



STATE OF TENNESSEE
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

05-00145

August 16, 2024

Mr. Jeff Riden, Chief Executive Officer
Tennessee Wastewater Systems, Inc.
e-copy: jeff.riden@adenus.com
849 Aviation Pkwy
Smyrna, TN 37167

Electronically Filed in TPUC Docket
Room on August 19, 2024 at 2:35 p.m.

**Re: State Operating Permit No. SOP-05033
Tennessee Wastewater Systems, Inc.
Smoky Village Subdivision
Kodak, Sevier County, Tennessee**

Dear Mr. Riden:

In accordance with the provisions of the Tennessee Water Quality Control Act, Tennessee Code Annotated (T.C.A.), Sections 69-3-101 through 69-3-120, the Division of Water Resources hereby issues the enclosed State Operating Permit. The continuance and/or reissuance of this Permit is contingent upon your meeting the conditions and requirements as stated therein.

Please be advised that a petition for permit appeal may be filed, pursuant to T.C.A. Section 69-3-105, subsection (i), by the permit applicant or by any aggrieved person who participated in the public comment period or gave testimony at a formal public hearing whose appeal is based upon any of the issues that were provided to the commissioner in writing during the public comment period or in testimony at a formal public hearing on the permit application.

Additionally, for those permits for which the department gives public notice of a draft permit, any permit applicant or aggrieved person may base a permit appeal on any material change to conditions in the final permit from those in the draft, unless the material change has been subject to additional opportunity for public comment.

Any petition for permit appeal under this subsection (i) shall be filed with the technical secretary of the Water Resources Board within thirty (30) days after public notice of the commissioner's decision to issue or deny the permit. A copy of the filing should also be sent to TDEC's Office of General Counsel.

TDEC has activated a new email address to accept appeals electronically. If you wish to file an appeal, you may do so by emailing the appeal and any attachments to TDEC.Appeals@tn.gov. If you file an appeal electronically, you do not have to send a paper copy. If you have questions

about your electronic filing, you can call 615-532-0131. Electronic filing is encouraged, but not required.

If you have questions, please contact the Knoxville EFO at 1-888-891-TDEC; or, at this office, please contact Mr. Bradley Smith at (731) 234-1408 or by E-mail at *Bradley.E.Smith@tn.gov*.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brad Harris", with a stylized flourish at the end.

Brad Harris, P.E.
Manager, Land-based Systems

Enclosure

cc: Permit File
Knoxville Environmental Field Office (EFO)
Ms. Jenny Nichols, Quality Control Technologist, Adenus Utilities Group,
jenny.nichols@adenus.com
Mr. Brandon Dotson, Operator, Tennessee Wastewater Systems, Inc.,
brandon.dotson@adenus.com
Ms. Michelle Mairs, Deputy Director, Utilities Division, Tennessee Regulatory Authority,
michelle.mairs@tn.gov

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Permit No. SOP-05033

PERMIT

For the operation of Wastewater Treatment Facilities

In accordance with the provision of Tennessee Code Annotated section 69-3-108 and Regulations promulgated pursuant thereto:

PERMISSION IS HEREBY GRANTED TO

Tennessee Wastewater Systems, Inc.
Smoky Village Subdivision
Kodak, Sevier County, Tennessee

FOR THE OPERATION OF

STEP/STEG collection system discharging to recirculating packed bed filter, followed by drip irrigation system located at latitude 35.99905 and longitude -83.63565 in Sevier County, Tennessee to serve approximately 28 homes in the Smoky Village subdivision. The design capacity of the system is .0056 MGD and will be dispersed on approximately 0.76 acres of suitable soils.

This permit is issued as a result of the application filed on April 4, 2024, in the office of the Tennessee Division of Water Resources and in conformity with approved plans, specifications and other data submitted to the Department in support of the above application, all of which are filed with and considered as a part of this permit, together with the following named conditions and requirements.

