

National Pollutant Discharge Elimination System (NPDES)

General Permit for Discharges of Treated Groundwater Associated with Underground Storage Tank Remediation

Permit Number TNG830000

Issued by

Department of Environment and Conservation Division of Water Resources William R. Snodgrass - Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, Tennessee 37243-1102

Under authority of the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.) and the authorization by 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.) and the Water Quality Act of 1987, P.L. 100-4, except as provided in subpart 1.3 of this general permit, operators of point source discharges of treated groundwater associated with underground storage tank remediation into waters of the State of Tennessee, are authorized to discharge treated groundwater associated with underground storage tank remediation in accordance with the following permit monitoring and reporting requirements, effluent limitations, and other provisions as set forthin Parts 1 through 10 herein, from the subject outfalls to waters of the State of Tennessee.

This permit is issued on: September XX, 2023
This permit is effective on: October 1, 2023
This permit expires on: September 30, 2028



for Jennifer Dodd Director

Tennessee General NPDES Permit No. TNG830000 Treated Groundwater Associated with Underground Storage Tank Remediation

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1. COVERAGE UNDER THIS GENERAL PERMIT

1.1. PERMIT AREA

The permit is being issued for the entire State of Tennessee.

1.2. LIST OF THE TDEC ENVIRONMENTAL FIELD OFFICES (EFOS) AND CORRESPONDING COUNTIES

EFO Name	List of Counties			
Chattanooga	Bledsoe, Bradley, Grundy, Hamilton, Marion, McMinn, Meigs,			
	Polk, Rhea, Sequatchie			
<u>Columbia</u>	Bedford, Coffee, Franklin, Giles, Hickman, Lawrence, Lewis,			
	Lincoln, Marshall, Maury, Moore, Perry, Wayne			
<u>Cookeville</u>	Cannon, Clay, Cumberland, De Kalb, Fentress, Jackson, Macon,			
	Overton, Pickett, Putnam, Smith, Trousdale, Van Buren,			
	Warren, White			
Jackson	Benton, Carroll, Chester, Crockett, Decatur, Dyer, Gibson,			
	Hardin, Haywood, Henderson, Henry, Lake, Lauderdale,			
	Madison, McNairy, Obion, Weakley			
Johnson City	Carter, Greene, Hancock, Hawkins, Johnson, Sullivan, Unicoi,			
	Washington			
<u>Knoxville</u>	Anderson, Blount, Campbell, Claiborne, Cocke, Grainger,			
	Hamblen, Jefferson, Knox, Loudon, Monroe, Morgan, Roane,			
	Scott, Sevier, Union			
<u>Memphis</u>	Fayette, Hardeman, Shelby, Tipton			
<u>Nashville</u>	Cheatham, Davidson, Dickson, Houston, Humphreys,			
	Montgomery, Robertson, Rutherford, Stewart, Sumner,			
	Williamson, Wilson			

TDEC may be reached by telephone at the toll-free number 1-888-891-8332 (TDEC). Local EFOs may be reached directly when calling this number from the site, using a land line.

1.3. ELIGIBILITY

1.3.1. Discharges Covered

This permit addresses any new or existing discharges of treated groundwater associated with petroleum product underground storage tank (UST) remediation

to surface waters of the State of Tennessee. This permit serves as a National Pollutant Discharge Elimination System (NPDES) general permit and is issued to be effective for a term of five years.

1.3.2. Limitations on Coverage

This general permit does not apply to:

- discharges that the director of Water Resources (director) determines will cause, have the reasonable potential to cause, or contribute to violations of water quality standards;
- any person who discharges in violation of the Water Quality Control Act or the regulations promulgated there under; or
- discharges to a receiving stream that will result in a measurable increased loading of a pollutant that is a cause of designation by the division as waters with unavailable parameters (previously referred to as impaired waters).

The following discharges are not authorized by this permit:

- a) Discharges <u>not authorized by the Division of Underground Storage Tanks</u> The division may deny applicant coverage under this permit if the applicant has not obtained approval for cleanup activities from the Division of Underground Storage Tanks. Any remedial action required to be performed by a permittee at a site by the Division of Underground Storage Tanks will be managed by the Division of Underground Storage Tanks.
- b) <u>Discharges into Outstanding National Resource Waters</u> The director shall not grant coverage under this permit for discharges into waters that are designated by the Water Quality Control Board as Outstanding National Resource Waters (ONRWs) Designation of ONRWs are made according to TDEC Rules, <u>Chapter 0400-4-3-.06</u>.
- c) <u>Stormwater Discharges</u> Stormwater discharges associated with construction or industrial activity are not authorized under this permit.
- d) <u>Discharges Covered by Another Permit</u> Discharges associated with underground storage tank remediation that have been issued an individual permit.
- e) <u>Discharges Threatening Water Quality</u> Discharges from underground storage tank remediation sites, that the director determines will cause, have the reasonable potential to cause, or contribute to violations of water quality standards. Where such determination has been made, the discharger will be notified by the director in writing that an individual permit application is necessary per section 7.6. However, the division may authorize coverage under this permit after appropriate controls and implementation procedures

have been designed to bring the discharge into compliance with water quality standards.

- f) <u>Discharges into Streams with Unavailable Parameters (previously referred to as impaired waters)</u> This permit does not authorize discharges that would add measurable loadings of a pollutant that is identified as causing or contributing to the impairment of a water body that is listed as having unavailable parameters.
- g) <u>Discharges Negatively Affecting a Property on the National Historic Register</u> Underground storage tank remediation discharges that would negatively affect a property that is listed or is eligible for listing in the National Historic Register maintained by the Secretary of Interior.

General permits may be issued, modified, revoked, reissued or terminated in accordance with the applicable requirements of T.C.A. § 69-3-108.

1.3.3. Discharges to Waters with Unavailable Parameters or Exceptional Tennessee Waters

This section of the permit applies to all existing or proposed discharges into waters designated by the division as waters with unavailable parameters (previously referred to as impaired waters). Waters designated as such have been assessed by the division as failing to support classified uses due to the presence of pollutants. Pollutants of concern associated with discharges of treated groundwater associated with petroleum product UST remediation sites are listed in part 4 of this general permit.

To obtain authorization under this permit, discharges into receiving streams with unavailable parameters for pollutants of concern must satisfy special conditions described in this part and must have a de minimis impact. These special conditions also apply to discharges upstream of waters with unavailable conditions, which, because of the proximity to the impaired segment and the nature of the discharge, are likely to contribute pollutants for which the receiving water is impaired in amounts that are measurable in the impaired segment.

