



गेल (इंडिया) लिमिटेड

(भारत सरकार का उपक्रम – महारत्न कंपनी)

GAIL (India) Limited

(A Government of India Undertaking - A Maharatna Company)

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No.: GAIL/ND/RA/T4S-RO-AMEND-REG/2020

Date: 30.04.2020

To  
The Secretary,  
Petroleum and Natural Gas Regulatory Board,  
1<sup>st</sup> Floor, World Trade Centre, Babar Road,  
New Delhi – 110001.

Respected Madam,

**Subject: Views/Comments on Amendments on the PNGRB (T4S for Retail Outlets dispensing Petroleum, Auto LPG and CNG) Regulations, 2018**

This has reference to the PNGRB Public Notice dated 17.02.2020 inviting views/comments on the amendments proposed by PNGRB on the PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG) Regulations, 2018.

2. In this regard, the views/comments of GAIL are enclosed as **Annexure-A**.

Submitted please.

Yours Sincerely,

*S. Kumar*

(Kumar Shanker)

Chief General Manager (Mktg-RA)

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Encl: As Above

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

<b>Clause</b>	<b>Description</b>	<b>GAIL Comments</b>	<b>Justifications</b>
1.0 (c).	<p><i>Scope</i></p> <p>Dispensing stations with following variants:</p> <p>i. Dispensing of LNG</p> <p>ii. Dispensing of CNG (LCNG)</p> <p>iii. Provision for connection for supply of PNG</p> <p>iv. Filling of CNG cascades</p>	Odourizing, Refilling and transportation of Portable LNG Cylinders may also be added in the Scope.	The LCNG facility is also meant for refilling and transportation of portable LNG cylinders for domestic PNG supply,
2.0	<p><i>Definitions</i></p> <p>I. Auto LNG</p> <p>II. Auto LNG dispensing station</p> <p>III. LCNG</p> <p>IV. Impounding area</p>	Definition of ‘Dispensing’ may also be added.	-
3.1(1) (a)	<p>TABLE -1: Distances from Impound Wall and Property Line</p> <p>NOTE: If the aggregate water capacity of a multiple container installation is 1.9 m or greater, the minimum distance must comply with the appropriate portion of this table, applying the capacity rather than the capacity per container, If more than one installation is made, each installation must be separated from any other installation by at least 7.6 m. Do not apply minimum distances between adjacent containers to such installation.</p>	<p>Table 1 of proposed regulations contradicts with existing provisions made in the PNGRB (Technical Standards and Specifications including Safety Standards for Liquefied Natural Gas Facilities) Regulations, 2018 vide Clause 1.7.1 &amp; 6.2.1.</p> <p>It is proposed that Table 1 on Distances from Impound Wall and Property Line may be aligned with Static and Mobile Pressure Vessel (Unfired) (Amendment), Rules 2018 for LCNG Stations or Auto LNG Dispensing.</p>	PESO vide Static and Mobile Pressure Vessel (Unfired) (Amendment), Rules 2018, Table I of Schedule IV: Section 1, also stipulates the ‘Distances from Impound Wall and Property Line’
3.1.(1) (a)	Table-3: Minimum distance(s) between equipment/items installed outside the dyke	Table-3: Minimum distance(s) between equipment/items installed	

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

Clause	Description	GAIL Comments	Justifications
	<p>wall and outer edge of dyke wall</p> <p>2. Min 4.0 m and min 9 m from adjoining property. The fill point shall also observe 9.0 meter safety distance to the adjoining property.</p>	<p>outside the dyke wall and outer edge of dyke wall</p> <p>May be modified as:</p> <p>2) Min 4.0 m (min 9 m from adjoining property). The fill point shall also observe 9.0 meter safety distance to the adjoining property.</p>	
3.1.(1) (a)	<p>Table-3: Minimum distance(s) between equipment/items installed outside the dyke wall and outer edge of dyke wall</p> <p>4. The safety distances as per Table I A of Gas Cylinder Rules, 2016 from edge of the dyke. The cascade shall be segregated from LNG facility by providing concrete wall up to the height of the cascade.</p>	<p>The grade of concrete wall up to the height of the cascade may be defined to meet the desired objective.</p>	-
3.1 (6)	<p>Odorizing unit shall be provided in LCNG stations.</p>	<p>Sub Clauses w.r.t Odorizing Unit may be further added:</p> <p>I. The odorising plant generally consists of a storage tank, smaller feed tanks, pumps and associated valves and pipe-work. Care should be taken that materials used in the construction are compatible with odourant. In particular, copper and copper based alloys, polyethylene and</p>	<p>Preventive measures need to be detailed out for Odorizing Unit.</p>

