LTD, is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at Plot No. 7/A, GIDC DAHEJ, TAL, VAGRA, Dist, BHARUCH.

Page 3 of 4



### GUJARAT POLLUTION CONTROL BOARD Paryavaran Bhavan

Sector-10-A, Gandhinagar - 382 010. Fax: (079) 23232156

Website: www.gpcb.gov.in

Sr. No.	Waste	Quantity	Schedule-1	Facility
1	Used Oil	3 KL/Y	5.1	Collection, storage & Fransportation, sale to registered recycler
2,	Waste residue containing oil	500 Kg/Y	5.2	Collection. storage, transportation to GEPH for incineration
3)	Industrial use of paints, plastics & ink waste	500 Kg/Y	21 1	Collection, storage, transportation to GEPIL for incineration

- 6.3 The authorization is granted to operate a facility for Hazardous waste collection, storage within premises and transportation to GEPH<sub>n</sub> for incineration.
- 6.4 The authorization shall be in force for a period up to 15/3/2014
- 6.5 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986

#### 6.6 TERMS AND CONDITIONS OF AUTHORISATION

- 6.6.1 Applicant shall have to comply with provisions of Hazardous Waste (Management, Rule-2008 as amended from time to time.
- 6,6,2 The authorization shall be produced for inspection at the request of an officer authorized by the Gujarat Pollution Control Board.
- 6.6.3 The persons authorized shall not tent, lend, sell, transfer of otherwise transport the hazardons wastes without obtaining prior permission of the Gujarat Pollution Control Board.
- 6.6.4 Any unauthorized change in personnel, equipment or working conditions as mentioned in the authorization order by the persons authorized shall constitute a breach of this authorization.
- 6.6.5 It is the duty of the authorized person to take prior permission of the Gujarat Pollution Control Board to close down the facility.
- 6.6.6 An application for the renewal of an authorization shall be made as laid down in rule 5 (6) (ii).

For and on behalf of Gujarat Pollution Control Board

(S.H. VEGDA) ENVIRONMENTA INGINEER

NO.PC/BRCH/CC&A-611/ / 6 892\_ISSUED TO:
M/s PETRONET LNG LTD..
PLOT NO. 7/A,
GIDC DAHEJ. TAL. VAGRA,
DIST BHARUCH

- 4 AUG 2009

Mangrove Plantation Carried Out at Ankalva- Mandroi (Total Area Covered – 500 Ha)







Mangrove Plantation Carried Out at Roniya Bhata, Bhavnagar (Total Area Covered: 100 ha.)



Mangrove Plantation Work in Progress at Roniya Bhata, Bhavnagar (Total Area under Coverage: 200 ha.)



#### 3.18 Status of Mangrove Plantation at Dahej, Vagra

(6 ha. Plantation Completed during 2008-09)



Mangroves developed through Transplantation Method Dahej, 2008-09 Status as on May 2012



Mangroves developed through Transplantation Method Dahej, 2008-09 Status as on May 2012