

STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF WATER RESOURCES

Davy Crockett Tower, 9th Floor 500 James Robertson Parkway Nashville, Tennessee 37243

June 25, 2024

Mrs. Crystal Tingle
Resource Manager, Dale Hollow Lake
e-copy: crystal.d.tingle@usace.army.mil
Dale Hollow Lake-Willow Grove Campground
540 Dale Hollow Dam Rd
Dale Hollow Lake
Celina, TN 38551

Subject: **Draft of NPDES Permit No. TN0021393**

U.S. Army Corps of Engineers (USACE) Allons, Clay County, Tennessee

Dear Mrs. Tingle:

Enclosed please find a draft copy of the NPDES Permit No. TN0021393, which the Division of Water Resources proposes to issue. This draft copy is furnished to you solely for your review of its provisions. No wastewater discharges are authorized by this draft permit. The issuance of this permit is contingent upon your meeting all of the requirements of the Tennessee Water Quality Control Act and the Rules and Regulations of the Tennessee Water Quality, Oil and Gas Board.

Also enclosed is a copy of the public notice that announces our intent to issue this permit. The notice affords the public an opportunity to review the draft permit and, if necessary, request a public hearing on this issuance process. If you disagree with the provisions and requirements contained in the draft permit, you have thirty (30) days from the date of this correspondence to notify the Division of your objections. If your objections cannot be resolved, you may appeal this permit upon issuance. This appeal should be filed in accordance with Section 69-3-110 of the Tennessee Code Annotated.

If you have questions, please contact the Cookeville EFO at 1-888-891-TDEC; or, at this office, please contact Ms. Sarah Terpstra at (615) 290-3216 or by E-mail at *Sarah.Terpstra@tn.gov*.

Sincerely,

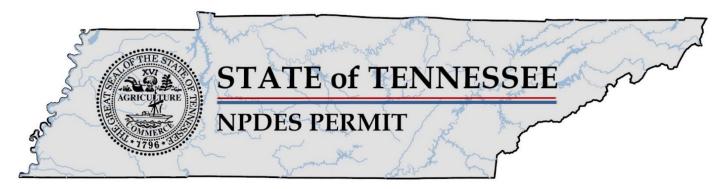
Manager, Water-Based Systems

Enclosure

cc: Permit File

Cookeville Environmental Field Office (EFO)

Ms. Sondra Carmen, Natural Resource Management Specialist, U. S. A. C. E., <u>sondra.f.carmen@usace.army.mil</u> Mr. Matt Leftwich, Facility Manager, Willow Grove Campground, <u>matthew.d.leftwich@usace.army.mil</u>



Authorization to Discharge Under the National Pollutant Discharge Elimination System (NPDES) Permit Number TN0021393

Issued by

Department of Environment and Conservation
Division of Water Resources
Davy Crockett Tower, 9th Floor
500 James Robertson Parkway
Nashville, Tennessee 37243

Under authority of the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.) and the delegation of authority from the United States Environmental Protection Agency under the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (33 U.S.C. 1251, et seq.)

Permittee: U.S. Army Corps of Engineers (USACE)

Dale Hollow Lake - Lillydale Recreation Area

is authorized to discharge: treated domestic wastewater from Outfall 001 and 002

from a facility located at: 5199 Lillydale Road, Allons, Clay County, Tennessee

to receiving waters named: Obey River at miles 31.4 (Outfall 001) and 31.9 (Outfall 002)

in accordance with effluent limitations, monitoring requirements and other conditions set

forth herein.

This permit shall become effective on:

This permit shall expire on:

Issuance date:

DRAFT

for April Grippo Interim Director

CN-0759 RDA 2366

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SMT TN0021393.DOC



PART 1

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1.1. NUMERIC AND NARRATIVE EFFLUENT LIMITATIONS

1.1.1. Numeric Limitations

U.S. Army Corps of Engineers (USACE) is authorized to discharge treated domestic wastewater from Outfall 001 and 002, which enter the Obey River at miles 31.4 and 31.9, respectively. Outfall 002 is closed and plugged, but the permittee desires to keep it in the permit in the event it discharges. Discharge from Outfall 001 and Outfall 002 (if applicable) shall be limited and monitored by the permittee as specified below:

	Outfalls 001 and 002						
Code	Parameter	Qualifier	Value	Unit	Sample Type	Frequency	Statistical Base
00300	Oxygen, dissolved (DO)	>=	1.0	mg/L	Grab	Two Per Week	Daily Minimum
20240 000 5 4 20 6		<=	45	mg/L	Grab	Monthly	Daily Maximum
00310	00310 BOD, 5-day, 20 C		30	mg/L	Grab	Monthly	Monthly Average
00400	00400		6.5	SU	Grab	Two Per Week	Daily Minimum
00400	рн	<=	9.0	SU	Grab	Two Per Week	Daily Maximum
00530 Tota	Total Suspended Solids (TSS)	<=	45	mg/L	Grab	Monthly	Daily Maximum
		<=	30	mg/L	Grab	Monthly	Monthly Average
00545	Settleable Solids	<=	1.0	mL/L	Grab	Two Per Week	Daily Maximum
50050	Пом	Report	-	MGD	Instantaneous	Two Per Week	Daily Maximum
30030	FIOW	Report	-	MGD	Instantaneous	Two Per Week	Monthly Average
50060	Chlorine, total residual (TRC)	<=	2.0	mg/L	Grab	Two Per Week	Daily Maximum
E1040	E. coli	<=	410	#/100mL	Grab	Monthly	Daily Maximum
51040		<=	126	#/100mL	Grab	Monthly	Monthly Average

Outfall 001: Monitoring frequency will be 1/month minimum to observe if discharging. If discharge is ever observed, monitoring frequency will revert to frequency in the table above.

Outfall 002: Monitoring frequency will be 3 or 4 times during the period when the day use area is open and when the outfall line is intentionally plugged. If the line becomes physically capable of discharging, the monitoring frequency will be 1/month minimum to observe if discharging. If discharge to waters is ever observed, the monitoring frequency will revert to the frequency in the table above.

Both Outfalls: Monitoring is not required during the months when the park is closed and all water service to the outfalls is terminated (historically October through March but possibly October through April). Once reporting in NetDMR, DMRs will be available for the months March – October. If the park is closed, the permittee should report NODI code 9 for "monitoring not required".



