

June 28, 2024

**VIA Email**

Sarah Elias  
NPDES Compliance Manager, Compliance and Enforcement Unit  
Tennessee Department of Environment and Conservation  
Division of Water Resources  
Davy Crockett Tower, Ninth Floor  
500 James Robertson Pkwy, Nashville, TN 37243

**Re: City of Memphis  
M.C. Stiles Wastewater Treatment Facility/TN0020711  
Response to Notice of Alleged Violation Dated May 28, 2024**

Dear Ms. Elias:

The City of Memphis received the above-referenced Notice of Violation (NOV) dated May 28, 2024, from the Tennessee Department of Environment and Conservation (TDEC) via email. The NOV requested a written explanation for the alleged violations, including the cause and the corrective action to avoid future violations.

As detailed in our March 13, 2024 DMR transmittal, the permit excursions in February 2024 were a continuation of the upset event that began in January 2024. We believe that an activated sludge inhibition occurred that limited the ability of the plant to handle maximum loading conditions that it has readily handled in the past. The data indicated an increase in metals (i.e., nickel and/or zinc) entering the treatment plant over the previous weeks may have caused (in whole or in part) the exceedances. The following activities were performed and/or are on-going to better identify the potential causes of the upset:

- The Industrial Monitoring Program contacted pertinent industrial users to inquire if there had been any changes in their process that would impact their discharge.
- Samples of the Stiles Plant influent and activated sludge were sent to EBS Biowizard to perform a general inhibition assessment. The report indicated elevated long-chain fatty acids and zinc in the return activated sludge.
- The Stiles Plant undertook a surveillance program including influent, the major sewer interceptors, and the lagoon return streams collecting samples weekly for metals and/or fats, oil, and grease analysis. This surveillance program is continuing.
- Industrial Monitoring Program data from both self-monitoring and control authority samples were reviewed. The City is in the process of reviewing the sampling frequency of self-monitoring metals data to determine if an increase in frequency is warranted for select industries.

As the alleged exceedances during January 2024 and February 2024 of technology-based effluent limits for BOD and percent removal were due to factors beyond the reasonable control of the City, the exceedances of these limits are subject to the upset affirmative defense as set forth in the Stiles NPDES permit. Please note that the City does not waive affirmative defenses it has pertaining to the reported exceedances.

Furthermore, it has been more than twelve years since the Stiles NPDES permit was issued. The City has submitted information justifying, among other things, higher BOD limits, and TDEC has indicated its intent to remove daily maximum BOD limits. Had the City's permit been appropriately reissued, as required by law, most of the exceedances would not have. In addition, two of the listed alleged violations pertain to having 81% removal and 83% removal of BOD in January and February 2024, respectively. Those were not violations. The existing M.C. Stiles NPDES permit was issued with a 65% BOD removal requirement.

If you have any questions or need further information, please contact me.

Sincerely,



Derek McElroy, P.E.  
Manager, M.C. Stiles Wastewater Treatment Facility

cc: April Grippo (TDEC-Nashville)  
Kyle Mabry (TDEC-Memphis)  
Brandon Stuart (TDEC-Memphis)  
Brittany N. Gibson (TDEC-Memphis)  
Sarah Elias (TDEC-Memphis)  
Kathryn Schulte (TDEC-Memphis)  
Robert O'Dette (TDEC-Nashville)  
Scott Morgan (City of Memphis)  
Robert Knecht (City of Memphis)  
Don Hudgins (City of Memphis)