

Don't get burned by Bonfire Night, warn HSE experts

With the Fifth of November fast approaching, anyone involved in the carriage of fireworks needs to be aware of their responsibilities and some potential pitfalls, says Paul Rushton of HSE's Explosives Inspectorate.

In many respects fireworks are just like any other dangerous goods. For transport purposes, they fall into UN Class 1. The relevant requirements of the 2004 Carriage of Dangerous Goods Regulations (Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2004 (SI 2004 No 568, as amended by SI 2005 No 1732) apply in Great Britain.

Where explosives differ from other dangerous goods is that, with a few exceptions, they may only be stored licensed or registered premises. This has implications for anyone carrying them.

Storage of explosives (including fireworks) is regulated by the Manufacture and Storage of Explosives Regulations (MSER 2005 (SI 2005 No 1082). While these do not apply to activities to which CDG2004 applies, it is a mistake to think that this is a blanket disapplication. If the fireworks are held in one place for more than 24 hours, even as part of a transport operation, then the fireworks are regarded as being in storage at that point and the appropriate requirements of MSER will apply. If the place of storage is not properly licensed for the type and quantity of fireworks, that storage will be illegal, and anyone found doing so can be subject to enforcement action by the licensing authority. During carriage, this will be the carrier.

The explosives licensing regime for fireworks is there to ensure that those undertaking the storage, and members of the public are not exposed to unacceptable risk. One of its main cornerstones is the requirement for maintaining separation distances between the fireworks in storage and occupied buildings such as offices, workplaces or houses, both on and off site. If these separation distances are not properly applied, the conse-

quences of an explosion can be extremely severe. On 13 May 2000, at Enschede in the Netherlands 22 people were killed and the surrounding neighbourhood was flattened when fire and explosions ripped through a fireworks storage depot. The separation distances were inadequate for the quantity and type of fireworks stored.

During the fireworks season, hundreds of containers of fireworks are transported from UK ports to importers' licensed storage sites and subsequently to retailers' storage sites. It is important therefore to properly plan these operations so that there is no risk of having to keep fireworks, for instance, in a haulier's depot for more than 24 hours. And while the law allows 24 hours, one must not forget the carrier's and driver's duties under Regulation 47 of CDG2004 to ensure that the carriage is completed "within a reasonable length of time having regard to the distance involved". This means that breaks in a journey should normally be significantly less than 24 hours.

As a carrier carrying fireworks you therefore need to work with the consignors to properly plan the transport operations. If the plan requires fireworks to be kept in one place for more than 24 hours, for whatever reason, you will need to apply for that site to be licensed, before the storage takes place.

A 40ft container of Division 1.4 fireworks may contain on average eight tonnes (net) of explosives. For this quantity the licensing authority will be the Health and Safety Executive (Explosives Inspectorate), and the licence will require local consultation and the "assent" of the local authority. For fireworks classified as Division 1.4, the required separation distance from occupied

buildings and major roads is 51 metres, while from railway lines and minor roads it is 26 metres. If there are two containers with 16 tonnes the distances are 55 and 28 metres respectively. If however there are any fireworks classified as Division 1.3, the occupied building separation distance rises to 136 metres.

This HSE licensing process, for more than 2000kg of explosives in fireworks, will take at least three months and must be completed before fireworks are stored at a site. More information on licensing can be found on the HSE web site www.hse.gov.uk/explosives

These stringent requirements mean that most haulage depots will be unsuitable for licensing for storage and therefore it is even more important for carriers to understand this and to work with consignors and consignees to plan the transport operations. This should include contingency arrangements to cover for foreseeable situations such as the consignee being unable to accept on that day, the loss of a driver or vehicle breakdown and include identifying alternative licensed sites that may be used for short-term storage.

A further requirement of Regulation 47 of CDG2004 is for

a carrier not to remove Class 1 goods from a consignor's premises unless he is ready immediately to despatch them to the consignee. This means for instance that fireworks should not be collected last thing at night and held at the depot in preparation for delivery the next day.

Neither should haulage depots or other unlicensed areas be used as distribution points for fireworks whereby container loads of fireworks are broken down into smaller consignments for onward distribution. This should only be done at a licensed site.

After the firework season, unsold fireworks may have to be returned to the supplier. It is the consignor's responsibility to ensure that these are properly packaged in their original UN certified packages. If you are asked to carry fireworks packaged in any other way, you should remember your duties as a carrier not to carry fireworks in unsuitable packaging.

With careful planning, carriers can ensure that fireworks are distributed in a safe and efficient manner and an incident of the type that occurred in Enschede does not happen in Great Britain. Contact: explosives.licensing@hse.gsi.gov.uk or Chris MacRae at cmacrae@fta.co.uk



What happens when four tonnes of fireworks go up in smoke