Analysis on the Necessity and Reasonableness of Project Management of Dangerous Cargo Declaration

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Abstract. Water transport is one of the most important modes of transportation in China. With the rapid growth of our economy, the number of goods transported by ship has doubled year by year. China has become the largest country in the world in terms of cargo throughput. Ship transport is of great significance to the rapid development of national economy. However, dangerous goods have some inherent characteristics, such as flammable and combustible, toxic, pollution hazards and so on, which decided in the event of an accident will lead to human life, ships and property catastrophic consequences. In the shipping industry, the human factors also give rise to significant safety and pollution accidents of dangerous goods transportation, as unidentified cargo transportation, improper loading of goods on board, unsafe shipping of ships with hidden dangers, false reporting of false cargoes and false negligence, and other dangerous factors. In recent years, the accident of poisonous chemicals been put into the Yangtze River, fire hazard on liquefied gas ship in Shenzhen and others treat people's security and social stability. Therefore, It is important and urgent to speed up the risk pre-control management legislation in dangerous goods, to develop in line with the actual situation needs, and effectively make supervision management regulations in protecting the safety of ships, people's lives and property of the ship-borne dangerous goods, in order to provide a strong legal protection to maritime law enforcement agency.

Keywords: dangerous cargo; declaration; management; necessity; reasonableness

1 Necessity for Declaring Dangerous Goods on Board

The key point of risk management of ship borne dangerous goods transportation is at the source and the key is to pre-control, ensuring the dangerous goods have the proper packing, clear mark, reasonable stowage, sufficient precaution and standard packing. These are requisite measures to ensure the safe transportation of dangerous goods. And carrying out shipborne cargo declaration management is the effective management tool to pre-control ship safety risks.

(1) Through the implementation of ship-borne declaration of dangerous goods management system, it is able to grasp the characteristics of the relevant goods and transport conditions, and fully implement the relevant precautionary measures.

(2) To strictly examine the implementation of the maritime transport of dangerous goods in accordance with the relevant information, such as the relevant conventions and rules, and fulfill
the contracting governments' responsibilities for the carriage of dangerous goods on board.

(3) Through the examination and approval of the contents of the declaration and found that the goods are not suitable for transport and ship does not fit and so do not meet the situation, the ship into the port or cargo shipment should notify the relevant transport side to be corrected to avoid accidents that ships carry at the greatest extent, or it will result in cargo, boat retention and so on.

2 Analysis of the Necessity and Rationality of the Project Management of Ship-borne Dangerous Goods Declaration

Since the declaration management has implemented for decades, the maritime administrative agencies identified and eliminated countless safety loopholes, such as dangerous goods packaging mislabeled, stowed isolation errors, dangerous goods carrying beyond the existing operational capacity by pre-reviewing the declaration of information, and promptly take appropriate measures to lift the risk, to avoid personnel, ships and terminals cause greater losses. Practice has proved that the administrative licensing approval is the most effective ways of controlling and eliminating ship-borne dangerous goods hidden dangers of the most effective means, but also the foundation to carry out the follow-up things in and after the inspection. The declaration of dangerous goods on board is a requirement to ensure the safety of ship, port and crew, the requirement of marine environmental protection, the requirement of standardized management, the requirements of international convention and domestic legislation, and it plays an important role in promoting the development of shipping industry. It is necessary and reasonable to declare a permit item. Fig. 1 shows the maritime management personnel, shipping enterprise management, the crew of dangerous goods on board the declaration of approval of the project the necessity and rationality of view.

![Figure 1. The Necessity and Rationality of Declaration of Dangerous Goods on Board](image)

2.1 The Requirements of the Relevant International Maritime Conventions

86.8%, 75.6% and 86.3% of the maritime management personnel, shipping enterprise management personnel and seafarers respectively considered that the approval and approval of ship-borne dangerous goods realized the effective supervision and management of the safe
transportation of dangerous goods on board by maritime administrations.
The International Convention for the Safety of Life at Sea (SOLAS), the International
Convention for the Prevention of Pollution from Ships (MARPOL 73/78), the International
Maritime Dangerous Goods Code (IMDG Code), the International Maritime Solid Bulk
Cargoes Code (IMSBC (HNS Code), the International Code for the Construction and
Equipment of Ships Carrying Chemical Cargoes in Bulk (IBC Code), the International Code for
the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (International Code
for the Construction and Equipment of Ships Carrying Liquefied Gases), the International
Convention for the Liability and Compensation for Damage of Maritime Transport by Sea (IGC
Code), the International Convention for the Regulation of Radioactive Nuclear Fuels,
Plutonium and High-level Radioactive Waste (INF Code) for the International Safe Carriage of
Containers for Ships, the implementation of the amendments to the Code, the Ship-borne
Danger Cargo, pollution of hazardous goods, solid bulk cargo declaration management also
made clear technical requirements. In the management of maritime transport of dangerous
goods, countries in the world have developed corresponding laws and regulations, especially in
developed Western countries have established a relatively sound legal system. Such as the
Transportation of Dangerous Goods Act (1975), the Toxic Substances Act (1976), the Canadian
Transport of Dangerous Goods Act (TDGA), the Canadian Transport of Dangerous Goods Code,
The United Kingdom's Regulations on the Control of Dangerous Cargo Accidents (1999), etc.,
all of them have clarified the requirements for the declaration and administration of dangerous
goods on board. In addition, the above-mentioned countries have prioritized their domestic laws
over international law and even more stringent international laws management.