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

Clause	Description	GAIL Comments	Justifications
		<p>polypropylene and butyl and natural rubber are attacked by liquid odourants and should not be used in the construction of this equipment. Welded pipe connections should be used whenever possible.</p> <p>II. A spill or leak of gas odourant results in an obnoxious odour, which – unless promptly neutralised – usually leads to employee and neighbour complaints. It is important that, if spills or leaks occur, the odourants are promptly neutralised and the odour masked.</p> <p>III. The Material Safety Data-Sheets for the odourant should be consulted for advice on the personal protection equipment required for the operators to safely handle the material.</p> <p>IV. Odourization is only applicable for CNG and PNG through CNG.</p>	
3.1 (9)	The height of impoundment wall shall be adequate to contain spillage of LNG. Dyke	Some stipulation needs to be given on height of the impoundment wall	-

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

Clause	Description	GAIL Comments	Justifications
	wall height should be between 0.6 meter to 1 meter from the dyke floor level.	from earth finish level to protect entrance of rain water.	
3.1 (19)	The operating personnel shall have an unobstructed overall view of the facilities both from the sales room and from the delivery area.	<p>May please add under Sub Clauses:</p> <p>I. Provision of CCTV should be made for viewing all events which could occur in hazardous or unmanned area.</p> <p>II. Under abnormal circumstances the operator should have the ability to use these CCTV system to analyse the situation.</p> <p>III. The system shall be considered as a priority load and is connected to the UPS system</p>	During the unloading of LNG from tankers and filling of Cascade, overall view of the facilities may get obstructed. In such case CCTV may add value in monitoring.
3.1 (20)	<p>Personal Protection :</p> <p>Every person handling any operations involving LNG shall always wear appropriate personal protective equipment (PPE) not limited to –</p> <p>(i) Safety goggles                      (ii) Insulated gloves                      (iii) Cover-all – covering “head to toe”                      (iv) Safety Shoes                      (v) Safety Helmet</p>	<p>May replace</p> <p>(ii) insulated gloves with ‘(ii) Thermal Insulated Gloves</p> <p>and</p> <p>(iii) Cover-all – Covering “head to toe” with ‘(iii) Thermal Insulated Coverall’</p>	To provide more clarity
4.0 a (3)	Foundation and support shall have a fire resistance rating of not less than two hrs. Support up to 0.4 meter may not need fire	<p>May please be modified as:</p> <p>Foundation and support shall have a</p>	Support up to 0.4 meter will also deteriorate during the fire in impoundment and lead to

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

Clause	Description	GAIL Comments	Justifications
	proofing.	fire resistance rating of not less than two hrs.	failure. Hence, fire proofing of such supports need to be provided.
10 (14)	Add	6 sq.mm braided copper wire with one end firmly bolted to the unloading facility and the other end provided with G.I crocodile clips are to be used for tanker grounding. The crocodile clips will be attached to the tank truck under Loading or discharging. Grounding system should be interlocked with the transfer system to shut down the product transfer operation if this resistance exceeds 10 ohms.  <i>Automatic earthing/grounding system may be considered for LNG unloading/loading.</i>	-
12.0	Fire Protection Facilities	May be renamed as <i>Safety Management, Fire Prevention, Fire Protection &amp; Emergency Planning by merging proposed Clause 12.0, 18.0 &amp; 20.0)</i>	To cover the requirement w.r.t Safety Management, Fire Prevention, Fire Protection & Emergency Planning
	Add	12 (1) The facility shall be designed to provide generally accepted levels of risk (Clause 10.2 of ERDMP Regulations) for life and property outside and inside the plant	Risk Analysis proposed to be considered one of the integral part w.r.t life cycle of LCNG facility.