This permit shall become effective on: January 1, 2025

This permit shall expire on: December 31, 2029

Issuance date: August 16, 2024



for April Grippo
Director

A. GENERAL REQUIREMENTS

The treatment system shall be monitored by the permittee as specified below:

<u>Parameter</u>	<u>Sample Type</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Measurement Frequency</u>
Flow *	Totalizer			Daily
BOD ₅	Grab	45 mg/l	N/A	Once/Year
Ammonia as N	Grab	Report	N/A	Once /Quarter
<i>E. Coli</i>	Grab	941 colonies/100 ml	N/A	Once /Quarter

No E. Coli monitoring if fields are fenced

* Report average daily flow for each calendar month.

Sampling requirements in the table above apply to effluent being discharged to the drip irrigation plots.

This permit allows the operation of a wastewater collection, treatment, and storage system with disposal of treated wastewater through approved land application areas. There shall be no discharge of wastewater to any surface waters or to any location where it is likely to enter surface waters. There shall be no discharge of wastewater to any open throat sinkhole. In addition, the drip irrigation system shall be operated in a manner preventing the creation of a health hazard or a nuisance.

The land application component shall be operated and maintained to ensure complete hydraulic infiltration within the soil profile, transmission of the effluent away from the point of application, and full utilization of the soil profile as a portion of the treatment system.

Instances of surface saturation, ponding or pooling within the land application area as a result of system operation are prohibited. Instances of surface saturation, ponding or pooling shall be promptly investigated and noted on the Monthly Operations Report. The report shall include details regarding location(s), determined cause(s), the actions taken to eliminate the issue, and the date the corrective actions were made. Any instances of surface saturation, ponding or pooling not associated with a major precipitation event not corrected within three days of discovery shall be reported to the local Environmental Field Office at that time for investigation. Surface saturation, ponding or pooling resulting in the discharge of treated wastewater into Waters of the State or to locations where it is likely to move to Waters of the State shall be immediately reported to the local Environmental Field Office, unless the discharge is separately authorized by a NPDES permit.”

All drip fields shall be fenced sufficiently to prevent or impede unauthorized entry as well as to protect the facility from vandalism. Fencing shall be a minimum of four feet in height. Fencing shall be constructed of durable materials. Gates shall be designed and constructed in a manner to prevent or impede unauthorized entry. All designs are subject to division approval. Fence shall be installed prior to beginning of operation.

All drip lines shall be buried and maintained 6 to 10 inches below the ground surface.

The site shall be inspected by the certified operator or his/her designee, at a minimum, once per fourteen days (default) OR in accordance with an operating and maintenance inspection schedule in the permit administrative file record. The default inspection frequency will apply if an operating and maintenance inspection schedule is not submitted to be a part of the permit administrative file record. The operating and maintenance inspection schedule shall at a minimum evaluate the following via onsite visits or telemetry monitoring or a combination of the two:

- the condition of the treatment facility security controls (doors, fencing, gates, etc.),
- the condition of the drip area security controls (doors, fencing, gates, etc.),
- the condition of the site signage,
- the operational status of the mechanical parts of the treatment system (pumps, filters, telemetry equipment, etc.)
- the condition of the UV bulbs (if applicable)
- the condition of the land application area including the location of any ponding
- the name of the inspector
- the description of any corrective actions

Submission of the schedule, or revisions to the schedule, may be submitted to the division electronically. The schedule shall be submitted on or before the effective date of the permit. The permittee is responsible for maintaining evidence that the schedule, or revisions, have been submitted to the division.

B. MONITORING PROCEDURES

1. Representative Sampling

Samples and measurements taken in compliance with the monitoring requirements specified above shall be representative of the volume and nature of the monitored discharge, and shall be taken at the following location(s):

Effluent to drip irrigation plots.

2. Test Procedures

Unless otherwise noted in the permit, all pollutant parameters shall be determined according to methods prescribed in Title 40, CFR, Part 136.

C. DEFINITIONS

The "daily maximum concentration" is a limitation on the average concentration, in milligrams per liter, of the discharge during any calendar day.