Notes on both outfalls:

See Part 1.2.3 for test procedures.

The permittee may collect more samples than specified as the monitoring frequency in the permit. Samples may not be collected at intervals of less than 12 hours. For the purpose of determining the geometric mean, individual samples having an *E. coli* group concentration of less than 1 per 100 mL shall be considered as having a concentration of 1 per 100 mL. In addition, the concentration of the *E. coli* group in any individual sample shall not exceed a specified maximum amount.

Total residual chlorine (TRC) monitoring shall be applicable when chlorine, bromine, or any other oxidants are added. The acceptable methods for analysis of TRC are any methods specified in Title 40 CFR § 136 as amended, so long as the requirements of Tennessee Rule 0400-40-03-.05(8) are met. The method detection limit (MDL) for TRC shall not exceed 0.05 mg/l unless the permittee demonstrates that its MDL is higher. The permittee shall retain the documentation that justifies the MDL and have it available for review upon request. In cases where the permit limit is less that the MDL, the reporting of TRC at less than the MDL shall be interpreted to constitute compliance with the permit.

1.1.2. Narrative Conditions

Due Date	Narrative Requirement			
	The permittee shall sign up for electronic reporting of			
90 days from permit	Discharge Monitoring Reports using NetDMR within 90			
effective date	days of the permit effective date. See Section 1.3.1. of			
	the permit for more information.			
	The permittee shall submit sampling results for			
1 year from permit	ammonia and oil & grease no later than 1 year from the			
effective date	permit effective date. Results should be submitted to			
	Water.Permits@tn.gov.			

The authorized discharge shall not:

- Result in distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits, or sludge banks of such size or character as may be detrimental to fish and aquatic life.
- Result in total suspended solids, turbidity, or color in such amounts or character that will result in any objectionable appearance to the receiving water, considering the nature and location of the water.
- Contain pollutants in quantities that will be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life, or fish and aquatic life in the receiving stream.



Sludge or any other material removed by any treatment works must be disposed of in a manner that prevents its entrance into or pollution of any surface or subsurface waters.

1.2. MONITORING PROCEDURES

1.2.1. Representative Sampling

Samples and measurements taken in compliance with the monitoring requirements specified herein shall be representative of the volume and nature of the monitored discharge and shall be taken at the nearest accessible point after treatment and prior to mixing with uncontaminated stormwater runoff or the receiving stream. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed and calibrated by a qualified source at least once every 12 months¹, and maintained to ensure that the accuracy of the measurements is consistent with accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of plus or minus 10% from the true discharge rates throughout the range of expected discharge volumes.

1.2.2. Sampling Frequency

The permittee should report "No Discharge" on Discharge Monitoring Reports (DMRs) only if a permitted outfall does not discharge at any time during the monitoring period. If the outfall discharges effluent at any time during the monitoring period, the permittee must provide at least one sampling result from the effluent of that outfall.

If the required monitoring frequency is once per month or 1/month, the monitoring period is one month. If the discharge occurs during only one day in that period, the permittee must sample on that day and report the results of analyses accordingly.

1.2.3. Test Procedures

a) Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304 (h) of the Clean Water Act (the "Act"), as amended, under which such procedures may be required.

¹ The Division expects for permittees to meet EPA's guidance on proper operation and maintenance of flow measurement devices, as stated in the NPDES Compliance Inspection Manual.



- b) Unless otherwise noted in the permit, all pollutant parameters shall be determined using sufficiently sensitive methods in Title 40 CFR § 136, as amended, and promulgated pursuant to Section 304 (h) of the Act. The chosen methods must be sufficiently sensitive as required in state rule 0400-40-03-.05(8).
- c) If the ML for all methods available in accordance with 40 CFR § 136 are above the stated permit limit or applicable water quality criteria for that parameter, then the method with the lowest ML shall be used.
- d) Where the analytical results are below the method detection limit (MDL), the permittee shall report the actual laboratory MDL and ML values. See **Section 1.3.5.** for instructions regarding reporting less than detection.
- e) When there is no analytical method that has been approved under 40 CFR §136 or required under 40 CFR chapter I, subchapter N or O, and a specific method is not otherwise required by the Director, the permittee may use any suitable method but shall provide a description of the method. When selecting a suitable method, factors such as a method's precision, accuracy, or resolution must be considered when assessing the performance of the method.

1.2.4. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a) The date, exact place, and time of sampling or measurements;
- b) The individual(s) who performed the sampling or measurements;
- c) The date analyses were performed;
- d) The individual(s) who performed the analyses;
- e) The laboratory where the analyses were performed;
- f) The analytical techniques or methods used; and
- g) The results of such analyses.



1.2.5. Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

1.3. REPORTING

1.3.1. Monitoring Results

Monitoring results shall be recorded and submitted monthly using Monthly Operational Reports (MORs). The permittee shall continue using MORs and will also be required to submit Discharge Monitoring Reports (DMRs) using EPA's NetDMR website for electronic reporting. The permittee must sign up for NetDMR within 90 days of the permit effective date. See Section 1.6 for more information.

See below for more specific information for MOR and NetDMR reporting requirements:

MOR Reporting:

Monitoring results shall be recorded monthly and submitted monthly using Monthly Operational Reports (MORs). MORs shall be submitted by the 15th day of the month following data collection and shall be submitted by one of the following methods, presented below in order of preference:

- 1) Using MyTDEC Forms, if available.
- 2) Submitting both a signed and certified copy in pdf format, uploaded as an attachment to NetDMR, *and* a copy of the native format spreadsheet file emailed to DWRWW.Report@tn.gov and to the Cookeville EFO:

Chattanooga	TDEC.Chattanooga.EFO@tn.gov
Columbia	TDEC.Columbia.EFO@tn.gov
Cookeville	TDEC.Cookeville.EFO@tn.gov
Jackson	TDEC.Jackson@tn.gov
Johnson City	TDEC.JohnsonCity.EFO@tn.gov
Knoxville	TDEC.KEFO.DWRPermits@tn.gov
Memphis	TDEC.Memphis.EFO@tn.gov
Nashville	DWR.NEFO@tn.gov



3) Submitting signed and certified forms to the EFO at the following address:

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES
Cookeville Environmental Field Office
1221 South Willow Avenue
Cookeville, Tennessee 38506

Monthly Operation Reports must be signed and certified by a responsible corporate officer, as defined at 40 CFR 122.22, or a general partner or proprietor, or a principal municipal executive officer or ranking elected officer, or a duly authorized representative. Such authorization must be submitted in writing and must explain the duties and responsibilities of the authorized representative.