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

Clause	Description	GAIL Comments	Justifications
		<p>boundaries, through appropriate Risk Analysis/Assessment.</p> <p>In order to ensure this high level of care in the LCNG facilities and its surroundings, safety shall be considered throughout all the project development phases: engineering, construction, start-up, operation and decommissioning through applicable Risk Management.</p>	
	Add	<p>12 (2) The facility should establish a Safety Management System which shall be an integral part of the overall management system, which comprises of Safety Organization, Safety Information, Process Hazard Analysis, Operation &amp; Maintenance Procedures, Work Permit System, Management of Change, Training, Compliance Audit etc.</p>	Establishment of Safety Management System proposed to be included in line with other PNGRB Regulations.
12 (1)	Each LNG Storage facility shall be provided with flammable gas detectors which shall activate visual and audible alarm at the plant site and at constantly attended location if the facility is not attended continuously and shall have provision to activate the ESD System.	May be re-numbered and modified as “12 (3)Each LNG Storage facility shall be provided with flammable gas detectors, spill detectors and flame detectors, which shall activate visual and audible alarms and shall have provision to activate the ESD System.”	Spill detectors and flame detectors also proposed to be included in addition with flammable gas detector to detect spillage and fire of LNG.

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

Clause	Description	GAIL Comments	Justifications
12 (2)	Flammable gas detection system shall activate an audible and visual alarm at level not higher than 25% of the LEL of the gas being monitored.	May be re-numbered as Sub Clause 12 (4)	-
12 (3)	Fire detectors shall activate an alarm at the site and at a constantly attended location if the plant site is not attended continuously. If determined by an evaluation that it is necessary then fire and gas detectors shall be permitted to activate the ESD system.	May be deleted as it has already been covered in the proposed to be modified Clause 12 (3).	Seems duplicate.
12 (4)	Fire protection shall be provided for all LNG fuelling facilities. The extent of such protection shall be determined by an evaluation based on sound fire protection engineering principles, analysis of local conditions, vehicle operations hazards within the facility, exposure to or from other property, and the size of the LNG containers. The evaluation shall determine the following, as a minimum:.....	Sub Clause 12 (4) may be deleted.	Such small LCNG Satellite Stations, very specific fire protection system provision needs to be done and recommended in below Clauses. Provision of ESDs duly mentioned in Clause 11.0.
12 (5)	Firefighting facilities need to be carefully planned after considering the availability of municipal fire tenders and other related matters and, at least the following portable fire extinguishers shall be positioned, namely: -	Proposed to be merged with 12 (6) and further modified as: “12 (5) Firefighting facilities need to be carefully planned after considering the availability of municipal fire tender(s).  Minimum Portable or wheeled fire extinguisher of DCP (ABC Type)	Sub Clause 12 (5) & 12 (6) both provide the stipulations w.r.t availability of Fire Extinguishers. Hence, proposed to be merged.



