

Effect of effluent from a sewage treatment plant in Shanghai on the slow flow of the Yangtze River

Wei Dong^a, Manjun Xie^b, Shunhua Zhu^c, Jianheng Zhang^a, Jie Yin^{a,*}

^aCollege of Marine Ecology and Environment, Shanghai Ocean University, Shanghai 201306, China, email: jieyin8743@163.com (J. Yin)

^bShanghai Coastal Sewage Treatment Co., Ltd., Shanghai 201300, China

^cShanghai Data Testing Service Technology Co., Ltd., Shanghai 201112, China

Received 25 June 2021; Accepted 23 September 2021

ABSTRACT

In order to study the Shanghai sewage treatment plant after the DiBiao water effect on the quality of the Yangtze River Estuary, this paper in Yangtze Estuary collected water samples, including total nitrogen, petroleum, volatile phenol and mercury, 18 indexes and rebuilding DiBiao before receiving waters of the Changjiang Estuary water quality survey data contrast, analysis of water quality in receiving waters of the Changjiang Estuary sewage treatment plant effluent. The results show that the effluent of the sewage treatment plant after upgrading meets the discharge standard, with biochemical oxygen demand₅ of 2.03–2.73 mg/L and chemical oxygen demand of 5.25–11.25 mg/L. Besides, the other indexes in the receiving waters of the Yangtze River Estuary meet the standard of Class II except for total nitrogen, petroleum, mercury and volatile phenol.

Keywords: Effluent from sewage treatment plant; Class I pollutants; Water quality of Changjiang Estuary

* Corresponding author.