In the event that electronic reporting is unavailable, the permittee shall comply with reporting conditions provided in **Section 1.6**.

DMR Reporting using NetDMR:

The first DMR is due on the 15th of the month following permit effectiveness using EPA's NetDMR website. Subsequent DMRs shall be submitted through NetDMR no later than 15 days after the completion of the reporting period. In compliance with the Federal NPDES Electronic Reporting Rule, DMRs may not be submitted via email under any circumstances.

Discharge Monitoring Reports and any other information or report must be signed and certified by a responsible corporate officer as defined in Tennessee Rules, Chapter <u>0400-40-05-.07(2)(i)</u>, a general partner or proprietor, a principal municipal executive officer or ranking elected official, or his or her duly authorized representative. Such authorization must be submitted in writing and must explain the duties and responsibilities of the authorized representative.

In the event that electronic reporting is unavailable, the permittee shall comply with reporting conditions provided in **Section 1.6**.

For more information about NetDMR electronic reporting and how to sign up, visit the Division's website here.



1.3.2. Additional Monitoring by Permittee

If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR § 136, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the MOR or other reporting form specified by the Commissioner. Such increased frequency shall also be indicated.

1.3.3. Falsifying Results and/or Reports

Knowingly making any false statement on any report required by this permit or falsifying any result may result in the imposition of criminal penalties as provided for in Section 309 of the Federal Water Pollution Control Act, as amended, and in § 69-3-115 of the Tennessee Water Quality Control Act.

1.3.4. Upset and Bypass Reporting

1.3.4.1. Event Report Requirements

For the purpose of this section, "events" are known as instances of unpermitted discharges, upsets and bypasses. These events shall be reported through MyTDEC Forms according to the following conditions:

- a) Events that are not a threat to human health and the environment shall be reported using MyTDEC Forms no later than 15 days following the completion of the DMR or MOR reporting period.
- b) Events that could cause a threat to human health or the environment, as defined in **Section 2.3.1.a**., shall be reported using MyTDEC Forms no later than 5 days after becoming aware of the non-compliance.

In both cases, the event report must contain the following:

- i. Start date;
- ii. Estimated duration in hours;
- iii. Estimated volume in gallons;
- iv. Type of event;
- v. Type of structure;
- vi. Types of human health and environmental impacts;
- vii. Location (i.e. latitude and longitude);
- viii. The name of receiving water (if applicable);
- ix. Description of the cause; and
- x. The steps being taken to correct, reduce, eliminate, and prevent recurrence of the noncompliance;



In the event that MyTDEC Forms is not functioning, the permittee shall comply with reporting conditions provided in **Section 1.6**.

1.3.5. Reporting Less Than Detection; Reporting Significant Figures

For the purpose of evaluating compliance with the permit limits established herein, where certain limits are below the minimum level (ML) of 40 CFR § 136 approved analytical methods, compliance will be demonstrated when a non-detect result is obtained using the most sensitive method available. The results of non-detect analyses, in this case, shall be reported as Below Detection Limit (BDL) or "NODI = B" in NetDMR. Reporting examples are provided below.

Reporting Example 1: If the permit limit is 0.02 mg/L with a method detection limit (MDL) of 0.05 mg/L and no detection is shown, the permittee must report "BDL" or "NODI = B" on DMRs in NetDMR. Whenever "BDL" or "NODI = B" is reported, the actual MDL must be reported in the DMR comments or in an attachment submitted in NetDMR.

Reporting Example 2: If the permit limit is 0.02 mg/L with an MDL of 0.05 mg/L and detection is shown, the actual detected value must be reported.

Reporting Example 3: If the permit limit is 0.02 mg/L with an MDL of 0.01 mg/L and no detection is shown, the permittee must report less than MDL (<0.01 mg/L in this case).

For purposes of calculating monthly averages, zero may be assigned for values less than the MDL, the numeric value of the MDL may be assigned for values between the MDL and the ML. If the average value is less than the MDL, the permittee must report "less than {numeric value of the MDL}" and if the average value is less than the ML, the permittee must report "less than {numeric value of the ML}." If a value is equal to or greater than the ML, the permittee must report and use the actual value. The resulting average value must be compared to the compliance level, the ML, in assessing compliance.

Reported results are to correspond to the number of significant figures (decimal places) set forth in the permit conditions. The permittee shall round values, if allowed by the method of sample analysis, using a uniform rounding convention adopted by the permittee.



1.4. REOPENER CLAUSE

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 307(a)(2), and 405(d)(2)(D) of the Clean Water Act, as amended, if the effluent standard, limitation, or sludge disposal requirement so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any condition in the permit; or
- b) Controls any pollutant or disposal method not addressed in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

1.5. SCHEDULE OF COMPLIANCE

Full compliance and operational levels shall be attained from the effective date of this permit.

1.6. ELECTRONIC REPORTING

This permit requires the submission of forms developed by the Director in order for a person to comply with certain requirements, including, but not limited to, making reports, submitting monitoring results, and applying for permits. The Director may make these forms available electronically and, if submitted electronically, then that electronic submission shall comply with the requirements of Chapter <u>0400-01-40</u>. Electronic submission is required when available unless waived by the Commissioner in accordance with 40 CFR § 127.15.

In the event of large-scale emergencies and/or prolonged electronic reporting system outages, an episodic electronic reporting waiver may be granted by the Commissioner in accordance with 40 CFR § 127.15. A request for a deadline extension or episodic electronic reporting waiver should be submitted to DWRWater.Compliance@tn.gov, in compliance with the Federal NPDES Electronic Reporting Rule.