Requesting coverage under this permit means that an applicant has obtained and examined a copy of this permit, and thereby acknowledges applicant's claim of ability to comply with permit terms and conditions. The owner or operator must satisfy the following conditions to be eligible to obtain and maintain coverage under this permit:

1.3.3.1. (i) Before a Total Maximum Daily Load (TMDL)

1. <u>Existing Discharges</u>. These are discharges other than expanded dischargers from facilities that were in existence on the expiration date of the previous UST general permit. It is one of the purposes of this general permit not to authorize the discharge of pollutants in such a manner as to cause or contribute to a violation of any water quality standards. Therefore, if a Total Maximum Daily Load (TMDL) information, available at

https://www.tn.gov/environment/program-areas/wr-water-

resources/watershed-stewardship/tennessee-s-total-maximum-daily-load--tmdl-program.html

has not been developed at the time of filing of the Notice of Intent (NOI), in order to obtain coverage under this permit the owner or operator must certify that the groundwater treatment methods and control measures selected for the site are the most appropriate for the reduction of pollutants at the site and that these treatment methods and control measures are designed, and will be implemented to effectively minimize contributions of pollutants of concern. A failure to implement treatment methods and control measures so as to minimize contributions of those pollutants is a violation of this permit.

2. <u>New or Expanded Discharges</u>. New discharges are ones from facilities that were not in existence on the effective date of this permit. Expanded discharges are ones from sites that increased loading of a pollutant of concern from the site after the effective date of this permit. Permit coverage for new or expanded discharges of a pollutant of concern is not available under this permit and the owner or operator must seek coverage under a separate (individual) permit.

1.3.3.2. (ii) After a Total Maximum Daily Load (TMDL)

If a <u>Total Maximum Daily Load (TMDL)</u> has been developed and approved for the receiving water body, where the discharge is new, expanded or existing, discharges from the facility must be consistent with the applicable provisions of the TMDL. In the situation where the limitations of this permit allow discharge of pollutants of concern in excess of the wasteload allocation (WLA) specified in the TMDL, then the permittee cannot remain authorized under this general permit.

a) Issuance of a Notice of Coverage (NOC) under this general permit will constitute confirmation of the division's finding that the discharges authorized by this general permit are either:

• not into waters with unavailable conditions; or

• the nature of the discharge is not likely to contribute pollutants of concern, for which the unavailable parameters exist, in amounts measurable in the segment with unavailable parameters.

b) If the division determines at any time that the discharge is causing or contributing to a violation of water quality standards or if the division has any other grounds for modifying or revoking this permit, the division may require corrective action or require the discharge be permitted differently in accordance with subpart 7.6

1.3.4. Issuance of a Notice of Coverage (NOC)

Issuance of a NOC for this general permit will constitute confirmation of the division's finding that the discharges authorized by this general permit are either:

- not into waters with unavailable conditions; or
- the nature of the discharge is not likely to contribute pollutants of concern, for which the receiving water is impaired, in amounts measurable in the impaired segment and the facility discharges are in compliance with all applicable TMDLs.

1.3.5. Violation of Water Quality Standards

If the division determines at any time that the discharge is causing or contributing to a violation of water quality standards or if the division has any other grounds for modifying or revoking this permit, the division may require corrective action or require the discharge be permitted differently in accordance with subpart 7.6.

1.3.6. Threatened and Endangered Species Protection

- 1.3.6.1. Issuance of a Notice of Coverage (NOC) under this permit will constitute confirmation of the division's finding that, with properly developed and implemented wastewater treatment methods and control measures selected for the pollutants of concern, the discharges authorized hereunder are not likely to result in the taking of threatened and endangered species.
- 1.3.6.2. Should the division later determine that the discharges covered by this permit would result in the taking of threatened or endangered species, or are otherwise

not in compliance with the Endangered Species Act, the director, upon written notification to the permittee, shall either:

a. Notify the permittee that it is no longer eligible for coverage under this permit and require coverage under an individual NPDES permit. The permittee will continue to be covered under this permit until the division issues an individual NPDES permit for its discharges, provided a timely application for an individual permit is made. A timely application is defined as submitting to the division a complete individual permit application, including sampling, within 90 days of the notice from the director requiring the application. A permittee may request a later date for the timely submission of an individual permit application for just cause; or

Notify the permittee that it must modify its wastewater treatment methods and control measures selected for the pollutants of concern. As a consequence, the discharges authorized by this permit will not result in the taking of threatened and endangered species and otherwise be in compliance with the Endangered Species Act. The permittee shall have 60 days after such notice to make such modifications to the wastewater treatment methods and control measures, and then 12 weeks to implement these modifications, unless a longer time is necessary for their implementation. Should a longer time be required, the permittee shall submit to the division's local Environmental Field Office (see subpart 1.2) a brief summary of the proposed modifications of wastewater treatment methods and control measures, including a timetable for implementation.

2. AUTHORIZATION TO DISCHARGE UNDER THIS PERMIT

Except as provided in section 1.3.2, if the Notice of Intent is submitted as set forth in part 3, a facility is permitted to discharge treated groundwater associated with underground storage tank remediation to the waters of the State of Tennessee in accordance with the terms of this permit and of T.C.A 69-3-108(b). Any such discharges not permitted under this permit or by an individual permit are unlawful under T.C.A 69-3-108(b). The division may grant or deny coverage under this permit or require an application for an individual permit. Upon notice from the division to the applicant, the applicant is covered under this general permit. General permits may be issued, modified, revoked, reissued or terminated in accordance with this permit and the applicable requirements of T.C.A 69-3-108.

3. **REQUESTING AND ISSUING COVERAGE**

3.1. FORMAT AND SUBMITTAL

3.1.1. Electronic Submittal

The Notice of Intent (NOI) shall be submitted electronically via <u>MyTDEC Forms</u> and must conform to the signatory requirements in subpart 7.4 unless a waiver is granted in accordance with <u>40 C.F.R. 127.15</u> (see section 7.9.3).

MyTDEC Forms may be found at the following link <u>https://forms.tdec.tn.gov/</u>

3.1.2. Hard Copy Option

Only after a waiver (see section 7.9.3) is approved by the division, a hard copy of the Notice of Intent (NOI), which indicates facility compliance with and requests coverage under the general permit, shall be completed and submitted using the form provided by the division. The NOI must signed in accordance with the signatory requirements of subpart 7.4 of this permit and should be mailed to the division at the following address:

Tennessee Division of Water Resources UST NOI Processing William R. Snodgrass Tennessee Tower, 11th Floor 312 Rosa L. Parks Ave. Nashville, TN 37243

3.2. DEADLINES

3.2.1. Existing Site

An operator of an existing site presently permitted under a general permit shall submit an NOI in accordance with the requirements of this part not more than 60 days following the effective date of this permit.

