

Chapter 4: Compliance to safety standards

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As LPG is highly inflammable, its safe usage is of prime concern especially in the context of PMUY beneficiaries who are traditionally dependent on unclean fuel and are unaware of the safe usage of LPG.

4.1 Safe usage of LPG

In order to ensure safe usage of LPG by PMUY beneficiaries, pre-installation inspection of the beneficiary's premises, safety briefing on usage of LPG during installation, connecting the LPG equipment, demonstration on usage of LPG, emergency response etc. by the mechanic assume great significance. Audit observations in this regard are discussed as below:

4.1.1 Non-conducting of Pre-installation Inspection

Pre-installation inspection is conducted before issuance of LPG connection in order to ascertain that the beneficiaries' premises meet the required safety standards for LPG installation *viz.* ventilated kitchen, elevated platform for stove etc. Pre-installation inspection also serves as a tool to check whether the household already has a LPG connection in which case, the beneficiary becomes ineligible for getting a LPG connection under PMUY.

During field audit, a test check of the KYC records at LPG Distributors revealed that in 2531 cases (13.64 *per cent*), the pre-installation inspection report regarding suitability, or otherwise, of the kitchen of household on the basis of pre-installation inspection was not available on record. In addition to this, audit observed that at three sample distributors, pre-installation inspection report was not found attached with the SVs in any of the PMUY connections (29078). Thus, the possibility of non-compliance to safety standards during LPG installation in these households cannot be ruled out.

OMCs replied (April 2019) that carrying out pre-installation inspection checks is a part of the process for distributors while releasing LPG connection. As release of PMUY connections was carried out in mission mode, additional resources were engaged on short-term basis. During this process, the distributors were lagging behind in completing the documentation part, for which they have now been sensitized.

Replies may be viewed against the fact that carrying out the pre-installation inspection check is essential to ensure that the premises of the beneficiary are safe enough for LPG installation and in absence of inspection reports, it could not be verified whether the inspections were done as per the norms of the OMCs.

MoPNG replied (May/July 2019) that the OMCs have been advised to conduct pre-installation inspection and to maintain reports thereof. Further, the OMCs have framed an SOP for installation along with format of inspection report.

4.1.2 Non-availability of installation certificates

Installation certificate serves as an evidence of proper and safe installation of LPG connection at the beneficiaries' household. Further, the installation process involves a briefing on safety, demonstration on usage of LPG and emergency response etc. which are documented by the mechanic of LPG distributor.

However, a test check during field audit at selected LPG distributors revealed that the installation certificates were not annexed with the SVs in 2367 instances (12.75 *per cent*). Besides, in case of four LPG distributors, audit observed that the installation certificates were not available for any of the 11906 PMUY connections.

OMCs replied (April 2019) that the PMUY scheme was launched in a Mission mode requiring deployment of additional manpower on temporary basis. As a result, the documentation part of the process took a backseat. IOCL further stated that distributors have been advised to complete the documentation part by revisiting the customer premises and prepare the installation certificates.

The fact remains that in the absence of documentation for installation, Audit could not derive an assurance that installations were done in accordance with the laid down procedure through which the users are made aware of the safe LPG practices. Further, required safety checks should not be compromised even during large scale enrolment on a mission mode.

MoPNG replied (May 2019) that the OMCs have been advised to update details.

4.1.3 Discrepancies in recording of mandatory inspection date in LPG software

In order to ascertain whether all the safety measures are being complied with by LPG consumers during LPG usage, physical inspection of the consumers' households is to be conducted at an interval of every two years. During mandatory inspection, the mechanic checks for signs of leakages, ascertains the condition of the regulators and the gas pipes and replaces/repairs these in case of any leakage. This mandatory service is available on payment of the charges⁹ approved by the OMCs.

Analysis of the "mandatory inspection date" field in the PMUY consumer database revealed that out of 3.78 crore LPG connections installed by the OMCs as on 31 December 2018, 1.36 crore connections were due for mandatory inspection. Out of the above, in respect of only 1.19 lakh beneficiaries (IOCL: 0.17 lakh, BPCL: 0.33 lakh and HPCL: 0.69 lakh) *i.e.* 0.88 *per cent* of PMUY beneficiaries, the date of mandatory inspection punched in the system was two years after the date of installation which indicates that mandatory inspection has been conducted in respect of only these beneficiaries.

