Research on the system and mechanism of investigation and treatment of port accidents

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Abstract. Based on the analysis of the current situation of investigation and treatment of port accidents, this paper puts forward some suggestions, such as improving relevant laws and regulations, establishing an independent third-party investigation organization and consultation mechanism, and formulating investigation procedures, so as to promote the modernization of port accident investigation and management system and capacity.

1. Introduction
In 2016, the CPC Central Committee and the State Council issued the "opinions on promoting the reform and development of the field of work safety", which clearly pointed out that accident investigation and handling is an important content to achieve legal governance in the field of production safety, and put forward more stringent requirements for accident investigation. According to the opinion, a technical support system for accident investigation and analysis should be established, and a special section on technical and management issues should be set up in all accident investigation reports to analyse the deep causes of the accident in detail. At the same time, it is proposed to establish a supervision system for rectification of accident exposure problems. The local government responsible for accident investigation and the relevant departments of the State Council should organize and carry out evaluation and timely release to the public.

2. Port accident investigation practice
In the practice of investigation and disposal of port accidents, serious accidents are organized by the State Council and led by the General Administration of work safety / emergency management department to form an accident investigation team. The local government entrusts the emergency management department to carry out accident investigation for major and minor accidents. The local port administration department is excluded from the scope of the investigation team, and has the right of ignorance and interpretation, which is completely passive. The lack of laws and regulations such as the regulations on the investigation and handling of maritime traffic accidents and the regulations on the investigation and handling of inland river traffic accidents provided strong legal support and guarantee for the investigation and treatment of maritime traffic accidents.

In addition, port operation and safety management are highly professional. Experts in emergency management often require port operation with chemical industry standards and management methods, which makes port enterprises and industry managers suffer a lot. According to the survey statistics, only once the port administration department organized the accident investigation according to the division of responsibilities document formulated by the municipal government. In accordance with the notice of
the general office of Ningbo Municipal People's Government /printing and distributing responsibilities for safety management of hazardous chemicals in Ningbo (Yong outgoing document [2013] No. 185), “VI. transportation departments responsibility (14) participate in the investigation of road transportation accidents of hazardous chemicals; To organize the investigation of safety accidents in the waterway transportation and port storage and transportation of hazardous chemicals within the scope of jurisdiction according to law, and report the investigation results in accordance with the provisions. ”The investigation report was approved by Ningbo municipal government.

It is necessary to further improve the technicality and professionalism of port accident investigation, separate technical investigation from administrative accountability investigation, and improve the discourse power of traffic (port) management department in accident investigation.

3. Research on the investigation system and mechanism

3.1. legal perfection

In China's current regulations on the reporting, investigation and handling of production safety accidents, a cooperative investigation organization is adopted in the investigation of work safety accidents, that is, the investigation team jointly formed by relevant administrative organs and judicial organs after the occurrence of production safety accidents. This arrangement strengthens the professionalism and diversity of the investigation team and provides effective resources for the smooth progress of the investigation work; however, the access of administrative organs limits the impartiality and independence of the investigation. In order to establish an objective, fair, scientific and authoritative accident investigation thought, it is necessary to formulate new national laws and regulations on accident investigation as soon as possible, make special and unified regulations on accident investigation, establish accident investigation system, strengthen the construction of independent accident investigation mechanism, and make the independence of accident reporting, investigation, handling, hearing, report legalized and programmed.

Referring to the special equipment safety law, it is clearly stipulated that the following major accidents shall be investigated by the accident investigation team organized by the safety supervision and Management Department of the equipment together with the relevant departments. Relevant laws and regulations of transportation (port) industry, such as the port law or port operation and management, are added with corresponding provisions, or the Safety Commission Office of the State Council issues opinions to clarify that "the transportation department shall organize the investigation work of waterway transportation and port storage and transportation safety accidents within its jurisdiction according to law, and report the investigation results according to the regulations", so as to improve the traffic (port) management department in the port The right to speak in the investigation and handling of production accidents.

3.2. Composition of the third party investigation organization

Establish an independent accident investigation organization, make it a permanent administrative subject of accident investigation, and enjoy the right of administrative reconsideration and administrative litigation according to law. Under the current situation, an independent accident investigation pilot organization can be set up under the State Council or the Ministry of transport, which is mainly, aimed at the investigation of typical port disaster accidents. The accident investigation organization is independent of the supervision department, and its investigation process is not subject to the intervention and control of the safety supervision department, so as to ensure the fairness and comprehensiveness of the production accident investigation to the greatest extent; After the national administrative system reform is in place, the accident investigation institutions of other industries can be unified and the accident investigation institutions of port industry can be established.
3.3. Investigation procedure

Referring to the relevant rules, regulations and documents such as "provisions on the summary procedure for investigation and handling of water traffic accidents", the work flow of port accident investigation and treatment can be divided into simple procedure and general procedure according to the level and type of accidents.

3.3.1. Summary procedure. In order to investigate and deal with port production accidents in accordance with the law, facilitate the people and efficiently investigate and deal with port production accidents, the simple procedures for investigation and handling of port production accidents (hereinafter referred to as "minor accidents") with simple facts, clear facts and clear causal relationship (hereinafter referred to as "minor accidents") shall be investigated and handled according to the written application of all parties to the accident and confirmed by the traffic (port) management department, except for the following circumstances:

(1) Accidents involving passenger transport, dangerous goods transportation, international ships and foreign ships;
(2) An incident in which either party disagrees with the applicability of summary procedure before the case is closed;
(3) It is found that the port and operators have serious violations such as false certificates and no certificates;
(4) The traffic (port) management department thinks that the accident has the significance of widely learning lessons;
(5) Accidents that the traffic (port) administration considers it inappropriate to investigate and deal with by simple procedures.

The traffic (port) management department shall carry out accident investigation and evidence collection, and at least one person shall hold port administrative law enforcement certificate. Port investigators shall terminate the application of summary procedure, investigate and deal with it according to the prescribed procedure, and issue the notification of termination of application of summary procedure.

The traffic (port) management department shall impose administrative punishment on the party involved in the accident in violation of the port administrative order found in the accident investigation.

3.3.2. General procedure. The investigation and handling of port production accidents which are not applicable to the simple procedure shall be carried out according to the general procedures. The general procedures for the investigation and treatment of port production accidents include accident report, acceptance and filing, accident investigation, case settlement, filing and filing, post evaluation, etc.

The general procedure workflow of port production accident investigation and handling is shown in figure 1.
4. Conclusion
The traffic (port) management departments at all levels re-examine the investigation work of major accidents in port production safety, establish an independent investigation agency for the investigation of port production safety accidents, promote the separation of administrative investigation and technical investigation, establish an accident investigation and consultation mechanism, study and build a major accident investigation and handling system suitable for the transportation power, so as to further improve the port production safety in China Management capacity, to ensure the safety of port production, reduce the occurrence of accidents.

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