

Cover

Gas Explosions: Monster resisting to be tamed

By Gbenga Akinfenwa

04 May 2024 | 4:08 am



PHOTO: ENIOLA DANIEL

Gas explosions have become a menace in the country. Not only are they recurring, these explosions have inflicted pains, physical injuries, and psychological trauma on survivors. GBENGA AKINFENWA writes that while various regulations have

been promulgated to control activities of the industry, government's inactivity has made it difficult to tame the monster.

Just 14 days to her 46th birthday, Gbemisola Olugbemi Odejide did not have any premonition of death. It was this lurking danger around the corner that she, her husband and two other tenants were trying to avoid that eventually claimed her life.

Gbemisola was one of the victims of the June 25, 2023 explosion at a gas retail shop in the Agege area of Lagos State. The explosion, which occurred at about 11:00pm, was caused by a leakage from one of the gas cylinders at the retail shop located in the premises of a storey building beside the Apostolic Church, Agege.

It all started when a teenager, Rofiat, who came to celebrate the Ramadan Festival with one of the neighbours, complained of hearing a strange noise from the window area. It was initially thought to be the sound of a fridge, but when it persisted, Rofiat's uncle and aunty were compelled to open the front door, hoping they will be able to trace the source of this strange sound.

In the process, Mr Babatunde Odejide and his wife, Gbemisola, who occupy the rooms close to the entrance, also came out. They later realised that the sound was actually from the gas shop in the premises.

After this discovery, everybody started looking for the apprentice, Martins, who stays in a small room rented for him by his master within the premises. When he eventually came with the key and opened the shop's door, there was no light at the period to trace the leaking gas. Then, he decided to switch on the light of his phone, immediately he switched on the light, the gas exploded.

The four of them had various degrees of burns, but Martins, who was severely affected, died hours later, while Odejide, his wife – Gbemisola, and Rofiat were hospitalised, they, however, died later died in hospital, while Odejide survived with scars.

The Guardian learnt that the explosion would have been more severe if all the cylinders in the shop were filled with gas. However, the magnitude of destruction on the main building and adjoining shops was massive. It took the intervention of the state emergency responders to contain the fire from spreading to adjoining shops and nearby buildings.

This is just one of the numerous havocs wrecked by gas explosion across the country daily. While many have been sent to their early graves, others have had

their body parts burnt, while majority have become widows and orphans.

To say that the recurring incidence of gas explosion has become a serious issue in the country, is to say the least, as it has become a time bomb waiting to explode, owing to government's failure to implement policies on siting of gas stations, shops and transporting of gas and relevant issues about the regulation of the industry.

Sadly, Nigerians are faced with the threat of this menace daily, as it surfaces in almost their daily endeavours – from domestic use, risks from gas stations, on the road, and industries, among others, it has become a necessary evil in homes, as many have adopted its use for cooking owing to the high cost of kerosene, while some are using it as substitute to power their generating sets.

It is unfortunate that those who escaped domestic gas accidents owing to their carefulness, often times, fall victim of the menace either in their offices or even on the road. Only last weekend in Abeokuta, Ogun State, four people were burnt to death, while two others sustained injuries as a gas tanker exploded. The explosion also burnt about five vehicles. The incident occurred at about 5.30 pm at Ita-Oshin after the gas tanker suffered a brake failure.

An eye witness said the driver of the tanker rammed into the road divider owing to brake failure, as the truck went up in flames. The witness claimed four persons were burnt to death in the explosion, while some vehicles, shops and buildings by the roadside were razed.

But the spokesperson of the Federal Road Safety Corps (FRSC), Florence Okpe, who confirmed the incident, said only one person died, adding that six persons were involved out of which one died, while two others sustained injuries.

Barely 72 hours after the Abeokuta incident, over 22 people, including a pregnant woman, were injured in another gas explosion that occurred at the Alaba lane in the Alayabiagba community, Ajegunle-Apapa area of Lagos State.

During the incident, which happened on Tuesday, April 30, 2024, at about 12:39pm, the pregnant woman and others suffered varying degrees of injuries. The explosion was reportedly triggered by a suspected gas leakage, and worsened by a high-tension cable.

The Director of Lagos State Fire and Rescue, Margaret Adeseye, said four commercial tricycles, six shops, and a section of a residential bungalow were damaged by the explosion.

"The incident occurred in an area known for its gas cylinder trading activities.

Thanks to the coordinated efforts of the Ajegunle and Sari-Iganmu Fire Stations with support from the Federal Fire Service, the fire was swiftly brought under control, preventing further devastation."

The Guardian checks revealed that over the years, many Nigerians, including experts and industry analysts, have expressed serious concern over the increasing manner gas are exploding everywhere.

It was learnt that the Federal Government had implemented various policies and regulations to ensure the safe operation of gas stations, transportation of gas, and other activities related to the gas industry to prevent gas explosions.

