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Handling and Transportation of Radioactive Materials by Maritime Carriage
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Port and terminal refusals to handle radioactive cargoes arise more out of perceived than actual danger.

Whenever we talk about transportation of Class 7 (radioactive) cargo, the immediate reaction from most carriers, ports and terminals is an outright refusal to carry or handle it, sighting reasons of company policy. But the real problem is a misconception created by the name of the cargo rather than the actual facts associated with it.

Radioactive material has been used to enhance the quality of our lives, playing an important role in the fields of Healthcare, Food, Power, and the Environment.

Class 7 cargo is a legitimate cargo, listed in the International Maritime Dangerous Goods (IMDG) Code, and is the most well-regulated of cargo in terms of packaging for safe transportation. Cargo shippers and suppliers follow a strong regulatory framework under the oversight of the International Atomic Energy Association. These regulations have been reviewed and updated regularly over the last 50 years.

To date, the marine transportation record of radioactive cargo is spotless, free from accidents. Additionally, freight rates are very attractive compared to general cargo. Despite all this, the sensitive nature of Class 7 cargo means that many shipping lines, ports, and terminals will neither carry nor handle it. Shippers encounter complexities and limitations of transportation at every stage of the departure, transit, transshipment and discharge process.

There is frequently non-availability of carriers on many routes, denial of access to numerous ports, differing regulatory requirements from one jurisdiction to another, and a lack of standards' harmonization. These factors create complications and delays which have a potentially costly impact on the industry.

Today owners/ Lines operate mainly in consortium with other lines by way of VSA (Vessel Sharing Agreement). Under such circumstances all lines in the consortium must agree for carriage of radioactive material. Liners which are in a VSA do not normally agree to the carriage of Class 7 cargo. However in some cases the line which has its own vessel in the consortium may be allowed by other consortium members to carry radioactive Cargo on their own Vessels.

There are many ports and terminals which do not permit discharge or transit or transshipment off radioactive cargo in their ports/ terminals.

There are however some ports which permit and handle radioactive cargo if it destined for their own Country. Even in such cases the cargo has to be taken by the consignee on the basis of direct delivery on to trailers and railway wagons without the container landing on the surface of the terminal.

Owing to the above constraints in handling and Transportation of Commercial radioactive cargo leads to delays resulting in high cost. Lack of competition means higher transaction cost by way of very high sea freight rates and operational and logistic cost. Primarily the burden of this high cost falls on the end consumer and on the Industry.

Shipping and handling of IMDG Class 7 radioactive materials, when carried out in compliance with the IMDG Code, should be considered as meeting the necessary safety requirements and should be facilitated; it should not result in refusals by the concerned stakeholders in the shipping industry. Considering the importance of radioactive material, and its safe transportation to date, stakeholders should re-examine their processes to ascertain how best to meet the transportation requirement of suppliers.

In order to streamline and address the concerns of the Maritime Industry for the carriage of radioactive cargo the following is suggested:

[1] The nuclear Industry should hold interactive conferences/ discussions with all the stake holders in the Maritime Industry including Ports and Terminals, ship owners/ operators, P&I clubs, Insurance companies, etc. These conferences/ discussions should be held region wise namely, Asia, Europe & the Americas. Alternatively teams from the Nuclear Industry can be formed region wise for engaging in discussion with Maritime Industry. Such interactions/ discussions with the Maritime Industry will result in confidence building measures in the Maritime sector for the carriage and transportation of radioactive cargo.

[2] Development of an industry data-base, focused on assisting shippers in dealing with transport service providers. This knowledge source can also provide factual information about insurance, radiation protection, stowage and segregation requirements during transportation.

[3] The existing international regulations can be harmonized with regional and domestic ones using more simple and direct references in order to create uniformity and ease of understanding and enforcement.

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