3.2.2. New Site or a Site with Expanded Discharge

An operator of a new source shall submit an NOI in accordance with the requirements of this part at least 30 days before any discharge of treated groundwater to the waters of the state occurs.

3.2.3. New Operator

Where the operator of a site that is covered by this permit changes, the new operator of the site must submit an NOI in accordance with the requirements of this part at least 5 days prior to the change. If the sale or transfer of ownership does not constitute a change of operator, and the signatory requirements for the NOI are still complied with, a new NOI does not have to be submitted.

3.3. SIGNATORY REQUIREMENTS FOR THE NOI

The NOI must be signed according to signatory requirements of section 7.4.1 of this permit.

3.4. ADMINISTRATIVE PROCEDURE FOR OBTAINING NOTICE OF COVERAGE (NOC)

The Notice of Coverage (NOC) is a notice from the division to the permittee informing them that the Notice of Intent (NOI) was received and accepted. The permittee is authorized to discharge treated groundwater associated with petroleum product underground storage tank remediation as of the effective date listed on the NOC.

The division reserves the right to deny coverage to artificial entities (e.g., corporations or partnerships, excluding entities not required to register with the Tennessee Secretary of State) that are not properly registered and in good standing (i.e., listed with an entity status of "active") with the Tennessee Secretary of State, Division of Business Services. The division also reserves the right to issue permit coverage in the correct legal name of the individual or entity seeking coverage, including each general partner of a general partnership in addition to the general partnership.

It is the responsibility of the applicant to thoroughly and accurately identify all waterbodies (see definition of streams) located on the site and to provide a determination of the water's status.

The division will review each NOI for completeness and accuracy. Except as provided in section 1.3.2, a complete and accurate NOI shall be processed as described below.

Upon receipt of a complete and accurate NOI, the division will transmit to the permittee a NOC, which shall specify the effective dates of coverage under the permit. The term of coverage shall end not later than the expiration date of this general permit.

If the division determines the submitted NOI is incomplete, or denies an applicant coverage under this general permit, the division shall notify the applicant of this determination in writing.

3.5. SCHEDULE OF COMPLIANCE

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

4. **EFFLUENT LIMITS**

4.1. NUMERIC EFFLUENT LIMITATIONS FOR TREATED GROUNDWATER

Discharges covered by this permit must comply with the following numerical effluent limits:

Parameter	Effluent Limitation
Benzene	0.005 mg/L as a daily maximum concentration
Ethylbenzene	0.010 mg/L as a daily maximum concentration
Toluene	0.010 mg/L as a daily maximum concentration
Xylene	0.010 mg/L as a daily maximum concentration
Lead, total recoverable	0.45 mg/L as a daily maximum concentration
Lead, total recoverable	0.018 mg/L as a monthly average concentration *
Total Suspended Solids (TSS)	40.0 mg/L as a daily maximum concentration
Floating Material, Color,	No distinctly visible floating scum, oil or other matter
Foam and Oil Sheen	
рН	6.5 - 9.0 (range)
IC25 (see Note)	Survival, Reproduction, & Growth in 100 % effluent
48 Hour LC50 (see Note)	Survival in 100% effluent

* In addition to the daily maximum concentration limitation for total recoverable lead, monthly average limitation will apply to those treatment systems that are discharging continuously for more than 4 days at any period of time into a zero low-flow receiving stream. The division will notify the applicant of applicability of this test requirement in writing; the notification will be included with the Notice of Coverage (NOC).

Note: The type of whole effluent toxicity testing applicable to any discharge depends on the receiving stream low flow conditions. Discharges into zero low flow receiving streams and streams that provide dilution factor up to 100:1 will have to comply with the numerical effluent limitation for IC25. Discharges with dilution factor of receiving stream to effluent between 100:1 and 500:1 will have to comply with the numerical effluent limitation for 48 hour LC50. If the calculated dilution factor is more than 500:1, and assuming immediate and complete mixing, there will be no WET testing required, unless toxicity was shown in the previous WET tests. Toxicity testing information is summarized in the table below:

Dilution Factor	0-100	100-500	>500
Type of WET testing	IC25	LC50	No Testing Required
Percent Effluent	100%	100%	Not Applicable

Calculation of dilution factor is as follows:

where Qw is a long-term average treated groundwater flow rate and Qs is a receiving stream low flow.) The division will notify the applicant of applicable WET test requirements in writing; the notification will be included with the Notice of Coverage (NOC).

4.2. NARRATIVE LIMITATIONS FOR TREATED GROUNDWATER DISCHARGES

- a) There shall be no distinctly visible floating scum, oil or other matter contained on or in the treated groundwater discharge.
- b) The treated groundwater discharge must result in no other materials in concentrations sufficient to be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life, or fish and aquatic life in the receiving stream.
- c) Sludge or any other material removed by any treatment works must be disposed of in a manner which prevents its entrance into or pollution of any surface or subsurface waters. Additionally, the disposal of such sludge or other material must be in compliance with the Tennessee Solid Waste Disposal Act, T.C.A 68-31-101, et seq. and the Tennessee Hazardous Waste Management Act, Tenn. Code Ann. 68-46-101, et seq.
- d) The treated groundwater discharge must not cause an objectionable color contrast in the receiving stream.
- e) The permittee shall use best management practices (BMPs) and good engineering practices to prevent contamination of the treated groundwater discharge from materials associated with activities at underground storage tank remediation sites.

5. MONITORING REQUIREMENTS

5.1. MONITORING REQUIREMENTS

- a) The permittee must monitor the treated groundwater for the parameters set forth in part 4 of this permit. Monitoring frequency for these parameters shall be <u>once per quarter</u>, except for the toxicity testing as described in subparagraph c) below, and any exceptions and/or additional monitoring as described in subparagraph f) below.
- b) Flow shall be reported in million gallons per day (MGD) as a total daily flow.
- c) Whole Effluent Toxicity (WET) Testing

Whole Effluent Toxicity (WET) testing, as prescribed in 40 CFR §136.3 - Identifications of test procedures, shall be completed according to the schedule described below. The applicable schedule will be established based on the previous WET test results for existing permittees and results of effluent chemical testing for new permittees. The division will notify the applicant of applicable WET test requirements in writing; the notification will be included with the Notice of Coverage (NOC).

Existing Permittees

If WET testing during the previous permit cycle (2018-2023) did not show effluent toxicity, no testing will be required during the term of this general permit. If WET testing did show effluent toxicity during the previous permit cycle, annual testing will be required for the duration of the permit. If applicable, WET testing shall commence within 180 days from the effective date of this permit.