Audit also observed that there was no validation check in the "mandatory inspection date" field in the software and the following discrepancies were noticed in the remaining cases where this inspection was due:

- i) In case of 75.43 lakh connections, the date of mandatory inspection was the same as the date of installation which indicates that either the mandatory inspection has not been carried out or the same has not been fed into the system after carrying out the mandatory inspection;
- ii) in case of 37.53 lakh connections, the date of mandatory inspection punched in the system was earlier to the date of installation which was not possible;
- iii) in case of 19.38 lakh connections, the date of mandatory inspection was within three months from the date of installation and in remaining 1.96 lakh cases, it was after three months but before completion of two years from installation.

⁹ ₹150 *plus* GST w.e.f 1 May 2016

Thus, in view of these discrepancies, audit could not get an assurance on whether in all these cases, inspections were conducted or not which is very important to ensure safety of the PMUY households. Further, it also reflects that the OMCs have failed to apply proper input data validation controls in the date field.

OMCs replied (April 2019) that key objective of the mandatory inspection (MI) is to ensure safe installation of ovens, hose, fixtures, regulators, positioning of installation in the kitchen etc. The periodicity of MI was based on 2 years life span of earlier rubber tube which was one of main reasons for LPG incidents. The same was later replaced by Suraksha Hose which has a life of 5 years. In view of the same, Industry has already proposed MoPNG to revise the MI norms from 2 years to 5 years. With respect to capturing and monitoring of MI, system improvisation is in progress and same will be implemented covering PMUY.

IOCL further stated that issues related to delay/ non adherence of conducting MI within two years were due to absence of the customer, not allowing mechanic inside kitchen etc. It may further be noted that MI are conducted on chargeable basis and it is entirely the choice of the customer to get the MI done or not.

OMC's replies are to be viewed against the fact that PMUY beneficiaries are first time users of LPG and therefore compliance to LPG safety standards by these beneficiaries need to be monitored by OMCs through these inspections. Further, many safety aspects (stove, pressure regulator and leakage) other than Suraksha hose are also checked during mandatory inspection. In addition, even though it is the choice of the customer to get this inspection done, greater awareness building on the importance of these inspections is required. Non-conducting of mandatory inspection at defined interval period may result in compromising the safety standards.

MoPNG replied (May/July 2019) that the OMCs have been advised to revise their SOP for carrying out mandatory inspection of PMUY beneficiaries. During Exit Conference, it stated that the OMCs have been directed to work out modalities in this regard as these beneficiaries have an affordability issue. Therefore, mandatory inspection has been kept on hold for PMUY beneficiaries.

Reply needs to be viewed in light of the fact that non/delayed mandatory inspection puts the safety of PMUY beneficiaries at risk.

4.1.4 Unsafe LPG usage by the PMUY beneficiaries

The Handbook of PMUY provides for the following safety standards to be observed:

- i) The hot plate should always be placed on a platform (made of non-flammable material) above the cylinder level;
- ii) All parts of the installation are to be in good condition;
- iii) Only ISI marked hot plates are to be used;
- iv) Rubber tube must be regularly checked and changed immediately in case any visible cracks / damage are noticed. Use of "SURAKSHA" LPG hose sold by LPG distributors is recommended for its enhanced safety features and longer life. Rubber Tube, if used, must be ISI approved.

Test check of KYC records at sample distributors and beneficiaries survey (1662) conducted by audit revealed adoption of unsafe LPG practices in 277 cases (16.67 per cent) viz. installation of hot plate below the height of LPG cylinder (82 cases), hot plates kept on wooden platform (9 cases), poor quality / rusted / damaged stove burners/non ISI stove (21 cases), sub-standard quality of hose-pipe (10 cases), installation of LPG connection in unsafe places i.e. kutcha houses, bamboo / hay roof (155 cases). Instances of unsafe practices are reflected in the following pictures:



1. Gas stove Kept on floor: IOCL, Kanpur



2. Kept on floor and damaged gas pipe in use: IOCL, Kanpur



3. Gas stove kept on floor: BPCL, Mirzapur



4. LPG connections installed in hay roof: HPCL, Sitapur

Further, review of pre-installation inspection and installation reports of the above mentioned cases revealed that in these cases, the households were declared safe for installation of LPG.

