Mont Louis

Maritime Chemical Accident

1984, August 25 North Sea, 7 n.m. off the Belgian coast

Uranium hexafluoride (Class 7) in steel cylinders; low-radioactive solid that reacts with water to form the highly corrosive and toxic gas/liquid hydrogen fluoride, Bp 20°C, VP 100 kPa (20°C), TLV 3 ppm (USA), IDLH 30 ppm (USA)

Summary: The French ro/ro ship Mont Louis, bound for Riga, collided with the car ferry Olau Britannia off the Belgian coast. Among her cargo, Mont Louis carried 30 cylinders with 15 tons each of solid nuclear fuel uranium hexafluoride (UF₆), loaded in Le Havre, France. The two ships became interlocked into each other and were drifting several hours towards the shore. After separation, Mont Louis sank in international waters at the depth of 15 metres, partly exposed at low tide. The responsible French charter company ordered the Dutch salvage company Smit Tak International to salvage the cargo. The Belgian government kept the operation under close continuous observation. The hull of Mont Louis was cut open and the cargo was, after some difficulties, located in the hull and salvaged. The work had to be interrupted at several times because of rough weather. The 30 cylinders were successively salvaged until October 4, 40 days after the accident. A few days after the accident an intensive work started to achieve information about the cargo. This turned out to be a tedious procedure that first resulted in incorrect information. Not until three weeks after the accident, the Belgian authorities got a full understanding of the contents of the cargo and the nature of its risks. The radioactivity of UF₆ is low. The main hazard is its reactivity, particularly in liquid form. It reacts with water to form uranyl fluoride and highly corrosive and toxic hydrogen fluoride.

Cause of Accident: Information not available.

Comments on Response: The Belgium authorities experienced great difficulties in searching for correct information about the cargo when contacting the ship's crew as well as French authorities. It was also difficult a achieve a full understanding of the hazards of the cargo and to identify the risks. Statements made by ill-informed specialists caused considerable confusion. Much time and effort must be devoted to disclaim false information. The contacts with the mass media were time-consuming and demanding. The news reports on the accident were often inaccurate. The recovery of the cargo took long time and was difficult because of adverse weather and the complexity of the operation when cutting the hull and searching for the cargo in the holds. The cylinders were unaffected by the accident and neither chemical nor radioactive pollution happened.

Source of Information: Proceedings of the Symposium on Oceanology, Brussels, Belgium, 4-6 March, 1985, Thierry G. Jacques, Scientific Evaluations of an Incident at Sea Involving a Sunken Ship Carrying a Dangerous Cargo.
(Abstracted February 1991 by Björn Loosström, Swedish Coast Guard H.Q.)