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
(615) 532-0625

**03-00377**

Electronically filed in TPUC Docket Room
on October 10, 2022 at 2:30 p.m.

# APPLICATION FOR A STATE OPERATION PERMIT (SOP)

Type of application: ☐ New Permit ☒ Permit Reissuance ☐ Permit Modification

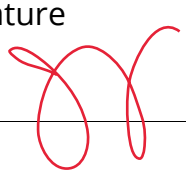
| **Permittee Identification:** (Name of city, town, industry, corporation, individual, etc., applying, according to the provisions of Tennessee Code Annotated Section 69-3-108 and Regulations of the Tennessee Water Quality Control Board.) | |
|---|---|
| Permittee Name (applicant): | Tennessee Wastewater Systems, Inc. |
| Permittee Address: | 851 Aviation Parkway Smyrna, TN 37167 |

| | | | |
|---|---|---|---|
| Official Contact: Jeff Risden | Title or Position: Chief Executive Officer | | |
| Mailing Address: 849 Aviation Pkwy | City: Smyrna | State: TN | Zip: 37167 |
| Phone number(s): (615) 220-7200 | E-mail: Jeff.risden@adenus.com | | |

| | | | |
|---|---|---|---|
| Optional Contact: Jeramy Stewart | Title or Position: Operator | | |
| Address: 851 Aviation Parkway | City: Smyrna | State: TN | Zip: 37167 |
| Phone number(s): (615) 220-7200 | E-mail: Jeramy.stewart@adenus.com | | |

**Application Certification** (must be signed in accordance with the requirements of Rule 0400-40-05-.05)

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 gathered and evaluated 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.

| Name and title; print or type | Signature | Date |
|---|---|---|
| Jeff Risden, CEO |  | 10/3/22 |

Permit Number: SOP-_____

| **Facility Identification:** | **Existing Permit No.** 03021 |
|---|---|
| Facility Name: Smoky Cove Subdivision | County: Sevier |
| Facility Address or Location: Bluff Mountain Road Pigeon Forge, TN, 37876 | Latitude: 35.79505 |
| | Longitude: -83.63895 |

Name and distance to nearest receiving waters: Unnamed Tributary of Nichols Branch---100'

If any other State or Federal Water/Wastewater Permits have been obtained for this site, list their permit numbers: N/A

Name of company or governmental entity that will operate the permitted system: TENN. WASTEWATER SYSTEMS

Operator address: 849 Aviation Parkway, Smyrna, TN 37167

Has the owner/operator filed for a Certificate of Convenience & Necessity (CCN), or an amended CCN, with the Tennessee Regulatory Authority (TRA) (may be required for collection systems and land application treatment systems)? ☐ Yes ☐ No ☒ N/A

If the applicant listed above does not yet own the facility/site or if the applicant will not be the operator, explain how and when the ownership will be transferred or describe the contractual arrangement and renewal terms of the contract for operations.

N/A

**Complete the following information explaining the entity type, number of design units, and daily design wastewater flow:**

| Entity Type | Number of Design Units | | Flow (gpd) |
|---|---|---|---|
| ☐ City, town or county | No. of connections: | | |
| ☐ Subdivision | No. of homes: | Avg. No. bedrooms per home: | |
| ☐ School | No. of students: | Size of cafeteria(s):<br>No. of showers: 0 | |
| ☐ Apartment | No. of units: | No. units with Washer/Dryer hookups:<br><br>No. units without W/D hookups: | |
| ☐ Commercial Business | No. of employees: | Type of business: | |
| ☐ Industry | No. of employees: | Product(s) manufactured: | |
| ☒ Resort | No. of units: 160 | Residential/Resort Chalets | 40,000 |
| ☐ Camp | No. of hookups: | | |
| ☐ RV Park | No. of hookups: | No. of dump stations: | |
| ☐ Car Wash | No. of bays: | | |
| ☐ Other | | | |

Describe the type and frequency of activities that result in wastewater generation.

