

Puducherry City Gas Distribution Policy – 2023

1. Introduction

1.1. Overview

India being the fastest growing economy in the world with the status of being the most populous country, the 3rd largest energy consumer in the world and the 14th in Natural gas consumption is rapidly increasing its energy demand. On the other side there is an urgent need to reduce the environmental pollution caused due to the usage of polluting liquid fuel, thereby significantly reduce the carbon footprint, in line with India's COP 21 commitment in UN Framework Convention on climate change extended in Paris Agreement. In this context the Govt. of India has taken decisive action to enhance the share of Natural Gas in primary energy basket from existing 6.71% to 15% by 2030.

The Government of India is rapidly expanding the City Gas Distribution (CGD) networks across the country, so as to provide cleaner fuel through Piped Natural Gas (PNG) to households, industrial and commercial units, as well as transportation fuel through Compressed Natural Gas (CNG) to vehicles. The Govt. of India is also keen in utilizing the domestically produced natural gas in the form of Liquefied Natural Gas (LNG) which is cheaper than the imported natural Gas.

The Petroleum and Natural Gas Regulatory Board (PNGRB) under the Ministry of Petroleum and Natural Gas (MoPNG), Govt of India has assigned four CGD entities, one each for the four regions of this U.T of Puducherry for development of Natural Gas Infrastructure and CGD Network. The estimated project cost of developing the CGD network in the four regions is around 700 Crores. The CGD entities are bound to complete the project in the span of eight years from the date of approval from PNGRB as per the Minimum Work Program (MWP) set out by PNGRB. In the context of above, there is necessity on the part of Government of Puducherry to notify a CGD Policy for standardizing the road restoration/permission charges along with time bound permissions. As such CGD Policy for this U.T namely "Puducherry City Gas Distribution Policy 2023" is notified by the Directorate of Industries and Commerce, Puducherry.

Definition

- 1.1.1. **“Act”** means the Petroleum and Natural Gas Regulatory Board (PNGRB) Act, 2006;
- 1.1.2. **“Authorised area”** means the specified geographical area for a city or local natural gas distribution (CGD) network authorized under these regulations for laying, building, operating or expanding the CGD network which may comprise of the following categories, either individually or in any combination thereof, depending upon the criteria of economic viability and contiguity as stated in Schedule A, namely: (i). geographic area, in its entirety or in part thereof, within a Municipality, any other urban area notified by the Central or Puducherry Government, Village Panchayat, Commune Panchayat, Taluk, Region or District, or any combination thereof;
- 1.1.3. **“Board”** means the Petroleum and Natural Gas Regulatory Board constituted under sub-section(1) of the section 3 of the Act and established under the Ministry of Petroleum and Natural Gas, Government of India;
- 1.1.4. **“City Gas Station (CGS)”** means the point where custody transfer of natural gas from the main natural gas transmission line to the CGD network takes place;
- 1.1.5. **“City or local natural gas distribution (CGD) network”** means an interconnected network of gas pipelines and the associated equipment used for transporting natural gas from a bulk supply high-pressure transmission main to the medium-pressure distribution grid and subsequently to the service pipes supplying natural gas to domestic, industrial or commercial premises and CNG Station situated in a specified geographical area;
- 1.1.6. **“CNG Station”** means a filling station where one or more dispensing units are provided for sale of compressed natural gas;
- 1.1.7. **“Compressed Natural Gas (CNG)”** means natural gas used as fuel for vehicles. Typically compressed to a pressure ranging from 200 to 250 bars in the gaseous state;
- 1.1.8. **“Development of a CGD network”** means laying, building operating or expanding a city or local natural gas distribution network;
- 1.1.9. **“DRS/PRS/MRS”** means District Regulating Station/Pressure Regulating Station/Metering & Regulating Station for reducing the pressure of natural gas flowing through pipeline network from 49 barg to 5 barg approximately;
- 1.1.10. **“Entity”** means a person, association of persons, firm, company, or cooperative society, by whatsoever name called or referred to, other than a dealer or distributor and engaged or intending to be engaged in refining, processing, storage,

- transportation, distribution, marketing, import and export of petroleum, petroleum products and natural gas, including laying of pipelines for transportation of petroleum, petroleum products, and natural gas, or laying, building, operating or expanding city or local natural gas distribution network or establishing and operating a liquefied natural gas terminal;
- 1.1.11. **“LCNG”** means CNG produced at the fueling station from LNG by pumping and vapourisation;
- 1.1.12. **“Liquefied Natural Gas”** (LNG) means a fluid in the liquid state composed predominantly of methane (CH₄) and which may contain minor quantities of ethane, propane, nitrogen, or other components normally found in natural gas;
- 1.1.13. **“Local distribution entity”** means an entity authorized by the Board under section 20 of the Act to lay, build, operate or expand a city or local natural gas distribution network;
- 1.1.14. **“MDPE Pipeline”** means Medium Density Poly Ethylene pipeline used for flow of medium/low pressure natural gas nearly 5 barg;
- 1.1.15. **“Natural Gas”** means gas obtained from boreholes and consisting primarily of hydrocarbons and includes (i) gas in a liquid state, namely liquefied natural gas (LNG) and the regasified liquefied natural gas, (ii) compressed natural gas (CNG), (iii) gas imported through transnational pipelines, including CNG or liquefied natural gas, (iv) gas recovered from gas hydrates as natural gas, (v) methane obtained from coal seams namely coal bed methane, but does not include helium occurring in association with such hydrocarbons;
- 1.1.16. **“Piped Natural Gas (PNG)”** means natural gas transported through pipelines or cascades or any other permitted mode in a CGD network for consumption by any customer in the domestic, commercial or industrial segment and includes natural gas supplied to an online CNG Station before its compressions;
- 1.1.17. **“Regulations”** means regulations made by the Board under PNGRB Act,2006;
- 1.1.18. **“SR”** means Service Regulator used for reducing pressure from 5 barg to 110 milli barg;
- 1.1.19. **“Work Program”** until issuance of authorization letter, means the number of domestic PNG connections, number of CNG stations and inch-kilometer of steel pipeline network as quoted by the bidder in the bid and after such issue on means number of domestic PNG connections, number of CNG stations and inch-kilometer of steel pipeline network as mentioned in the authorization letter as per Schedule D of CGD Authorization Regulations.

2. Objectives of this CGD Policy

- 2.1. To promote the adoption of natural gas in the Union Territory of Puducherry as a Green and Clean fuel.
- 2.2. To ensure faster development and implementation of CGD infrastructure in the Union Territory.
- 2.3. To ensure compliance with safe operations by CGD entities and also to entrust the entities to provide a reliable/uninterrupted supply of natural gas.
- 2.4. To facilitate in issue of permissions/clearance/charges in a time-bound manner and provide necessary support mechanism.
- 2.5. To Develop applicable rules/regulations to encourage the use of natural gas for industrial, commercial, transportation, and household purposes in a phased manner.
- 2.6. To encourage CNG/LNG as a preferred transport fuel, LNG bunkering in fishing vessels and boats. Conversion of Diesel generators in Telecom service towers with Gas generators. In this regard, the charges and other aspects shall be notified from time to time, upon the readiness of CGD entities in establishing the CGD networks across the U.T, and ensuring uninterrupted supply of natural gas to all the customers.
- 2.7. **This policy shall come into effect from the date of notification of this policy by the Government of Puducherry in the Official Gazette.**

3. U.T Level CGD Policy

The Government of Puducherry shall accord priority to encourage the use of natural gas as a fuel for piped Natural Gas (PNG) for the domestic, commercial, and industrial sectors; and Compressed Natural Gas (CNG) for the transportation sector. In order to ensure the coverage of CGD infrastructure across the Union Territory and to derive benefits from value-added services and employment opportunities, the Government of Puducherry hereby notifies guidelines for expeditious and safe implementation of CGD networks and value added services across the Union Territory of Puducherry.

