

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

SURFACE WATER DISCHARGES

DIVISION OF WATER
RICHARDSON & ROBBINS BUILDING
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

PHONE (302) 739-9946

NOTICE OF VIOLATION W-20-SWD-01

CERTIFIED MAIL 7014 0150 0000 7843 4956 RETURN RECIPT REQUESTED

February 5, 2020

Lewes Board of Public Works Darrin Gordon 107 Franklin Avenue Lewes, DE 19958

Dear Mr. Gordon:

Pursuant to the authority in 7 <u>Del. C.</u>, § 6019, this **Notice of Violation (NOV)** is being issued to the Lewes Board of Public Works for violating §7201 of the State of Delaware *Regulations Governing the Control of Water Pollution* (Regulations) and National Pollutant Discharge Elimination System (NPDES) Permit No. DE 0021512 as documented in this NOV.

BACKGROUND

The Lewes Board of Public Works (BPW) was issued the current NPDES Permit on November 1, 2018 for the Howard Seymour Water Reclamation Facility (HSWRF) located at 106 American Legion Road, Lewes, Delaware authorizing the discharge of effluent through Outfall 001 which discharges to the Lewes-Rehoboth Canal. The HSWRF is contractually operated by Tidewater Utilities, Inc.

On December 19th, 2019, representatives from Tidewater contacted the Department of Natural Resources and Environmental Control, Surface Water Discharges Section (SWDS) because of a potential treatment issue at the facility. At the time, there were no violations but the treatment plant was unable to treat the incoming wastewater through the membranes and the operators were investigating and troubleshooting the situation. Representatives from Tidewater contacted the SWDS again after attempts to restart flow through the membranes had failed and it became clear that a bypass of the system would be required later in the evening once all available storage

capacity at the facility was exhausted. At approximately 6:30pm, the facility began bypassing by allowing flow to settle in the equalization (EQ) tank, as well as, another circular tank (former clarifier) before injecting effluent with hydrogen peroxide for disinfection and then pumping out onto the ground surface on the south side of the facility. At the time, flow was being discharged onto the ground where it flowed into a grassy area, then to the wetlands on the south side of the facility, eventually reaching the Lewes-Rehoboth Canal.

On Friday, December 20th, 2019, DNREC representatives from the SWDS and the Watershed Assessment Section were on site to observe the bypass activities and gather information from the facility. As a result of coordination with the Watershed Assessment Section, the facility relocated the bypass pipe to an area west of the treatment facility to increase retention time of partially treated effluent in the wetlands thereby minimizing discharge into the Lewes-Rehoboth Canal. The facility continued to bypass at an approximate rate of 300-400 gallons per minute (gpm) throughout the weekend while cleaning and refurbishment attempts of the membrane filters continued. On Monday, December 23rd, the BPW was able to find a train of new membranes located in Canada from the manufacturer and began the procurement process. The facility was ordered to conduct enhanced monitoring of the bypass flow, as well as several areas in the wetlands and in the Lewes-Rehoboth Canal.

On Thursday, December 26th, 2019, DNREC representatives from the SWDS were on site to meet with Tidewater and Lewes BPW personnel for an update and to observe the bypass and other activities at the plant. During this visit, multiple samples were taken from the canal, in the wetlands/marsh area, and at the bypass location by DNREC personnel. At the time of the visit, the bypass was not actively discharging as the facility had some capacity to hold flow while doing some preventative maintenance and cleaning of the headworks building in preparation for the new membranes. The bypass was offline from approximately 7:00am to approximately 2:00pm. The new membranes arrived at the HSWRF on Friday, December 27th, 2019 and Tidewater personnel with the help of some contractors began installation of the new set of membranes. At approximately 6:00pm on Saturday, December 28th, 2019 the train of new membranes was put online and the bypass was discontinued. On Wednesday, January 1st, 2020, the new membranes experienced high pressure issues and Tidewater had to bypass again. The bypass was active for approximately two (2) hours from 9:45pm until 11:45pm. On Friday, January 3rd, 2020, a train of refurbished membranes was re-installed and put back online which gave the facility two trains of membranes for treatment. With two trains online, the facility was able to process approximately 700 gpm, which enabled the facility to resume normal treatment rates and provide for operational flexibility. Additionally, another train of new membranes was ordered on Friday, January 3rd and arrived on site on Thursday, January 9th, 2020. Tidewater continued the enhanced daily sampling protocol until Friday, January 10th when the SWDS approved a reduction in monitoring from daily to weekly. Currently, weekly monitoring associated with the bypass continues until such time SWDS approves a further reduction in sampling.