New Permittees

WET testing will be required if the permittee is not in compliance with any of the numerical effluent limits for Benzene, Ethylbenzene, Toluene, Xylene or Lead, as described in part 4.1 of this permit during the first year of permit coverage. If an exceedance of any effluent limitation is reported, WET testing shall commence within 180 days from the date an exceedance is reported. WET tests shall be performed for three (3) consecutive months using two appropriate species. If toxicity is determined in any of these tests, annual testing will be required for the duration of the permit. If toxicity is not demonstrated, annual testing will not be required.

At the end of the initial WET testing period it is the responsibility of the permittee to notify the division of their results and to request either removal of the WET testing requirement or an annual testing frequency, based on their results. Requests should include the permit tracking number assigned, as shown on the Notice of Coverage, and should be submitted to the following address:

UST NOI Processing Tennessee Division of Water Resources Tennessee Tower, 11th Floor 312 Rosa L. Parks Ave. Nashville, TN 37243

Chronic testing

The permittee shall conduct a 3-Brood *Ceriodaphnia dubia* Survival and Reproduction Test and a 7-Day Fathead Minnow (*Pimephales promelas*) Larval Survival and Growth Test on the same samples of final effluent. The measured endpoint for toxicity will be the inhibition concentration causing 25% reduction in survival, reproduction, and growth (IC25) of the test organisms. The IC25 shall be determined based on a 25% reduction as compared to the controls using methods in accordance with the EPA guidance document for the specific test. The average reproduction and growth responses will be determined based on the number of *Ceriodaphnia dubia* or *Pimephales promelas* larvae used to initiate the test.

Test shall be conducted and its results reported based on appropriate replicates of a total of five serial dilutions and a control, using the percent effluent dilutions as presented in the following table:

Serial Dilutions for Whole Effluent Toxicity (WET) Testing					
Permit Limit (PL)	0.5 X PL	0.25 X PL	0.125 X PL	0.0625 X PL	Control
% effluent					
100	50	25	12.5	6.25	0

The dilution/control water used will be a moderately hard water as described in <u>Short-Term Methods for Estimating the Chronic Toxicity of Effluents and</u> <u>Receiving Water to Freshwater Organisms</u>, EPA-821-R-02-013, or the most current edition. A chronic standard reference toxicant quality assurance test shall be conducted with each species used in the toxicity test and the results submitted with the discharge monitoring report. Additionally, the analysis of this multi-concentration test shall include review of the concentrationresponse relationship to ensure that calculated test results are interpreted appropriately.

Toxicity will be demonstrated if the IC25 is less than or equal to the permit limit indicated in the above table. Toxicity demonstrated by the tests specified herein constitutes a violation of this permit.

All tests will be conducted using a single grab sample of final effluent collected on days 1, 3 and 5. If, in any control, more than 20% of the test organisms die in 7 days, the test (control and effluent) is considered invalid and the test shall be repeated within two weeks. Furthermore, if the results do not meet the acceptability criteria in <u>Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms</u>, EPA-821-R-02-013 (or the most current edition), or if the required concentrationresponse review fails to yield a valid relationship per guidance contained in <u>Method Guidance and Recommendations for Whole Effluent Toxicity (WET)</u> <u>Testing</u>, EPA-821-B-00-004 (or the most current edition), that test shall be repeated. Any test initiated but terminated before completion must also be reported along with a complete explanation for the termination.

In the event of a test failure, the permittee must schedule a follow-up test within two weeks and submit results from a follow-up test within 30 days from obtaining initial WET testing results. The follow-up test must be conducted using the same serial dilutions as presented in the corresponding table above. The follow-up test will not negate an initial failed test. In addition, the failure of a follow-up test will constitute a separate permit violation which must also be reported.

In the event of two consecutive test failures or three test failures within a 12month period for the same outfall, the permittee must initiate a Toxicity Identification Evaluation/Toxicity Reduction Evaluation (TIE/TRE) study within 30 days and so notify the division by letter. This notification shall include a schedule of activities for the initial investigation of that outfall. **During the term of the TIE/TRE study, the frequency of biomonitoring shall be once every three months.** Additionally, the permittee shall submit progress reports once every three months throughout the term of the TIE/TRE study. The toxicity must be reduced to allowable limits for that outfall within two years of initiation of the TIE/TRE study. Subsequent to the results obtained from the TIE/TRE studies, the permittee may request an extension of the TIE/TRE study period if necessary to conduct further analyses. The final determination of any extension period will be made at the discretion of the division.

The TIE/TRE study may be terminated at any time upon the completion and submission of two consecutive tests (for the same outfall) demonstrating compliance. Following the completion of TIE/TRE study, the frequency of monitoring will return to a regular schedule, as defined previously in this section. During the course of the TIE/TRE study, the permittee will continue to conduct toxicity testing of the outfall being investigated at the frequency of once every three months but will not be required to perform follow-up tests for that outfall during the period of TIE/TRE study.

Test procedures, quality assurance practices, determinations of effluent survival/reproduction and survival/growth values, and report formats will be made in accordance with <u>Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms</u>, EPA-821-R-02-013, or the most current edition.

Results of all tests, reference toxicant information, copies of raw data sheets, statistical analysis and chemical analyses shall be compiled in a report. The report will be written in accordance with <u>Short-Term Methods for Estimating</u> the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms, EPA-821-R-02-013, or the most current edition.

Acute testing

The permittee shall conduct a 48-hour static acute toxicity test on two test species on the same samples of final effluent. The test species to be used are Water Fleas (*Ceriodaphnia dubia*) and Fathead Minnows (*Pimephales promelas*).

The measured endpoint for toxicity will be the concentration causing 50% lethality (LC50) of the test organisms. The LC50 shall be determined based on a 50% lethality as compared to the controls using methods in accordance with the EPA guidance document for the specific test.

Test shall be conducted and its results reported based on appropriate replicates of a total of five serial dilutions and a control, using the percent effluent dilutions as presented in the following table:

Serial Dilutions for Whole Effluent Toxicity (WET) Testing					
Permit Limit (PL)	0.5 X PL	0.25 X PL	0.125 X PL	0.0625 X PL	Control
% effluent					
100	50	25	12.5	6.25	0

The dilution/control water used will be moderately hard water as described in <u>Methods for Measuring the Acute Toxicity of Effluents to Freshwater and</u> <u>Marine Organisms</u>, EPA-821-R-02-012 (or the most current edition). An acute standard reference toxicant quality assurance test shall be conducted with each species used in the toxicity tests and the results submitted with the discharge monitoring report. Additionally, the analysis of this multi-concentration test shall include review of the concentration-response relationship to ensure that calculated test results are interpreted appropriately.