**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

Clause	Description	GAIL Comments	Justifications												
	<table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Location</th> <th>Type of Extinguishers</th> </tr> </thead> <tbody> <tr> <td align="center">1</td> <td><u>Storage and decantation area</u></td> <td><u>1 x 75 kg DCP / ABC with dial gauge</u></td> </tr> <tr> <td align="center">2</td> <td><u>LNG/ LCNG Dispensing forecourt</u></td> <td><u>1 x 75 kg DCP / ABC with dial gauge</u></td> </tr> <tr> <td align="center">3</td> <td><u>MCC or Electrical Installation</u></td> <td><u>1 x 4.5 kg CO2 Per 25 Sq. M floor area</u></td> </tr> </tbody> </table>	Sr. No.	Location	Type of Extinguishers	1	<u>Storage and decantation area</u>	<u>1 x 75 kg DCP / ABC with dial gauge</u>	2	<u>LNG/ LCNG Dispensing forecourt</u>	<u>1 x 75 kg DCP / ABC with dial gauge</u>	3	<u>MCC or Electrical Installation</u>	<u>1 x 4.5 kg CO2 Per 25 Sq. M floor area</u>	<p>shall be made available at strategic locations, as follows:</p> <ol style="list-style-type: none"> <li>1. Storage and decantation area: 1x75 Kg DCP, 2x9Kg DCP &amp; 2x9 KG AFFF Extinguishers</li> <li>2. LNG/LCNG dispensing area 1x75 Kg DCP, 2x9Kg DCP &amp; 2x9 KG AFFF Extinguishers</li> <li>3. MCC or Electrical Installations 1x4.5Kg Co2 per 25 Sq. M floor area”</li> </ol>	
Sr. No.	Location	Type of Extinguishers													
1	<u>Storage and decantation area</u>	<u>1 x 75 kg DCP / ABC with dial gauge</u>													
2	<u>LNG/ LCNG Dispensing forecourt</u>	<u>1 x 75 kg DCP / ABC with dial gauge</u>													
3	<u>MCC or Electrical Installation</u>	<u>1 x 4.5 kg CO2 Per 25 Sq. M floor area</u>													
12 (6)	Portable or wheeled fire extinguishers of DCP and/or foam type shall be made available at strategic locations. At least 4 such extinguishers of 10 kg capacity each shall be provided.	Proposed to be deleted, as the same has been proposed to be merged with sub-clause 12 (5).	-												
12 (7)	Additionally, two sets of sand buckets each comprising at least 4 sand bucket shall be provided at strategic locations.	Proposed to be considered for deletion.	Such station should not have extensive electrical facility.												
12 (8)	These facilities shall be in addition to the fire firefighting facilities required for standalone dispensing stations as given in Schedule - 1 and Schedule-3 of these Regulations.	<p>Sub Clause 12 (8) is proposed to be re-numbered and modified as follows: “12 (7)</p> <p>A fire water supply and delivery system shall be provided based on the risk analysis. However, as a minimum a fire water storage tank of</p>	Schedule 1 & 3 of PNGRB (T4S for Retail Outlets dispensing Petroleum, Auto LPG and CNG) Regulations, 2018 only specified the provision of Fire Extinguishers.												

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

Clause	Description	GAIL Comments	Justifications
		<p>10% of LNG storage tank capacity or 5000 litres whichever is higher with pumping facilities and hose reel system away from the LNG storage facility shall be provided for dispersion of LNG vapour cloud in case of leakage or spillage and cooling of storage tank(s), equipment etc. to prevent to radiant heat in case of fire.”</p>	
	Add	<p>Proposed to be added under Sub Clause 12 (7)</p> <p>Water curtains may be used to mitigate gas releases and protect against radiant heat. The aim of a water curtain system is to rapidly lower the gas concentration of an LNG vapour cloud in order to attain the lower flammability limit of gas in air.</p> <p>Fire water pumps and networks shall be laid in accordance with standard practices as adopted in Oil &amp; Gas Industry.</p>	<p>Additional provisions need to be made in document to adopt standard practices in Fire Water System.</p>
	Add	<p>Proposed to be added as sub-clause 12 (8)</p> <p>A comprehensive ERDMP shall be</p>	<p>Clause 18.0 proposed to be part of Clause 12.0 for completeness.</p>