Typical Domestic Waste

Permit Number: SOP-03021

| **Engineering Report (required for collection systems and/or land application treatment systems):** | ☐ N/A |
|---|---|

☐ Prepared in accordance with Rule 0400-40-05-.03 and Section 1.2 of the State of Tennessee Design Criteria for Sewage Works

☐ Attached, or

☒ Previously submitted and entitled: Approved? ☒ Yes. Date: 08/29/2003 ☐ No

Operation and Maintenance Inspection Schedule Submitted:

Approved? ☐ Yes. Date: ☐ No

| **Wastewater Collection System:** | ☐ N/A |
|---|---|

System type (i.e., gravity, low pressure, vacuum, combination, etc.): STEP/STEG small diameter sewer system

System Description: STEP/STEG small diameter sewer system

Describe methods to prevent and respond to any bypass of treatment or discharges (i.e., power failures, equipment failures, heavy rains, etc.): Tanks and sewers are watertight, no bypass points in system. TWSI Cellular Telemetry

In the event of a system failure describe means of operator notification: Cellular telemetry notification

List the **emergency** contact(s) (name/phone): Jeramy Stewart (615) 220-7200

For low-pressure systems, who is responsible for maintenance of STEP/STEG tanks and pumps or grinder pumps (list all contact information)? STEP/STEG TANKS-TWS (615) 220-7200

Approximate length of sewer (excluding private service lateral): ~11,100 LF

Number/hp of ~~l~~lift stations: 0 / 0 Number/hp of lift pumps 0 / 0

Number/volume of low pressure and or grinder pump tanks 0 / 0

Number/volume septic tanks 160 / 1,500 gal.

Attach a schematic of the collection system. ☐ Attached Previously submitted and approved

If this is a satellite sewer and you are tying in to another sewer system complete the following section, listing tie-in points to the sewer system and their location (attach additional sheets as necessary):

| Tie-in Point | Latitude (xx.xxxx°) | Longitude (xx.xxxx°) |
|---|---|---|
| N/A | | |
| | | |
| | | |

Permit Number: SOP-03021

| **Land Application Treatment System:** | ☐ N/A |
|---|---|
| Type of Land Application Treatment System: ☒ Drip ☐ Spray ☐ Other, explain: | |
| Type of treatment facility preceding land application (recirculating media filters, lagoons, other, etc.): Recirculation Trickling filter | |
| Attach a treatment schematic. ☐ Attached Previously submitted and approved | |
| Describe methods to prevent and respond to any bypass of treatment or discharges (i.e., power failures, equipment failures, heavy rains, etc.): Cellular telemetry notification, same as above | |
| For New or Modified Projects: Existing permit<br>Name of Developer for the project: Existing permit | |
| Developer address and phone number: Existing permit | |
| For land application, list: Proposed acreage involved: 4 +/- acres<br>Inches/week gpd/sq.ft loading rate to be applied: 2.4 inches/week | |
| Is wastewater disinfection proposed? | |
| ☒ Yes Describe land application area access: | |
| ☐ No Describe how access to the land application area will be restricted: Fenced | |

**Attach required additional Engineering Report Information (see website for more information)**

☐ Topographic map (1:24,000 scale presented at a six inch by six inch minimum size) showing the location of the project including quadrangle(s) name(s) GPS coordinates, and latitude and longitude in decimal degrees should also be included.

☐ Scaled layout of facility showing the following: lots, buildings, etc. being served, the wastewater collection system routes, the pretreatment system location, the proposed land application area(s), roads, property boundaries, and sensitive areas such as streams, lakes, springs, wells, wellhead protection areas, sinkholes and wetlands.

☐ Soils information for the proposed land disposal area in the form of a Water Resources Soils Map per Chapter 16 and 17 State of Tennessee Design Criteria for Sewage Work. The soils information should include soil depth (borings to a minimum of 4 feet or refusal) and soil profile description for each soil mapped.

☐ Topographic map of the area where the wastewater is to be land applied with no greater than ten foot contours presented at a minimum size of 24 inches by 24 inches.

☐ Describe alternative application methods based on the following priority rating: (1) connection to a municipal/public sewer system, (2) connection to a conventional subsurface disposal system as regulated by the Division of Groundwater Protection, and/or (3) land application.