Toxicity will be demonstrated if the LC50 is less than or equal to the permit limit indicated in the above table. Toxicity demonstrated by the tests specified herein constitutes a violation of this permit.

All tests will be conducted using four separate grab samples of final effluent, to be used in four separate tests, and shall be collected at evenly spaced (6-hour) intervals over a 24-hour period. If, in any control, more than 10% of the test organisms die in 48 hours, the test (control and effluent) is considered invalid and the test shall be repeated within two weeks. Furthermore, if the results do not meet the acceptability criteria as defined in <u>Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms</u>, EPA-821-R-02-012 (or the most current edition), or if the required concentration-response review fails to yield a valid relationship per guidance contained in <u>Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing</u>, EPA-821-B-00-004 (or the most current edition), that test shall be repeated. Any test initiated but terminated before completion must also be reported along with a complete explanation for the termination.

In the event of a test failure, the permittee must schedule a follow-up test within 2 weeks and submit results from a follow-up test within 30 days from obtaining initial WET testing results. The follow-up test must be conducted

using the same serial dilutions as presented in the corresponding table above. The follow-up test will not negate an initial failed test. In addition, the failure of a follow-up test will constitute a separate permit violation which must also be reported.

In the event of two consecutive test failures or three test failures within a 12 month period for the same outfall, the permittee must initiate a Toxicity Identification Evaluation/Toxicity Reduction Evaluation (TIE/TRE) study within 30 days and so notify the division by letter. This notification shall include a schedule of activities for the initial investigation of that outfall. **During the term of the TIE/TRE study, the frequency of biomonitoring shall be once every three months.** Additionally, the permittee shall submit progress reports once every three months throughout the term of the TIE/TRE study. The toxicity must be reduced to allowable limits for that outfall within two years of initiation of the TIE/TRE study. Subsequent to the results obtained from the TIE/TRE studies, the permittee may request an extension of the TIE/TRE study period if necessary to conduct further analyses. The final determination of any extension period will be made at the discretion of the division.

The TIE/TRE study may be terminated at any time upon the completion and submission of 2 consecutive tests (for the same outfall) demonstrating compliance. Following the completion of TIE/TRE study, the frequency of monitoring will return to a regular schedule, as defined previously in this section. During the course of the TIE/TRE study, the permittee will continue to conduct toxicity testing of the outfall being investigated at the frequency of once every three months but will not be required to perform follow-up tests for that outfall during the period of TIE/TRE study.

Test procedures, quality assurance practices and determination of effluent lethality values will be made in accordance with <u>Methods for Measuring the</u> <u>Acute Toxicity of Effluents to Freshwater and Marine Organisms</u>, EPA-821-R-02-012, or the most current edition.

Results of all tests, reference toxicant information, copies of raw data sheets, statistical analysis and chemical analysis shall be compiled in a report. The report shall be written in accordance with <u>Methods for Measuring the Acute</u> <u>Toxicity of Effluents to Freshwater and Marine Organisms</u>, EPA-821-R-02-012, or the most current edition.

d) Sample types shall be as follows, with the exception of paragraph e) below:

Parameter	Sample Type
Flow	Instantaneous
Benzene	Grab
Ethyl benzene	Grab
Toluene	Grab
Xylene	Grab
Lead, total recoverable	Grab
Total Suspended Solids (TSS)	Grab
Floating Material, Color, Foam and Oil Sheen	Visual
рН	Grab
48 Hour LC50	Grab
IC25	Grab

- e) If the division determines that a discharge will not accurately be characterized by grab samples, the division may require the permittee to sample by composite sample. This requirement shall be given by written notice to the permittee.
- f) The division may require the permittee to sample for additional parameters, or sample at an increased monitoring frequency, by either grab or composite sample. Replacing or changing the groundwater treatment system at a site may be a cause for the division to require sampling for additional parameters, or require sampling at an increased monitoring frequency. Any additional requirements shall be given by written notice to the permittee.

5.2. EFFECT OF SAFETY CONSIDERATIONS ON MONITORING REQUIREMENTS

The division does not require the permittee to jeopardize the safety or health of an individual in order to carry out any monitoring or surveillance requirement of this permit. If the permittee cannot complete any requirement of the permit during the required monitoring period due to severe weather concerns or other precarious site conditions, the permittee must submit the appropriate monitoring form or report along with a detailed explanation of the situation that prevented the permittee from completing the requirement.

6. **REPORTING**

6.1. MONITORING RESULTS

6.1.1. Reporting Procedures

Monitoring results shall be recorded and submitted quarterly based on the effluent limits in subpart 4.1 of the permit. DMRs and DMR attachments, including any supporting laboratory data, shall be submitted electronically using NetDMR no later than the 15th of the month following the end of the monitoring period. All NPDES program reports must be signed and certified by a responsible official or a duly authorized representative, as defined in 40 CFR §122.22.

The <u>NPDES Electronic Reporting Rule</u>, which became effective on December 21, 2016, replaces most paper-based application and reporting requirements with electronic reporting requirements. NetDMR allows NPDES permittees to submit DMRs electronically to EPA through a secure internet application and has been approved by Tennessee as the official electronic reporting tool for DMRs.

According to 40 CFR 127.15, states have the flexibility to grant temporary or episodic waivers from electronic reporting to NPDES permittees who are unable to meet the electronic reporting requirements. To obtain an electronic reporting waiver, an electronic reporting waiver request must be submitted by email to DWRwater.compliance@tn.gov or by mail to the following address:

Tennessee Division of Water Resources Compliance and Enforcement Unit William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, TN 37243

For contact and training information about NetDMR electronic reporting, visit TDEC's website at <u>NetDMR and Electronic Reporting (tn.gov)</u>.

6.2. ADDITIONAL MONITORING BY DISCHARGER

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods according to section 7.9.5, the results of such monitoring shall be included in the calculations and reporting of the values required in the Discharge Monitoring

Report (DMR) form. Such increased frequency shall also be indicated upon NetDMR submittal or in the "Frequency" column of the DMR.

