

From: [Karina Bynum](#)
To: [Elizabeth Rorie](#)
Cc: [Ann Morbitt](#); [Ariel Wessel-Fuss](#)
Subject: Fw: 2022 Facility Monitoring Exceedance Letters
Date: Thursday, January 12, 2023 3:29:04 PM
Attachments: [image001.png](#)
[Outlook-3lwtom4.png](#)

Please upload to TDOT MS4 waterlog and send an acknowledgement out.

Thank you,

Karina Bynum, Ph.D., P. E. | Integrated Water Resources Engineer
Building Communities and Restoring Watershed Health

Division of Water Resources
1221 South Willow Avenue, Cookeville, TN 38506
karina.bynum@tn.gov | (931) 217-6638



We value your feedback! Please complete our [customer satisfaction survey](#).

From: Klint Rommel <Klint.Rommel@tn.gov>
Sent: Thursday, January 12, 2023 2:28 PM
To: Karina Bynum <Karina.Bynum@tn.gov>
Cc: Carma H. Smith <Carma.H.Smith@tn.gov>
Subject: 2022 Facility Monitoring Exceedance Letters

Good afternoon Karina!

Attached you will find the Exceedance Letters for facilities that have surpassed the threshold limits in one or more categories established in the State-Wide Facility Storm Water Monitoring Plan (pH, oil and grease, Chemical Oxygen Demand, Total Suspended Solids, and Chloride).

Within the letters are recommendations the ECO will administer to address any exceedance categories.

Please let me know if you have any questions or would like additional information.

Thank you and have a great rest of the week!



Klint Rommel | Transportation Manager I
Environmental Division, Facility Compliance Section Manager
James K. Polk Building, 9th Floor
505 Deaderick St., Nashville, TN 37243
p. 615-253-2419 c. 615-478-5169



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

**ENVIRONMENTAL DIVISION
ENVIRONMENTAL COMPLIANCE OFFICE**
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BUTCH ELELY
DEPUTY GOVERNOR &
COMMISSIONER OF TRANSPORTATION

BILL LEE
GOVERNOR

January 11, 2023

Ms. Karina Bynum, PhD, PE
Tennessee Department of Environment and Conservation
Division of Water Resources
1221 South Willow Avenue
Cookeville, Tennessee 38506

**Re: Tennessee Department of Transportation Facility Monitoring Results
Cookeville District Garage**

Dear Ms. Bynum:

Per Section 2.1.6.5 of the Tennessee Department of Transportation (TDOT) Municipal Separate Storm Sewer System Permit TNS077585, a State-Wide Facility Storm Water Monitoring Plan (SFMP) has been developed and implemented in each permit year to sample storm water runoff from 19 representative TDOT facilities, one of which was the Cookeville District Garage. The storm water samples collected from the Cookeville District Garage are sent to a certified laboratory and tested for pH, as well as the potential pollutants oil and grease, chemical oxygen demand (COD), total suspended solids (TSS), and chloride. As a courtesy, the Tennessee Department of Environment and Conservation is notified when sampling results are greater than the pollutant action level specified in the SFMP.

On April 7, 2022, EnSafe Inc., consultants to the TDOT Environmental Compliance Office (ECO), conducted analytical monitoring of the storm water discharge from the Cookeville District Garage in Putnam County, Tennessee, according to the methods and requirements of the SFMP. The final laboratory analytical report from this sampling event was received on April 21, 2022. Samples were acquired from two principal outfalls, Outfall 71-D-01 and 71-D-02. Results from the sample acquired from Outfall 71-D-01 included a value for COD of 152 milligrams per liter (mg/L), which exceeds the action level concentration of 120 mg/L for COD specified in the SFMP. The sample also yielded a measured TSS concentration of 363 mg/L, which exceeds the action level concentration of 150 mg/L. Results from the sample acquired from Outfall 71-D-02 included a value for COD of 147 mg/L and a value for chloride of 3,740 mg/L, which exceeds the action level of 1,200 mg/L. There were thick deposits of cedar tree detritus observed on the ground at

Outfall 71-D-01, and this was the likely source of the high COD in the storm water sample collected there. The source of the high TSS at Outfall 71-D-01 was unclear, but there was no sediment staining or deposits observed near the outfall or beyond it. During the install of the samplers, field personnel observed salt-staining on the pavement in front of the salt shed. Salt had recently been delivered, loaded into the shed, and swept up as much as possible. No other exposed deposits of salt were observed. The salt-staining was the likely source of the high chloride levels at Outfall 71-D-02, but there may have been some dissolved salt deposited in the riprapped ditch line, although there was none visible. Due to difficulty of installing the inground sampler in the riprapped ditch, the sample was collected by hand at the beginning of the storm event from the upper end of the ditch. It is possible that the chloride levels would have become more diluted by the time the storm water discharged at the bottom of the ditch line. The source of the elevated COD at Outfall 71-D-02 is unclear, but standing water in the riprap ditch line and decaying organic matter is suspected. Site personnel at the Cookeville District Garage should continue to handle and store salt and de-icing liquid per the TDOT standard environmental procedures in order to minimize the exposure of storm water to de-icing materials. Please see the attached photo log. The Storm Water Pollution Prevention Plan for this facility will be revised to incorporate the lab results.

Please distribute this letter within your department to the appropriate personnel. If you have any questions or concerns, then please email me at Klint.Rommel@tn.gov.

Sincerely,

**Klint
Rommel**

Digitally signed by Klint
Rommel
Date: 2023.01.12 12:38:36
-06'00'

Klint Rommel
Facility Compliance Section Manager
TDOT Environmental Division

Attachments:

Photographic Log



Cookeville District Garage

Region 2
Outfall 71-D-01

Photograph 1

Note: View upslope of Outfall 71-D-01. The collected storm water sample exceeded the action levels for total suspended solids and chemical oxygen demand. No exposed soil was observed.



Photograph 2

Note: View looking offsite from Outfall 71-D-01. There was a thick layer of cedar tree needles on the ground around the sampler installation. Decaying vegetation can cause chemical oxygen demand levels to rise. No sediment stains or deposits were observed at the Outfall or beyond.



**Cookeville District
Garage**

**Region 2
Outfall 71-D-02**

Photograph 3

Note: Salt is being kept under cover and back from the entrance of the shed. Some salt-staining had been observed in front of the shed before the rain event occurred and was the likely cause of the elevated chloride levels in the storm water that discharges at Outfall 71-D-02.



Photograph 4

Note: View of the riprap-lined ditch leading to Outfall 71-D-02. Due to difficulties getting a sampler installed in the riprap, a storm water sample was collected by hand at the beginning of the rain event from approximately this location. The sample tested high for chloride, but levels may have been reduced by dilution once the storm water made it to the discharge point.