Some of these include – the Department of Petroleum Resources (DPR) Regulations, to control the oil and gas industry, including gas stations, and ensures compliance with safety standards; the National Petroleum Policy 2004, which outlines the government's objectives and strategies for the petroleum sector, including gas safety; the Gas Safety Regulations 2012 – which provide guidelines for the safe handling, storage, and transportation of gas; and Licensing and Permitting, which aims at ensuring that gas stations and transportation companies must obtain licenses and permits from DPR before operating.

Others are Regular Inspections and Monitoring; Safety Standards and Guidelines; Training and Capacity Building; and Emergency Response Planning, among others, just to minimise the risk of gas explosions and ensure the safe operation of the gas industry.

Despite these policies and regulations, gas explosions remain a concern in Nigeria. Industry analysts identify lack of effective enforcement; poor maintenance and infrastructure; human error; substandard materials and equipment; lack of public awareness; corruption; inadequate training; overcrowding and poor ventilation environments, increasing the risk of gas accumulation and explosions, and lack of emergency preparedness, as factors crucial to reducing the prevalence of gas explosions in the country.

Three months ago, the House of Representatives agreed to investigate incessant occurrence of domestic gas explosion in the country with a view to determining the immediate and remote causes and identifying potential safety hazards in the gas industry.

The move followed the adoption of a motion moved by Abdulhakeem Kamilu Ado and Umar Muktar Zakari both from Kano State at the plenary.

Moving the motion, Ado said the frequent domestic gas explosions have caused immense pain, suffering, and loss of lives and destruction of communities. He noted that the recent surge in domestic gas explosions has left a trail of devastation across the country, with over 50 reported incidents in 2022 alone, resulting in avoidable deaths of innocent citizens, several injuries and the destruction of properties worth millions of Naira.

"Aware that the pain inflicted by domestic gas explosions is not limited to the physical injuries sustained by the victims, as the psychological trauma is immense, leaving survivors in fear, anxiety, and posttraumatic stress disorders and leading to a high rate of suicide.

"Cognisant of the roles of regulatory agencies like the Nigerian Upstream Petroleum Regulatory Commission (NUPRC), the Standards Organisation of Nigeria (SON), and others, and their inability to checkmate this trend, as well as the proliferation of G2S retail outlets situated even in residential areas across the country.

"Also cognisant of the urgent need to address domestic gas explosions and unsafe trinities through a multi-pronged implementation strategy including public education, stricter safety regulations and effective enforcement mechanisms," Ado stated.

On adoption of the motion, the House mandated relevant committees to review existing safety regulations and make recommendations for their strengthening and monitor the implementation of safety regulations by the NUPRC, as well as other related organisations.

But since then, nothing was heard about the motion till date.

A disaster management expert, Prof. Usman Kibon, who is the Director, Centre for Disaster Risk Management and Development Studies, Ahmadu Bello University (ABU), Zaria, Kaduna State, who described gas explosion as dangerous and serious disaster, said the recorded incidences owe much to total negligence and lack of respect for law and order.

"This menace has continued for a long time. Both the government and stakeholders in the industry have not been able to do something tangible about it and it has kept on reoccurring, with serious impacts on the environment, the economy, properties and lives of the people.

"It is something that is manageable if the necessary authorities are really serious, gas explosion may be caused by pressure on the pipelines that have served for 20 to 30 years without replacement. Then, there are other things again, maybe because of rain and others things, some of them have been exposed and because there is no routine maintenance, there is likelihood of explosion. These are contributory factors that are making gas explosions incessant in the country.

"The issue of reoccurrence still boils down to negligence. We have laws that can control the movement of gases, but there is no enforcement of these laws, people are just acting in a lawless manner. I was in Ethiopia sometime ago and my friend was honking, people rushed out of their cars to ask what was happening because it is only when there was an emergency that such thing can be done, you can see how law and order is working over there."

Prof. Kibon stressed that some of the cases recorded in the country were caused by total negligence and lack of respect for the law. He said in the case of transporting gases, overloading and lack of maintenance of vehicles are the other factors responsible for explosion on the road. "Some of the vehicles tyres are worn out, some with faulty brakes. The people that ought to be checking this, once they are given a token, they just look away.

"Unless the government is ready to address this issue, there will continue to be losses, which are quite enormous. There are policies to address this problem. There are policies that dictate the distance of siting a gas station to a residential building, even the distance to the main road. There are laws, but in the case of Nigeria, once you know anyone in power, you can violate the law and go scot-free.

"I was building a house sometime ago, and the urban development officers came around, to place a stop work notice on the building. I showed them my building plan and other things, they just requested for N2, 000 from me, and that was the end. This is the proper corruption that we are facing in the country. If you want to dig a well in your house, there is approved distance of where the well can be dug away from your building."

He warned that if the government failed to address this issue headlong, there will be serious disaster in the country, fiercer than previous gas explosion incidences. "Government at all levels needs to act now and promulgate all the policies and laws. From the top to the bottom, there is carelessness, lawlessness. We don't love the country, we don't love ourselves, because if you love yourself, you'll love your brother and sisters, you'll love the environment because once you spoil the environment, it backfires to you.

