



PRESS

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กรมควบคุมมลพิษ
POLLUTION CONTROL DEPARTMENT

Volume 26, 5 March 2022 (B.E. 2565)

PCD warning ice plants and cold storage to prevent ammonia gas leaks in summer which high production

Mr. Athapol Charoenshunsra, Director General of Pollution Control Department (PCD) revealed that from statistics of chemical accident, there are frequent incidents of ammonia gas leaks from ice plants and cold storage. During the last few months in this year it was happened three times: on 8th February 2022 in Phetchabun Province, 6th January and 8th February 2022 in Bangkok and it may also occur during in summer period when the demand of ice consumption increases. PCD, therefore, would like to warn the operators that if the production capacity is accelerated increasingly, it will make the cooling system work harder. Thus increasing risk of ammonia gas leaks or possibility of equipment failure, toxicity ammonia gas is going to affect to the respiratory system of people who work and live in the area nearby.

Mr. Athapol said that most of the ammonia leaks has mainly caused from defective equipments such as leaks in pipelines, joints, valves or during maintenance operation system. As ammonia can combine with water and moisture inside the plant to form ammonium hydroxide with high alkalinity, It can corrode gas pipelines and valves, causing leaks. It can also occur from improper storage of ammonia containers, for example, without a dedicated space for chemical storage, no warning signs, etc. Besides, most of the ice factories are old businesses, and often located in the community, leakage of ammonia gas, which is toxic to the respiratory system, cause a huge impact on public health. If wastewater from fire fighting or ammonia gas capture is released into public water sources, it can be harmful to fish and aquatic life because ammonia is toxic to aquatic life and causes the amount of dissolved oxygen to decrease.

PCD has assigned Regional Environmental Office 1-16 to coordinate with relevant agencies in the area to warn the operators of ice and cold storage plants to inspect the systems, materials and equipments and to increase cautions in business operations in summer as well. PCD has developed the ERG4Thai application or the application of manual for prevention of basic accidents from hazardous materials for officials to use as the information to support rescues, such as hazardous of respiratory exposure skin and eyes, including actions in case of emergencies such as fires, leaks, first aid and guidelines for considering the evacuation of people from the accident area. It can be downloaded in the Android or iOS operating system and the website: www.erg4thai.com. If you have any questions or need advices, you can call the hotline 1650 for 24 hours a day, Mr. Athapol said.