Permit Number: SOP-03021

| **For Drip Dispersal Systems Only: Unless otherwise determined by the Department, sewage treatment effluent wells, i.e, large capacity treatment/drip dispersal systems after approval of the SOP Application, will be issued an UIC tracking number and will be authorized as Permit by Rule per UIC Rule 0400-45-06-.14(2) and upon issue of a State Operating Permit and Sewage System Construction Approval by the Department. Describe the following:** | ☒ N/A |
|---|---|
| The area of review (AOR) for each Drip Dispersal System shall, unless otherwise specified by the Department, consist of the area lying within a one mile radius or an area defined by using calculations under 0400-45-06-.09 of the Drip Dispersal System site or facility, and shall include, but not be limited to general surface geographic features, general subsurface geology, and general demographic and cultural features within the area. Attach to this part of the application a general characterization of the AOR, including the following: (This can be in narrative form) | |
| ☐ A general description of all past and present groundwater uses as well as the general groundwater flow direction and general water quality. | |
| ☐ A general description of the population and cultural development within the AOR (i.e. agricultural, commercial, residential or mixed) | |
| ☐ Nature of injected fluid to include physical, chemical, biological or radiological characteristics. | |
| ☐ If groundwater is used for drinking water within the area of review, then identify and locate on a topographic map all groundwater withdrawal points within the AOR, which supply public or private drinking water systems. Or supply map showing general location of publicly supplied water for the area (this can be obtained from the water provider) | |
| ☐ If the proposed system is located within a wellhead protection area or source water protection area designated by Rule 0400-45-01-.34, show the boundary of the protection area on the facility site plan. | |
| ☐ Description of system, Volume of injected fluid in gallons per day based upon design flow, including any monitoring wells | |
| ☐ Nature and type of system, including installed dimensions of wells and construction materials | |

| **Pump and Haul:** | ☒ N/A |
|---|---|
| Reason system cannot be served by public sewer: | |
| Distance to the nearest manhole where public sewer service is available: | |
| When sewer service will be available: | |
| Volume of holding tank: gal. | |
| Tennessee licensed septage hauler (attach copy of agreement): | |
| Facility accepting the septage (attach copy of acceptance letter): | |
| Latitude and Longitude (in decimal degrees) of approved manhole for discharge of septage: | |
| Describe methods to prevent and respond to any bypass of treatment or discharges (i.e., power failures, equipment failures, heavy rains, etc.): | |

| **Holding Ponds (for non-domestic wastewater only):** | ☒ N/A |
|---|---|
| Pond use: ☐ Recirculation ☐ Sedimentation ☐ Cooling ☐ Other (describe): | |
| Describe pond use and operation: | |
| If the pond(s) are existing pond(s), what was the previous use? | |
| Have you prepared a plan to dispose of rainfall in excess of evaporation? ☐ Yes ☐ No | |
| If so, describe disposal plan: | |
| Is the pond ever dewatered? ☐ Yes ☐ No | |
| If so, describe the purpose for dewatering and procedures for disposal of wastewater and/or sludge: | |
| Is(are) the pond(s) aerated? ☐ Yes ☐ No | |
| Volume of pond(s): gal. Dimensions: | |
| Is the pond lined (Note if this is a new pond system it must be lined for SOP coverage. Otherwise, you must apply for an Underground Injection Control permit.)? ☐ Yes ☐ No | |
| Describe the liner material (if soil liner is used give the compaction specifications): | |
| Is there an emergency overflow structure? ☐ Yes ☐ No | |
| *If so, provide a design drawing of structure.* | |
| Are monitoring wells or lysimeters installed near or around the pond(s)? ☐ Yes ☐ No | |
| *If so, provide location information and describe monitoring protocols (attach additional sheets as necessary):* | |

| **Mobile Wash Operations:** | ☒ N/A |
|---|---|

☐ Individual Operator ☐ Fleet Operation Operator

**Indicate the type of equipment, vehicle, or structure to be washed during normal operations (check all that apply):**

☐ Cars
☐ Trucks
☐ Trailers (Interior washing of dump-trailers, or tanks, is prohibited.)
☐ Other (describe):
☐ Parking Lot(s): sq. ft.
☐ Windows: sq. ft.
☐ Structures (describe):