1. Further, it was seen that in the first three cases, availability of elevated platform for LPG was confirmed in the pre-installation inspection report. However, during beneficiary survey the same was not found in these kitchens;
2. In the fourth case, it was confirmed in the pre-installation inspection report that roof was *pucca*. However, during beneficiary survey the same was found as hay roof.

This indicates that these reports were prepared in a cursory manner and do not reflect the actual situation in the beneficiary's premises and these should not have been declared safe for installation of LPG connections. Further, it also underlines the need to carry out massive safety campaigns by the OMCs to spread awareness regarding safe usage of LPG.

Number of accidents which took place in the premises of PMUY beneficiaries during 2016-17 to 2018-19 (up to December 2018) are as under:

Table 4.1: OMC-wise number of accidents

Year	No. of Accidents			
	IOCL	BPCL	HPCL	Total
2016-17	23	6	16	45
2017-18	109	41	47	197
Apr-Dec'18	94	22	37	153
Total	226	69	100	395

Source: OMCs

The increasing number of accidents during the period underlines the importance of conducting regular inspections to check and prevent unsafe practices in usage of LPG by PMUY beneficiaries.

MoPNG noted (May 2019) the observation and added that the OMCs have been advised to conduct more number of safety clinics to educate on safe use of LPG.

4.2 Information Sharing and Consumer Awareness

OMCs have been conducting safety clinics for their LPG consumers much before launch of PMUY. Subsequently, MoPNG had instructed (November 2016) the OMCs to organize Intensive Safety Campaigns at all LPG distributors¹⁰ in coordination with district administration and also to undertake print and electronic media campaigns at OMC level. A financial assistance of ₹5000/- per distributor was to be borne by the OMCs and this was to be reimbursed from CSR fund (out of IEC fund of PMUY). The respective DNOs were to submit detailed report thereon on the basis of distributor-wise field officer's report. A monthly report was to be submitted to MoPNG by 10th of the following month. The reimbursement was to be done through PPAC after vetting of the DNOs' reports by OMCs. Further, the OMCs were also instructed to undertake regular safety promotion campaigns at Gram Sabha level to educate women on safe usage of LPG. OMCs did not lodge their claims for expenditure incurred on safety clinics as it also covered non-PMUY beneficiaries.

In this regard, audit observed that IOCL had conducted relatively fewer number of safety clinics as compared to HPCL despite having 46.90 *per cent* of the total PMUY connections as on 31 March 2018 as shown below:

Table 4.2: OMC-wise number of safety clinics organized

OMC	No. of safety clinics organized			
	2015-16	2016-17	2017-18	Total
IOCL	9434	22267	46921	78622
HPCL	15224	23323	70311	108858
BPCL	23681	26271	32739	82691
Total	48339	71861	149971	270171

As PMUY focused on BPL households who were less likely to be aware about safe usage of

¹⁰ Urban-rural, rural and Rajiv Gandhi Gramin LPG Vitrak

LPG, lack of adequate awareness camps and workshops goes against the objective of educating the beneficiaries about safety measures in LPG usage.

Audit observed that the monthly report on safety campaigns as stipulated by MoPNG was not submitted by the OMCs.

Subsequently, the concept of Pradhan Mantri LPG Panchayat (LPG Panchayat) was mooted (2017-18) by MoPNG to bring together about 100 nearby LPG customers to discuss about safe and sustainable usage of LPG, its benefits and the linkage between use of clean fuel for cooking and women empowerment. MoPNG kept a target of conducting one lakh LPG Panchayats by March 2019 which was achieved¹¹ by the OMCs.

OMCs (April 2019) replied that since all such safety programmes are conducted by the distributors/field officers at the field level, no separate reports from DNOs are generated.

Reply may be viewed in light of the fact that despite MoPNG directives, OMCs did not submit the reports on safety campaigns. In the absence of proper monitoring and reporting, audit could not ascertain the extent to which the PMUY beneficiaries participated in these programmes.

MoPNG replied (May 2019) that the OMCs have been advised to submit reports on safety campaign (clinics) as and when conducted.

¹¹ 105123 LPG Panchayats were organized by OMCs (IOCL: 54440, HPCL 27002 and BPCL: 23681) till 31 March 2019.