3.1. High-Level Committee on CGD Development:

- 3.1.1. A High Level Committee shall be formed under the Chairmanship of the Chief Secretary to Government to facilitate the following:
 - 3.1.1.1. Creation of CGD infrastructure and value-added services;
 - 3.1.1.2. Formulation of policies and streamlining the processes for various permissions;
 - 3.1.1.3. Make suitable mechanisms for permission from the concerned authorities of PESO (Petroleum & Explosive Safety Organization)/NHAI (National Highway Authority of India)/Railway/Ministry of Urban Development

(MoUD)/Ministry of Road Transport & Highways
(MoRTH)/Ministry of Environment, Forest & Climate
Changes (MoEF & CC), etc.

3.1.2. The constitution of the High Level Committee is as below.

- (i) The Chief Secretary - Chairman
- (ii) The Secretary to Govt.(Ind. & Com.) – Vice Chairman
- (iii) The Secretary to Govt.(LAD) - Member
- (iv) The Secretary to Govt.(PWD) - Member
- (v) The Secretary to Govt.(Electricity) - Member
- (vi) The Secretary to Govt.(IT) - Member
- (vii) The Secretary to Govt.(Science & Tech)- Member
- (viii) The Secretary to Govt.(TCP) - Member
- (ix) The Secretary to Govt.(Revenue) - Member
- (x) The Secretary to Govt.(Fire service) - Member
- (xi) The Managing Director, PIPDIC - Member
- (xii) The Director (Ind.&Com.) -Member Secretary

3.1.3. **Periodicity of meetings:**

High Level Committee shall convene at least once in six months for expeditious development of the CGD network and otherwise as per need.

3.1.4. **Key Functions:**

The committee shall decide measures which may, inter alia include the following:

- 3.1.4.1. Development of CGD infrastructure in all parts of the Union Territory of Puducherry in alignment with various Government initiatives.
- 3.1.4.2. Encouraging the usage of PNG and CNG through the conversion for city buses to CNG and long-distance buses to CNG/LNG.
- 3.1.4.3. Promote usage of PNG and CNG by all segments of consumers including industrial and commercial as a preferred fuel.
- 3.1.4.4. Addressing the issues related to safe CGD operations and all interfaces with the Government of Puducherry arising out of safe operations and emergency management.
- 3.1.4.5. To deal with issues related to land rates, utility and infrastructure status, ease of rolling out CGD business in line with that of other Utility programs such as telecom, electricity, water, etc.,
- 3.1.4.6. To coordinate with all the stakeholders for faster implementation of the Policy objectives set out here.

- 3.1.4.7. To implement suitable modification in Building Plan Rules for providing gas pipe line infrastructure in residential & commercial buildings at the architectural design stage itself to facilitate readiness of the buildings for “Gas-In” at the end of their construction.
- 3.1.4.8. To develop suitable policy guidelines/framework for earmarking/allotment of feasible Government lands to accommodate the District Regulating System (DRS) and Pressure Regulating System (PRS) for setting up of CNG stations, etc., by the CGD entities.

3.2. **Nodal Agency for CGD implementation**

- 3.2.1. To expedite the implementation of “Petroleum & Natural Gas pipeline projects and City Gas Distribution network projects (CGD)” in the Union Territory of Puducherry, the Directorate of Industries & Commerce, Puducherry, shall act as the Nodal Agency for all such assigned projects.

3.2.2. **Periodicity of meetings:**

In order to achieve expeditious implementation of CGD projects at all Geographical Areas (GA) covering the four regions of this Union Territory, review meetings shall be convened under the Chairmanship of the Secretary to Govt.(Ind & Com.), Puducherry, once in three months or on need basis, along with Nodal Officers of all related line Departments and District Collectors/Regional Administrators. The representatives from each CGD entity shall also be invited for the above said review meetings.

3.2.3. **Key functions:**

The Nodal Agency shall conduct regular coordination meetings and follow-up with line Departments concerned and CGD entities for facilitating timely issuance of permissions/clearances and for allotment of feasible Government land parcels for establishing DRS/PRS and SRS for faster implementation of CGD network by CGD entities. The Nodal Agency will suggest suitable measures which may, inter alia include the following:

- 3.2.3.1. Coordination with the District/Region Level Monitoring Committee (DLMC) to ensure the issuance of clearances to the CGD entities through the single window system.
- 3.2.3.2. Each of the concerned Departments shall update the status of issuance of permission/clearance for CGD projects, including pending clarifications/details from CGD entities to the Nodal agency in order to ensure compliance with the timelines for the issuance of

permissions/clearance and also shall submit the details to State Level Committee.

- 3.2.3.3. All the matters relating to further suggestions received for improvement by the line Departments for incorporation in the Policy.

3.3. **District Level Monitoring Committee (DLMC) for CGD development:**

- 3.3.1. The District Level Monitoring Committee (DLMC) shall be constituted under the Chairmanship of the District Collector/Regional Administrator with the following as Members:

- 3.3.1.1. The Senior Superintendent of Police (SSP/Superintendent of Police) of concerned District/Region.

- 3.3.1.2. The Chief/Superintending/Executive Engineer, PWD of concerned District/Region.

- 3.3.1.3. The Commissioner of Municipality/Commune of concerned District/Region.

- 3.3.1.4. The Director/Deputy Director of the Departments at the District/Region level.

- 3.3.1.5. The Member Secretary/Officer Incharge of the Puducherry Pollution Control Committee.

- 3.3.1.6. The Regional Transport Officer of concerned District/Region.

- 3.3.1.7. Other senior officials from concerned line Department and the representative of CGD entities operating in the District shall also be invited to the review meetings.

- 3.3.1.8. The District Collector shall designate Revenue Officer/Tahsildar/Dy.Tahsildar as the Nodal Officer of the DLMC who shall function as the Member Secretary of DLMC.

3.3.2. **Periodicity of meetings:**

The District Level Monitoring Committee shall be convened once in 3 months or more frequently whenever needed, during the implementation of the project. The status update on the review meeting shall be submitted to the Nodal Agency i.e. Directorate of Industries & Commerce, Puducherry.

3.3.3. **Key Functions:**

The DLMC, headed by the District Collector/Regional Administrator concerned, will coordinate with the line Departments and monitor the progress of CGD works implemented in their District/Region and shall update the status to the State Nodal Agency periodically. The key functions include:

- 3.3.3.1. To facilitate allotment of feasible Government land parcels to the CGD entities for establishing DRS/PRS/SRS stations and CNG/LNG stations including the issuance of the enter-upon permissions as per prevailing Government norms.
- 3.3.3.2. To facilitate the provision of details of Government Lands under various categories available for consideration in the pipeline alignment submitted by the CGD entities.
- 3.3.3.3. To facilitate the issuance of permissions/clearances and NOCs related to establishing LCNG/CNG stations and laying pipelines in a time-bound manner.
- 3.3.3.4. Standardizing permission issuance mechanisms with timelines, issuance of “In principle approvals” to facilitate immediate commencement of field activities, approval of work execution methodology as per site condition, levying of applicable charges, for issuing NOC, etc, from CGD entities for laying distribution steel pipelines, MDPE pipelines, last mile connectivity (LMC) along/across various categories of roads and other utilities to facilitate implementation of CGD infrastructure in a time bound manner.
- 3.3.3.5. DLMC shall provide a platform to the CGD entities to appeal against the decision of the permission issuing authority for establishing the CGD network.
- 3.3.3.6. To address the issues related to the seamless execution of CGD field works by CGD entities at different stretches in Towns/Cities/Rural Area.
- 3.3.3.7. To facilitate the issuance of requisite additional operational guidelines as and when felt necessary, to ensure uninterrupted work execution by the CGD entities.
- 3.3.3.8. To facilitate the provision of details covering various aspects viz. future road expansion, co-existence with other utilities, period of pipeline laying and public safety etc. in consultation with road-owning authorities concerned and as per synchronisation of work envisaged under PM_Gati Shakti Framework.
- 3.3.3.9. To deal with matters related to the adoption of all safety norms/measures by the CGD entities during the execution of pipeline laying works at various stretches, preferably road cutting and restoration work. In case any suitable manpower required by the District Administration for such supervision, the CGD entities shall assist in providing manpower at their cost.
- 3.3.3.10. Ensuring submission of ERDMP (Emergency Response Disaster Management Plan) by the CGD entities.

