STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
COOKEVILLE ENVIRONMENTAL FIELD OFFICE
1221 South Willow Avenue
Cookeville, Tennessee 38506
Phone 931-520-6688 Statewide 1-888-891-8332 Fax 931-432-6952

August 22, 2022

Certified Mail Return Receipt Requested
91 7108 2133 3939 2427 3111

The Honorable Luke Collins, Mayor
email: celinamayor@twlakes.net
City of Celina
P.O. Box 449
Celina, TN 38551

RE: **Notice of Violation and Compliance Review Meeting**
Compliance Evaluation Inspection (CEI);
City of Celina Sewer Treatment System, NPDES # TN0063886

Dear Mayor Collins:

The Division of Water Resources staff wishes to thank Mr. Ode Moore (Operator) for his generous time and courtesy during the recent Compliance Evaluation Inspection (CEI) on July 28, 2022, at the City of Celina's Wastewater Treatment Facility.

During this CEI, state inspector Mr. Oakley Hall discussed the following subject matter specifically – Solid's level in the first of three ponds.

Permit

The permit was briefly reviewed prior to the site inspection. The permit became effective May 1, 2020. It will expire on April 30, 2025.

Facility Site Review, Operations & Maintenance

The site was reviewed, starting at the current construction area where the influent will pass through the new headworks solids removal systems. New concrete channels were observed along with concrete pedestal construction for the new inlet piping. Because of the concrete support construction, the first pond had to be drained and bypassed. The existing bypass valve for the system (first pond) was slowly worked so it could be opened without damage to the valve. The valve was reportedly able to fully function. Additional pumps were used to further drop the level of this first pond. The pond is reported to be 7 feet deep while the final two ponds are reportedly 5 feet in depth. The removal of solids in the ponds will likely help to improve some pH issues that are seasonally occurring at the facility. Solids removal will be needed throughout the service life of this sewer treatment works. Solids removal has been discussed in previous inspections along with preparation for the associated cost. The operator commented that the bypass of the first pond did result in effluent violations. The effluent was cloudy (possibly algae) during the site review.

NPDES Permit, Notice of Violation (NOV)

Celina STP NPDES Permit TN0063886

- 2.1.4. Proper Operation and Maintenance, Pages 12 and 13

a. The permittee shall at all times properly operate and maintain all facilities and systems (and related appurtenances) for collection and treatment which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

NOV Justification:

The observation of the solids level in the first pond by the state inspector was concerning and is the focus of this inspection letter. Solid's depth is at a point to where the removal is going to be especially difficult. Due to the observed conditions, a file review of previous inspections was implemented. It was requested in numerous inspections dating back as far as September 15, 2009, to investigate solids levels in the ponds. A plan for removal was then to be developed for solids removal. Until this first pond was recently drained, an investigation of the solids level has not been provided. This demonstrates neglect by the City of Celina for the operation of the wastewater treatment system. Fiber and plastic hygiene products are littered throughout the solids within the first pond. This is likely due to the historically inoperable headworks system and allowing unsupervised septic pumpers to discharge directly into the first pond.

Required Actions

- ✓ Determine the sludge depth in all three ponds and develop a zone map illustrating the levels. Estimate the solids volume in each pond to be removed.
- ✓ Starting with the first pond, provide a timely plan for the removal of the solids from the three ponds.
- ✓ Attend the Compliance Review Meeting at the Cookeville Environmental Field Office (EFO).

Compliance Review Meeting (CRM) on Tuesday, September 27, 2022, at 10:00 AM CST

The Division of Water Resources wishes to arrange the aforementioned Compliance Review Meeting (CRM). To reiterate, the meeting is currently set for Tuesday, September 27, 2022, at 10:00 AM. The location will be the 2nd floor Conference room in the Cookeville EFO. Please invite your current contract operators and if you wish, your current consulting engineer. Please respond to this notice by September 1, 2022, notifying Cookeville EFO staff that the current date and time for the CRM is acceptable.

The Division of Water Resources would again like to thank you, and Mr. Ode Moore for your time and courtesy during this inspection process.

If you have any questions, you may contact Oakley Hall, TDEC Environmental Consultant by way of telephone at (931) 520-3582 or toll free at 1-(888)-891-8332. You may also use electronic mail at: Oakley.Hall@tn.gov.

Sincerely,

Mr. Brad Ulmer
Environmental Field Office Manager
Division of Water Resources
Cookeville Environmental Field Office

Enclosure: CEI Site Photographs by W. Oakley Hall

cc: EFO-CK, Clay County DWR Electronic Files: TN0063886
Ms. Jessica Murphy, Compliance and Enforcement Section, Nashville Central Office.
Mr. Robert Becker, TDEC Regional Director of External Affairs
Mr. Lucas Hix, Environmental Scientist, Cookeville Environmental Field Office