VIOLATIONS

Discharge of partially/undertreated wastewater to the ground:

Law:

7 Del. C. § 6003(a)(2) states:

"No person shall, without first having obtained a permit from the Secretary, undertake any activity in a way which may cause or contribute to discharge of a pollutant into any surface or ground water."

AND

Section 3.2.3 of the State of Delaware's *Regulations Governing the Control of Water Pollution* states:

"No person shall discharge any pollutant from a point source into surface or ground water, directly or indirectly, except as authorized pursuant to a permit granted under these regulations, unless such discharge is specifically exempted from such permit regulations."

AND

Section 3.2.4 of the State of Delaware's Regulations Governing the Control of Water Pollution states:

"No person shall discharge liquid waste from an existing septic tank or other system where such liquid waste flows to the surface of the ground or into surface water."

Fact:

The HSWRF owned by the Lewes BPW discharged 3,920,300 gallons of partially treated/undertreated wastewater to the ground and surface waters from December 19th through December 28th, 2019 then again for a two-hour period on Wednesday, January 1st, 2020 due to a failure of the treatment membranes.

Facility Operation and Maintenance:

Law:

Part II.A.3 "Facilities Operation" of the Delaware NPDES Permit No. DE 0021512 states: "The Permittee shall at all times maintain in good working order and operate as efficiently as possible all collection and treatment facilities and systems (and related appurtenances) installed or used by the Permittee for water pollution control and

abatement to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective performance (based upon the facilities' design), adequate funding, effective management, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, when necessary, to achieve compliance with the terms and conditions of this permit."

Fact:

Equipment failure at the HSWRF resulted in the need for a system bypass and the unauthorized discharge of partially treated wastewater effluent from the facility.

Conclusion:

The Facility is authorized by NPDES Permit No. DE 0021512 to discharge treated wastewater through Outfall 001 to the Lewes-Rehoboth Canal. Due to a major failure of the treatment membranes the facility discharged 3,920,300 gallons of partially treated/undertreated wastewater to the ground and surface waters from December 19th through December 28th, 2019 (10 days) and on January 1st, 2020 in violation of 7 <u>Del. C.</u> Chapter 60, the Regulations and NPDES Permit No. DE 0021512.

ACTIONS REQUIRED

Pursuant to 7 Del. C. § 6019, the Department is pursuing voluntary compliance by way of this notice. Lewes Board of Public Works may correct the violations documented herein and come into compliance with 7 Del. C. § 6003, Del. Admin C. § 7201, and NPDES Permit DE 0021512 by taking the following actions:

- 1) Within thirty (30) days of receipt of this NOV, Lewes Board of Public Works shall submit to the Department a comprehensive investigation report detailing the initial cause(s) of the failure, what was done during the bypass, and the current status of the facility operations.
- 2) Within thirty (30) days of receipt of this NOV, Lewes Board of Public Works shall submit to the Department an emergency contingency plan, detailing what the facility will do to prevent this type of occurrence in the future.
- 3) Within thirty (30) days of receipt of this NOV, Lewes Board of Public Works shall submit a proposal to the Department for assessing if any impacts to the wetlands have occurred as a result of the bypass events.

NOTICE

This letter shall serve as official Notice of the above violations of 7 Del. C. Chapter 60, 7 Del. Admin. C. §7201 State of Delaware *Regulations Governing the Control of Water Pollution*, and NPDES Permit No. DE 0021512.

The Department, to the extent necessary, reserves the right to take enforcement regarding these and other violations by the Lewes BPW/HSWRF, including but not limited to one or more of the following: an action under 7 Del. C. § 6005(b)(1) seeking penalties for past violations, an action under 7 Del. C. § 6005(b)(2) seeking penalties for continuing violations, an action in the Court of Chancery pursuant to 7 Del. C. § 6005(b)(2) seeking a temporary restraining order or an injunction, a Cease and Desist Order pursuant to 7 Del. C. § 6018, and the imposition of civil penalties and recovery of the Department's costs and attorney's fees pursuant to 7 Del. C. §§ 6005(b)(3) & (c)(1). Nothing in this NOV shall be deemed to estop, or in any way preclude, any additional enforcement action for these or any other violations, including administrative and civil penalties for each day of violation, or an action for the recovery of Department costs expended in abating these violations.

Should you have any questions regarding this letter, please feel free to contact me at (302) 739-9946. This Notice of Violation will be posted on the Department website at http://apps.dnrec.state.de.us/Violations/ViolationsSearch.aspx.

Sincerely,

Bryan A. Ashby Program Manager

Surface Water Discharges Section