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Chemical Management Regulations of Korea

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Abstract

Man-made disasters caused by the negligence of chemical safety officers of workspaces will always occur without fundamental measures for the administration of safe control of chemicals. Responding to the repeated incidence of chemical accidents, in September 2012, the congress passed, the 「Act on the Registration and Evaluation, etc. of Chemical Substances」 and the 「Chemicals Control Act」 to replace the previous 「Toxic Chemicals Control Act」 based on the experience of responses to the EU REACH regulation. This paper describes the background of chemical regulations, domestic chemical accidents and the problems on regulation in Korea.

Key-words: Chemical accidents, Regulation (of chemical substance), Safety management, Chemical control act

1. Background of Chemical Management Regulations¹⁻⁶⁾

Over 88 million chemical substances have been developed, while approximately 120,000 chemical substances are distributed in the commercial market worldwide, and it is estimated that around 40,000 chemicals are distributed domestically in Korea. These chemicals might make our everyday life more convenient, however they can also be the key to destroy it. Lead by EU, movements to regulate chemicals which have the potential to harm human health or the environment have spread throughout the world. 「REACH」 June 2007, EU; 「Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Chemical Substances Control Law)」 April 2010, Japan; 「Amended Measures on the Environmental Management of New Chemical Substances (Decree or Order 7)」 October 2010, China, are good examples of the world wide effort to control chemicals. Management of chemicals is now mandatory, not optional. The principle of ‘No Data, No Market’ which restricts legal transaction of chemicals when required data is not provided, is now a norm for international chemical trading, which prompted the need for Korea to also have its own responsive chemical regulations. The system

provided pursuant to the 「Toxic Chemical Control Act」 is not sufficient for the management of human health according to the exact purpose of use, and type of exposure to the human body for each and every various chemical. Accidents are also reported to have occurred due to the insufficiencies of the previous management system. The lung damage of numerous victims caused by humidifier disinfectants containing substances such as PHMG, PHG, etc. occurred without proper acknowledgement of the hazard of the chemicals.

The government’s lack of administration is considered to be one of the major causes of this tragedy. Products containing hazardous substances were manufactured and distributed to the general public for over 10 years with no control system to manage and administrate the distribution of chemicals, which eventually lead to numbers of unfortunate fatalities.

PHMG (Polyhexamethylene Guanidine) is used in other countries, but not in the manner that its usage can cause a direct and lethal hazard to the human body such as application as humidifier disinfectants. In countries other than Korea, PHMG is categorized as a fertilizer or a hazardous substance, and its application is strictly regulated.

Since it was the Ministry of Environment who approved the manufacturing application filed by Yukong, the manufacturing company of PHMG, now named as SK Chemical, it is inevitable to conclude that the Ministry of Environment was responsible for opening the door to apply a hazardous substance such as PHMG to humidifier disinfectants.

It was the Ministry of Trade and Industry, now known as the Ministry of Trade, Industry and Energy, who permitted



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