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DIFFICULTIES ENCOUNTERED IN THE SHIPMENT OF IMDG CODE CLASS 7 RADIOACTIVE MATERIAL AND, IN PARTICULAR, COBALT-60

1 The Facilitation Committee, at its thirty-first (19 to 23 July 2004) and thirty-second (4 to 8 July 2005) sessions, considered the increasing difficulties encountered in the worldwide shipment of Cobalt-60, an IMDG Code class 7 radioactive material with UN 2916[1].

2 The Committee, at its thirty-second session (4 to 8 July 2005), bearing in mind the conclusions and recommendations of the Sub-Committee on Dangerous Goods, Solid Cargoes and Containers, which considered the matter from the technical point of view at its ninth session (27 September to 1 October 2004) and the results of the consideration of the issue by the International Atomic Energy Agency, in an effort to foster the alleviation of the difficulties encountered, adopted the Advice on the shipment of IMDG Code class 7 radioactive material and, in particular, Cobalt-60, which is set out in the annex.

3 Member Governments are urged to bring this circular and the annexed Advice to the attention of their Public Authorities, of owners, operators and masters of ships entitled to fly their flag and of owners and operators of ports located within the area under their jurisdiction.

4 The Committee remains, in particular, concerned about the potential adverse consequences the denial of shipment of IMDG Code class 7 radioactive materials used in medical applications, for example Cobalt-60 and those radioisotopes used in radiotherapy and nuclear medicine in general, might have on public health.

5 Member Governments and non-governmental organizations with consultative status are urged to bring to the attention of the Committee any instances, together with the associated reasons, where the shipment of IMDG class 7 radioactive materials and, in particular those which have medical or public health applications, encounter difficulties or are refused aboard ship or in or through ports, so as to enable the Committee to consider the matter further and to determine the actions required.

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[1] The Committee was advised, at its thirty-first session, that difficulties were also encountered with the shipment of tantalite, an iron manganese tantalum niobium oxide, which is an inert ore shipped in bulk and which is classified as IMDG Code class 7 radioactive material.

ANNEX

ADVICE ON THE SHIPMENT OF IMDG CODE CLASS 7 RADIOACTIVE MATERIAL AND IN PARTICULAR COBALT-60

General

1 Shipping and handling of IMDG Code class 7 radioactive materials, when carried out in compliance with the relevant provisions of SOLAS chapter VII, the IMDG Code and the recommendations contained in MSC/Circ.675 on Recommendations on the safe transport of dangerous cargoes and related activities in port areas, should be considered as meeting the necessary safety requirements and should be facilitated.

Specific advice related to transport of Cobalt-60

2 Cobalt-60, a non-fissile IMDG Code class 7 radioactive material with UN 2916, is used to sterilize approximately 45% of all single use medical supplies used worldwide, such as syringes, surgeons' gloves, bandages, and a wide variety of other products. Cobalt-60 is also relied upon to sterilize a vast array of consumer products and is used to make the food supply safer by eliminating food pathogens and to reduce the incidence of disease-carrying insects. Finally, Cobalt-60 is one of the radioisotopes used in the treatment of cancer.

3 Cobalt-60 emits high-energy gamma rays that are used to eliminate harmful micro-organisms, bacteria and pathogens from a variety of products including single-use surgical and medical supplies, lab ware, packing materials, pharmaceutical products, cosmetics, raw materials, spices, fruits, seafood, poultry and red meat. The gamma rays kill micro-organisms, bacteria and pathogens, without damaging the product, thus preventing the spread of diseases and infections. The radiation treatment process does not induce radioactivity in the product. After the completion of the radiation process the product is available for immediate use.

4 The transport of Cobalt-60 has a humanitarian dimension and is critical to the interest of public health and is thus for the benefit of society at large. The use of sterile disposable medical products in clinics and hospitals worldwide is linked directly to a reasonable and safe system for international supply and delivery of Cobalt-60. The rising number of incidents of denial of shipments of Cobalt-60 are seriously jeopardizing this supply and as a result this trend is having a negative impact on global health care.

Efforts of the IAEA

5 The International Atomic Energy Agency (IAEA) in an effort to assist in the alleviation of the difficulties encountered in the shipment of IMDG Code class 7 radioactive materials has, *inter alia*, developed:

.1 a half-day Training programme for cargo handlers. This programme can be dovetailed to the existing training programmes on handling dangerous goods;

.2 a half-day Training programme for Public Authorities. This programme familiarizes Public Authorities with the safety standards so that IMDG Code class 7 radioactive material is moved safely and smoothly; and

.3 a Radiation protection programme specifically for Public Authorities which is to be included in a Safety Guide which is under preparation.

6 Further details in relation to the aforesaid programmes may be obtained from the IAEA[2].

Recommended actions

7 Member Governments and those concerned should facilitate the efficient, cost effective and expeditious handling and shipment of Cobalt-60 aboard ships and in and through ports, provided it is shipped in accordance with the provisions in paragraph 1, because, ultimately, national populations rely on this material and, therefore, Governments have a vested interest in facilitating its transport.

8 Member Governments should work with relevant national authorities and industry associations to raise awareness of these matters as a means to help alleviate the difficulties encountered in the shipment of IMDG Code class 7 radioactive materials and in particular Cobalt-60.

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