"The environment is made up of components that are vital to our lives and once anything happen it disturb some of the components we need to survive. This shows how dangerous gas explosion is. Government should try to do something as soon as possible."

Professor of Petroleum Economics and Management, University of Cape Coast, Ghana, Wumi Iledare, who described gas explosions menace as worrisome, said it could be easily ameliorated with proper education before sales.

He told The Guardian that quality gas equipment with safety accessories can also help solve the recurring incident.

Prof Iledare said there are three possible explanations causing recurring incidence of gas explosions in the country. "One is mistaking gas pipelines as oil; second is deliberate vandalism because of discontent and perhaps lack of repair; and maintenance of aging pipeline system."

He said though accidents are bound to happen, but to minimise domestic gas explosions, transportation distance must be minimised. He said long transportation must be with approved trucks, noting that some public education on how to install the equipment can help greatly.

The don listed the Nigerian Ports Authority (NPA) rules of engagement and Standardisation guidelines for gas equipment and the Pipeline Act as well, as part of the rules and regulations guiding the activities of the industry, noting that the propensity to break rules of law is high in Nigeria, "so also is a high propensity to not enforce rules of law in the PIA 2021."

The Ogun State Commissioner for Environment, Mr. Ola Oresanya, told The Guardian that the unpleasant, recurring incidents call for safety consciousness. He noted that safety consciousness is essential at this period, when the country is changing from the traditional fuel or petroleum and diesel into a more cleaner energy, which is pivotal to the energy transition programme of the Federal Government.

"We need just to look more into safety matters on this issue. Like the Compressed Natural Gas (CNG), this is a very safe gas, safer than petrol energy. So, we just need to look into how we transport it. Then, the one that happened at Ajegunle, Lagos was a Liquefied Petroleum Gas (LPG). That one is more volatile.

"The safety issue that we need to look at is the container we use in the storage of the volatile materials – that's the job of the SON and we believe they'll rise to the occasion, to ensure that we have the right standard of containers for the storage of the gas, both for transportation and domestic or industrial usage."

He said there are policies formulated by government to regulate the gas industry. "For instance, in Ogun State, for you to build a gas location, where you refill gas, there are regulations — the type of cylinders you can use, where it can be located and the rest of it. So, there are regulations. Now, the key thing is the capacity of the regulators to make sure that the new alternative energy we are moving into will need to be familiarised with and the peculiar nature of how to handle it.

"The handling of the volatile material is the key thing now. Recently, we had a national workshop on chemical and hazardous materials handling and we had papers presented in the state. This underscores the importance of making sure that regulators, the environmental protection agencies, across the country are up-to-speed in knowing how to regulate the storage and transportation of hazardous materials, even vehicles transporting fuel, like the recent incident in Port Harcourt, we need to be able to know what to do in regulating such situation."

Oresanya said government's policies on the regulation of gas stations location, transporting of gas and others activities in the industry have not failed.

"Well, if the regulators do what they are supposed to do, the menace would be contained. Like in Ogun State, the truck that was involved in last weekend's explosion was traced to the company and the company was sealed up. What we are doing now is the safety audit of the company.

"So, all regulators need to do what is called safety audit of all the organisations handling all these volatile materials, if they fail to comply, they should be shutdown," Oresanya said.

As fallout of the Abeokuta incident, The Guardian learnt that the Federal Government has promised to stop granting licences to gas companies with no capacity to build pipelines for distribution.

This, the government said, became necessary to discourage the transportation of compressed natural gas through the roads.

The Minister of State for Petroleum (Gas), Ekperikpe Ekpo, who disclosed when he visited Abeokuta for an on-the-spot assessment of gas explosion at Ita Oshin, said the country must transit from fossil fuel to CNG.

Ekpo revealed that he had directed the Chief Executive of the Nigerian Midstream and Downstream Regulatory Authority, Farouk Ahmed, not to issue licenses to anyone who could not pipe CNG to the end users.

The minister emphasised the need to stop physical gas transportation, saying the Federal Government is putting efforts in top gear to build pipelines for seamless transportation of CNG.

According to him, this will not only prevent explosions on the road, it will equally save lives and property. "As the Federal Government, we are trying all that we can to ensure we reduce virtual transportation of gas because of the volatility of it, especially with the Ajaokuta–Kaduna–Kano pipeline.

"I have directed the authority chief executive that for any further issuance of licence, the company should be competent enough to pipe it to their end users so that we are not exposed to this kind of danger any longer.

"As a ministry, we are looking at how we can reduce a lot of virtual conveyance of gas. That is why we are putting much in developing the gas pipeline infrastructure so that the transportation would not be virtual, but rather through the pipelines. This will reduce this kind of incident and take off the pressure on our roads," he said.



Related