

Preliminary Investigation of Drinking Water Quality on Passenger Ships in National Ports of Northern Taiwan and Ports of Mini-Three-Links

Ming-Ching Liu^{1*}, Yu-Jia Huang², Chun-Hui Wu¹, Hsiao-Yun Tseng¹,
Chia-Wen Lee¹, Jiun-Shian Kuo¹, Jer-Jea Yen¹

Abstract

Quarantine officers implemented drinking water quality testing and documents inspection of 12 passenger ships in national ports of northern Taiwan and ports of Mini-three-links from March to August in 2017. The testing results of drinking water on ships showed that pH values were 100% qualified, whereas residual chlorine values were 50% qualified. Investigation of drinking-water supply and transfer chain and regular testing results indicated that Keelung port was the only port to implement the drinking water sampling in shore water supply point to ensure the safety of drinking water between shore water supply point and distributing reservoir. Besides, the abnormality of drinking water on ships may result from the poor design and construction of storage tanks and inappropriate distribution. In this study, all inspection results were notified immediately to the shipmaster and port authority concerned to proceed corrective measures and obtained satisfied outcomes. Passenger ships with drinking water supply system in Keelung port could implement all steps in the “ship drinking water and sanitation inspection flow chart” issued by Taiwan Centers for Disease Control in 2017. Passenger ships in other ports, which are small-scaled, short-voyaged and without drinking water supply system and required documents of water quality, use the bottled water for drinking, therefore, pose lower risks of outbreak

¹Taipei Regional Center, Centers for Disease Control, Ministry of Health and Welfare, Taiwan

²Kao-Ping Regional Center, Centers for Disease Control, Ministry of Health and Welfare, Taiwan

DOI: 10.6525/TEB.201810_34(20).0001

Corresponding author: Ming-Ching Liu^{1*}

E-mail: liugem@cdc.gov.tw

Received: Apr. 16, 2018

Accepted: Jul. 23, 2018

of water-borne diseases. Implementation of the strict regulation “ship drinking water and sanitation inspection flow chart “for the passenger ships with drinking water supply system should be justifiable.

Keywords: Passenger ship, drinking water test, ship sanitation inspection, quarantine, residual chlorine