



Communiqué from The Nigerian Institution of Safety Engineers (NISafetyE) National Workshop on Petroleum Tanker Explosions

Theme: *The Issues, The Challenges, and The Solutions*

Date: May 27–28, 2025

Venue: NSE National Headquarters, Abuja

PREAMBLE

The Nigerian Institution of Safety Engineers (NISafetyE) convened a national workshop on petroleum tanker explosions in Nigeria, bringing together industry experts, regulatory agencies, policymakers, and other key stakeholders to deliberate on critical safety concerns in petroleum product transportation. The workshop provided a forum for comprehensive discourse on regulatory deficiencies, technical advancements, and enforcement mechanisms aimed at mitigating tanker-related incidents.

DELIBERATIONS

The workshop was structured into seven thematic sessions, each addressing distinct facets of petroleum tanker safety:

1. **Case Study Presentations on Past Tanker Explosions** – A systematic review of past incidents to identify root causes and preventive measures.
2. **Panel Discussion on Regulatory and Policy Gaps** – A detailed examination of existing enforcement frameworks, highlighting deficiencies and proposing remedial actions.
3. **Technical Solutions for Tanker Safety** – An exploration of innovative approaches to tanker design, safety features, and risk mitigation strategies.
4. **CNG Tanker Safety & Revamping of Road Infrastructure** – An analysis of the safety implications of compressed natural gas (CNG) tankers and the requisite improvements in transportation infrastructure.
5. **Addressing the Human Factor – Training & Certification** – A discourse on capacity development for tanker operators, emphasizing rigorous training and certification protocols.
6. **Strengthening Enforcement & Compliance** – A critical evaluation of regulatory agencies' enforcement strategies and industry-wide compliance metrics.
7. **The Way Forward: Establishing a Petroleum Products Stakeholders Safety Committee** – A strategic proposal to institutionalize a multi-stakeholder safety framework for sustained industry improvements.

KEY ISSUES IDENTIFIED

The discussions raised several pertinent questions regarding the current safety and enforcement landscape, including:

- Human factors that influence accidents, include driver behavior, safety knowledge gaps, and other error-enforcing conditions.

- Imported tanker trucks are in better compliance than locally made tankers, which often spill contents and burst, leading to explosions.
- Measures undertaken by the Nigerian Midstream Downstream Petroleum Regulatory Agency (NMDPRA) to enhance enforcement mechanisms in 2025.
- Coordination frameworks between NMDPRA and other regulatory bodies to streamline enforcement efforts.
- Compliance rates among petroleum tankers subjected to safety inspections at designated checkpoints.
- The potential of the Federal Road Safety Corps (FRSC) to leverage technology for improved roadside safety inspections.
- Existing standards governing the construction and maintenance of petroleum tankers in Nigeria.
- Enforcement mechanisms employed by the Standards Organization of Nigeria (SON) to guarantee compliance among local tanker manufacturers.
- The database maintained by Vehicle Inspection Officers (VIOs) on registered petroleum tankers nationwide.
- Legislative deficiencies affecting highway safety and required policy interventions.
- The proposed reforms of the House of Representatives Committee on Safety Standards and Regulations (HCSSR) aimed at strengthening tanker transportation safety protocols.

RECOMMENDATIONS

Based on the deliberations, the workshop participants collectively proposed the following actionable recommendations:

1. **Publish a White Paper** based on this communiqué and circulate to all stakeholders.
2. **Engage the National Assembly** Committee on Safety Standards for drafting of relevant regulations.
3. **Monitor implementation** through quarterly stakeholder review meetings.
4. Launch a **Petroleum Products Stakeholders Safety Committee** within three months.
5. The **Technical Working Committee (TWC)** set up by NMDPRA should include safety professional bodies such as the Nigerian Institution of Safety Engineers (NISafetyE), Process Safety Initiative of Nigeria (PSIN), and Institute for Safety Professionals of Nigeria (ISPON) to formulate and institute a Safety Committee for the Petroleum Industry in Nigeria.
6. Partner with regulatory bodies to produce and publicize a **Tanker Safety Compliance Index** annually.
7. Reduce tanker traffic through **intermodal transportation systems** such as railways, marine routes, and pipelines.
8. Establish clear and enforceable **standards for trucks and petroleum tankers**, including vehicle integrity and construction features like bulkheads and overturn protection.
9. Promote **public awareness and safety campaigns**, especially on the dangers of RTAs involving trucks carrying hazardous materials.
10. **Educate drivers and the general public** on tanker operations, emphasizing defensive driving, hazard awareness, and hazardous material (HAZMAT) communication.



11. **Driver education, training, and re-training** regarding tanker safety principles and dynamics in moving hazardous materials and prevention measures in an emergency.
12. **Enforce standards and regulations** related to driver certification, vehicle specifications, speed limits, alcohol and drug testing, and other high-risk transport protocols.
13. **Improve national emergency response capabilities** across the nation, including states and built-up areas, to effectively manage tanker-related incidents.
14. **Institute stringent penalties** and active enforcement mechanisms for tanker safety infractions to foster adherence to regulatory provisions and extant laws.
15. **Encourage stakeholder collaboration** across the petroleum transportation sector to drive safety improvements.
16. **Mandate thorough investigations** of petroleum tanker accidents and ensure transparency through **public reporting**.
17. Introduce and **enforce age restrictions** for personnel who drive tankers and other articulated vehicles to uphold safety standards.
18. Incorporate **mandatory eyesight and psychological assessments** for tanker drivers as part of their journey management protocols.
19. **Foster synergy** between the Presidential Compressed Natural Gas (CNG) Initiative and the Nigerian Society of Engineers to conduct extensive safety evaluations of CNG infrastructure, assess technician competency, and bolster investor and consumer confidence in CNG applications.
20. **Introduce smart technologies** to monitor human factors and detect performance issues and environmental changes.
21. **Establish a national database for accident investigation reports** and ensure access to this repository to promote lateral learning across the industry and society at large.

CONCLUSION

The workshop underscored the imperative need for concerted efforts to enhance petroleum tanker safety in Nigeria. It was organized as collaboration between the Nigerian Institution of Safety Engineers, the Nigerian Society of Chemical Engineers, the Nigerian Institution of Mechanical Engineers, the Nigerian Institution of Highway and Transportation Engineers and the Process Safety Initiative of Nigeria and it was supported by the Nigerian Society of Engineers and the House Committee on Safety Standards and Regulations of the H

It is incumbent upon all relevant stakeholders—government agencies, industry players, and professional bodies—to implement the recommendations set forth, thereby ensuring the safety of lives, property, and the environment.

Signed

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For: The Nigerian Institution of Safety Engineers (NISafetyE)
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