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

Clause	Description	GAIL Comments	Justifications
		<p>developed in accordance to the Petroleum and Natural Gas Regulatory Board (Codes of Practices for Emergency Response and Disaster Management Plan (ERDMP)) Regulations, 2010.</p> <p>The facility should have close liaison with Fire Services, Police, Municipal Authorities and other stakeholders etc. on emergency management.</p>	
	Add	<p>Proposed to be added as sub-clause 12 (9)</p> <p>The Safety Inspections/Audit of LCNG facility shall be carried out as given below:</p> <ol style="list-style-type: none"> <li>1. General Inspection Daily by operating personnel  Twice in Quarter by authorized personnel of marketing company</li> <li>2. Safety Audit Once in a year by Authorized Person</li> </ol>	<p>Clause 20.0 proposed to be part of Clause 12.0 for completeness.</p> <p>Electrical Audit of such LCNG Terminal will not add any value where electrical system does not have switch gear room, transformers etc. Electricals System/Equipment should be part of every Safety Audit.</p>

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

<b>Clause</b>	<b>Description</b>	<b>GAIL Comments</b>	<b>Justifications</b>
15.0	Operation, Maintenance and Training		
D (2)	The procedure shall incorporate the need to carry out periodic inspection, tests on every equipment and system in service to verify that the equipment is maintained in accordance with the equipment manufacturer’s recommendations.	Add at the end of Para:  and national codes & standards.	As our national codes and standards clearly defined the inspection frequency and methodology for PSV, TSV, Storage Vessel, Pressure Gauge, ESD, Detection System, Fire Water System etc.
	Add	Sub Clause E. Training	Sub Clause A of Clause 15.0 specifies the requirement of training procedures.
	Add	E. Training  1) The objective is to provide good understanding of all the facets of dispensing activities including storages, operations, procedures, maintenance and hazards of LNG & CNG and the risks associated with handling of the product. Training shall ensure that the jobs are performed in accordance with the laid down procedures and practices.  2) Every entity shall develop, implement, and maintain a written training plan to instruct all LCNG facility personnel	Sub Clause 17.1 & 17.2 proposed to be modified to meet training requirement of LNG and CNG.  Training Clauses have been stipulated through PNGRB Regulations of LNG and Retails Outlets, requires merger.

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

Clause	Description	GAIL Comments	Justifications
		<p>with respect to the following:</p> <ol style="list-style-type: none"> <li>I. The basic operations carried out at the LCNG facility/station</li> <li>II. Carrying out the emergency procedures that relate to their duties at the facility as set out in the procedure manual and providing first aid.</li> <li>III. The characteristics and potential hazards of LNG and CNG during operation and maintenance of facility, including the serious danger from frostbite that can result upon contact with LNG.</li> <li>IV. The methods of carrying out their duties of maintaining and operating as set out in the manual of operating, maintenance and transfer procedures.</li> <li>V. Fire prevention, including familiarization with the fire control plan of the installation, firefighting, the potential</li> </ol>	

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

Clause	Description	GAIL Comments	Justifications
		<p>causes of fire/ accident in facility, the types, sizes, and likely consequences of a fire/ accident at installation.</p> <p>VI. Recognizing situations when it is necessary for the person to obtain assistance in order to maintain the security of the facility.</p> <p>3) Appropriate training techniques shall be adopted which will include:</p> <ul style="list-style-type: none"> <li>a. Classroom training</li> <li>b. Hands on/ practical training</li> <li>c. Demonstration</li> <li>d. Case studies</li> <li>e. Training aids</li> </ul> <p>4) Proper records for the training and refresher courses shall be maintained at the installations.</p>	
17.0	Competence Assessment and Assurance	Proposed to be merged with Clause 15 under Sub Clause E.	-
17.1	The objective is to provide good understanding of all the facets of dispensing activities including operations, procedures,	Sub Clause 17.1 proposed to be modified to meet training requirement of LNG and CNG. This Sub Clause is	Training Clauses have been stipulated through PNGRB Regulations of LNG and Retails

