

INCIDENT INVESTIGATION REPORT

Location of Incident: No. 12B Igbeyinadum Street, off Casca-Iyasoko Street, Agboju, Amuwo Odofin LGA, Lagos State						
Status of Report: <i>Issued for Approval</i>	Date of Report	15 th April 2021			Revision No: Rev 1	
Date of Incident	13 th April 2021	Time of Incident			06.15PM	
Date Incident was Reported	14 th April 2021	Time Incident was Reported			10.21PM	
<p>Nature of Incident: Loss of containment from cross-filling of gas cylinders leading to an explosive atmosphere, which was consequently ignited by an unknown source. Witnesses report somebody using a mobile phone</p> <ul style="list-style-type: none"> • Fire and explosion; • Injuries to personnel (the two sales persons suffered first degree burns); • Loss of property (the store room burnt down, all the materials in the store equally got burnt); 						
Direct Impact and Severity of Incident: (Low / Medium / High)	People Health	People Safety	Environ-ment	Asset	Business Operation	Reputation
	M	L	L	H	H	H
Potential Impact and Severity of Incident: (Low / Medium / High)						
	L	L	L	H	H	H
Probability of Recurrence (Low / Medium / High)	<p>High without:</p> <ul style="list-style-type: none"> • Properly regulating the activities of retailers and road side LPG vendors by Regulators (DPR, LASPPA etc.), if possible stopping unauthorized dealers and decanting. 					
<p>Description of How Incident Occurred: Incident notification came via social media The NLPGA HSE Manager visited the scene of the incident the next day and gathered information visually and by interviewing eye witnesses.</p> <p>Eye witness accounts:</p> <p>On Tuesday 13th April 2021 at about 6 in the evening, a number of witnesses were seated a foot away from the scene of the incident (in an adjacent residential building). Suddenly there was a blast, which they initially assumed was a tyre explosion until a fire broke out and two workers ran out from the shop with burns. The witnesses quickly applied an available fire extinguisher in the shop but it failed. Responders from around the neighbourhood tried contacting Festac and Monkey Village Fire Service but to no avail. They then resorted to using water, which they sourced locally and were joined by motorists who stopped by and applied their own fire extinguishers. The two persons that suffered burns were rushed to the hospital and as of today (14th April 2021) have been discharged.</p>						
Pictures of Incident? Yes (see below)						
Post Accident Pictures						





Pictures of an eye witness



Analysis:

The following findings were established.

- The store is sited 1ft away from a residential building and there is a close interaction with people and living environment. The probability that an ignition will occur in such environment is high because of the presence of ignition sources all around the place, which is an indication that site suitability studies was not carried out.
- They are not one of the top LPG players licenced by the DPR to operate. They are buying from the former and retailing, themselves.
- The two personnel working for the dealer have not received proper sensitiation and training regarding LPG operations. One is above the age of 20, while the other one is above 30 years.
- The two workers suffered first degree burns. One on the face and hands, the other on the face and legs.
- Safety procedure, rules or precautions seem not to exist in this business area.
- Possible there have been several near misses that were not reported nor corrected before the top event occured.
- The store's proximity to the road where automobiles commute constantly, pedestrains pass smoking, and the fact that it is sited just under an electric power line, all indicate that Risk Assessment was not carried out before siting the business over there.
- Fire service were allegedly contacted but did not show up.

<ul style="list-style-type: none"> • <i>The fire extinguisher in this business area was not serviced and is inadequate.</i> • <i>The business owner is not a member of the NLPGA.</i> 	
<p>Direct Impact of the Incident:</p> <ul style="list-style-type: none"> • <i>Injury to workers.</i> • <i>Economic losses to the business owner.</i> • <i>Property loss to the land lord.</i> • <i>Misrepresentation of LPG facts and significant damage to public perception on the use of gas.</i> 	
<p>Primary Causes: what unsafe acts or conditions caused the event?</p> <ul style="list-style-type: none"> • <i>An unknown ignition source, possibly, a mobile phone as reported by an eye witness.</i> 	
<p>Secondary (Root) Causes: what human, organisational or other factors caused the event?</p> <ul style="list-style-type: none"> • <i>Boycotting of procedures and regulatory standards which should have guided the entire philosophy of the business.</i> • <i>Lack of proactiveness by regulatory authorities who could have sealed the place early enough.</i> • <i>Lack of Safety Training and sensitization about the nature of LPG to the workers.</i> • <i>Lack of an operating procedures.</i> 	
<p>Key Lessons and Conclusion</p> <ul style="list-style-type: none"> • Regulatory Authorities: <i>Regulators need to-</i> <ul style="list-style-type: none"> (i) <i>Work with legitimate operators in a collaborative way to promote safety.</i> (ii) <i>Partner with stakeholders to proactively identify illegal facilities, eliminate / dismantle illegal facilities once identified and confirmed.</i> • Industry Stakeholders / Participants must: <ul style="list-style-type: none"> (i) <i>Supervise and monitor workers to ensure they comply with safety rules.</i> (ii) <i>Be mandated to take specific training on the areas of operation they undertake.</i> (iii) <i>Make available adequate number of fire extinguishers, keep it serviced and accessible at all times.</i> <p><i>Ensuring also that workers are trained to be able to use it to put out fire at the incipient stage.</i></p>	
<p>Signed: NLPGA Safety and Technical Committee</p>	<p>Date: 15th April 2021</p>

Appendix