7. STANDARD PERMIT CONDITIONS

7.1. DUTY TO COMPLY

7.1.1. Permittee's Duty to Comply

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

8.1.2. Penalties for Violations of Permit Conditions

Pursuant to T.C.A 69-3-115 of The Tennessee Water Quality Control Act of 1977, as amended:

- a. any person who violates an effluent standard or limitation or a water quality standard established under this section (T.C.A 69-3-101, et. seq.); violates the terms or conditions of this permit; fails to complete a filing requirement; fails to allow or perform an entry, inspection, monitoring or reporting requirement; violates a final determination or order of the board, panel or commissioner; or violates any other provision of this section or any rule or regulation promulgated by the board, is subject to a civil penalty of up to ten thousand dollars (\$10,000) per day for each day during which the act or omission continues or occurs;
- b. any person unlawfully polluting the waters of the state or violating or failing, neglecting, or refusing to comply with any of the provisions of this section (T.C.A 69-3-101, et. seq.) commits a Class C misdemeanor. Each day upon which such violation occurs constitutes a separate offense;
- c. any person who willfully and knowingly falsifies any records, information, plans, specifications, or other data required by the board or the commissioner, or who willfully and knowingly pollutes the waters of the state, or willfully fails, neglects or refuses to comply with any of the provisions of this section (T.C.A 69-3-101, et. seq.) commits a Class E felony and shall be punished by a fine of not

more than twenty-five thousand dollars (\$25,000) or incarceration, or both.

Nothing in this permit shall be construed to relieve the discharger from civil or criminal penalties for noncompliance. Notwithstanding this permit, the discharger 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 treated wastewater to any surface or subsurface waters. Additionally, notwithstanding this permit, it shall be the responsibility of the discharger 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. Furthermore, nothing in this permit shall be construed to preclude the State of Tennessee from any legal action or relieve the discharger from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or the Federal Water Pollution Control Act.

7.2. DUTY TO REAPPLY

7.2.1. Permittee's Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new individual permit or a new permit coverage.

7.2.2. Continuation of the Expired General Permit

This permit expires on October 31, 2027. However, an expired general permit continues in force and effect until a new general permit is issued.

7.3. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the division, within a time specified by the division, any information which the division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the commissioner upon request, copies of records required to be kept by this permit.

7.4. SIGNATORY REQUIREMENTS

All Notices of Intent (NOI), requests for termination of permit coverage, discharge monitoring report (DMR) forms, NetDMR submittals, certifications and/or any other information either submitted to the division, or that this permit requires be maintained by the permittee, shall be signed and dated.

7.4.1. Signatory Requirements for a Notice of Intent (NOI)

Notice of Intent (NOI) shall be signed as follows:

- 1. For a corporation, by a responsible corporate officer. For the purpose of this Subsection, a responsible corporate officer means:
 - a. a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or
 - b. the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

NOTE: The division does not require specific assignments or delegations of authority to responsible corporate officers. The division will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

- 1. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively.
- 2. For a municipality, State, Federal, or other public agency, by either
 - a. A principal executive officer (i.e. the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency); or
 - b. ranking elected official.

7.4.2. Changes to Authorization

If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of subpart 7.4 must be submitted to the director prior to or together with any reports, information, or applications to be signed by an authorized representative.

7.4.3. Certification

Any person signing a document under subpart 7.4 above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated section 39-16-702(a)(4), this declaration is made under penalty of perjury".

7.5. 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 is considered a new source as defined in Tennessee State Rule Chapter 0400-40-5-.02;
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged; or
- c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices.

7.6. REQUIRING AN INDIVIDUAL PERMIT, AN ALTERNATIVE GENERAL PERMIT, OR OTHER CORRECTIVE ACTION

7.6.1. Division of Water Resources Designation

If the division has notified the owner or operator in writing before or after the filing of a Notice of Intent (NOI) that the facility's discharges will cause or contribute to a violation of water quality standard or that coverage under this general permit is subject to being modified or revoked for any grounds under Tenn. Code Ann. 69-3-108(f), the discharger has the following options:

- 1. Provide a demonstration to the division within 60 days of the notification that the discharge does not cause or contribute to a violation of water quality standard;
- 2. Modify treatment methods and control measures at the facility to address the division's concerns within 120 days of the notification; or
- 3. Apply for coverage under other general permit (if available) or file an individual permit application within 180 days of the notification. Individual permit applications shall be submitted to email address: <u>water.permits@tn.gov</u>.

The permittee does not lose coverage under the general permit while exercising the above options. Although a permittee may exercise more than one of these three options, if the division does not approve the actions taken under (1) or (2), the permittee must comply with (3) within the stated time or an extension thereof granted by the division. If the owner or operator fails to submit in a timely manner an individual NPDES permit application as required by the division, the applicability of this permit to the individual NPDES permittee is automatically terminated at the end of the day specified for application submittal.

Any interested person may petition the division (in writing, providing valid justification) to take action under this subsection.

7.6.2. Individual Permit Application

Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application (Forms 1, 2E and any other applicable forms) with reasons supporting the request to the division. Individual permit applications shall be submitted to the address listed in section 7.6.1. The request may be granted by the issuance of any individual permit or an alternative general permit if the reasons cited by the owner or operator are adequate to support the request.

7.6.3. Individual/Alternative General Permit Issuance

When an individual NPDES permit is issued to an owner or operator otherwise subject to this permit, or the owner or operator is authorized for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to an owner or operator otherwise subject to this permit, or the owner or operator is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the date of such denial, unless otherwise specified by the division.

7.7. STATE/ENVIRONMENTAL LAWS

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 Tennessee law or regulation under authority preserved by the section 510 of the Clean Water Act. No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

7.7.1. Oil and Hazardous Substance Liability

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 to which the permittee is or may be subject under section 311 of the Clean Water Act or section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). This permit does not relieve the person of the reporting requirements for releases in excess of reportable quantities as described in 40 CFR 117 and 40 CFR 302.

7.7.2. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges.

7.7.3. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid,

the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

7.8. PROPER OPERATION AND MAINTENANCE

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related equipment) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

7.9. MONITORING AND RECORDS

7.9.1. Representative Samples/Measurements

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 after treatment and:

- prior to mixing with uncontaminated stormwater runoff or the receiving stream;
- prior to effluent leaving the facility boundary.

7.9.2. Retention of Records

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 three years from the date of sample, measurement, report or application. This period may be extended by request of the director at any time. If practicable, the records should be kept on-site or locations owned/operated by the permittee, such as a corporate office. Permittees must submit any such records to the division within 15 days upon written request.

7.9.3. Electronic Submission of Documents

This permit requires electronic 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 permit coverage.

The Notice of Intent (NOI) and Notice of Termination (NOT) shall be submitted electronically via <u>MyTDEC Forms</u> and must conform to the signatory requirements in subpart 7.4 unless a waiver is granted in accordance with <u>40 C.F.R. 127.15</u> (see section 7.9.3).

MyTDEC Forms may be found at the following link <u>https://forms.tdec.tn.gov/</u>

All electronic submissions shall comply with the requirements of Tennessee State Rule Chapter <u>0400-01-40</u>. Electronic submission is required when available unless waived by the Commissioner in accordance with 40 C.F.R. § 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 C.F.R. § 127.15. A request for a deadline extension or episodic electronic reporting waiver should be submitted to <u>DWRWater.Compliance@tn.gov</u>, 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:

TENNESSEE DIVISION OF WATER RESOURCES COMPLIANCE & ENFORCEMENT UNIT William R. Snodgrass - Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, Tennessee 37243-1102

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.

