Economic Commission for Europe

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Inland Transport Committee

Working Party on the Transport of Dangerous Goods

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Any other business

Accidents of Bleve during 2011 in the World and conclusions about them

Transmitted by the Government of Spain

During 2011 we have recollected the following accidents, in which the LPG substances have been involved.

1) 4-2-11 Tundla UP (INDIA)

Road-Tanker- LPG

Explanation: Road-tanker carrying LPG from Kanpur to Mathura refinery overturned on NH-2 <u>after hitting barrier</u>, tanker exploded, damaging roadside tea stalls and injuring three people; driver, cleaner fled on foot.

2) 6-2-11 Dahej, Gujarat (INDIA)

Road-Tanker-LPG

Explanation: Empty LPG tanker exploded in industrial state while welder and mechanic were working on the vehicle; both men were killed, two others injured; electric poles blow down, cutting power to port for five hours.

3) 15-2-11 Kütahya (TURKEY)

Road-Tanker-LPG

Explanation: Tanker carrying LPG from Kacaeli to Antalaya exploded after leak; fire engine, bus and nine cars incinerated in blast; 19 people injured including 9 fire-fighters; nearby buildings also damaged.

4) 4-3-11 Tundla UP (INDIA)

Road-Tanker-LPG

Explanation: Road-tanker carrying LPG from Agra to Fiozabad suffered <u>leak</u> of cargo while on NH-2; driver stopped but tanker exploded before emergency services could arrive; six people injured in blast.

5) 1-3-11 Odakkur TAMIL NADU (INDIA)

Road-Tanker-LPG

Explanation: "Bullet Tanker" enroute Mangalose to Bangalore overturned in Bhaskaran on NH-48, closing road for 10 hours; gas leaked from tanker; fire crews sprayed water to deter ignition; rest of cargo transferred to second tanker.

Conclusion

In all accidents there was a leak, or impact, that causes the exit of the gas or the ignition with the explosion of it.

Consequently it is convenient to think in the necessity to establish a bigger thickness on the LPG tanks (Road-tanks) to protect the shell of impacts and of the heating by fire or other causes.

A combination of relief-devices (to eliminate pressure) and thickness of the tank can be appropriate to prevent the accidents of Bleve. Thickness less than 9,5 mm shall not be allowed for this kind of Road-tankers, independently of the diameter of the shell.