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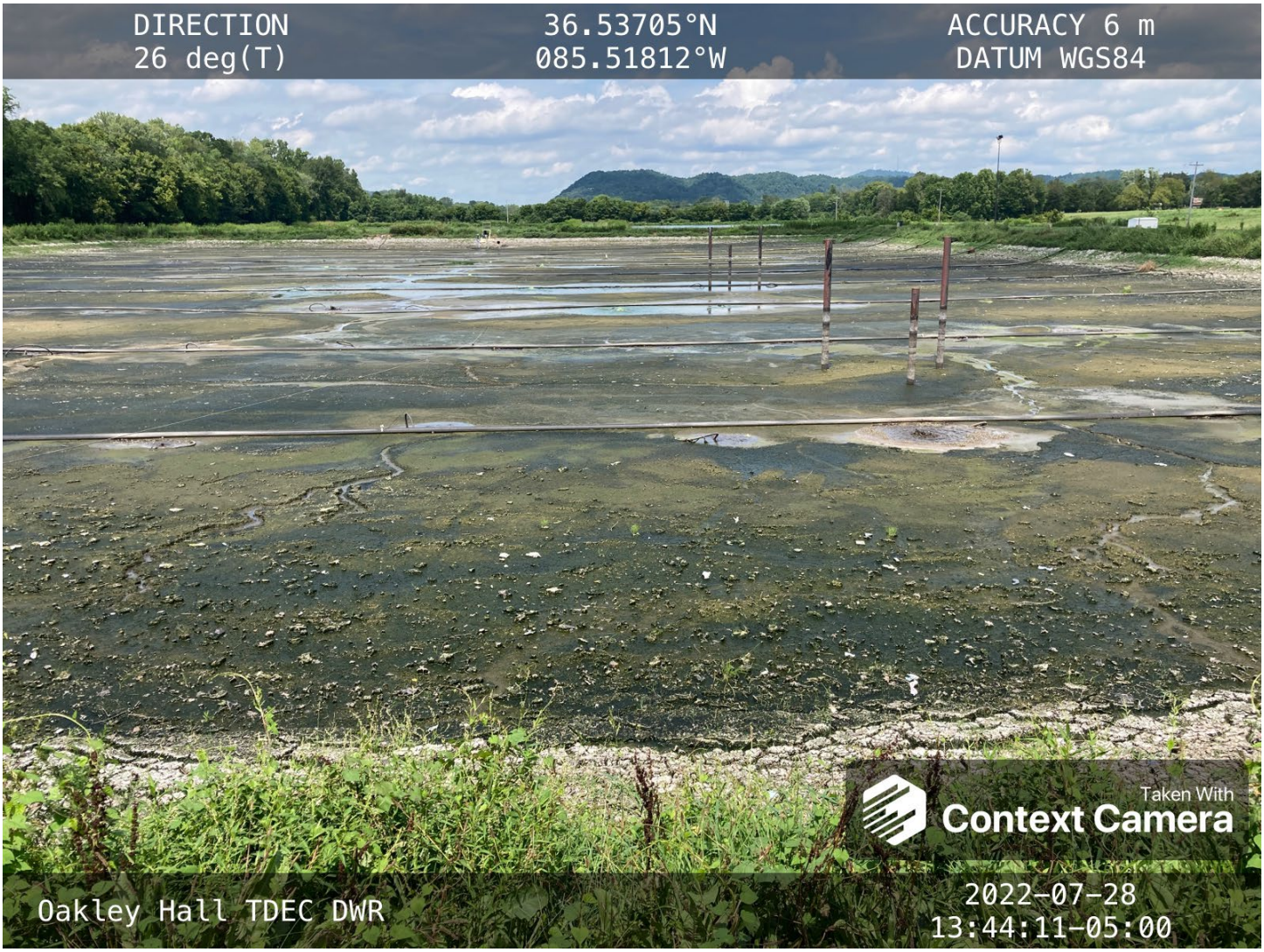
The City of Celina Wastewater Treatment Plant (NPDES # TN0063886), July 28, 2022; Clay County

The first in the series of three ponds is pictured. It was drained in order to place the concrete pedestal for the new influent pipe support. Heavy solids were visible in this first pond. It was heavily laden with fibers from hygiene products.



Heavy solids are distributed across the pond. Since the headworks were never properly operational and repairs unsuccessful, hygiene products of fiber and plastic have not been properly removed. The sludge in this pond has not been removed under a maintenance schedule. Solids from unscreened septic hauler's waste has contributed to the problem.

The sludge buildup in the ponds has likely affected the efficiency of the aeration unit(s).

The third iteration in headworks is being constructed for this sewer treatment system.

Heavy thick solids are visible in the first pond as the pedestal for the new inlet pipe is constructed. Vegetation is growing on the surface of the sludge. Talking to the Operator, a thin layer of clay may have been used for the lining of the pond. The operator was asked to immediately record photos of the pond in order to assess the removal of these observed solids.

The concrete form for the new headworks is pictured. Some piping issues have come to light with the as built plans. The piping issues had to be discussed with engineering personnel.

The effluent discharge is pictured. This is with the first pond bypassed. The Operator stated that he had a couple of violations while removing the first pond from service. The Operator and City will need to develop a plan for the removal of the sludge solids from at least the first pond. It will need to be done next year after the new headworks system is on-line.

The first pond is pictured. Note the solids delta with vegetation in the forefront of the picture. This material should have never been allowed to build up in the pond. This is due to a lack of proper maintenance by periodically removing the solids.

The construction area of the new headworks is pictured. Note the heavy solids in the first treatment pond.

Two pumps are being used to assist draining the first pond as it is bypassed.

The second pond is pictured. The solids level in this pond will need to be determined.

The second of two pumps is being used to assist in draining the first pond as it is bypassed. This pond was bypassed with an existing bypass line. The valve had to be gently worked to get it to move and open. The valves need to be worked.

The third and final pond is pictured. Vegetation is high around the periphery of the pond. This may be in this condition to protect wild bird nests. The discharge from this pond is treated with bleach before discharged to the Cumberland River. The Operator stated that while the first pond is filling, (when the headworks are complete) he is going to drain the bleach contact chamber and perform required maintenance. This system has an approximate 30-day detention time.