If an episodic electronic reporting waiver is granted, reports with wet-ink original signatures shall be mailed to the following address:



DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES
COMPLIANCE & ENFORCEMENT UNIT
Davy Crockett Tower, 9th Floor
500 James Robertson Parkway
Nashville, Tennessee 37243

For purposes of determining compliance with this permit, data provided to the Division electronically is legally equivalent to data submitted on signed and certified forms. A copy must be retained for the permittee's files.



PART 2

2. GENERAL PERMIT REQUIREMENTS

2.1. GENERAL PROVISIONS

2.1.1. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Water Quality Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

2.1.2. Duty to Reapply

The permittee is not authorized to discharge after the expiration date of this permit. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information and forms as are required to the Division Director no later than 180 days prior to the expiration date. Such forms shall be properly signed and certified.

2.1.3. Proper Operation and Maintenance

- 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. Proper operation and maintenance also includes adequate laboratory and process controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. Backup continuous pH and flow monitoring equipment are not required.
- b) Dilution water shall not be added to comply with effluent requirements to achieve BCT, BPT, BAT, or other technology based effluent limitations such as those established in Tennessee Rule <u>0400-40-05-.09</u>.

2.1.4. Duty to Provide Information

The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.



2.1.5. Right of Entry

The permittee shall allow the Director, the Regional Administrator of the U.S. Environmental Protection Agency, or their authorized representatives, upon the presentation of credentials, to:

- a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records shall be kept under the conditions of this permit;
- b) Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this permit;
- c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d) Sample or monitor at reasonable times for the purposes of assuring permit compliance or as otherwise authorized by the Director.

2.1.6. Availability of Reports

Except for data determined to be confidential under Section 308 of the Federal Water Pollution Control Act, as amended, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the Division's offices or via the Department's <u>dataviewer webpage</u>. As required by the Federal Act, effluent data shall not be considered confidential.

2.1.7. Treatment Facility Failure (Industrial Sources)

The permittee, in order to maintain compliance with this permit, shall control production, all discharges, or both, upon reduction, loss, or failure of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in such situations as the reduction, loss, or failure of the primary source of power.

2.1.8. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.



2.1.9. Severability

The provisions of this permit are severable. If any provision of this permit due to any circumstance is held invalid, then the application of such provision to other circumstances and to the remainder of this permit shall not be affected thereby.

2.1.10. Other Information

If the permittee becomes aware of failure to submit any relevant facts in a permit application, or of submission of incorrect information in a permit application or in any report to the Director, then the permittee shall promptly submit such facts or information.

2.2. CHANGES AFFECTING THE PERMIT

2.2.1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as defined in Rule <u>0400-40-05-.02</u>;
- b) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit nor to notification requirements under 40 CFR § 122.42(a)(1); or
- c) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices.

2.2.2. Permit Modification, Revocation, or Termination

- a) This permit may be modified, revoked and reissued, or terminated for cause as described in 40 CFR § 122.62 and § 122.64, Federal Register, Volume 49, No. 188 (Wednesday, September 26, 1984), as amended. Causes for such permit action include but are not limited to the following:
 - i. Violation of any terms or conditions of the permit;
 - ii. Obtaining a permit by misrepresentation or failure to disclose fully all relevant facts; and
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.



- b) The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- c) If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established for any toxic pollutant under Section 307(a) of the Federal Water Pollution Control Act, as amended, the Director shall modify or revoke and reissue the permit to conform to the prohibition or to the effluent standard, providing that the effluent standard is more stringent than the limitation in the permit for the toxic pollutant. The permittee shall comply with these effluent standards or prohibitions within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified or revoked and reissued to incorporate the requirement.
- d) The filing of a request by the permittee for a modification, revocation, reissuance, termination, or notification of planned changes or anticipated noncompliance does not halt any permit condition.

2.2.3. Change of Ownership

Except as provided in Tennessee Rule Chapter <u>0400-40-05-.06(5)(a)</u> or (b), this permit may be transferred to another party (provided there are neither modifications to the facility or its operations, nor any other changes which might affect permit limits and conditions contained in the permit) by the permittee if:

- a) The permittee notifies the Director of the proposed transfer at least 30 days in advance of the proposed transfer date;
- b) The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage, and liability between them; and
- The permittee shall provide the following information to the Director in their formal notice of intent to transfer ownership:
 - i. The permit number of the subject permit;
 - ii. The effective date of the proposed transfer;
 - iii. The name, address, and contact information of the transferor;
 - iv. The name, address, and contact information of the transferee;



- v. The names of the responsible parties for both the transferor and transferee;
- vi. A statement that the transferee assumes responsibility for the subject permit;
- vii. A statement that the transferor relinquishes responsibility for the subject permit;
- viii. The signatures of the responsible parties for both the transferor and transferee pursuant to the signatory requirements of subparagraph (i) of Rule 0400-40-05-.07(2); and
- ix. A statement regarding any proposed modifications to the facility, its operations, or any other changes, which might affect the permit, limits and conditions contained in the permit.

2.2.4. Change of Mailing Address

The permittee shall promptly provide to the Director written notice of any change of mailing address. In the absence of such notice, the original address of the permittee will be assumed to be correct.

2.3. NONCOMPLIANCE

2.3.1. Reporting of Noncompliance

a) 24-hour Reporting:

In the case of any noncompliance which could cause a threat to public drinking supplies or any other discharge which could constitute a threat to human health or the environment, the required notice of non-compliance shall be provided to the Division of Water Resources in the appropriate EFO within 24 hours from the time the permittee becomes aware of the circumstances. The EFO should be contacted for names and phone numbers of the environmental response team.

A written submission must be provided via MyTDEC Forms², if available, within five days of the time the permittee becomes aware of the circumstances unless the Director on a case-by-case basis waives this requirement. The permittee shall provide the Director with the following information:

i. A description of the discharge and cause of noncompliance;

² If this particular form is not available in MyTDEC Forms, please submit the report per Section 1.3.1.



- ii. The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and
- iii. The steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

b) Scheduled Reporting:

For instances of noncompliance which do not cause a threat to public drinking supplies, or any other discharge which could constitute a threat to human health or the environment, the permittee shall report the noncompliance on the MOR. The report shall contain all information concerning the steps taken, or planned, to reduce, eliminate, and prevent recurrence of the violation and the anticipated time the violation is expected to continue.