The "***monthly average concentration***", other than for *E. coli* bacteria, is the arithmetic mean of all the composite or grab samples collected in a one-calendar month period.

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

For the purpose of this permit, "***continuous monitoring***" means collection of samples using a probe and a recorder with at least one data point per dosing cycle.

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.

"Wastewater" for the purpose of this permit means "sewage" as defined in TCA 69-3-103

D. REPORTING

1. Monitoring Results

Monitoring results shall be recorded consistent with the general requirements imposed in Part A above OR in accordance with the operating and maintenance inspection schedule in the permit administrative file record and submitted quarterly.

Submittals shall be postmarked no later than 15 days after the completion of the reporting period. A copy should be retained for the permittee's files. Monitoring results shall be reported in a format approved by the division. Operation reports and any communication regarding compliance with the conditions of this permit must be sent to:

Division of Water Resources
Knoxville Environmental Field Office
3711 Middlebrook Pike
Knoxville, TN 37921

Sampling results may be submitted electronically to: DWRWW.Report@tn.gov.

The first operation report is due on the 15th of the month following the quarter containing the permit effective date.

2. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified in Rule 0400-40-05-

.07(2)(h)2, the results of such monitoring shall be included in the calculation and reporting of the values required in the Quarterly Operation Report. Such increased frequency shall also be indicated.

3. Falsifying Reports

Knowingly making any false statement on any report required by this permit may result in the imposition of criminal penalties as provided for in Section 69-3-115 of the Tennessee Water Quality Control Act.

4. Signatory Requirement

All reports or information submitted to the commissioner shall be signed and certified by the persons identified in Rules 0400-40-05-.05(6)(a-c).

PART II

A. GENERAL PROVISIONS

1. 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 Director of Water Resources (the "Director") no later than 180 days prior to the expiration date.

2. Right of Entry

The permittee shall allow the Director, or authorized representatives, upon the notification of permittee and presentation of credentials:

a. To enter upon the permittee's premises where an effluent source is located or where records are required to be kept under the terms and conditions of this permit, and at reasonable times to copy these records;

b. To inspect at reasonable times any monitoring equipment or method or any collection, treatment, pollution management, or discharge facilities required under this permit; and

c. To sample at reasonable times any discharge of pollutants.

3. Availability of Reports

All reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Division of Water Resources.

4. Proper Operation and Maintenance

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.

The monitoring frequency stated in this permit shall not be construed as specifying a minimum level of operator attention to the facility. It is anticipated that visits to the treatment facility by the operator will occur at intervals frequent enough to assure proper operation and maintenance, but in no case less than one visit every fourteen days OR in accordance with an operating and maintenance inspection schedule in the permit administrative file record. If monitoring reports, division's inspection reports, or other information indicates a problem with the facility, the permittee may be subject to enforcement action and/or the permit may be modified to include increased parameter monitoring, increased monitoring frequency or other requirements as deemed necessary by the division to correct the problem. The permittee shall ensure that the certified operator is in charge of the facility and observes the operation of the system frequently enough to ensure its proper operation and maintenance regardless of the monitoring frequency stated in the permit.

Dilution water shall not be added to comply with effluent requirements.

5. 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.

6. 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.

7. Other Information

If the permittee becomes aware that he failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, then he shall promptly submit such facts or information.

B. CHANGES AFFECTING THE PERMIT**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.

2. Permit Modification, Revocation, or Termination

a. This permit may be modified, revoked and reissued, or terminated for cause as described in Section 69-3-108 (h) of the Tennessee Water Quality Control Act as amended.

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

3. Change of Ownership

This permit may be transferred to another person 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

c. The Director, within 30 days, does not notify the current permittee and the new permittee of his intent to modify, revoke or reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

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.

C. NONCOMPLIANCE**1. Effect of Noncompliance**

Any permit noncompliance constitutes a violation of applicable State laws and is grounds for enforcement action, permit termination, permit modification, or denial of permit reissuance.