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

<b>Clause</b>	<b>Description</b>	<b>GAIL Comments</b>	<b>Justifications</b>
	maintenance and hazards of CNG and the risks associated with handling of the product. Training shall ensure that the jobs are performed in accordance with the laid down procedures and practices. .	proposed to be moved to the newly proposed Sub Clause 15.E.1)	Outlets, requires merger.
17.2	Every entity shall develop, implement, and maintain a written training plan to instruct all CNG dispensing station personnel with respect to the following:	Sub Clause 17.1 proposed to be modified to meet training requirement of LNG and CNG. This Sub Clause is proposed to be moved to the newly proposed Sub Clause 15.E.2)	
17.2.1	Carrying out the emergency procedures that relate to their duties at the CNG dispensing station as set out in the procedure manual and providing first aid.	Proposed to be merged with Clause 17.2.2. This Sub Clause is proposed to be moved to the newly proposed Sub Clause 15.E.2) ii.	Changes proposed to be done to give coverage of LNG.
17.2.2	Permanent maintenance, operating, and supervisory personnel with respect to the following:  i. The basic operations carried out at the CNG dispensing station  ii. The characteristics and potential hazards of CNG dispensing station and other hazardous fluids involved in operating and maintaining the CNG dispensing station, including the serious danger from frostbite that can result upon contact with POL products and CNG.	This Sub Clause is proposed to be moved to the newly proposed Sub Clause 15.E.2)	Changes proposed to be done to give coverage of LNG.

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

Clause	Description	GAIL Comments	Justifications
	<p>iii. The methods of carrying out their duties of maintaining and operating as set out in the manual of operating, maintenance and transfer procedures.</p> <p>iv. Fire prevention, including familiarization with the fire control plan of the CNG dispensing station; fire fighting; the potential causes of fire/ accident in CNG dispensing station; the types, sizes, and likely consequences of a fire/ accident at a CNG dispensing station.</p> <p>v. Recognizing situations when it is necessary for the person to obtain assistance in order to maintain the security of the CNG dispensing station.</p>		
17.3	<p>Training shall be imparted to the staff attached with the CNG dispensing station at the time of induction, which is to be followed up by periodic refresher courses once every year. The training programme shall inter alia cover following aspects:</p> <p>a. Hazardous characteristics of CNG.  b. Familiarisation with operational procedures &amp; practices.  c. Commissioning of new facilities and equipment.</p>	Proposed to be deleted as covered under Clause 15.E 2.	To avoid keeping the training requirement for CNG & LNG separately.



**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

Clause	Description	GAIL Comments	Justifications
	<p>d. Hands on experience on operation of equipment.</p> <p>e. Routine maintenance activities of the facilities.</p> <p>f. Knowledge of emergency and manual shut down systems</p> <p>g. Immediate and effective isolation of any CNG leak.</p> <p>h. Accounting of product</p> <p>i. Safety regulations and accident prevention.</p> <p>j. Fire fighting facilities ,methods of fire fighting and its upkeep.</p> <p>k. Evacuation and safe egress of the vehicles.</p> <p>l. Housekeeping</p> <p>m. Safety in transportation of CNG.</p> <p>n. First aid.</p> <p>o. Emergency plan /drills</p> <p>p. Natural gas leakage possibility and its containment.</p> <p>q. Filling nozzles, types of gasket/ seal etc.</p> <p>r. Access control of vehicles so as to allow the vehicle with tested cylinders to be filled with CNG</p>		
17.4	<p>Appropriate training techniques shall be adopted which will include:</p> <p>a. Classroom training</p> <p>b. Hands on/ practical training</p> <p>c. Demonstration</p>	Proposed to be moved under the newly proposed Sub Clause 15.E.3	-

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

<b>Clause</b>	<b>Description</b>	<b>GAIL Comments</b>	<b>Justifications</b>
	d. Case studies e. Training aids		
17.5	Proper records for the training and refresher courses shall be maintained at the installation.	Proposed to be moved under the newly proposed Sub Clause 15.E.4	-
18.0	Emergency Plan and Procedure	Proposed to be merged with Clause 12.0	-
18.1	A comprehensive ERDMP shall be developed in accordance to the Petroleum and Natural Gas Regulatory Board (Codes of Practices for Emergency Response and Disaster Management Plan (ERDMP)) Regulations, 2010. The copies of the ERDMP shall be available to all personnel at the CNG dispensing station.	Proposed to be merged in Clause 12 (8) as mentioned.	-
18.2	Provision of minimum 2 points for emergency shutdown shall be maintained;  The entity having control over the dispensing station shall draw an operational emergency plan in consultation with adjoining establishments and local authorities e.g. fire brigade, police, and other District Emergency Authorities etc. for the following circumstances:  a. Loss of or interruption to the gas supplies due to leaks or failure of pipeline b. Over-odorisation of the gas	Proposed to be deleted as already mentioned in Clause 11.0.  Proposed to be deleted as already been covered in ERDMP Regulations.	-  -

