## 4.7 Management of Toxic and Concerned Chemical Substances

PharmaEssentia uses a limited number of environmentally regulated toxic and concerned chemical substances in its R&D and production processes (including machine cleaning). Therefore, we focus particularly on source control by properly classifying and storing each chemical substance, implementing documented control of usage, tracking the flow of chemicals, and preventing environmental pollution and harm to human health. In 2023, there were no incidents of chemical or waste leakage.

## Classification and Control of Toxic Substances

We classify substances according to the "Management Law of Toxic and Concerned Chemical Substances." storing regulated toxic substances in laboratory fume hoods by category. Due to the wide variety of chemicals used, we have established a "Chemical Hazard Management Procedure" that defines clear responsibilities and control measures for the purchasing, usage, storage, and disposal of toxic substances, with precise records of chemical usage and inventory.

Our subsidiary Panco operates as a logistics center, not a manufacturing plant, and does not use chemicals, hence no chemical hazard operation procedures are required. The logistics center engages in processing and labeling operations; during which, accidental breakages of pharmaceuticals may occur, necessitating on-site cleanup. Therefore, we have written a "Cleanup Procedure for the Processing and Labeling Line" to ensure proper handling of any pharmaceutical leaks. No incidents of pharmaceutical breakages occurred during processing in 2023.

## **Toxic Chemical Disaster Response Actions**

The Taichung factory is equipped with one general-level professional emergency responder to maintain safety. We have established a "Chemical Spill Emergency Response Standard Operating Procedure" that allows for quick and effective response actions. To date, no such incidents have occurred. The laboratory is equipped with comprehensive emergency response equipment available for use in emergencies, and equipment conditions and safety stock levels are checked monthly. Annual toxic substance spill drills

are conducted to ensure that employees can respond promptly and effectively in emergency situations, minimizing the impact of disasters. In the future, based on the "Management Measures for Professional Responders to Toxic and Concerned Chemical Substances." professional responders will be appointed within the factory to take necessary protective, response, and cleanup actions in the event of an accident, while other unit's professional responders will perform disaster response support tasks, ensuring the implementation of factory-wide toxic disaster response operations and education and training for handlers of toxic substances.

## 2023 Annual Emergency Response Personnel Suit-Up Training and PEG Process Toxic Substance Spill Disaster Drills

(Response Procedure: Suiting Up  $\rightarrow$  Decontamination  $\rightarrow$  Cleanup)

**Emergency** Responder **Suit-Up Training** 

