2. 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 appropriate Division environmental field office within 24 hours from the time the permittee becomes aware of the circumstances. (The environmental field office should be contacted for names and phone numbers of emergency response personnel.)

A written submission must be provided within five days of the time the permittee becomes aware of the circumstances unless this requirement is waived by the Director on a case-by-case basis. The permittee shall provide the Director with the following information:

- i. A description of the discharge and cause of noncompliance;
- 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 non complying discharge.

b. Scheduled Reporting

For instances of noncompliance which are not reported under subparagraph 2.a. above, the permittee shall report the noncompliance on the Quarterly Operation Report. 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.

3. Overflow

a. "**Overflow**" means the discharge of wastewater from any portion of the collection, transmission, or treatment system other than through permitted outfalls.

b. Overflows are prohibited.

c. The permittee shall operate the collection system so as to avoid overflows.

d. No new or additional flows shall be added upstream of any point in the collection system, which experiences chronic overflows (greater than 5 events per year) or would otherwise overload any portion of the system. Unless there is specific enforcement action to the contrary, the permittee is relieved of this requirement after: 1) an authorized representative of the Commissioner of the Department of Environment and Conservation has approved an engineering report and construction plans and specifications prepared in accordance with accepted engineering practices for correction of the problem; 2) the correction work is underway; and 3)

the cumulative, peak-design, flows potentially added from new connections and line extensions upstream of any chronic overflow point are less than or proportional to the amount of inflow and infiltration removal documented upstream of that point. The inflow and infiltration reduction must be measured by the permittee using practices that are customary in the environmental engineering field and reported in an attachment to a Monthly Operating Report submitted to the local TDEC Environmental Field Office on a quarterly basis. The data measurement period shall be sufficient to account for seasonal rainfall patterns and seasonal groundwater table elevations.

e. In the event that more than 5 overflows have occurred from a single point in the collection system for reasons that may not warrant the self-imposed moratorium or completion of the actions identified in this paragraph, the permittee may request a meeting with the Division of Water Resources EFO staff to petition for a waiver based on mitigating evidence.

4. Upset

a. "**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.

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."

5. 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.

6. Bypass

- a. **"Bypass"** is the intentional diversion of wastewater away from any portion of a treatment facility.
- b. Bypasses are prohibited, unless:
 - i. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - ii. 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
 - iii. For anticipated bypass, the permittee submits prior notice, if possible at least ten days before the date of the bypass; or
 - iv. 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. A bypass that does not cause effluent limitations to be exceeded may be allowed only if the bypass is necessary for essential maintenance to assure efficient operation.
- d. "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.

D. LIABILITIES

1. Civil and Criminal Liability

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. 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.

PART III OTHER REQUIREMENTS

A. CERTIFIED OPERATOR

The waste treatment facilities shall be operated under the supervision of a Biological Natural System certified wastewater treatment operator and collection system shall be operated under the supervision of a the grade I certified collection system operator in accordance with the Water Environmental Health Act of 1984.

B. PLACEMENT OF SIGNS

The permittee shall place a sign at the entrance to the land application area if fenced or all reasonsable approaches to the land application area. The sign should be clearly visible to the public. 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

**RECLAIMED WASTEWATER
DRIP IRRIGATION
(PERMITTEE'S NAME)
(PERMITTEE'S PHONE NUMBER)
TENNESSEE DIVISION OF WATER
RESOURCES
Knoxville Environmental Field Office
PHONE NUMBER: 1-888-891-8332**

C. ADDITION OF WASTE LOADS

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

D. SEPTIC (STEP) TANK OPERATION

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 insure that the treatment plant will comply with the discharge requirements of this permit.

E. SEPTAGE MANAGEMENT PRACTICES

The permittee must comply with the provisions of Rule 0400-48-01-.22. If the septage is transported to another POTW for disposal, the permittee shall note the amount of septage wasted

in gallons and name of the facility the hauler intends to use for disposal of the septage on the monthly operation report. 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, TCA 68-31-101 et seq. and Tennessee Hazardous Waste Management Act, TCA 68-46-101 et seq.