7.9.4. Records Contents

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

- 1. The date, exact place, and time of sampling or measurements;
- 2. The name(s) of the individual(s) who performed the sampling and measurements;

- 3. The date(s) analyses were performed;
- 4. The time(s) analyses were initiated;
- 5. The name(s) of the individual(s) who performed the analyses;
- 6. References and written procedures, when available, for the analytical techniques or methods used; and
- 7. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

7.9.5. Approved Monitoring Methods

Monitoring results must be conducted according to test procedures approved under 40 CFR part 136.

7.9.6. Reporting

Regular reporting (at a frequency of not less than once per year) to assure that compliance is being achieved will normally be required of the discharger in any permit as indicated below:

- a. Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the commissioner. Monitoring may also be reported via electronic reporting methods established by the commissioner.
- b. If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 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 DMR or other reporting form specified by the commissioner.
- c. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in the permit.

7.9.7. Penalties for Falsification of Reports

Section 69-3-115 of the Tennessee Water Quality Control Act and in section 309 of the Federal Water Pollution Control Act provides that any person who knowingly makes any false material statement, representation, or certification in any record

or other document submitted or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine and, or, by imprisonment for not more than two years, or by both.

7.10. INSPECTION AND ENTRY

The permittee shall allow the commissioner, or an authorized representative, or an authorized EPA representative, upon presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must 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 commissioner.

7.11. **PERMIT ACTIONS**

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. Causes for such permit action include but are not limited to the following:

- a. Violation of any terms or conditions of the permit;
- b. Obtaining a permit by misrepresentation or failure to disclose fully all relevant facts; and
- c. A change in any conditions that requires either a temporary or permanent reduction or elimination of the permitted discharge.

7.12. BYPASS OF TREATMENT FACILITY

Bypass, as defined in Tennessee State Rule Chapter 0400-40-5-.02, is prohibited unless:

- a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- b. There were no feasible alternatives to the 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 backup 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 preventive maintenance; and
- c. For anticipated bypass, the permittee submits prior notice, if possible at least ten days before the date of the bypass; or
- d. 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 to the appropriate EFO.

7.13. NONCOMPLIANCE

In the case of any noncompliance which could cause a threat to human health or the environment, the permittee shall report the noncompliance to the commissioner within 24 hours from the time the permittee becomes aware of the circumstances. A written submission must be provided within five days of the time the permittee becomes aware of the noncompliance. The permittee shall provide the following information to the appropriate EFO:

- a. A description of, and the cause of the noncompliance;
- b. The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and
- c. The steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

7.14. UPSET

An upset shall constitute an affirmative defense to an action brought for noncompliance with such technology-based numeric effluent limitations if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An upset occurred and that the permittee can identify the cause(s) of the upset;
- b. 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;
- c. The permittee submitted information to the appropriate EFO 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
- d. The permittee complied with any remedial measures required under "Adverse Impact."

7.15. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

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 non-complying 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.

7.16. PLACEMENT OF SIGNS

Within sixty (60) days of obtaining a Notice of Coverage under this general permit, the permittee shall place and maintain a sign at each outfall. The sign(s) should be clearly visible to the public from the bank and the receiving stream or from the nearest public property/right-of-way, if applicable. The minimum sign size should be two feet by two feet (2'x2') 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 is given as an example of the minimal amount of information that must be included on the sign:

UNDERGROUND STORAGE TANK REMEDIATION TREATED GROUNDWATER DISCHARGE (PERMITTEE'S NAME) (PERMITTEE'S PHONE NUMBER) NPDES PERMIT TRACKING # TNG83 ___ TENNESSEE DIVISION OF WATER RESOURCES 1-888-891-8332 ENVIRONMENTAL FIELD OFFICE – (EFO NAME)

8. **REOPENER CLAUSE**

8.1. POTENTIAL OR REALIZED IMPACTS ON WATER QUALITY

If there is evidence indicating potential or realized impacts on water quality or on a listed endangered species due to any effluent discharge covered by this permit, the owner or operator of such discharge may be required to obtain an individual permit or an alternative general permit in accordance with subpart 7.6.

8.2. APPLICABLE REGULATIONS

Permit modification or revocation will be conducted according to 40 CFR 122.62, 122.63, 122.64 and 124.5.

9. TERMINATION OF COVERAGE

9.1. NOTICE OF TERMINATION

A permittee shall request termination of coverage under this permit if and when discharges of treated groundwater to the surface waters of the State have been eliminated. The permittee must submit facts in support of the notice, which shall be signed in accordance with subpart 7.4 of this permit. The division retains the right to deny termination of coverage under this general permit upon receipt of the necessary notice and information from the permittee. If discharges have ceased but coverage under the general permit is still in effect because the permittee has not requested termination of permit coverage, the permittee will continue to be responsible for annual permit maintenance fees billed according to Tennessee State Rule Chapter 0400-40-11 - Environmental Protection Fund Fees.

The notice of termination shall be submitted electronically via <u>MyTDEC Forms</u> and must conform to the signatory requirements in subpart 7.4 unless a waiver is granted in accordance with <u>40 C.F.R. 127.15</u> (see section 7.9.3).

MyTDEC Forms may be found at the following link <u>https://forms.tdec.tn.gov/</u>

10. DEFINITIONS

BEST MANAGEMENT PRACTICES Best Management Practices ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the discharge of pollutants to waters of the state. BMPs also include treatment requirements, operating procedures; and practices to control plant site runoff, spillage, leaks, sludge or waste disposal, or drainage from raw material storage. BMPs include source control practices (non-structural BMPs) and engineered structures designed to treat runoff.

<u>Structural BMPs</u> are facilities that help prevent pollutants in stormwater runoff from leaving the site.

<u>Non-structural BMPs</u> are techniques, activities and processes that reduce pollutants at the source.

BYPASS means the intentional diversion of waste streams from any portion of a treatment facility.

A **CALENDAR DAY** means the 24-hour period from midnight to midnight or any other 24-hour period that reasonably approximates the midnight to midnight time period.

COMMISSIONER means the commissioner of the Department of Environment and Conservation or the commissioner's duly authorized representative and, in the event of the commissioner's absence or a vacancy in the office of commissioner, the deputy commissioner.

COMPOSITE SAMPLE means a combination of not less than eight influent or effluent portions (aliquots), collected over a 24-hour period. Under certain circumstances a lesser time period may be allowed, but in no case less than eight hours. A sufficient volume of sample to perform all required analyses plus any additional amount for quality control must be obtained. For automatic samplers that use a peristaltic pump, a minimum 100 ml aliquot must be obtained.