2.3.2. Upset

- a) "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations due to factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b) An upset shall constitute an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - i. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - ii. The permitted facility was at the time being operated in a prudent and workman-like manner and in compliance with proper operation and maintenance procedures;
 - iii. The permittee submitted information required under "Reporting of Noncompliance" within 24 hours of becoming aware of the upset (if this information is provided orally, a written submission must be provided within five days); and
 - iv. The permittee complied with any remedial measures required under "Adverse Impact".



2.3.3. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the waters of Tennessee resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

2.3.4. Bypass

- a) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b) Bypasses are prohibited unless all the following conditions are met:
 - i. The bypass is unavoidable to prevent loss of life, personal injury, or severe property damage;
 - ii. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
 - iii. For anticipated bypass, the permittee submits prior notice, if possible at least ten days before the date of the bypass, or for unanticipated bypass, the permittee submits notice of an unanticipated bypass within 24 hours from the time that the permittee becomes aware of the bypass.
- c) Bypasses that do not cause effluent limitations to be exceeded may be allowed only if the bypass is necessary for essential maintenance to assure efficient operation and are not subject to the reporting requirements of part b) iii. above.



2.3.5. Washout

- a) For domestic wastewater plants only, a "washout" shall be defined as loss of Mixed Liquor Suspended Solids (MLSS) of 30.00% or more. This refers to the MLSS in the aeration basin(s) only. This does not include MLSS decreases due to solids wasting to the sludge disposal system. A washout can be caused by improper operation or from peak flows due to inflow and infiltration.
- b) A washout is prohibited. If a washout occurs the permittee must report the incident to the Division in the appropriate EFO within 24 hours by telephone. A written submission must be provided within five days. The washout must be noted on that month's DMR. Each day of a washout is a separate violation.

2.4. LIABILITIES

2.4.1. Civil and Criminal Liability

Except as provided in permit conditions for "Bypass" (Section 2.3.4) and "Upset" (Section 2.3.2), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Notwithstanding this permit, the permittee shall remain liable for any damages sustained by the State of Tennessee, including, but not limited to, fish kills and losses of aquatic life and/or wildlife as a result of the discharge of wastewater to any surface or subsurface waters. Additionally, notwithstanding this permit, it shall be the responsibility of the permittee to conduct its wastewater treatment and/or discharge activities in a manner such that public or private nuisances or health hazards will not be created.

2.4.2. Liability Under State Law

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or the Federal Water Pollution Control Act, as amended.



PART 3

3. PERMIT SPECIFIC REQUIREMENTS

3.1. CERTIFIED OPERATOR

The waste treatment facilities shall be operated under the supervision of a certified wastewater treatment operator in accordance with the Water Environmental Health Act of 1984.

3.2. SLUDGE MANAGEMENT PRACTICES

The permittee must comply with the provisions of 40 CFR § 503. If the sludge is transported to another POTW for disposal, the permittee shall note on the MOR the amount of sludge wasted in gallons, percent (%) solids of sludge wasted, and the name of the facility to which the sludge was taken.

The proper operation of this treatment system depends, largely, on the efficient use of the septic tank. The solids that accumulate in the tank shall be removed at a frequency that is sufficient to ensure that the treatment plant will comply with the discharge requirements of this permit.

3.3. PLACEMENT OF SIGNS

Within 60 days of the effective date of this permit, the permittee shall place and maintain a sign at each outfall and any overflow/release point in the collection system or the nearest publicly accessible location. For the purposes of this requirement, any point that has had a total of 5 or more overflows plus releases in the previous 12 months must be so posted. The sign(s) should be clearly visible to the public from the bank and the receiving stream. The *minimum* sign size should be two feet by two feet (2' x 2') with one-inch (1") letters. The sign should be made of durable material and have a white background with black letters.

The sign(s) are to provide notice to the public as to the nature of the discharge and, in the case of the permitted outfalls, that the discharge is regulated by the Tennessee Department of Environment and Conservation, Division of Water Resources. The following are given as examples of the minimal amount of information that must be included on the signs:



NPDES Permitted Domestic Outfall:

TREATED DOMESTIC WASTEWATER
U.S. Army Corps of Engineers (USACE)
Dale Hollow Lake - Lillydale Recreation Area
(Permittee's Phone Number)
NPDES Permit NO. TN0021393
TENNESSEE DIVISION OF WATER RESOURCES
1-888-891-8332 ENVIRONMENTAL FIELD OFFICE - Cookeville

3.4. ADDITION OF WASTELOADS

The permittee may not add wasteloads to the existing treatment system without the knowledge and approval of the Division.



PART 4

4. DEFINITIONS AND ACRONYMS

4.1. **DEFINITIONS**

A **bypass** is defined as the intentional diversion of waste streams from any portion of a treatment facility.

A *calendar day* is defined as the 24-hour period from midnight to midnight or any other 24-hour period that reasonably approximates the midnight to midnight time period.

The *daily maximum concentration* is a limitation on the average concentration in units of mass per volume (*e.g.* milligrams per liter) of the discharge during any calendar day. When a proportional-to-flow composite sampling device is used, the daily maximum concentration is the concentration of that 24-hour composite; when other sampling means are used, the daily maximum concentration is the arithmetic mean of the concentrations of equal volume samples collected during any calendar day or sampling period.

Degradation means the alteration of the properties of waters by the addition of pollutants, withdrawal of water, or removal of habitat, except those alterations of a short duration.

De Minimis is degradation of a small magnitude, as provided in this paragraph:

- (a) Discharges and withdrawals:
 - 1. Subject to the limitation in part 3 of this subparagraph, a single discharge other than those from new domestic wastewater sources will be considered de minimis if it uses less than five percent of the available assimilative capacity for the substance being discharged.
 - 2. Subject to the limitation in part 3 of this subparagraph, a single water withdrawal will be considered de minimis if it removes less than five percent of the 7Q10 flow of the stream.
 - 3. If more than one activity described in part 1 or 2 of this subparagraph has been authorized in a segment and the total of the authorized and proposed impacts uses no more than 10% of the assimilative capacity, or 7Q10 low flow, they are presumed to be de minimis. Where the total of the authorized and proposed impacts uses 10% of the assimilative capacity, or 7Q10 low flow, additional degradation may only be treated as de minimis if the Division finds on a scientific basis that the additional degradation has an insignificant effect on the resource.



