

April 29, 2022

Ms. Jessica Murphy Division of Water Resources William R. Snodgrass – Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, TN 37243-1102

Dear Ms. Murphy:

LEE HARRIS MAYOR

Shelby County has received the Notice of Violation from the Department based on routine compliance status review of the Discharge Monitoring Reports for the Shelby County – Chapel Hill S.D. STP. This plant is further identified by the permit issued for it and shown in the NOV as NPDES Tracking Number: TN0026361. This review was for the period of November 2021 through February 2022 and the Notice of Violation was dated April 19, 2022.

The County took over operation of the treatment plant from the City of Memphis on November 1, 2022 as part of an asset transfer agreement. Prior to the transfer, each authority performed upgrades to their respective assets. The work on the Chapel Hill plant was designed and constructed through a City of Memphis construction contract. Following the improvements, the operator found that large rain events would "wash" over both the newly replaced parallel trough and effluent trough in the final clarifier. As a corrective measure, the elevation of the skimmer was raised prior to transfer of the assets to Shelby County.

When the County took over plant operation, a foamy material was observed collecting behind the raised skimmer during lower flow conditions, which allowed paths for unskimmed flow to move pass the skimmer. It was determined that the skimmer elevation was needed to be variable based on flowrates for it to function properly. An initial corrective measure was completed by the Shelby County treatment plant operator on February 23, 2022 and operational modifications have been made since. An additional adjustment was made April 25, 2022 and the County is waiting to see if results will further improve.

It was noted that the facility had exceedances for effluent limits for cBOD and TSS. These exceedances are a result of effluent with concentrated levels of these pollutants entering the clarifier prematurely. cBOD and TSS tests were performed by an independent lab since the compliance status review on 2/25, 3/24, 3/31 and 4/22 with results of 9, 12, 12, and 10 mg/L respectively for cBOD and 9, 11, 8, and 11 mg/L for TSS.

We are confident that the problem has been identified and being addressed. Thank you for your willingness to work with Shelby County in returning this location to full compliance with these important environmental standards. Should you have any further questions or need additional information, please do not hesitate to call me at (901) 222-7746, or contact me by email at chris.masin@shelbycountytn.gov.

Sincerely,

Chris Masin, P.E. Senior Engineer

Chas Man

Shelby County Government

cc: Cliff Norville, Director of Public Works

Darren Sanders, P.E, Administrator Megan Smith, Assistant County Attorney

Eddie Bouzeid, TDEC MFO