3.4. Authorities who can issue permissions:

S.N	Details of permission	Permission issuing Authorities/ Nodal officers
1.	Laying of pipelines along & across National Highways – cutting and restoration of Roads	NHAI
2.	Laying of pipelines along & across State Highways/Major District Road-cutting and restoration of Roads	<p>Estate Officer/Executive Engineer, PWD, Puducherry/Karaikal /Mahe/ Yanam Regions after obtaining in-principle approval of Chief Engineer, PWD, Puducherry.</p> <p>Concerned Estate Officers of PWD will be the Executive Engineers of National Highways Division/ Buildings and Roads (Central) Division/ Buildings and Roads (North) Division/ Buildings and Roads (South) Division in Puducherry, Buildings and Roads Division in Karaikal/Mahe/Yanam regions.</p>
3.	Laying of pipelines along & across Municipality/Commune Panchayat Roads/ Gram Panchayat Roads/ Village Roads/other Road-cutting and restoration of Roads	Commissioner of concerned Municipality/Commune Panchayat
4.	Laying of pipelines along & across water bodies – cutting and restoration of Roads	Concerned Estate Officers of PWD will be Executive Engineers of Irrigation Division in Puducherry/ Irrigation and Public Health Division in Karaikal/ Mahe/Yanam regions.
5.	Laying of pipelines along & across Government land (poramboke land) – cutting and restoration of Roads	District Collector/Regional Administrator (in case of Yanam and Mahe region)

6.	Laying of pipelines along & across lands owned by PIPDIC & other-cutting and restoration of Roads	Managing Director, PIPDIC and any other agencies responsible for maintaining public roads/water courses etc.
7.	Laying of pipelines along & across Railways – cutting and restoration of lands.	Railways
8.	Laying of pipelines along & across various utilities during cutting and restoration of Roads.	Consent from concerned Utility owning agencies.
9.	Laying of pipelines along & across city water & sewage networks while executing cutting and restoration of Roads	Consent from concerned Utility owning agencies.
10.	Prior to laying intimation and approval for work execution.	Urban Local bodies, Fire service & Traffic police, Electricity, Telecommunication
11.	Allocation of Government land for setting up DRS/CGS/LCNG/DCS/SRS and issue of NOC for setting up CGS & LCNG facilities	District Collector, Puducherry/Karaikal District Regional Administrator, Mahe/Yanam Region
12.	Approval for retrofitter agencies	Transport Commissioner / Regional Transport Officer

3.4.1. Though the above list of various permissions required for establishing the CGD network and the permission issuing authorities concerned are exhaustive, this CGD policy is applicable for other road/land/utilities owning Agencies concerned, whose names are not mentioned above, but involved in this permission issuing process.

3.4.2. As the prescribed format for issuing permission vary from case-to-case, based on the type of utilities along which the pipelines are laid, the concerned agencies shall issue the permission as per applicable format utilized by them in other cases, along

with applicable terms and conditions, so as to ensure timely issuance of permission and also to ensure the quality of work executed by the CGD entities as per the guidelines issued to them in a safe manner, without causing any inconvenience to the general public.

3.5. Standardisation of Permission issuance mechanisms:

3.5.1. CGD Infrastructure-Authorised Implementing Agencies

The Ministry of Petroleum and Natural Gas (MoPNG), Government of India has authorized the following entities to lay, build, operate or expand city or local Natural Gas Distribution Networks in the following 4 Geographical areas in the Union Territory of Puducherry.

S.No	Geographical Area (GA)	Authorized Entity
1	Puducherry	East Coast Natural Gas Distribution Private Limited
2	Karaikal	Torrent Gas Private Limited
3	Mahe	Indian Oil-Adani Gas Private Limited
4	Yanam	HCG Yanam Private Limited

3.5.2. The Government of Puducherry finds it expedient and essential to formulate uniform policy/guidelines elaborating financial mechanisms, institutional mechanisms for faster permissions/approvals, technical parameters of trenching and restoration and liabilities of parties, etc., for timely execution of CGD projects in the public interest. Apart from the above targets vis-a-vis CGD entities, this policy applies to all further City Gas Distribution projects/entities also awarded through PNGRB.

3.5.3. The enforceability of permissions granted is restricted to the extent of provisions and scope of services defined in the license agreement with PNGRB executed by CGD entities.

3.5.4. Subject to the guidelines of PNGRB the CGD entities shall not claim any exclusive right on the RoW (Right of Way) on which the CGD network is established and subsequent user agencies shall be permitted to use the RoW, subject to the technical requirement being fulfilled.

3.5.5. The Directorate of Information Technology, Puducherry has notified an order vide G.O.Ms.No.2/DIT/2021/2242, dated 22-02-2021, wherein, the existing policy has been amended in order to be in alignment with the provisions contained in the Indian Telegraph Right of Ways Rules, 2016. The Clause No 3.(i) of the above said Government Order states

that “No other fees/charges shall be levied by the respective authorities other than those prescribed in the Indian Telegraph Right of Way Rules, 2016 while giving permission for establishment of telecom infrastructure”. The CGD policy adopts the above said clause in terms of charges to the CGD entities in establishing underground Gas Pipelines. Accordingly, in adoption of the Indian Telegraph Right of Ways Rules, 2016, the CGD entities shall be charged one thousand rupees per Kilometer for establishing underground Gas Pipelines as Administrative Expenses to be paid to the respective Authorities concerned.

- 3.5.6. Every application submitted by the CGD entities shall be supported with the following documents to expedite the permission issuance process by the Departments concerned:
 - 3.5.6.1. Detailed description of Route & location details for the distribution pipeline alignments.
 - 3.5.6.2. Work execution plan/phasing of the plan for uninterrupted work execution.
 - 3.5.6.3. Details on the proposed methodology section-wise/area wise taking local factors into consideration.
 - 3.5.6.4. Submission of alternate route plan in case of fouling with existing above or underground utilities recorded during the initial survey stage itself.
 - 3.5.6.5. Requisite undertakings for protection of existing utilities and undertakings as sought by the concerned authorities for according the “In principle approval”.
 - 3.5.6.6. Alignment maps & trench cross section/Bell hole details etc.
 - 3.5.6.7. Surface-wise length of road cutting proposed and number of crossings etc.,
 - 3.5.6.8. Safety precautionary measures envisaged for adoption during execution of the work at the site.
- 3.5.7. High & Medium pressure steel pipelines will be laid predominantly along State Highways/MDR/Main city roads and other roads under Municipalities/Commune Panchayats, etc. The medium and low pressure MDPE pipeline will be laid predominantly in all by-lanes in addition to main roads as a last mile delivery point by the CGD entities.
- 3.5.8. After careful consideration, the Government of Puducherry hereby issues the following guidelines /instructions in regard to uniform restoration charges based on the methodology proposed to be adopted by CGD entities as per the permission issued by the authorities concerned in line with the prevailing site conditions and safety requirements:

- 3.5.8.1. Detailed CGD network implementation proposal shall be submitted by CGD entities in advance to the District Level Monitoring Committee (DLMC) comprising:
 - 3.5.8.1.1. Route maps for the distribution pipelines alignment
 - 3.5.8.1.2. Year-wise MWP (Minimum Work Program)
 - 3.5.8.1.3. Methodology (open cut/HDD) proposed to be adopted at various stretches.
 - 3.5.8.1.4. Safety measures envisaged at different stages starting from material construction to connection at the consumer end.
 - 3.5.8.1.5. Information on the number of land parcels with location and extent details for establishing DRS/PRS/SV/CNG/LCNG stations shall be initially surveyed by the CGD entities with the Departments concerned prior to joint inspection and process of applications by the Departments concerned.
- 3.5.8.2. CGD entities shall submit application forms in original along with requisite details to the concerned District Level Monitoring Committees and Departments/Agencies concerned of Government of Puducherry for steel and MDPE pipeline network along with the methodology of laying of pipelines & drawings for various stretches as per prevailing site conditions facilitating speedy scrutiny of applications and issuance of “In principle” approval for early commencement of work.
- 3.5.8.3. Steel and MDPE pipeline laying methodology and applicable charges levying mechanism:
 - 3.5.8.3.1. The Choice of choosing a methodology for laying the steel & MDPE pipelines shall be with the CGD entities concerned except when the roads are proposed to be laid / relaid by the road owning authorities during that year as part of their annual work plan. The CGD entities shall adopt ‘Self Dig and Restoration method’.
 - 3.5.8.3.2. In case of “Self-Dig & restoration” by the CGD entity based on prevailing site conditions, the CGD entities, at their risk and cost shall restore the roads as per the technical specification specified by the permission issuing authority. In this case, the CGD entity shall also submit the security deposit for 12 months in the form of a Bank Guarantee @ 100% of the total restoration charges calculated on the basis of the cost per

square meter rate fixed by the Government of Puducherry for corresponding categories of roads before the commencement of the work. The Bank Guarantee shall be released on issuance of NOC for satisfactory completion of road restoration works from concern road owning authority and on submission of a new Bank Guarantee equal to 10% of the above said Bank Guarantee as Performance Bank Guarantee towards the defect liability period of 12 months, which shall be from the date of completion of work at the site to the satisfaction of the concerned road owning authority. During the defect liability period, if any damages occur due to faulty restoration, the CGD entities shall restore the same at their own cost. The defect liability period shall cease if any work is carried out in the same stretch by other Departments/Local Bodies/Agencies etc.. and the Performance Bank Guarantee shall be released immediately.

3.5.8.3.3. For laying the Steel/MDPE pipeline network through HDD (Horizontal Directional Drilling) trenchless method, the cost of restoration charges shall be limited to entry and exit pits on the actuals. The restoration methodology shall be on "Self-dig & restoration" basis by the CGD entity. The restoration charges shall be limited to only entry and exit pits calculated @ 1.5 times of pit sizes. The CGD entity need not pay any upfront restoration charges separately for the undisturbed road stretch but shall have to submit the Security Deposit for 12 months in the form of a Bank Guarantee for 100% of the total actual restoration charges calculated for the restoration of entry and exit pits on the basis of cost per square meter rate incurred for meeting the technical specifications as per the permission order before commencement of work. The basic conditions that necessitate the adoption of the trenchless method in various segments shall be issued by the Road owning authorities.

3.5.8.3.4. The road cut restoration charges are as fixed by the concerned Department as per Puducherry Schedule of Rates (PSR). As the charges are on a fixed basis, no further additional charges and taxes are leviable by the line Departments. The

road-owning authorities may revise the restoration charges as per the revision of rates in latest PSR.

- 3.5.8.3.5. The unit of measurement for restoration charges shall be calculated for the area of the road in square meter basis only.
- 3.5.8.3.6. During the monsoon period the CGD entities shall not carry out Open Trench method (more than 600 mm) road cutting. However Trenchless and Micro Trenching method (upto 600 mm) road cutting may be carried out, provided the CGD entities shall take adequate measures towards safety and security and shall restore the damaged position immediately, if any and in case of extreme weather also.
- 3.5.8.3.7. As part of PM-Gati Shakti, the CGD entities shall also explore the possibilities of laying their CGD pipeline network along with other works carried out by line departments simultaneously when their works are in progress or utilizing their RoW (Right of way) stretches with proper planning & coordination with the line departments concerned in order to eliminate duplication of works and ease of doing the work execution with the least inconvenience to the common public.
- 3.5.8.3.8. The restoration through Self-Dig & restoration by the CGD entities on roads under various departments including State Highways, PWD Roads, Municipality/Commune/Panchayat roads etc.. shall be allowed to perform the self-dig & restoration upon submission of 100%. BG.
- 3.5.8.3.9. The self-dig & restoration modalities of roads shall be jointly discussed and executed in close coordination with concerned road owning authorities and the CGD entities.
- 3.5.8.3.10. The CGD entities apart from executing the self-dig & restoration works longitudinally along the roads, shall also execute the stretches where the domestic pipelines are also proposed to be laid to the residences under self-dig & restoration mechanism or trenchless methodology basis as per prevailing site conditions.
- 3.5.8.3.11. The CGD entities apart from executing the trench works limited to a width of 600 mm approximately, shall execute actual restoration of the blacktop overlapping with the undisturbed stretches of

roads as well and measurement shall be undertaken accordingly for arriving at actual restoration charges. Moreover, the Departments concerned shall extend their assistance for the supervision of works on the blacktop surface based on the request from the CGD entities.

- 3.5.8.3.12. The HDD and the restoration work shall be done by the CGD entities only under the supervision of the concerned authority and there shall not be any damages caused to the utilities provided in the said roads.

3.6. Protection of existing above and underground utilities:

- 3.6.1. It is the responsibility of all CGD entities to coordinate and collect the route map & associated details of underground Utilities/essential service water lines, sewerage systems, telecommunication lines, other pipelines and electricity supply lines, etc. along with site supervision required by CGD entity prior to commencement of work. Also, it is the responsibility of the CGD entity to intimate the concerned supervisory authority/department of such utilities concerned before undertaking the digging work.
- 3.6.2. It is the responsibility of all CGD entities to submit the details of the work execution plan along with the route map & associated details of all the underground utilities/essential services like water lines, sewage systems, telecommunication lines, other pipelines, and electricity supply lines, etc., to the DLMC in advance, so as to facilitate the line department concerned to assess their existing underground utilities and advice the level of protection to be taken by CGD entities during the execution of the fieldwork.
- 3.6.3. CGD entity shall ensure the protection of existing above-ground and underground utilities. Necessary precautions are to be taken by the CGD entity for safeguarding and maintaining all other existing utilities falling in the Pipeline alignment including to make good in case of any damage within 24 hours at their own risk and cost. It shall be the responsibility of the CGD entity to coordinate with other related agencies concerned whose utilities are falling in the pipeline alignment. The CGD entity shall indemnify the Department concerned by all means against damage to already existing cables/underground installations/Utilities/facilities etc. during the execution of the work at the site.
- 3.6.4. The CGD entities shall carry out the works without interrupting the traffic and causing inconvenience to the general public and prior intimation shall be given to all the

authorities concerned in advance before the commencement of the work at the site.

3.6.5. CGD entity shall ensure strict adherence to all safety guidelines, special terms & conditions apart from general conditions issued along with permission from the Departments concerned. All precautionary measures, such as providing sign boards, warning tapes, fencing, lights, etc., shall be ensured at the sites by the CGD entity to prevent any accidents or near-miss incidents to pedestrians and vehicular traffic.

3.6.6. The minimum allowable depth of cover for CGD Steel Pipeline:

(as per PNRGB Guidelines)

S.No.	Details of Location	Minimum cover of depth (in meters)
1	Normal/rocky terrain	1.0
2	Minor/unlined canal/nala crossings, tidal areas and other water courses	1.5
3	Major river crossings	2.5
4	Rivers with Rocky bed	1.5
5	Drainage ditches at roadways and rail loads	1.0
6	Rocky areas	1.0
7	Cased/uncased road crossing	1.2
8	Cased railroad crossing	1.7

Notes:

1. Cover shall be measured from the top of the coated pipe to the top of the undisturbed surface of the soil or the top of the graded working strip, whichever is lower. The fill material in the working strip shall not be considered in the depth of cover.
2. For River / Watercourses that are prone to scour and / or erosion, the specified cover shall be measured from the expected lowest bed profile after scouring / erosion. Where scour level cannot be established, an additional

cover of minimum 1 meter shall be provided from the existing bed of the river/watercourse.