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

<b>Clause</b>	<b>Description</b>	<b>GAIL Comments</b>	<b>Justifications</b>
	c. Major failure of LCNG / LNG fittings d. Accidents or other emergencies, which can affect the L-CNG/ LNG dispensing station e. Civil emergencies f. Emergency situations during transportation of LCNG through mobile cascade vehicles g. Any other risk arising from the existence or use of the LCNG/ LNG dispensing station.		
18.3	The above emergency plan shall be disseminated amongst all personnel involved and ensured that they understand their roles and responsibilities in the event of an emergency.	Proposed to be deleted as already been covered in ERDMP Regulations.	-
18.4	The operator of the dispensing station should have close liaison with Fire Service, the Police, the Municipal Authorities and the person supplying gas to CNG facility.	Proposed to be merged in Clause 12 (8) as mentioned, appropriately.	-
18.5	Important telephone numbers for emergency use shall be displayed prominently.	Proposed to be deleted as already been covered in ERDMP Regulations.	-
18.6	Means of communication shall be always at the disposal of the Incharge of the installation on 24 hours basis.	Proposed to be deleted as already been covered in ERDMP Regulations.	-
18.7	The emergency plan should be tested as per PNGRB ERDMP regulations.	Proposed to be deleted as already been covered in ERDMP Regulations.	-

**Amendments in “PNGRB (Technical Standards and Specifications including Safety Standards for Retail Outlets dispensing Petroleum, Auto LPG and CNG), Regulations 2018”**

Clause	Description	GAIL Comments	Justifications														
18.8	First aid kit shall contain items to handle possible emergencies as per Rules applicable to factories in the concerned State for such purpose; and	Proposed to be deleted as already been covered in ERDMP Regulations.	-														
18.9	Electrical shock treatment chart written in bilingual (English and local languages) and RO attendants shall be given training on how to treat an electrocuted person before help from a doctor is available.	Proposed to be deleted as already been covered in ERDMP Regulations.	-														
20.0	Safety Inspections/ Audit	Proposed to be covered under Clause 12.	Coverage of Safety Management System is given under Clause 12.0														
	<p>The safety inspections / audit of CNG dispensing station shall be carried out as given below:</p> <table border="1"> <thead> <tr> <th>TYPE</th> <th>FREQUENCY</th> <th>AGENCY</th> </tr> </thead> <tbody> <tr> <td rowspan="2">General Inspection</td> <td>Daily</td> <td>Operating personnel</td> </tr> <tr> <td>Twice in a quarter</td> <td>Authorised personnel of marketing company</td> </tr> <tr> <td>Safety Audit</td> <td>Once in a year</td> <td>Authorised Person</td> </tr> <tr> <td>Electrical Audit</td> <td>Once in three years</td> <td>Licensed Electrical agency</td> </tr> </tbody> </table> <p>The comprehensive checklist shall be developed in line with the similar checklists provided in Schedule – 1 of these Regulations.</p>	TYPE	FREQUENCY	AGENCY	General Inspection	Daily	Operating personnel	Twice in a quarter	Authorised personnel of marketing company	Safety Audit	Once in a year	Authorised Person	Electrical Audit	Once in three years	Licensed Electrical agency	<p>Clause 20.0 proposed to be part of Clause 12.0 for completeness.</p> <p>Electrical Audit of such LCNG Terminal will not add any value where electrical system does not have switch gear room, transformers etc.</p>	-
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