CONTINUOUS DISCHARGE means a "discharge" which occurs without interruption for periods greater than four days or more. Infrequent shutdowns for maintenance, process changes, or other similar activities are not deemed

interruptions for this definition. For the purposes of this permit, all other discharges are **intermittent**.

CWA means the Clean Water Act of 1977 or the Federal Water Pollution Control Act (33 U.S.C. 1251, et seq.)

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.

DIRECTOR means the director of the Tennessee Division of Water Resources, or an authorized representative.

EXCEPTIONAL TENNESSEE WATERS AND OUTSTANDING NATIONAL RESOURCE WATERS are surface waters of the State of Tennessee that satisfy characteristics as listed in Tennessee State Rule Chapter 0400-40-3-.06 of the official compilation - rules and regulations of the State of Tennessee. Characteristics include waters designated by the Water Quality Control Board as Outstanding National Resource Waters (ONRW); waters that provide habitat for ecologically significant populations of certain aquatic or semi-aquatic plants or animals; waters that provide specialized recreational opportunities; waters that possess outstanding scenic or geologic values; or waters where existing conditions are better than water quality standards.

GRAB SAMPLE: for the purpose of this permit, is defined as a single effluent sample of at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes. The sample(s) shall be collected at the period(s) most representative of the total discharge.

IC25 refers to the inhibition concentration in which at least a 25% reduction in reproduction and/or growth in test organisms occurs.

LC50 refers to the concentration that causes at least 50% lethality of the test organisms.

LOAD ALLOCATION (LA): The portion of a receiving water's loading capacity that is attributed either to one of its existing or future nonpoint sources of pollution or to natural background (40 CFR 130.2(g)).

MARGIN OF SAFETY (MOS): The "MOS" accounts for uncertainty in the loading calculation. The MOS may not be the same for different waterbodies due to differences in the availability and strength of data used in the calculations.

MONTHLY AVERAGE CONCENTRATION, means the arithmetic mean of all samples collected in a one calendar-month period, expressed in units of mass per volume of any pollutant other than bacteria.

NEW SOURCE means any building, structure, facility, area, or installation from which there is or may be a "discharge of pollutants," the construction of which commenced after the publication of state or federal regulations prescribing a standard of performance.

NONPOINT SOURCE is essentially any source of pollutant(s) that is not a point source. Nonpoint source pollution occurs when precipitation moves over and through the ground, picks up and carries away pollutants and deposits them into waters of the state. Examples are sheet flow from pastures and runoff from paved areas.

POINT SOURCE means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

A **QUARTER** is defined as any one of the following three-month periods: January 1 through March 31, April 1 through June 30, July 1 through September 30, and/or October 1 through December 31.

SECTION 313 WATER PRIORITY CHEMICAL means a chemical or chemical categories that: 1) are listed at 40 CFR 372.65 pursuant to section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986); 2) are present at or above threshold levels at a facility subject to EPCRA section 313 reporting requirements; and 3) meet at least one of the following criteria: (i) are listed in Appendix D of 40 CFR part 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria. See

Addendum A of this permit. This addendum is based on the final rulemaking EPA published in the Federal Register November 30, 1994.

SIGNIFICANT SPILLS includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR 110.10 and 40 CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4).

SITE, for the purpose of this permit, shall mean the location at which the groundwater remediation will take place.

STORMWATER means contaminated or uncontaminated stormwater runoff, snow melt runoff, and surface runoff and drainage.

TOTAL MAXIMUM DAILY LOAD (TMDL) is the sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background (40 CFR 130.21(1)). TMDL is a study that: (1.) quantifies the amount of a pollutant in a stream, (2.) identifies the sources of the pollutant, (3.) recommends regulatory or other actions that may need to be taken in order for the stream to no longer be polluted. Following are actions that might be recommended: Re-allocate limits on the sources of pollutants documented as impacting streams. It might be necessary to lower the amount of pollutants being discharged under NPDES permits or to require the installation of other control measures, if necessary, to insure that standards will be met. For sources the division does not have regulatory authority over, such as ordinary non-point source agricultural and forestry activities, provide information and technical assistance to other state and federal agencies that work directly with these groups to install appropriate Best Management Practices. Even for the impacted streams. TMDL development is not considered appropriate for all bodies of water: if enforcement has already been taken and a compliance schedule has been developed; or if best management practices have already been installed for nonregulated activities, the TMDL is considered not applicable. In cases involving pollution sources in other states, the recommendation may be that another state or EPA perform the TMDL analysis. TMDLs can be described by the following equation:

TMDL = sum of non-point sources (LA) + sum of point sources (WLA) + margin of safety

UNAVAILABLE CONDITIONS exist where water quality is at, or fails to meet, the criterion for one or more parameters.

UPSET means an exceptional incident in which there is unintentional and temporary noncompliance with the numeric effluent limitations as described in part 4 above this permit 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.

WASTELOAD ALLOCATION (WLA): The portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation. (40 CFR 130.2(h)).

WATER QUALITY-LIMITED SEGMENTS: Those water segments that do not or are not expected to meet applicable water quality standards even after the application of technology-based effluent limitations required by sections 301(b) and 306 of the Clean Water Act. (40 CFR 130.2(j)) Technology-based controls include, but are not limited to, best practicable control technology currently available (BPT) and secondary treatment.

WATERS OF THE STATE or simply **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.

WATERS WITH UNAVAILABLE PARAMETERS (previously referred to as impaired waters) means any segment of surface waters that has been identified by the division as failing to support classified uses. The division periodically compiles a list of such waters. The division will notify applicants and permittees if their discharge is into, or is affecting, waters with unavailable parameters.

10.1. ACRONYMS

- BAT best available technology economically achievable
- BCT best conventional pollutant control technology
- BDL below detection level
- BPT best practicable control technology currently available
- CFR code of federal regulations
- CFS cubic feet per second
- CIU categorical industrial user
- CSO combined sewer overflow

DMR – discharge monitoring report

D.O. – dissolved oxygen

EFO – environmental field office

LB (lb) - pound

MDL – method detection level

MGD – million gallons per day

ML – minimum level of quantification

ml – milliliter

MOR – monthly operating report

NODI – no discharge

NPDES – national pollutant discharge elimination system

PL – permit limit

POTW – publicly owned treatment works

RDL – required detection limit

STP – sewage treatment plant

Tenn. Code Ann. – Tennessee code annotated

TDEC – Tennessee Department of Environment and Conservation

TMDL – total maximum daily load

TRC – total residual chlorine

TSS – total suspended solids