3. The cover shall be measured from the top of road or top of rail, as the case may be. Whenever the above provisions of cover cannot be provided due to site constraints, additional protection in form of casing/concreting etc. shall be provided.
4. Clearance and casing requirements for buried steel pipelines and mains and clearance between pipelines or mains and other underground structures shall be in strict compliance with the corresponding clauses stipulated in PNGRB Notifications dated 27.08.2008 and its latest amendments G.S.R.612(E).

3.7. Standard Operating Procedure (SOP) for the accommodation of city gas distribution network along and across roads maintained by various Departments:

3.7.1. Procedure for processing application for granting permission for use of Right of Way (RoW):

3.7.1.1. The CGD entity shall make application to the Road Owning authority for the Right of Way (RoW).

3.7.1.2. The following details and documents must be submitted with the application:

- 3.7.1.2.1. Name of the road
- 3.7.1.2.2. Division of the road
- 3.7.1.2.3. Type: Road/footpath/CC road/Berms/Earthen Portion
- 3.7.1.2.4. Length, Width & Depth of the road cut required
- 3.7.1.2.5. Nature of the road cut (open/trenchless technology)
- 3.7.1.2.6. Sketch and location of the road where the cut has to be made
- 3.7.1.2.7. Self-restoration/Departmental restoration.

3.7.1.3. After a joint field survey, the concerned line Department shall issue permission to the respective utility service provider with the conditions imposed by the Department to ensure a safe and uninterrupted flow of traffic. The utility service provider shall be designated as a 'Licensee' for the purpose of this project and will be authorized to install and operate utility services within the RoW. However, utility services shall be made operational by

the Licensee only after an NOC (No Objection Certificate) to the effect is issued by the Department concerned.

3.7.2. Laying of Utility Services:

3.7.2.1. Laying of Utility Services along the Roads:

The Utility services shall be located, beyond the toe line of the embankment and drains, as close to the extreme edge of the road as possible.

3.7.2.1.1. Towards this, the top of the utility services shall be as per the PNGRB norms.

3.7.2.1.2. No utility service charges shall be laid over existing culverts and bridges, except through the utility ducts where such provision exists. In case of absence of such provisions, the Licensee shall make his own arrangements for the crossing of cross drainage structures, rivers, etc below the bed.

3.7.2.1.3. In exceptional cases, where RoW is restricted the utility services can be allowed beneath the carriageway(BT Surface), subject to the conditions as per IRC & PNGRB norms, which will be designed to carry traffic on top. In such cases, it also needs to be ensured that maintenance of the utility services shall not interfere with the safe and smooth flow of traffic. The cost of operation and maintenance will have to be borne by the Licensee.

3.7.2.2. Laying of Utility Services across the Roads:

3.7.2.2.1. The utility services shall be permitted to cross the Roads preferably using Trenchless technology (Horizontal drilling method). The casing/conduit pipe should be minimum extended from drain to drain in cuts, toe of slope to toe of slope in the fills and shall be designed in accordance with the provision of IRC and executed following the Specifications of the MoRTH.

3.7.2.2.2. Existing drainage structures shall not be allowed to carry the lines across. The utility services shall cross the Roads preferably on a line normal to it or as nearly so as practicable.

3.7.2.2.3. The casing/conduit pipe may be installed under the road embankment either by boring or digging

a trench installation by the boring method preferably.

3.7.2.2.4. In the case of trenching, the sides of the trench should be done as nearly vertical as possible. The trench width should be at least 300 mm wider (but not more than 600 mm wider) than the outer diameter of the utility pipe. Filling of the trench shall conform to the specifications contained here-in-below or as supplied by the road owning Authority:

3.7.2.2.4.1. The bedding shall be to a depth not less than 300 mm. It shall consist of granular material, free of lumps, clods and cobbles, and graded to yield a firm surface without a sudden change in the bearing value. Unsuitable soil and rock edges should be excavated and replaced by selected material.

3.7.2.2.4.2. The backfill shall be completed in two stages (1) Side-fill to the level of the top of the pipe (2) Overfill to the bottom of the road crust.

3.7.2.2.4.3. The side fill shall consist of granular material laid in 150 mm. Layers each consolidated by mechanical tramping and controlled addition of moisture to 95% of the modified Proctor's density. Overfill shall be compacted to the same density as the material that had been removed.

3.7.2.2.4.4. The road crust shall be built to the same strength as the existing crust on either side of the trench or to the thickness and specifications stipulated by the road owing Authority.

3.7.2.2.4.5. When utilities are allowed aboveground, the horizontal and vertical clearance in accordance with the PNGRB guidelines shall be maintained.

3.7.3. **Restoration Methods**

3.7.3.1. **Self-Restoration Methods**

The following methodology is to be adopted for Self-restoration:

- 3.7.3.1.1. Self-Dig and restoration mechanism is carried out at the risk and cost of the utility entities by meeting the technical specification specified by the permission issuing authority.
- 3.7.3.1.2. The utility entities should submit the security deposit for 12 months in the form of a Bank Guarantee at 100% of the total restoration charges.
- 3.7.3.1.3. Restoration shall be carried out under the supervision of the departmental officials to restore it to the original condition.
- 3.7.3.1.4. If the Licensee fails to comply with any condition to the reasonable satisfaction of the Authority, the same shall be executed by the Authority at the cost and risk of the Licensee.
- 3.7.3.1.5. Grant of License is subject to the Licensee satisfying (a) minimum disruption of traffic and (b) least damage to the road.
- 3.7.3.1.6. As far as possible, the Licensee should avoid cutting of the road for crossing Highway, and other roads and try to carry out the work by trenchless technology. In case any damage is caused to the road pavement in this process, the Licensee shall restore the road to its original condition at its cost.
- 3.7.3.1.7. If due to unavoidable reasons the road needs to be cut for crossing or laying utility services, the Licensee has to execute the work in a time-bound manner at its cost, either by itself or through its authorized representative in consultation with the Authority as per predetermined time schedule and quality standards.
- 3.7.3.1.8. All required restoration and maintenance work subsequent to the laying of utility services shall be required to be undertaken by the Licensee at its cost either by itself or through its authorized representative in consultation with the Authority as per the predetermined time schedule and quality standards. To process for the granting of permission a Performance Bank Guarantee for an amount based on per square metre with a validity of one year initially, in the prescribed format (extendable if required till satisfactory completion of work) shall have to be furnished by the utility service provider/Licensee as security against the improper restoration of ground in terms of

filling/unsatisfactory compaction damages caused to other underground installations/utility services, interference, interruption, disruption or failure caused thereof to any services, etc.

- 3.7.3.1.9. In case the Licensee fails to discharge the obligation of making good of the excavated trench/other restoration work, the Authority shall have a right to make good the damages caused by the excavation at the cost of the Licensee, and recover the amount by forfeiture of the bank Guarantee.

3.7.3.2. Departmental Restoration:

For Departmental restoration, the Utility entities should pay the upfront restoration charges as fixed by the concerned departments as per existing PSR and there is no need for Bank Guarantee.

