4.4 Water Stewardship

Water Withdrawal, Water Discharge, and Recycled Water

Water used at PharmaEssentia's operational sites in Taiwan and Panco were all sourced from tap water. According to the World Resources Institute (WRI) water risk mapping tool, our operational sites were all located in areas with low to moderate water stress in 2024. Our Taichung Plant is our main production site, and our water consumption included water used for production processes and domestic usage; wastewater was discharged through the Central Taiwan Science Park Taichung Science Park sewage treatment plant. Every year, in accordance with Ministry of Environment regulations, our Taichung Plant commissions testing institutes certified by the Ministry of Environment Environmental Management Administration to conduct water quality tests on discharged water every six months to ensure compliance with Ministry of Environment and Central Taiwan Science Park Administration discharge standards. In 2024, total water withdrawal volumes at our Taipei Headquarters and Taichung Plant both increased compared to the previous year, mainly as overall production volumes increased, and we added water withdrawal volumes from the Taipei Bioinnovation Park and expansions on the 18th and 19th floors into water withdrawal data for our Taipei Headquarters.

PharmaEssentia continues to improve water management measures, and our Taichung Plant recycles process RO brine and wastewater for use in air-conditioner cooling towers to enhance water reuse efficiency. In 2024, we recycled 9.72 million liters of water, an increase of 46.8% compared to 2023.



Water Resources Used at PharmaEssentia's Main Operational Sites GRI 303-3

(GRI 303-3)(GRI 303-4)(GRI 303-5)

(Unit: million liters)

Operational sites	2022			2023			2024		
	Water withdrawal volumes	Water discharge volumes	Water consumption volumes	Water withdrawal volumes	Water discharge volumes	Water consumption volumes	Water withdrawal volumes	Water discharge volumes	Water consumption volumes
Taipei Headquarters	7.38	7.38	-	7.63	7.63	-	22.89	22.89	-
Taichung Plant	18.11	9.13	10.5	14.13	5.74	8.98	22.97	9.77	13.2
Panco		Not recorded	d	1.4	1.4	-	0.11	0.11	-
Total	25.49	16.51	10.5	23.16	14.77	8.98	45.97	32.77	13.2

Note 1: In 2024, water withdrawal and water discharge volumes for our Taipei Headquarters included data from the Taipei Bioinnovation Park and expansions on the 18th and 19th floors, and therefore water volumes were significantly higher than for 2023

Note 2: Water discharge and water consumption volumes for 2022-2023 were revised in our 2024 Sustainability Report following internal confirmations

Water Pollution Control and Wastewater Discharge Management Indicators

The quality of water discharged from our Taichung Plant is tested every six months in accordance with Ministry of Environment regulations by a testing institute certified by the Environmental Protection Administration. Test results for 2024 all adhered to regulation standards. Additionally, discharged water is appropriately treated at the Central Taiwan Science Park Administration Taichung Science Park sewage treatment plant before discharge. The discharged water adheres to wastewater treatment system standards for the pharmaceutical manufacturing industry set by the Central Taiwan Science Park Administration. In 2024, the quality of water discharged from our Taichung Plant adhered to regulated items and limits, and therefore did not raise any significant environmental pollution concerns.

In 2024. PharmaEssentia incurred a fine for 1 violation of the Water Pollution Control Act, mainly as our Zhubei Plant construction site submitted a plan for reducing runoff wastewater, but the Department of Environmental Protection discovered during an on-site inspection that the runoff wastewater treatment facilities were not consistent with the original submitted plan, so a fine of NT\$70,000 was imposed. In response to the discovered violation, the construction company has already submitted a new runoff wastewater reduction plan, which has been reviewed and approved by the Department of Environmental Protection, ensuring that the procedures comply with related regulatory requirements. PharmaEssentia has directed the construction company to strengthen on-site management measures, increase inspection frequencies, and ensure that the wastewater treatment facilities are operating normally. We also strengthened personnel training, established internal monitoring and management mechanisms, and comprehensively strengthened compliance and management capabilities.

Taichung Plant Water Discharge Management

Factory	Operations Center	Manufacturing Center		
Discharge handling method	Regulated discharge	Regulated discharge		
Inspection items	None	pH, COD, BOD, SS, water temperature, true color, free available residual chlorine		
Discharge standards and standard sources (Environmental indicators and regulatory compliance)	Taichung Science Park underground sewage discharge standards	Taichung Science Park underground sewage discharge standards		
Discharge location	Commercial building	Junhao Factory area		