(b) Habitat alterations authorized by an Aquatic Resource Alteration Permit (ARAP) are de minimis if the Division finds that the impacts, individually and cumulatively, are offset by impact minimization and/or in-system mitigation, provided however, in Outstanding National Resource Waters (ONRWs) the mitigation must occur within the ONRW.

Discharge or **discharge of a pollutant** refers to the addition of pollutants to waters from a source.

The **geometric mean** of any set of values is the nth root of the product of the individual values where "n" is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For the purposes of calculating the geometric mean, values of zero (0) shall be considered to be one (1).

A *grab sample* is a single influent or effluent sample collected at a particular time.

The *instantaneous maximum concentration* is a limitation on the maximum concentration, in units of mass per volume (*e.g.* milligrams per liter), of any pollutant contained in the wastewater discharge determined from a grab sample taken from the discharge at any point in time.

The *instantaneous minimum concentration* is the minimum allowable concentration, in units of mass per volume (*e.g.* milligrams per liter), of a pollutant parameter contained in the wastewater discharge determined from a grab sample taken from the discharge at any point in time.

The **monthly average concentration**, a limitation on the discharge concentration in units of mass per volume, of any pollutant, other than bacteria, is the arithmetic mean of all the composite or grab samples collected in a one calendar-month period.

Pollutant means sewage, industrial wastes, or other wastes.

A **rationale** (or **fact sheet**) is a document that is prepared when drafting an NPDES permit or permit action. It provides the technical, regulatory and administrative basis for an agency's permit decision.

Sewage means water-carried waste or discharges from human beings or animals, from residences, public or private buildings, or industrial establishments, or boats, together with such other wastes and ground, surface, storm, or other water as may be present.



Severe property damage, when used to consider the allowance of a bypass, means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

Sewerage system means the conduits, sewers, and all devices and appurtenances by means of which sewage and other waste is collected, pumped, treated, or disposed.

Sludge or **sewage sludge** is solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

The term **washout** is applicable to domestic wastewater activated sludge plants and is defined as loss of mixed liquor suspended solids (MLSS) of 30.00% or more from the aeration basin(s).

Waters means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through, or border upon Tennessee or any portion thereof, except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.

The **weekly average concentration** is the highest arithmetic mean of all the composite samples collected in a one-week period in a month.



4.2. ACRONYMS AND ABBREVIATIONS

1Q10 – 1-day minimum, 10-year recurrence interval
 30Q5 – 30-day minimum, 5-year recurrence interval
 7Q10 – 7-day minimum, 10-year recurrence interval
 BAT – best available technology economically achievable
 BCT – best conventional pollutant control technology

BDL – below detection limit

BOD₅ - five-day biochemical oxygen demand

BPT – best practicable control technology currently available CBOD₅ – five-day carbonaceous biochemical oxygen demand

CEI – compliance evaluation inspection

CFR – code of federal regulations

CFU – colony forming units CSO – combined sewer overflow

DMR – discharge monitoring report

D.O. – dissolved oxygen *E. coli – Escherichia coli*

EPA – Environmental Protection Agency

EFO – environmental field office

GPM – gallons per minute

LB (lb) - pound

MDL – method detection limit MGD – million gallons per day mg/L – milligrams per liter

ML – minimum level of quantification

mL - milliliter

MLSS – mixed liquor suspended solids MOR – monthly operating report

NPDES - national pollutant discharge elimination system

PL - permit limit

POTW - publicly owned treatment works

SSO – sanitary sewer overflow STP – sewage treatment plant

TBEL – technology-based effluent limit
TCA – Tennessee code annotated

TDEC – Tennessee Department of Environment and Conservation
TIE/TRE – toxicity identification evaluation/toxicity reduction evaluation

TMDL – total maximum daily load TRC – total residual chlorine TSS – total suspended solids

WQBEL - water quality-based effluent limit



4.3. RESOURCES, HYPERLINKS, AND WEB PAGES

Electronic Code of Federal Regulations (eCFR), Title 40 (40 CFR § 1 through § 1099)

https://www.ecfr.gov/cgi-bin/text-

idx?SID=75202eb5d09974cab585afeea981220b&mc=true&tpl=/ecfrbrowse/Title40/40chapt erl.tpl

Electronic Reporting (NetDMR) Waiver Request

https://www.tn.gov/content/dam/tn/environment/water/documents/wr ereporting waiver.pdf

NetDMR Login

https://cdxnodengn.epa.gov/net-netdmr/

NetDMR, MyTDEC Forms, & Electronic Reporting Information

https://www.tn.gov/environment/program-areas/wr-water-resources/netdmr-and-electronic-reporting.html

NPDES Compliance Inspection Manual (EPA)

https://www.epa.gov/sites/production/files/2017-01/documents/npdesinspect.pdf

NPDES Electronic Reporting Rule

https://www.federalregister.gov/documents/2015/10/22/2015-24954/national-pollutant-discharge-elimination-system-npdes-electronic-reporting-rule

Rules of the TN Department of Environment and Conservation, Chapter 0400-40 https://publications.tnsosfiles.com/rules/0400/0400-40/0400-40.htm

TDEC Water Quality Rules, Reports, and Publications

https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/water-quality-reports---publications.html

Technical Support Document for Water Quality-based Toxics Control (EPA) https://www3.epa.gov/npdes/pubs/owm0264.pdf

Tennessee Water Resources Data and Map Viewers

https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/water-resources-data-map-viewers.html

USGS StreamStats

https://www.usgs.gov/mission-areas/water-resources/science/streamstats-streamflow-statistics-and-spatial-analysis-tools?qt-science center objects=0#qt-science center objects

USGS SWToolbox

https://www.usgs.gov/software/swtoolbox-software-information



RATIONALE

U.S. Army Corps of Engineers (USACE)

Dale Hollow Lake - Lillydale Recreation Area

NPDES Permit No. TN0021393

Permit Writer: Sarah Terpstra

1. PERMIT STATUS & PUBLIC PARTICIPATION

Permit Type: Domestic

Previous Issuance Date: September 1, 2019
Previous Expiration Date: August 31, 2024
Previous Effective Date: October 1, 2019

As provided under Rule 0400-40-05-.06, this permit allows 30 days for public comment on the proposed permit. The 30-day public comment period begins the date this permit is placed on public notice. The public notice document for this permit can be found at the Division's <u>Water Notices and Hearings website</u> under "Permit Public Notices".