F. OWNERSHIP OF THE TREATMENT FACILITIES

a. The permittee shall own the treatment facilities (and the land upon which they are constructed) including the land to be utilized for wastewater dispersal. A perpetual easement (properly recorded) may be accepted in lieu of ownership. If the permittee elects to make the treated wastewater available for reuse (irrigation of a golf course for example) a backup dedicated land application site must be provided or a perpetual easement must be obtained for the property where reuse is to take place. The perpetual easement must allow year-round application of the wastewater except where the permittee has provided (and the division has approved) storage facilities for periods when reuse is not available. Evidence of ownership of the treatment facility land application site(s) and/or a copy of the perpetual easement(s) must be furnished to the division for approval prior to construction of the wastewater collection and dispersal system. Signed agreements stating the intent of the existing landowner to transfer ownership may be provided to support permit issuance. Evidence of such ownership or access rights must be provided to, and approved by, the Commissioner prior to commencement of operation.

b. Where the treatment facility serves private homes, condominiums, apartments, retirement homes, nursing homes, trailer parks, or any other place where the individuals being served have property ownership, rental agreements, or other agreements that would prevent their being displaced in the event of abandonment or noncompliance of the sewerage system, ownership of the treatment facilities must be by a municipality, a public utility, a wastewater authority, or a privately owned public utility (having a Certificate of Convenience and Necessity from the Tennessee Public Utility Commission) or another public agency.

Attachment 1

Record of Comments and Responses (Notice of Determination)
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Tennessee Wastewater Systems, INC. –Smoky Village-Notice of Determination

Permit No. SOP-05033

Administrative Record

The most recent state operating permit application for Tennessee Wastewater Systems, Inc. – Smoky Village - was received by the Division of Water Resources (the Division) on April 4, 2024, and deemed complete on April 17, 2024. The draft state operating permit was placed on public notice on April 23, 2024. The draft state operating permit was signed on April 29, 2024. The public comments received during the public notice period are summarized below, along with the Division’s responses.

Comments received and responses

- 1. Comment: Provide a summary in the permits’ rationales of each facility’s performance over the past permit period, including a summary of permittees’ inspections, whether the results were satisfactory (or whether the results of any necessary follow-up were satisfactory), whether annual fees have been paid, and results of inspections by TDEC Staff.**

Response: The Division agrees to provide the following in the permits’ rationales based on information available from the most recent permit period:

- Permittee’s Monitoring Results- Summary
- Division Inspection Results - Summary
- Annual Maintenance Fee Payment - Verification

- 2. Comment: Post copies of the agency’s inspections of each facility on the DataViewer, not just a short summary of some inspections.**

Response: It is the Division’s intention to make the results of all inspections and associated inspection reports visible on the Division of Water Resources’ “Permit Information” Data Viewer. (There may be rare occasions where public access to inspection reports is restricted due to policy constraints.)

- 3. Comment: Post copies of the operators’ inspection and monitoring reports on the DataViewer, not just make them available for in-person inspection at a field office. For example, the SOPs provide that monitoring results may be submitted electronically if not postmarked within 15 days after each reporting period, but the DataViewer pages for the SOPs do not include monitoring or sampling results.**

Response: The Division agrees that it is certainly desirable to have permittee inspection and monitoring reports available on the Data Viewer. Currently monitoring reports, both paper and electronic, are stored in the Division of Water Resources' Regional Offices (Field Offices). Field office staff are working toward making monitoring reports available on the Data Viewer. They have been asked to upload all incoming state operation permit monitoring reports and to begin scanning/uploading previously submitted reports that are on file. With the understanding that the field offices have limited resources, they will prioritize their efforts to scan and/or upload these based on permits for which an application for renewal has been made or is anticipated will be made within the coming months.

4. Comment: Remove the permit term that allows-at a permittee's discretion-a permittee to reduce the frequency of inspections. Inspections should be conducted at least every 14 days.