3.7.4. Methodology for grant of Permission

The Licensee shall apply in the prescribed format to the DLMC and the concerned land owning Authorities for usage of RoW for laying CGD Networks. On receipt of application from the licensee:

- 3.7.4.1.1. Joint inspection shall be carried out to assess the feasibility of the Self-Dig and restoration methodology.
- 3.7.4.1.2. Road Owning Department will issue the demand and licensee shall submit the security deposit for 12 months in the form of a Bank Guarantee @ 100% of the total restoration charges calculated on the basis of the cost per square meter rate fixed by the Government of Puducherry for corresponding categories of roads before the commencement of the work. The Bank Guarantee shall be released on issuance of NOC for satisfactory completion of road restoration works from concern road owning Authority and on submission of a new Bank Guarantee equal to 10% of the above said Bank Guarantee as Performance Bank Guarantee towards the defect liability period of 12 months, which shall be from the date of completion of work at the site to the

satisfaction of the concerned road owning authority. During the defect liability period, if any damages occur due to faulty restoration, the CGD entities shall restore the same at their own cost. The defect liability period shall cease if any work is carried out in the same stretch by other Dept./Local Bodies/Agencies etc.. and the Performance Bank Guarantee shall be released immediately.

- 3.7.4.1.3. The Work shall be carried out under the supervision Road Owning Department Officials and on getting NOC, the defect liability period of 12 months will commence.
- 3.7.4.1.4. Self-Dig and restoration methodology shall be carried and as per the specified standards and specifications.
- 3.7.4.1.5. Self-Dig and restoration methodology is applicable on roads under various departments including State Highways, PWD Roads, Municipality/Commune/Panchayat Roads etc. as per the specified standards and specifications.

3.7.5. The following guidelines/norms shall be followed during and after the execution of the road cuts :

Licensee to lay utility services after obtaining permission subject to the following conditions, namely :

- 3.7.5.1. RoW permissions are only enabling in nature. The purpose of extending the way leave facility on the RoW is not for enhancing the score of activity of a utility service provider, either by content or by intent. Further, enforceability of the permission so granted shall be restricted only to the extent of provisions/scope of activities for the purpose for which it is granted.
- 3.7.5.2. No Licensee shall claim exclusive right on the RoW and any subsequent user will be permitted to use the RoW, either above or below, or by the side of the utilities laid by the first user, subject to technical requirements being fulfilled. The decision of the Authority in relation to fulfillment of technical requirements shall be final and binding on all concerned parties. In case any disruption/damage is caused to any existing user by the subsequent user, the Authority shall not be held accountable or liable in any manner.
- 3.7.5.3. The Licensee shall be responsible for undertaking all activities including but not limited to site identification,

survey, design, engineering, arranging finance, project management, obtaining regulatory approvals and necessary clearances, supply of equipment, material, construction, erection, testing and commissioning, maintenance and operation and all other activities essential or required for efficient functioning of their own utility/industrial infrastructure facilities.

- 3.7.5.4. The utility services shall be laid at the edge of road. In case of restricted width of RoW, which may be adequate only to accommodate the carriageway, central verge, shoulders, slopes of embankment, drains, other road side furniture etc; the utility services shall be laid beyond the toe line of the embankments and clear of the drain.
- 3.7.5.5. The Licensee shall make his own arrangement for the crossing of cross drainage structures, rivers, etc. below the bed. In case, this is not feasible, the utility services may be carried outside the railings/parapets and the bridge superstructure. The fixing and supporting arrangement with all details shall be required to be approved in advance from the concerned Administration. Additional cost on account of fixing and supporting arrangement as assessed by the Authority shall be payable by the Licensee.
- 3.7.5.6. The road crust shall be built to the same strength as the existing crust on either side of the trench or to thickness and specifications stipulated by the Authority.
- 3.7.5.7. The Licensee shall ensure making good the excavated trench for laying utility services by proper filling and compaction, clearing debris/loose earth produced due to excavation of trenching at least 50m away from the edge of the right of way.
- 3.7.5.8. All work subsequent to the laying of the pipe shall be required to be undertaken by the Licensee at its cost either by itself or through its authorized representative in consultation with the Authority as per the predetermined time schedule and quality standards.
- 3.7.5.9. In case of shifting of the utility services due to improvement/widening of road or construction of flyover/bridge the road owning Authority shall submit the detailed proposal for shifting to the District Level Monitoring Committee. Based on the recommendation of the Committee, the Authority shall issue the notice for shifting. The restoration of the road/land to its original condition shall be at the own cost and risk of the CGD entities.

- 3.7.5.10. The Licensee shall be responsible to ascertain from the respective agency in co-ordination with Authority regarding the location of other utilities/underground installations/facilities etc. The Licensee shall ensure the safety and security of already existing underground installations/utilities/facilities, etc. before commencement of the excavation/using the existing utility ducts. The Licensee shall indemnify against damages to already existing underground installations/utilities/facilities etc.
- 3.7.5.11. The Licensee shall be solely responsible/liable for full compensation/indemnification of concerned Agency/Aggrieved Authority for any direct, indirect, or consequential damage caused to them/claims or replacements sought for, at the cost and risk of the Licensee. The concerned Agency in co-ordination with Authority shall also have a right to make good such damages/recover the claims by forfeiture of Bank Guarantee.
- 3.7.5.12. The Licensee shall inform/give a notice to the agency concerned designated by the Authority at least 15 days in advance with the route details prior to digging trenches for fresh or maintenance/repair works.
- 3.7.5.13. xiii. The extent of digging the trenches should be strictly regulated so that utility services are laid and trenches filled up before the start of the next stretch. Filling should be completed to the reasonable satisfaction of the officials concerned designated by the Authority.
- 3.7.5.14. The Licensee shall indemnify the agency concerned in co-ordination with Authority, against all damages and claims, if any due to the digging of trenches for laying pipes/ducts.
- 3.7.5.15. The Authority also has a right to terminate the permission or to extend the period.
- 3.7.5.16. The Licensee shall not undertake any work of shifting, repairs, or alterations to the utility services without prior written permission of the Authority.
- 3.7.5.17. The permission granted shall not in any way be deemed to convey to the Licensees any ownership right or any interest in route/Road/Highway, land/property, other than what is herein expressly granted. No use of RoW will be permitted for any purpose other than that specified.
- 3.7.5.18. The utility services located in RoW/property shall be deemed to have been constructed and continued only by

- the consent and permission of the Authority so that the right of the Licensee to the use thereof shall not become absolute and indefeasible by lapse of time.
- 3.7.5.19. Three copies of 'as laid drawings' of utilities (hard and soft copies) with **GIS mapping of Gas pipeline laid** (with respect to the roads) and after restoration shall be submitted to the Authority for verification and record within a month of completion of works.
- 3.7.5.20. The utility services shall not be made operational by the Licensee unless a NOC to the effect that the utility services has been laid in accordance with the approved specifications and drawings and the trenches have been filled up to the reasonable satisfaction of the concerned Agency in co-ordination with the Authority has been obtained. Notwithstanding anything contained herein, this permission may be cancelled at any time by Authority for breach of any condition of the same and the Licensee shall neither be entitled to any compensation for any loss caused to it by such cancellation, nor shall it be absolved from any liability already incurred.
- 3.7.5.21. The Licensee shall ensure adherence to relevant Indian Standards and follow best industry practices, methods, and standards for the purpose of ensuring safe, efficient and economic design, construction, commissioning, operation, repair and maintenance of any part of the utility lines/industrial infrastructure facilities and which practices, methods, and standards shall be adjusted as necessary to take account of:
- 3.7.5.21.1. operation, repair, and maintenance guidelines given by the manufacturers;
 - 3.7.5.21.2. the requirements of Law;
 - 3.7.5.21.3. the physical conditions at the Site, and;
 - 3.7.5.21.4. The safety of operating personnel and human beings.
- 3.7.5.22. The Licensee shall have to provide safety measures like barricading, danger lighting, and other necessary caution boards while executing the work.
- 3.7.5.23. While laying utility services, at least one lane of road shall be kept open to traffic at all times. If any traffic diversion works are found necessary during the working period, it shall be provided at the cost of Licensee.
- 3.7.5.24. Traffic police should be informed in advance and necessary permission has to be obtained from the traffic point of view, wherever required. After getting police

- permission, the probable date of commencement and completion date should be informed to the Authority.
- 3.7.5.25. If chambers are constructed while laying of utilities in the road, the chamber should be at the road level to avoid accidents. It shall not be above or below road level surface.
 - 3.7.5.26. After the permission, if the applicant fails to start the work and complete within the permitted period, the permission granted will automatically get cancelled. The work can be commenced only after revalidation of the permission by the competent authority.
 - 3.7.5.27. Notwithstanding this, the Licensee shall be liable to pay full compensation to the aggrieved Authority/its designated agency for any damage sustained by them by reason of the exercise of the RoW facility.
 - 3.7.5.28. Within 24 hours of completion, the service departments/service providers have to inform the Authority.
 - 3.7.5.29. After the completion of road cut work, the photos and completion certificate have to be submitted to the authority by CGD entity.

