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	DEPARTMENT OF THE ENVIRONMENT												
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V.						*	SECRETARY OF THE						
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MAYOR AND CITY COUNCIL						*							
OF BALTIMORE, MARYLAND						*							
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Baltimore, Maryland 21202,						*							
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## **ORDER**

The Mayor and City Council of Baltimore ("Baltimore City") applied for, and the Maryland Department of the Environment (the "Department") established conditions and requirements and authorized Baltimore City, pursuant to NPDES Discharge Permit Number MD0021555, State Discharge Permit Number 15-DP-0581A (effective May 1, 2018; modified January 1, 2020; expires April 30, 2023) ("Back River Discharge Permit") to discharge from the Back River Wastewater Treatment Plant ("Back River WWTP" or the "Plant"), located at 8201 Eastern Avenue, Baltimore, Maryland.

On March 22, 2022, the Department conducted an inspection of the Back River WWTP. This inspection revealed the precipitous decline of the functioning of several critical processes at the Plant in comparison with prior inspections, including, but not limited to, those conducted on September 20 and December 29, 2021. The March 22, 2022, inspection revealed significantly increased noncompliance with the Back River Discharge Permit that is causing new or increased unpermitted discharges to Back River, which is designated as Use II waters protected for Estuarine and Marine Aquatic Life. Additional data from Discharge Monitoring Reports submitted by Baltimore City indicate monthly violations of total suspended solids ("TSSs"), total nitrogen, and total phosphorus.

Specifically, the March 22, 2022, inspection report revealed that:

1. Only 2 of the 11 primary settling tanks ("PSTs") were in service, and 1 of the 2 operating PSTs requires maintenance to function properly. The Back River WWTP does not have sufficient PST capacity to treat its primary waste stream;

2. Denitrification filters ("DN Filters") were not functioning as designed because of the presence of a high solids concentration in the DN Filter influent. The Plant has 52 DN Filters arranged in 4 quads of 13 DN Filters each. Quads 1, 2 and 4 are not functioning properly because they are underwater. Additionally, the 13 DN Filters in Quad 4 are not functioning properly because they require various mechanical maintenance. These improperly functioning DN Filters are causing DN Filter influent to bypass permit required Enhanced Nutrient Reduction ("ENR") treatment. In addition, the Department observed the presence of hydrogen sulfite (sewer gas) at the DN Filters which indicates operational or treatment process deficiencies; this is possibly related to incorrect methanol dosing;

3. January 2022 concentrations of TSS in DN Filter influent ranged between 31 and 292 mg/L. This indicates that the solids settling processes are failing. These high concentrations are causing intermittent and chronic clogging of the DN Filter system;

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4. Significant algal and vegetation have grown on the weirs of the secondary clarifiers. This has caused the short circuiting of the system and likely negatively impacts TSS concentration in the Plant's treatment train wastewater;

5. Significant amounts of solids have accumulated in the secondary clarifiers. This accumulation is decreasing the quality of the Plant's final effluent.

6. Significant amounts of vegetation (*e.g.*, reed grasses) have grown and are established in the secondary clarifiers. This is preventing the proper functioning of these clarifiers; and

7. Significant amounts of vegetation (*e.g.*, reed grasses) have grown and are established in the biological reactors. This is preventing the proper functioning of these reactors.

The decline in the proper maintenance and operation of the Plant risks catastrophic failures at the Plant that may result in environmental harm as well as adverse public health and comfort effects.

Pursuant to § 9-252(a) of the Environment Article, to prevent or correct pollution of the waters of the State and to ensure the Back River WWTP is operated in a manner that will protect public health and comfort, effective immediately, Secretary Grumbles hereby ORDERS Baltimore City to operate the Back River WWTP in compliance with all terms of the Back River Discharge Permit, including, but not limited to, providing an adequate number of operating staff that are qualified to carry out the operations, maintenance, and testing functions required to ensure compliance with the Back River WWTP Permit, and to cease all unpermitted discharges from the Back River WWTP. Baltimore City shall make all necessary and appropriate alterations to the Back River WWTP and its operations in order to comply with this Order.

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Within 48 hours of service of this Order, Baltimore City will submit to the Department sufficient documentary evidence that the Back River WWTP is operating in compliance with all terms of the Back River Discharge Permit and that it has ceased all unpermitted discharges.

In accordance with § 9-263 of the Environment Article, if Baltimore City is dissatisfied with this Order, it may commence, within 10 days after the service of this Order, an action in circuit court to vacate or set aside the Order on the grounds that the Order is unlawful or unreasonable, or that the Order is not necessary for the for the protection of the public health or comfort.

## STATE OF MARYLAND,

## DEPARTMENT OF THE ENVIRONMENT

Date March 24, 2022

Ben Grumbles, Secretary