Response: The Division appreciates the commentor's recommendation regarding permittee inspection frequency. However, we feel this has been sufficiently addressed by the existing permit language in Part II, Section A. 4., which states, in part:

The monitoring frequency stated in this permit shall not be construed as specifying a minimum level of operator attention to the facility. It is anticipated that visits to the treatment facility by the operator will occur at intervals frequent enough to assure proper operation and maintenance, but in no case less than one visit every fourteen days OR in accordance with an operating and maintenance inspection schedule in the permit administrative file record. If monitoring reports, division's inspection reports, or other information indicates a problem with the facility, the permittee may be subject to enforcement action and/or the permit may be modified to include increased parameter monitoring, increased monitoring frequency or other requirements as deemed necessary by the division to correct the problem. The permittee shall ensure that the certified operator is in charge of the facility and observes the operation of the system frequently enough to ensure its proper operation and maintenance regardless of the monitoring frequency stated in the permit.

The current permit language provides an opportunity for the permittee to reduce physical inspections, contingent upon proper operation and maintenance, while at the same time providing the Division with a mechanism to make discretionary changes to the permit, if necessary, to be protective of human health and the environment. The inspection frequency may be amended by the Division depending on the system's past and current performance.

5. Comment: Require the permittee to specify whether the inspections are conducted in-person or remotely.

Response: The standard permit language does seem to suggest that telemetry monitoring (remote monitoring) can be used in lieu of an on-site visit. However, in considering

the list of items specified by the permit as needing evaluation during an inspection, it becomes apparent that an on-site visit is necessary to complete the process. A representative of Tennessee Wastewater Systems Inc., the permittee for SOP-08014, has verified that all site inspections do in fact include a site visit, even sites with telemetry monitoring capabilities.

- 6. Comment:** **The draft permit contains the same provision to allow less frequent inspections. (Permit, p. 3). The permittee has opted to inspect the facility monthly.**

Response: See response to comment number “4” above.

- 7. Comment:** **This facility has a short rationale like the other SOPs with no mention there of the system’s performance or payment of permit fees. However, there are older records on the DataViewer describing non-compliance (e.g., “The site appears to be in a state of constant violation.”)⁴¹ and notices of violation without follow-up records showing that the facility came into compliance..**

Response: See response to comments number “1” above and number “10” below.

- 8. Comment:** **The DataViewer’s most recent TDEC inspection for this facility is from October 2019. Records mention a ditch previously seen on the site (i.e., “told me they had removed 3 chambers from each ditch and filled in with dirt to stop the effluent from reaching the disturbed area that been the ditch running off the property”),⁴² but it is not clear why the facility would have had a ditch.**

Response: In January of 2024, the Division did conduct a drip dispersal field inspection at this facility as part of a broader investigation into the efficacy of drip dispersal systems across the State. Posting of the inspection result was delayed due to the time involved in processing and evaluating such a large amount of data but, the inspection has since been published and is now available on the Data Viewer. The drip field for this system was determined to be “in compliance” with the terms of the permit.

The purpose of the ditch documented in the inspection reports from 2019 was unknown to the inspector. It was noted in the second report from 2019 that the ditch had been filled. The 2024 inspection report gave no indication the the filled ditch was any longer an area of concern.

- 9. Comment:** **In 2015, TDEC commented on the facility’s expansion plans, noting that, “Soils in the new area were similar to the existing field . . . with noted clay content as shallow as 7”-9” continuing to 35”+ in depth. A Division of Water Resources inspection of the site on July 9, 2013, revealed that the pits dug for the evaluation for the soil texture and structure were full of water.”**

Response: The quotation provided in this comment is from the Division’s Engineering Services Section and is given in preface to a list of recommends aimed at increasing the probability of success for a proposed drip field expansion. The commentor’s concern with this quotation is unclear.

