

LESSONS LEARNED BOKSBURG LPG TANKER EXPLOSION

What?: A road tanker carrying 60 000 Litres of Liquefied Petroleum Gas (LPG) gas exploded after mistaking the route from Sasolberg, Richards Bay to Botswana.

INCIDENT OVERVIEW

When?: 24 December 2022, 06:15 am (SAST)

Where?: Boksburg, Gauteng, South Africa (Under a bridge on the N17 highway)

How?: The truck was stuck under a bridge after an incline on the road raised the trailer pressing it to the roof of the bridge. This imposed a scratch on the tank resulting in an opening which dissipated the LPG, thus it ignited after 30 minutes.

INVESTIGATIONS AND FINDINGS

Key findings

- > There were illegible restriction boards.
- > An incline raised the back of the trailer
- > The gas tanker was damaged

Factors

- > Human error: The driver could not recognise the incline, and he mistook the set route.
- > Environmental conditions: The bridge was too low and the incline on the road led to the accident.

ACTIONS TAKEN AND LESSONS LEARNED

The driver communicated with ISS (Innovative Staffing Solutions)

He tried to cordon off the area and warned the public



LOW CLEARANCE . m



IMPORTANCE OF CLEAR SIGNAGE AND REGULAR INFRASTRUCTURE ASSESSMENTS

Visible height restriction signage must be installed on all bridges and regular maintenance must be done, especially in areas frequented by heavy vehicles.



IMPORTANCE OF NAVIGATION, ROUTE PLANNING, AND COMPLIANCE

Training drivers in comprehensive route planning, can ensure contingency plans are established and regulations strictly followed. Designating specific routes for transporting hazardous goods like LPG can help reduce associated risks



VEHICLE SUITABILITY AND OPERATION

There is a need for vehicles to be both well-maintained and properly suited to the specific routes they will navigate.



INTER-STAKEHOLDER COMMUNICATION AND COORDINATION

There is a need for seamless communication and coordinated action among all relevant parties involved throughout hazardous goods transportation, including emergency response services and the public



REGULATORY OVERSIGHT

Ensuring compliance with safety standards and conducting regular inspections of vehicles and routes used for transporting dangerous goods is crucial.



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safe

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WITH YOU

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