UK P&I CLUB

Ship Type: Dry Cargo / Container **Trade Area: Worldwide**

Bulletin 232 - 02/02 - Sulphuryl Fluoride Poisoning in Containers

We would like to bring the following to Member's attention. It has been taken from an article published in TT Talk, 17th Edition, 18th January 2002. The TT Club (Through Transport Mutual Insurance Association), deals with road, rail and air transport issues.

One of their Members recently organised the transport of wooden furniture as an FCL from southeast Asia to Europe. In accordance with regulations, the container was fumigated with methyl bromide at the port of loading and appropriate warnings were fixed prominently to the outside. When it arrived at the port of discharge, specialists checked the container to make sure that the fumigant had been dispersed and posed no threat to humans. They found that it was clear, removed the warning signs and let the container go forward for delivery.

When the container arrived at the consignee's warehouse, the doors were opened and an employee climbed inside to assist in lifting the boxes. Suddenly he complained of difficulties in breathing and irritation to his eyes and throat. He was taken to hospital where it was found that he was suffering from poisoning by sulphuryl fluoride (also known as sulfuryl fluoride in the USA). Fortunately the man recovered although, had he been exposed to the poison for longer, he could have suffered long-term neurological problems. He was very fortunate indeed, since there are no known antidotes for sulphuryl fluoride poisoning.

Claims investigators were at first puzzled where the poison could have come from. The usual checks on previous loads showed no record that this cargo had been carried. The Club then called on its chemical experts who pointed out that sulphuryl fluoride is widely used to control termites and other wood-boring insects. It has outstanding penetration qualities, which enable it to infiltrate termite tunnels and crevices to kill insects. The assumption is therefore that the furniture itself had been treated with the gas either during the manufacturing process or at the time of loading into the container. The gas does not disperse as rapidly as methyl bromide, so would have remained within the container or the furniture packaging and, as it is odorless, there was nothing to warn the consignee of its presence.

Shipped on its own, sulphuryl fluoride is a hazardous product, classed under UN No:2120 in the IMO's Dangerous Goods Code (IMDG Code), and would therefore require a hazardous goods declaration, proper labeling and special stowage arrangements. Cargo being shipped under fumigation comes under UN No:3359, IMO 9 – with a requirement for "Fumigation" labels to be placed on the container or cargo unit. Because there was no indication that the cargo had been thus treated, no checks were made for the gas at the port of discharge. It appears that this container was checked for methyl bromide (the fumigant) only - none was found. When a container is fumigated, it can only be shipped as non-IMO cargo / harmless if it has been declared gas-free by a *competent* company.

The chemical experts retained by the Club point out that regulatory agencies and courts in the United States have found repeated violations of fumigation safety procedures during sulphuryl fluoride treatment. One judge went so far as to describe the practices of a major extermination company as "nothing short of scary".

While we would hope that responsible shippers would include indications on containers that the contents have been treated with sulphuryl fluoride, quite clearly there is a risk that proper procedures have not been followed. This seems to be a gap in the regulations, which could pose a hazard to personnel at the unvanning point.

The Club therefore warns Members (and their clients) that extreme caution should be exercised when discharging containers loaded with furniture coming from tropical and sub-tropical areas, particularly southeast Asia. Ideally a container should be ventilated with its doors fully open for at least 30 minutes before anyone is allowed to enter it, as a precaution against another case of accidental poisoning.

Source of Information: Andrew Trasler, TT Club