

STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

DIVISION OF UNDERGROUND STORAGE TANKS

TECHNICAL GUIDANCE DOCUMENT - 010

EFFECTIVE DATE - JANUARY 16, 1992

RE: Procedure to obtain an NPDES Permit at a Petroleum Underground Storage Tank Site and the Division's Interim Requirements.

The Tennessee Department of Environment and Conservation believes that ground water contamination caused by releases from petroleum underground storage tank systems are serious problems and must be addressed in a proper and timely manner. In any ground water cleanup, the problem of contaminant removal and the disposal of treated waters is always an issue. One method of disposal of treated water is discharge to surface waters according to a National Pollution Discharge Elimination System (NPDES) permit issued by the Division of Water Pollution Control (WPC). WPC and the Division of Underground Storage Tanks (UST) developed an agreement effective April 17, 1990 which streamlines the NPDES process thus allowing for timely free product removal, cleanup of ground water, and proper wastewater treatment. The April 17, 1990 agreement is described below:

- 1. If there has been a release of petroleum from an underground storage tank system to the environment and there is discharge of treated water to surface waters, then an NPDES Permit will be required.
- 2. The Responsible Party or his/her representative shall submit two (2) NPDES Permit Applications to the appropriate WPC field office, along with a copy to the appropriate UST field office and a copy to the UST central office. The permit application may be submitted at any time during the investigation or remediation of a UST site.
- 3. UST shall respond to the permit application request by issuing an interim approval letter. This letter will include requirements for sampling frequency, discharge limits, and reporting as stated below:
 - a. The sampling frequency for all chemical parameters shall be monthly until the NPDES permit is issued by WPC. After the permit is issued by WPC the sampling frequency shall be based on the requirements of the permit.
 - b. The discharge limits for the effluent from the treatment unit are based on available treatment technologies and water quality criteria and are as follows:

Effluent Characteristic	Daily Max. Conc. mg/1	Sample Type
Flow		Instantaneous
Benzene	0.005	Grab
Ethylbenzene	0.010	Grab
Toluene	0.010	Grab
Xylene	0.010	Grab
Total Lead	0.030	Grab
Total Sus. Solids	40	Grab
Oil and Grease	15	Grab
48 Hour LC50*	Survival in 100% effluent	Composite

*Acute toxicity testing will be required monthly for the first 3 months and 2 appropriate test species, including a Daphnidae species and the fathead minnow (Pimephales promelas). Chronic toxicity testing will not be required. If toxicity is determined in any of these 3 tests, annual acute toxicity testing for the duration of the permit will be required. If toxicity is not demonstrated, annual testing will not be required.

UST may impose additional requirements as deemed necessary to protect human health and the environment. This may include but is not limited to requiring additional effluent characteristic limitations on TPH, MTBE, etc. These additional requirements shall remain after the NPDES permit is issued, although they may not be specifically required in the permit.

- c. A monthly report shall be submitted to the appropriate UST field office and the UST central office on a monthly basis. The report shall contain all information gathered during the sampling period and reported on standard Discharge Monitoring Report (DMR) forms. The report shall be submitted by the fifteenth day of the preceding month.
- 4. The permit applicant shall be sent a draft of the NPDES permit for review by WPC. If the draft is not agreeable and/or is more stringent than the criteria outlined above, the applicant must contact WPC. Additionally, a public notice regarding the permit issuance process will be made by WPC following development of the draft permit.
- 5. The Division of WPC will issue the NPDES Permit to the applicant. Once the permit is issued, the applicant has 30 days to appeal if the permit is not agreeable and/or is more stringent than the criteria outlined above.

The technology based standards used for the NPDES permit do not take stream dilution into account. The sampling frequency for chemical parameters will generally be monthly. However streams with 3Q20 low flow of zero may require weekly sampling. This will be determined by WPC on a case by case basis.

If the applicant feels dilution should be taken into account, the sampling frequency is not appropriate etc., then the applicant should appeal the NPDES permit. If the Water Quality Control Board grants the appeal, then UST will re-evaluate its requirements for discharge at that site to be consistent with the effective NPDES permit.

- 6. Once the NPDES permit is agreeable to all parties, the effluent sample results shall be reported as required as stated in the permit and submitted to the following:
 - a. Division of Water Pollution Control-Central Office; (DMR's only)
 - b. Division of Water Pollution Control-Field Office: (Upon request of the field office, individual sample results may be required in addition to DMR's.)
 - c. Both influent and effluent sample result will be reported monthly and will be submitted to the appropriate UST field office and UST central office.
- 7. If the effluent exceeds the limits established in the NPDES Permit, a Notice of Violation (NOV) will be issued by the Division of Underground Storage Tanks under the authority of the Tennessee Water Quality Control Act and/or the Tennessee Petroleum Underground Storage Tank Act.
- 8. If the permittee fails to correct permit violations, appropriate enforcement action may be taken by UST. If violations persist, the NPDES permit may be revoked.

It is important that the letter from the Division of Underground Storage Tanks approving discharge of treated water to surface water be followed in every detail. The approval letter allows the owner/operator to begin discharging to surface water after filing for an NPDES permit, yet prior to issuance of the NPDES permit.