10. Comment: Other examples of issues that might justify bi-weekly inspections rather than monthly inspections exist in Smoky Village’s records. In December 2013, for example, a deficiency was noted that, “Ponded water in the drip field indicate poor percolation, and vector attraction problems will persist.”⁴⁴ In 2012, in response to a citizen complaint, TDEC “sampled a spring-like flow of water emerging down gradient from the Smoky Village wastewater treatment plant and drip field.”⁴⁵ Or, if these issues have been fully remedied, that would be helpful information to include in the draft rationale.

Response: The examples of issues listed in this comment all predate the 2019 drip field expansion and date back roughly 2 permit cycles. The most recent drip field inspection, from early 2024, indicates the issues have been remedied. (See response to comment number “8” above.)

RATIONALE

Tennessee Wastewater Systems, Inc.
STATE OPERATION PERMIT NO. SOP-05033
Kodak, Sevier County, Tennessee

Permit Writer: Mr. Bradley Smith

FACILITY CONTACT INFORMATION:

Mr. Jeff Riden
Chief Executive Officer
Phone: (615) 220-7171
jeff.riden@adenus.com
SR-139 (Douglas Dam Road)
Smyrna, TN 37167

Activity Description: Treatment of domestic wastewater via a decentralized waste water to serve the Smoky Village Subdivision.

Facility location: Latitude 35.99905 and Longitude -83.63565

Name of the nearest stream: No discharge allowed.

Treatment system: STEP/STEG collection system discharging to recirculating packed bed filter, followed by UV disinfection and drip irrigation

Permit period: This permit will be issued for a five year period effective from the issuance date on the title page.

Terms & Conditions: BOD₅ is a standard measure of sewage strength. The 45 mg/L daily maximum limit is the required treatment standard for domestic waste water in Tennessee. Ammonia and BOD₅ reporting serve to demonstrate the treatment system is meeting minimum treatment standards. Land application, versus stream discharge, enables reduced monitoring frequency for these parameters. Narrative conditions for drip disposal and septage management are proposed in support of proper system operation to prevent runoff to streams and avoidance of nuisance conditions. E.coli limits apply when the disposal area is not fenced.

Financial Security: Municipalities and Utility Districts are government entities exempt from the financial security requirement in TCA 69-3-122. (or) Privately-owned public utilities provide financial security to the Public Utility Commission to comply with TCA 69-3-122.

Annual Maintenance Fee: An annual maintenance fee for the permit will apply after permit issue and upon receipt of an invoice. The fee is currently \$350.00 for non-discharging facilities with influent flow less than 0.075 MGD.

- As of the date of this draft there were no outstanding maintenance fees for this permit.

Items Requisite for Operation:

This draft permit proposes terms and conditions for planning purposes and to seek public comment on the potential water quality impacts of the proposed activity. Actual operation of the sewerage system is contingent on the following items (items may occur in any order):

- Approval of sewerage system construction plans and specifications per TCA 69-3-108(i),
- Final construction inspection and submission of O & M manual per Rule 0400-40-02-.09,
- Issuance of a Certificate of Convenience and Necessity (CCN) by the Public Utility Commission,
- Utility ownership of sewerage system assets consistent with Rule 0400-40-16-.02(8). Sewerage system assets broadly consist of those units integral to the collection, treatment and disposal of both the solid and liquid component of sewage (i.e. septic tanks and pumps, collection lines, treatment system and drip irrigation area and related appurtenances), and
- Final issue of the permit.

Permittee Monitoring Summary:

During the term of the previous permit, treatment system effluent was monitored according to the parameters and frequency specified in the “General Requirements” above. Monitoring results are summarized below:

Flow	Avg. – 2033gpd	Max. – 3418gpd
BOD5	Avg. – 52.5mg/L	Max. – 202mg/L
Ammonia as N	Avg. – 14.2mg/L	Max. – 51.7mg/L

Division Inspection Summary:

In January of 2024 the Division conducted a compliance evaluation inspections of the drip dispersal area. The drip field for this system was determined to be “in compliance” with the terms of the permit.

Permittee Minimum Inspection Frequency:

Site inspection frequency is monthly, as specified in the operation and maintenance inspection schedule included in the administrative file of record.