Public Notice Date:June 25, 2024Comment Period Ends:July 25, 2024

Those wishing to make a formal comment on the proposed permit may submit comments electronically to Water.Permits@tn.gov, or by mail to:

Division of Water Resources - Water Based Systems Unit Davy Crockett Tower, 9th Floor 500 James Robertson Parkway Nashville, TN 37243

The public may also request a public hearing on a proposed permit by submitting such a request in writing during the public comment period specified above. The request should indicate the interest of the party filing it and the reasons why a hearing is warranted. A request for public hearing should be submitted as soon as practicable to the addresses provided above. Questions regarding the draft permit may be directed to 1-888-891-TDEC.



2. DISCHARGER INFORMATION

Permittee Name:	U.S. Army Corps of Engineers (USACE)
Project Name:	Dale Hollow Lake - Lillydale Recreation Area
Location:	5199 Lillydale Road, Allons, Clay County, Tennessee
Contact:	Mrs. Crystal Tingle - Resource Manager, Dale Hollow Lake
	(931) 243-3136
	crystal.d.tingle@usace.army.mil
Design Flow:	0.0022 MGD (both outfalls)
Treatment Description:	Septic tank, sand filter and post chlorination (both outfalls)
Certified Operator Grades:	STP: BNS
Discharge Type:	Domestic

3. RECEIVING STREAM INFORMATION

Receiving Waterbody: Obey River at miles 31.4 (Outfall 001, campground) and 31.9

(closed Outfall 002, day use)

Watershed Group: Obey Hydrocode: 05130105

Low Flow: N/A (Lake) with significant dilution factor > 500:1

Low Flow Reference: Based on permit writer's best professional judgment (BPJ)

Stream Designated Uses: Domestic Water Supply Industrial Fish & Aqua

Domestic Water Supply	Industrial	Fish & Aquatic Life	Recreation
		X	Х
Livestock & Wildlife	Irrigation	Navigation	Trout
Х	Х		

4. PERMIT HISTORY

4.1. PREVIOUS PERMIT

Permit Type: Domestic

Issuance Date: 01-SEP-19

Expiration Date: 31-AUG-24

Effective Date: 01-OCT-19



See below for previous permit limits:

PARAMETER	Units	MONTHLY AVERAGE CONCENTRATION	DAILY MAXIMUM CONCENTRATION
BOD ₅	mg/L	30	45
Total Suspended Solids	mg/L	30	45
Dissolved Oxygen	mg/L	1.0 (daily minimum)	-
Total Residual Chlorine	mg/L	-	2.0
E. coli	CFU/100 mL	126	487
Settleable Solids	mL/L	-	1.0
рН	SU	6.5 - 9.0	
Flow (MGD):	MGD	Report	Report

During the previous permit term, Division personnel from the Cookeville Environmental Field Office performed a Compliance Evaluation Inspection (CEI) of the permittee's facility. The CEI was performed by William Oakley Hall on June 11, 2020, and the permittee was found to be in compliance.

4.2. PERMIT TIMELINE

Date	Permit Activity
July 1974	Record created
September 1, 2004	Permit effective
	Expiration date: August 31, 2009
October 1, 2009	Permit effective
	Expiration date: August 29, 2014
	 Fecal coliform limits removed; replaced with E. colimonthly average and daily maximum limits
	- pH range changed from 6.0-9.0 to 6.5-9.0
September 1, 2014	Permit effective
	Expiration date: August 31, 2019
October 1, 2019	Permit effective
	Expiration date: August 31, 2024

Note: Due to the Department's retention procedures outlined in the Tennessee Department of State Records Disposition Authorization, the history outlined above may not represent a complete and comprehensive summary, but instead reflects the best information available at this time.

5. PROPOSED EFFLUENT LIMITS & RATIONALE

The conditions under which this permit was previously issued have changed.



The units for *E. coli* have been standardized to number per 100 mL (#/100 mL). Previously, the Division used either MPN/100 mL or CFU/100 mL. The identification of one of these two units indirectly created a requirement for a specific type of testing methodology. By utilizing #/100 mL unit, permittees are provided the flexibility to select the 40 CFR § 136 method that is most suitable for their operations. The limit value (number) will remain the same as the limit units are functionally equivalent. Moreover, the daily maximum limit for *E. coli* has been changed to 410 #/100 mL as a result of updated water quality criteria in Rule 0400-40-03-.03 for the protection of the recreation designated use.

5.1. CONVENTIONAL PARAMETERS

5.1.1. BOD₅

For this facility, the monthly average and daily maximum BOD_5 limits of 30 mg/L and 45 mg/L, respectively, are technology-based effluent limits for conventional secondary treatment plants (Rule 0400-40-05-.09(1)(a)).

5.1.2. Settleable Solids

According to Rule <u>0400-40-05-.09(1)(a)</u>, the concentration of settleable solids shall not exceed 1.0 mL/L.

5.1.3. Total Suspended Solids

Total Suspended Solids (TSS) is a general indicator of the quality of a wastewater and will be limited in this permit. The monthly average and daily maximum TSS limits of 30 mg/L and 45 mg/L are technology-based effluent limits for conventional secondary treatment plants (Rule <u>0400-40-05-.09(1)(a)</u>).

5.2. FLOW

Monitoring of flow quantifies the load of pollutants to the stream. Flow shall be reported in million gallons per day (MGD) and monitored at the time of sample collection.

5.3. PH

According to the State of Tennessee Water Quality Standards (Chapter <u>0400-40-03-.03(3)(b)</u>), the pH for the protection of Fish and Aquatic Life shall not fluctuate more than 1.0 unit over a period of 24 hours and shall not be outside the following ranges: 6.0 – 9.0 standard units (SU) in wadeable streams and 6.5 – 9.0 SU in larger rivers, lakes, reservoirs, and wetlands.



