4.5. Operation of Transfer Systems

4.5.1. Public access to areas where LPG is stored and transferred shall be prohibited except where necessary for the conduct of normal business activities.

4.5.2. Where liquid level devices are not clearly visible from filling points, two persons operation or remote liquid level reading measures shall be ensured.

4.5.3. Sources of ignition shall be turned off during transfer operations, while connections or disconnections are made, or while LPG is being vented to the atmosphere. Internal combustion engines within 4.6 m of a point of transfer shall be shut down while such transfer operations are in progress except for the LPG Tanker.

4.5.4. Smoking, open flame, portable electrical tools, and extension lights capable of igniting LPG shall not be permitted within 7.6 m of a point of transfer while filling operations are in progress.

4.5.5. Metal cutting, grinding, oxygen–fuel gas cutting, brazing, soldering, or welding shall not be permitted within 10.7 m of a point of transfer while filling operations are in progress.

4.5.6. Materials that have been heated above the ignition temperature of LPG shall be cooled before that transfer is started.

4.5.7. Sources of ignition shall be turned off during the filling of any LPG container on the vehicle.

4.5.8. Industrial air moving equipment, equipment with open flame within 15 m of point of transfer shall be shutdown.

4.5.9. Hose assemblies shall be observed for leakage or for damage that could impair their integrity before each use. Leaking or damaged hose shall be immediately repaired or removed from service.

4.5.10. Extended fill, offloading, or vapour balance lines, shall terminate with a manual shut-off valve and transfer hose half-coupling, immediately upstream of the valve by a non-return valve or excess flow valve as appropriate. These should be sited in a well-ventilated position. This provision shall be in addition to the requirement for valves adjacent to the vessel and hydrostatic relief valves

FILLING POINT FOR ILLUSTRATION