2.2 Relevant Domestic Laws
October 29, 1981, the Ministry of Transport promulgated "Rules for the Supervision and
Administration of Dangerous Cargo Loaded by Ships", which clarified the requirements for the
declaration and management of ship-borne dangerous goods transport. It is in accordance with
the instructions of the State Council, and was set in order to strengthen the safety of ship
transport of dangerous goods supervision and management to prevent the occurrence of
catastrophic accidents, to protect the safety of ships, ports and human life and property, and
promote transport production.Since then, the Maritime Department has comprehensively
applied for declaration of ship-borne dangerous goods in accordance with the Maritime Traffic
Safety Law of the People's Republic of China (No. 7 of 1983) and the International Maritime
Dangerous Goods Regulations (IMDG Code). With the "Marine Environmental Protection Law
of the People's Republic of China" (Decree No. 26 of 1999), Regulations on the Prevention and
Control of Marine Pollution by Maritime Ships (State Council Decree No. 355 of 2002) and
Regulations on Safety Management of Dangerous Chemicals The State Council Decree No. 591
of 2011), and put forward new declaration requirements for ship-borne dangerous chemicals,
pollution-hazardous cargoes and solid bulk cargoes.As a performing country, China should
actively internationalize the requirements of the domestic, at the same time according to the
actual situation in the country, develop and improve dangerous goods on board the declaration
of the relevant provisions of the management of goods. (Such as industry associations) to
regulate the declaration of dangerous goods and transport behavior, advocating the transport
side to consciously abide by international rules and domestic norms, the international shipping
industry is a kind of integrity management model.However, at present, China's industry
self-regulation model is in the initial stage of exploration, the integrity system is not yet
complete, the binding force of bad faith and weak discipline, to form a perfect, strict industry
restraint mechanism, promote industry-standard declaration and transport of dangerous goods will take some time. Second, the declaration and approval system for ship carrying dangerous goods is a pre-control management measures, cannot be something to check and after-inspection to replace.

2.3 Requirements of Safeguarding Ships, Ports and Crew

73.7%, 75.6% and 75.5% of the maritime management personnel, shipping enterprise management personnel and seafarers respectively considered that the ship-borne Dangerous Goods Declaration and Approval Project raised the crew's awareness and risk prevention awareness of dangerous goods on board. The three types of subjects to the effect of the recognition rate is close, but nearly 30% of the staff did not agree that the increase in the crew's risk prevention awareness needs to rely on government management measures, but also the shipping company's internal management and enhance the overall quality of the crew, control and administrate cooperatively, with disciplining and self-disciplining to form a good security environment. From the past three years, the number of declarations and the number of approvals per year between the 60,000 single gap, but also shows that the maritime administrative agencies identify and eliminate a large number of dangerous goods transport security risks, reduce the risk, and the possibility of accident through priority audit the declaration information.

2.4 Marine environmental protection requirements

78.9%, 70.9% and 70.5% of the maritime management personnel, shipping enterprise management personnel and seafarers respectively considered that the declaration and approval project of ship-borne dangerous goods was the requirement of marine environmental protection. In recent years, there have been too many shipments accidents caused by dangerous goods leakage, fire and explosion both in domestic and abroad, and the number is increasing. In the case of hazardous chemicals, once the accident, causing great harm: it will pollute the surrounding marine environment, endangering the local marine aquaculture industry, threatening the health of nearby residents, coupled with the row of pollutants cannot be broken down, but to completely eliminate the impact, it will take years in short time and decades in long.

2.5 Requirements of the Standardized Management

86.8%, 75.6% and 86.3% of the maritime management personnel, shipping enterprise management personnel and seafarers respectively considered that the approval and approval of ship-borne dangerous goods realized the effective supervision and management of the safe transportation of dangerous goods on board by maritime administrations. Maritime management personnel and the crew of a higher degree of recognition, and its commitment to the regulatory responsibilities and direct exposure to transport risks associated with the management of the shipping business is relatively low recognition, and licensing requirements on the management of a certain increase.

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