5.4. CHLORINATION

Chlorination is used to disinfect the wastewater in order to protect the receiving stream from pathogens. When water quality is not the limiting factor due to the large dilution afforded by the receiving stream, an effluent concentration of 2.0 mg/L shall not be exceeded as an operational control of treatment facilities.

5.5. TOTAL NITROGEN AND TOTAL PHOSPHORUS

The Division is not including nutrient monitoring and reporting at this time in association with its state-wide nutrient reduction effort.

Nutrients are naturally occurring and essential components of healthy aquatic systems. Excessive amounts of nutrients, however, can impact water quality. The enrichment of a waterbody with nutrients, called eutrophication, can result in dense, rapidly multiplying growths, or blooms, of algal species and other nuisance aquatic plants. These have potential for negatively impacting the habitat for fish and aquatic life and degrading the water quality for drinking water supply and recreation uses. These impacts can present both locally from an individual activity and much further downstream from the cumulative impact of multiple activities. The Division has therefore developed and begun to implement a strategy to accomplish long-term nutrient reduction in Tennessee waters. The strategy, referred to as the Tennessee Nutrient Reduction Framework (NRF), contains proposed rationale and the methodology for implementing the strategy within a watershed area. Consequently, the Framework considers impacts from both point and non-point sources of nutrients and recommends possible reduction goals for both point and non-point sources. The NRF approach to nutrient reduction is intended to utilize an adaptive management approach in consideration of the facts presenting within a watershed and reevaluation of the effectiveness of progress being made. Regular reassessments of goals and action plans will be conducted by reviewing monitoring data, modeling results and other measures of success. As additional data becomes available (such as WWTP effluent characterization and instream water quality data), model results can be reevaluated.

For small domestic systems who may apply using Form 2E (facilities which do not discharge process wastewater), the Division will generally make a conservative estimate and not require effluent monitoring and reporting. This is especially true for discharges whose users would reasonably be accounted for in watershed loading another way (e.g. municipal discharges or the septic systems inherent in nonpoint source loads from urban and agricultural lands). However, effluent characterization may be requested pursuant to T.C.A. § 69-3-107(10) by the



Division during the permit term or included in a permit action with site-specific rationale for its inclusion.

5.6. *E. COLI*

Disinfection of wastewater is required to protect the receiving stream from pathogenic microorganisms. *E. coli* is used as an indicator organism as a measure of the bacteriological health of a receiving stream and the effectiveness of disinfection. Both the geometric mean and daily maximum are limited for *E. coli* in accordance with Rule <u>0400-40-03-.03</u>. While the Rule retains the geometric mean for *E. coli* of 126 cfu/100 mL, the maximum has been changed. Formerly, the *E. coli* daily maximum limit of 487 colony forming units (cfu) per 100 mL applied to lakes and exceptional Tennessee waters, while a daily maximum limit of 941 cfu/100 mL applied to all other recreational waters.

In November 2022, the Tennessee Board of Water Quality, Oil, and Gas adopted a new maximum criterion to align with U.S. Environmental Protection Agency national recommended criteria. That criterion will apply to Tennessee waters to protect the recreation use designation effective March 17, 2024. EPA established a statistical relationship between number of colony forming units and percent of time when such numbers were observed in any 30-day period. The new criterion of 410 cfu/100 mL corresponds to no exceedances in more than 10% of samples during any 30-day interval for all receiving waters.

Tennessee has historically applied water quality standards for pathogens at the outfall of POTWs so that a discharger can demonstrate that it is not contributing to any violation of the criterion in the receiving waterbody. The Division therefore proposes to apply the new criterion as a daily maximum of 410 cfu/100 mL in accordance with EPA guidance and retains the monthly geometric mean for E. coli of 126 cfu/100 mL.

The units for *E. coli* have been standardized to #/100 mL, which is functionally equivalent to colony forming units.

5.7. UPSET AND BYPASS REPORTING

State regulations at <u>0400-40-05-.07(2)</u> establish "standard conditions". These standard conditions include 0400-40-05-.07(2)(l) and (m) pertaining to bypass and 0400-40-05-.07(2)(p) pertaining to upset.



6. OTHER PERMIT REQUIREMENTS AND CONDITIONS

6.1. CERTIFIED WASTEWATER TREATMENT OPERATOR

The waste treatment facilities shall be operated under the supervision of a Grade Biological Natural System (BNS) certified wastewater treatment operator in accordance with the Water Environmental Health Act of 1984. Operator grades are under jurisdiction of the Water and Wastewater Operators Certification Board. This NPDES permit is under jurisdiction of the Tennessee Board of Water Quality, Oil and Gas. Operator grades are rated and recommended by the Division of Water Resources pursuant to Rule Odd0-49-01 and are included in this fact sheet for reference. The grades are intentionally not specified in the permit so that the operation certification board can authorize changes in grade without conflicting with this permit.

6.2. PERMIT TERM

In order to meet the target reissuance date for the Obey watershed and following the directives for the Watershed Management Program initiated in January 1996, the permit will be issued to expire in 2029.

7. ANTIDEGRADATION STATEMENT / WATER QUALITY STATUS

Tennessee's Antidegradation Statement is found in the Rules of the Tennessee Department of Environment and Conservation, Chapter <u>0400-40-03-.06</u>. It is the purpose of Tennessee's standards to fully protect existing uses of all surface waters as established under the Act.

Stream determinations for this permit action are associated with the waterbody segment identified by the Division as segment ID# TN05130105002_1000.

The Division has made a water quality assessment of the receiving waters associated with the subject discharge(s) and has found the receiving stream to be neither an exceptional nor outstanding national resource water. Additionally, this water supports the Domestic Water Supply, Fish and Aquatic Life, Industrial Water Supply, Irrigation, and Livestock Watering and Wildlife designated uses. However, in the most recent assessment cycle, the receiving stream segment was determined to be not supporting for recreation due to mercury from atmospheric deposition and sources outside state jurisdiction or borders.

No Total Maximum Daily Loads (TMDLs) have been developed for this waterbody segment.



8. COMPLIANCE SCHEDULE SUMMARY

Permit Section	Description
1.3	MOR Reports, monthly
1.3	Sign up for NetDMR during permit cycle
3.2	Sludge management practices, monthly
3.3	Placement of sign(s) within 60 days of permit effective date