3.8. Timelines for issuance of permissions/clearances:

- 3.8.1. Scrutiny of applications submitted by the CGD entities for seeking clarifications, joint inspection, and additional inputs if any, shall be done within 10 days of receipt of the application with requisite details by the department concerned.
- 3.8.2. The department concerned shall ensure issuance of “In principle approval” for early work commencement within 15 days of receipt of the application with details, and taking requisite undertakings from CGD entities pending final permission. The final permission shall be accorded within 30 days from receipt of the application and payment of the applicable restoration charges or Bank Guarantee from the CGD entities.
- 3.8.3. Adequate time-period for work execution shall be given considering the quantum of works involved, the length of stretches, and the criticality of the site conditions involved. Needful extension of the work execution time-period without any penalty may be given on a case-to-case basis. The decision of the Officer-in-charge of the Department concerned is final and binding on the CGD entities.
- 3.8.4. Upon satisfactory completion of the field works in compliance with the terms & conditions and specifications of the permission order, NOC may be issued to entities within 10

days of receipt of complete details and joint inspection by the Competent Authority.

- 3.8.5. It shall be obligatory upon the CGD entities to make the road motorable – good and safe for movement within 48 hours after related road works are completed and the full restoration of the road shall be completed within 30 days of the work completed to the reasonable satisfaction of the authority concerned.

3.9. Alienation/ lease of land parcel for CGD equipment (DRS/PRS/SV/CNG/LCNG/CGS station) erection.

- 3.9.1. As a step towards facilitating early work commencement for DRS/PRS/SV/CNG/LCNG stations in the Government lands under the process of allotment/alienation, the district authorities shall exercise the option of issuance of the “enter upon permission” for early commencement of work in the station by the CGD entities within 15 days upon receipt of requisite details and refundable caution deposit of 10% of the total estimated cost of land in the form of Bank Guarantee, which shall be refunded or adjusted at the time of issuance of final allotment/alienation.
- 3.9.2. In consideration of the requirement of land to CGD entities for installation of DRS (District regulating Stations, PRS (pressure regulating stations), SV (sectionalizing valve) stations, CNG/LCNG/CGS and other safety-related systems, the concerned State department shall have the permissible sanction from Government to lease feasible Government lands to CGD entities for upto 30 years. The annual lease rent in such cases shall be payable by the CGD entities as per the new lease policy of the Government.

4. CNG KIT APPROVAL:

- 4.1. Fixing of the CNG Kits into a vehicle is predominantly done in two ways namely factory-fitted kits for new vehicles by Vehicle manufacturers/OEMs and retrofitted kits fitted in the existing vehicles currently utilizing gasoline fuel.
- 4.2. For the retrofitted vehicles, all vehicles shall have a CNG Kit and a cylinder fitted which is type approved in accordance with the guidelines of the Ministry of Surface Transport, Government of India, and installed and tested by a retrofitter agency authorized by the Transport Commissioner/Regional Transport Office (RTO) of this Union Territory and get issued a fitness certificate for its suitability for CNG use. A vehicle once retrofitted also would require an RTO approval/endorsement on the Registration document before it is permitted to ply on the roads. These certificates are essential to be shown to the CNG station operator before each refill of the cylinder.

The cylinder with stainless steel valves and connected facilities fitted in the vehicle shall be in accordance with Gas Cylinder Rules. These Cylinders should be subjected to a hydro test at least once every three years.

- 4.3. It is essential that qualified people/agencies duly trained by the CNG kit manufacturers shall have to be deployed sufficiently in the Union Territory of Puducherry. The CNG kit and its accessories viz., stainless steel safety valve & pipes shall be tested by the Automotive Research Association of India (ARAI)/International Centre for Automotive Technology (ICAT) and other testing agencies for new vehicles fitted along with these CNG kits. For retrofitting the CNG Kit, agencies with expertise need to be developed in the Union Territory for which needful initiatives shall come from the CGD entities. Necessary amendments in “The Central Motor Vehicles Rules” are being framed through the Standing Technical Committee formed under the Ministry of Surface Transport for registering agencies with expertise in monitoring the installation of CNG kits. Sufficient qualified CNG kit manufacturing and retrofit agencies shall also be developed by the CGD entities in converting Diesel vehicles/buses.
- 4.4. Effective inspection system shall be introduced, as already a large number of CNG Buses are currently operating in this country and numerous such buses are expected to be converted in the next few years due to the stringent statutory regulations and also a rapid proliferation of CNG by CGD entities to meet the minimum work program as prescribed by PNGRB. The Ministry of Road Transport and Highways (MoRTH) is already in the process of issuing notifications for expeditious authorization of conversion workshops.
- 4.5. CGD entities shall collaborate & co-ordinate with CNG kit manufacturers, Cylinder & fittings manufacturers and explore and train sufficient retrofitter agencies area wise through the training institutes developed under the guidance of the Government of Puducherry. The issuance of type approval & RTO endorsement shall be within 3 months from the date of issuance of permission for usage of the CNG Kits.

5. Implementation of safety Measures

- 5.1. Design of the transmission pipelines and associated facilities involved in implementing the CGD network shall be in accordance with PNGRB-T4S, ASME, ANSI, AGA, API, IGE/TD standards & recommendations, etc. and supported by the relevant international standards. The material specifications shall follow API, ASTM, ANSI, AGA ASME IS, MSS-SP, NACE AND DIN standards or as specified by PNGRB and supported by the relevant international standards. Anticipated future development shall be taken into account for the determination of the final location class.
- 5.2. The location of the Pipeline should be indicated at suitable intervals by using markers installed above ground at field boundaries, at all the

crossings, and wherever the direction of the Pipeline alignment changes. These markers shall be installed after the mechanical completion of works and prior to the pre-commissioning of the CGD network in accordance with API RP 1109.

- 5.3. Suitable Cathodic Protection system, Odourisation system, efficient maintenance practice for sub-transmissions, Primary steel network pipelines, MDPE Pipeline networks, Pipeline Patrolling, Leakage survey and establishment of Network control centres, etc. shall be in place prior to full-fledged commissioning of the CGD network by the CGD entities.
- 5.4. All CGD entities shall have an **“emergency service Group/emergency response team”** positioned at strategic locations. It is very much an essential and critical requirement for all the CGD entities to have a dedicated **Emergency Response and Disaster Management Plan (ERDMP)** formulated through approved PNGRB agencies and shall form a part of the overall Disaster Management Plan under the Chairmanship of the respective District Collector.
- 5.5. All the CGD entities shall have following location wise contingency plan for their proposed CGD network implementation:
 - 5.5.1. Third Party damage prevention plan covering Pipeline markers, Dial before dig, creating safety awareness, effective advertisement and training, etc.
 - 5.5.2. Action plan-Monsoon focused.
 - 5.5.3. Developing effective leak detection system and carrying out mobile leak detection surveys.
 - 5.5.4. Action plan for periodical surveys on vegetation, pressure drop, public building, and green house.
- 5.6. All the CGD entities to formulate an effective & efficient “Asset Integrity Plan” with an Asset Integrity Management system & Integrated Management Plan etc., for their CGD networks to ensure the safety of the established CGD network to protect the personnel property, public and environment through requisite provisions/resources for prevention, detection and mitigation activities.
- 5.7. All the CGD entities shall ensure stage wise pre Audit/Inspection of their CGD network covering all existing and new CGD networks including Sub transmission pipelines, CGS, Distribution mains, piping facilities downstream of inlet isolation valve of CGS (inclusive of Primary, Secondary and Tertiary networks)including customer meter for commercial and Industrial customers upto the final isolation valve including connecting hose to the Gas appliances for the domestic customers as per applicable Statutory norms viz., T4S Audit, Oil Industry Safety Directorate (OISD) audit, auditing/evaluation of Asset Integrity Management system, and other provisions made as necessary including statutory approvals from PESO department.

