

## **Major Risk Factors and Its Management In PGI's LPG and Industrial Gas Business**

PGI, the parent Company's subsidiary, is primarily engaged in the distribution and sale of LPG and industrial gases, mainly oxygen and acetylene. Since these are highly flammable gas products, the obvious principal risk is an operational one and relates to the hazards of handling and storage of these products. The particular risks involved are: (a) potential injury to people; (b) damage to property; (c) damage to environment; (d) or some combination thereof. The business losses arising from a disastrous consequence of any of these hazards are significant and could amount to several times that of the actual damage / losses and can further result in a longer-than-expected business interruption in any of PGI's refilling plants or terminals. Hazards can be due to any, or a combination, of the following: (1) intrinsic property of the product; (2) catastrophic ruptures/leakages; (3) unsafe refilling and receiving activities; (4) failure of safety valves; (5) un-requalified fire-protection equipment or devices; (6) potential sparks from presence of gasoline-fueled vehicles during refilling and receiving activities (7) discharge of LPG to the atmosphere because of leak(s).

Mitigation of the above risks are done through consistent and systematic application of management policies, procedures and practices concerning safety. There are continual tasks on analyzing, evaluating and controlling the different types of risks involved. Having identified and evaluated the risks, decisions are made on how acceptable the risk might be and the need for further actions to be undertaken, either to eliminate the risks or reduce them to a tolerable level. Risk management includes such elements as identification of possible risk reduction measures (which could be preventive or mitigative) and risk acceptability. PGI's risk management and mitigation system covers at least the following areas:

- Continuous identification of hazards and consequence analysis thereof (utilizing the Structure What If Technique or 'SWIFT');
- Fire prevention and fire-protection management program;
- Regular emergency response training and drill, and continued evaluation thereof;
- Maintaining operating standards in relation to safety practices and requirements and fire-preventive measures; and
- Training and continuing education of its personnel on safety and risk management