- 5.8. The CGD entity shall take third party insurance policy coverage for any kind of mishap/accidents occurred to General Public in addition to the employees / workers involved in the CGD project.

6. Adoption of CNG/LNG as the preferred fuel

- 6.1. To promote the usage of Clean and Green fuel, CNG/LNG in the transportation sector, the thrust shall be made to make CNG/LNG a preferred transportation fuel in public transportation. The CGD entities shall evolve suitable mechanisms in organizing the Public/Industries awareness campaign in consultation with the District authorities.
- 6.2. Needful guidelines shall be issued for the Transport Department to encourage the possibilities of CNG/LNG buses while purchasing new buses and retrofitting the present alternative fuel fleet (which is viable), in order to actively promote the usage of the CNG/LNG public transport in a phased manner, based on the CGD infrastructure developed by concerned the CGD entities for the respective GAs.
- 6.3. Needful guidelines will be issued to encourage the possibilities of converting vehicles being utilized/engaged by the Government Departments (Cars, Buses, Ambulances, Delivery Vans, Goods Carriers, etc) to CNG vehicles in a phased manner, wherever the CNG infrastructure is made available by the CGD entities.
- 6.4. New Industries along with its allied facilities shall be encouraged to use Natural Gas instead of the liquid/solid fuels through the departments concerned based on the establishment of requisite CGD infrastructure and ensuring uninterrupted Gas supply to the industries by the CGD entities concerned.
- 6.5. To encourage the adoption of Natural Gas as Green and clean fuel by the Government Departments/local bodies/concerned authorities, requisite guidelines shall be issued for wider usage of the environment friendly Natural Gas by all the segments of consumers, i.e., residential, industrial and commercial establishments, based on the establishment of the requisite CGD infrastructure, and ensuring the uninterrupted Gas supply to the Industries by the CGD entities concerned.
- 6.6. Applicable policy guidelines in this regard shall be issued for the effective implementation of this fuel conversion process in phased manner based on the readiness of the CGD infrastructure by the CGD entities.
- 6.7. LNG has the potential to address persistent requirements of a clean and environment-friendly fuel because of its low level of harmful emissions. LNG is approximately 15% to 25% cheaper than diesel, which will lead to savings in the operational cost for shipping companies and Fishing vessels. The state level committee shall make

efforts to facilitate the creation of LNG bunkering facility at appropriate places under the conversion of fishing vessels to LNG by providing the suitable incentives.

6.8. Conversion of Diesel Generator in Telecom Service Towers in the Authorised area with Gas generators:

Telecom towers are located all over the Union Territory of Puducherry and draw primary and back up energy from a myriad of Conventional sources. With the implementation of CGD networks, Government of Puducherry shall be bringing in appropriate rules/regulations and initiate measures to facilitate the usage of Natural Gas based generators by all telecom operators, especially in urban areas, for an environment friendly alternative, at a lower cost. The State-Level Committee shall facilitate conversion of diesel sets to CNG generators by bringing in appropriate rules/regulations. The CGD entities shall submit the required details to facilitate the facility by furnishing the detailed mechanisms proposed for supply of natural Gas to these segments spread all over the areas. Upon receipt of the requisite proposals from CGD entities, applicable policy guidelines in this regard, shall be issued.

7. CBuD app:

This policy shall emphasis the usage of the Call Before u Dig (CBuD) app developed by BISAG-N as stated below.

- 7.1. CBuD mobile app provides an interface for excavating agencies/ contractors to alert / inform owners of existing utility assets about their upcoming excavation route.
- 7.2. The underground / utility asset owners such as electricity cables, water pipe, gas pipe etc are to map their underline assets with GIS coordinates on PM Gati Shakti portal.
- 7.3. All Excavation agencies are mandated by the Government of Puducherry to use this app.

8. Grievance Redressal Mechanism:

- 8.1. The CGD entity should resolve all the complaints / issues raised by the General Public / Authority / other Public utilities within specified time period.
- 8.2. The complaint lodged shall be forwarded to the one concerned CGD entity and the CGD entity shall address the same and submit the compliance against each complaint within seven (07) days to the District Nodal Officer.

8.3. The District Nodal Officer shall review all the complaints / grievances lodged by the public / Authority / CGD Entity on Quarterly basis.

9. Overall Terms and Conditions

9.1. For clarification/resolution of interpretation of any term and/or dispute relating to the function of any provisions under this policy shall have to be referred to the Department of Industries and Commerce, Puducherry and the decision of the Department in this regard shall be the final and binding on all

9.2. No right or claim of any incentive/privileges under this policy shall be deemed to have been conferred merely on the ground of the provision in the Policy. Implementation of various provisions covering the incentives, concessions, etc., shall be subject to the issue of detailed guidelines/statutory notifications, wherever necessary in respect of each item by the Department concerned.

9.3. The department shall reserve right to amend any provision of the policy with the approval of the Government, keeping in view of the guidelines issued by the Central Government/Government of Puducherry from time to time.

10. Abbreviations

S.N.	Abb.	Description
1	AGA	American Gas Association
2	API	American Petroleum Institute
3	ANSI	American National Standard Institute
4	ARAI	Automotive Research Association of India
5	ASME	American Society of Mechanical Engineers
6	ASTM	American Society for Testing & Materials
7	CAGR	Cumulative Average Growth Rate
8	CBG	Compressed Bio Gas
9	CGD	City Gas Distribution
10	CGS	City Gas Station
11	CNG	Compress Natural Gas
12	CSR	Corporate Social Responsibility
13	DCS	Decompressed Skid
14	DIN	Deutshces Institute for Nornung (German Institute for Standardization)
15	DLMC	District Level Monitory Committee
16	DRS	District Regulating Station

17	ERDMP	Emergency Response Disaster Management Plan
18	GA	Geographical Area
19	GoI	Government of India
20	HDD	Horizontal Directional Drilling
21	ICAT	International Centre for Automotive Technology
22	ICF	International Code Safety for Ships using Gases
23	IS	Indian Standards
24	IIPC	Industries, Investment Promotion & Commerce
25	LCNG	Liquified Compressed Natural Gas
26	LNG	Liquified Natural Gas
27	MDPE	Medium Density Poly Ethylene
28	MDR	Major District Roads
29	MoEF & CC	Ministry of Environmental Forest and Climate Change
30	MoPNG	Ministry of Petroleum and Natural Gas
31	MoRTH	Ministry of Road Transport and Highways
32	MoUD	Ministry of Urban Development
33	MRS	Metering Regulating System
34	MSS-SP	Manufacturers Standardization Society of Standard Practise
35	MWP	Minimum Work Programme
36	NHAI	National Highways Authority of India
37	NOC	No Objection Certificate
38	OEM	Original Equipment Manufacturer
39	OISD	Oil Industry Safety Directorate
40	PESO	Petroleum and Explosive Safety Organisation
41	PNG	Pipeline Natural Gas
42	PNGRB	Petroleum and Natural Gas Regulatory Board
43	PRS	Pressure Regulating Station
44	PSR	Puducherry Schedule of Rates
45	RTO	Regional Transport Officer

46	SLA	Service Level Agreement
47	SV	Sectionalise Value
48	SR	Service Regulator
49	SOP	Standard Operating Procedure
50	WRO	Water Resource Organisation