**Wash operations take place at (check all that apply):**

☐ Car sales lot(s)
☐ Private industry lot(s)
☐ County(ies), list:
☐ Public parking lot(s)
☐ Private property(ies)
☐ Statewide

**Wash equipment description:**

☐ Truck mounted
☐ Rinse tank size(s) (gal.):
☐ Collection tank size(s) (gal.):
☐ Trailer mounted
☐ Mixed tanks size(s) (gal.):
Number of tanks per vehicle:

Pressure washer: psi (rated) gpm (rated)
☐ gas powered ☐ electric

Vacuum system manufacturer/model: Vacuum system capacity: inches Hg

Describe any other method or system used to contain and collect wastewater:

List the public sewer system where you are permitted or have written permission to discharge waste wash water (include a copy of the permit or permission letter):

Are chemicals pre-mixed, prior to arriving at wash location? ☐ Yes ☐ No

**Describe all soaps, detergents, or other chemicals used in the wash operation (attach additional sheets as necessary):**

| Chemical name: | Manufacturer: | Primary CAS No. or Product No. |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

**APPLICATION FOR A STATE OPERATION PERMIT (SOP)**
**INSTRUCTIONS**

Purpose of this form A completed SOP application must be submitted to obtain SOP coverage. This permit is required to operate a sewage, industrial waste or other waste collection and/or treatment system that does not have a point source discharge to any surface or subsurface waters. This form must be submitted at least 180 days before starting any new activity, before an existing permit expires, or when renewing a permit.

Complete the form Type or print clearly, using black or blue ink; not markers or pencil. Answer each item or enter "N/A," for not applicable. If you need additional space, attach a separate piece of paper to the SOP application. Applicants may be required to submit engineering reports, plans and specifications. Contact the division for the applicable items, or refer to Appendix 1-D of the state Design Criteria for Sewage Works for more information. **The application will be considered incomplete without supplying all of the required information, Engineering Reports, and an original signature.**

Permittee Identification/Facility Identification Describe and locate the project, use the legal or official name of the facility or site. Provide the latitude and longitude (expressed in decimal degrees) of the center of the site, which can be located on USGS quadrangle maps. The quadrangle maps can be obtained at 1-800-USA-MAPS, or at the Census Bureau world wide web site: http://www.census.gov/cgi-bin/gazetteer. Attach a copy of a portion of a 7.5 minute quad map, showing location of site, with boundaries at least one mile outside the site boundaries. If business is mobile give the owner of operations' home, or business office address, and list all current areas of operation by city and county.

Wastewater Collection System These types of systems require engineering reports, refer to Appendix 1-D of the state Design Criteria for Sewage Works for more information.

Land Application Treatment System These types of systems require engineering reports, refer to Appendix 1-D of the state Design Criteria for Sewage Works for more information. Public access to the treatment area must be restricted, if disinfection is not part of the treatment. Applicants completing this section of the application must also complete the Wastewater Collection System section.

Pump and Haul These types of systems may require engineering reports, refer to Appendix 1-D of the state Design Criteria for Sewage Works for more information.

Holding Ponds Given that annual rainfall onto open ponds exceeds annual evaporation (in Tennessee), the permittee must develop a written plan (to be retained on site and be available to the division upon request) that addresses how excess rainfall will be disposed of in compliance with the no discharge requirement of this permit. Treatment ponds are not to be used for stormwater treatment or storage. All new and existing point source industrial stormwater discharges associated with industrial activity require coverage under the

Tennessee industrial stormwater multi-sector general permit TMSP, refer to the website for more information. Describe the system for re-routing surface runoff away from ponds in the rainfall disposal plan.

Mobile Wash Operations Indicate whether the operation is run by an individual or a corporation with a fleet of vehicles equipped to wash and collect waste waters. If a corporation, indicate the home office as the "Official Contact". Indicate if operations take place at specific sites and list those counties that apply. Note that this permit covers operations for all of Tennessee. Operations indicated as "statewide" generally apply as a fleet type operation and each office location shall be individually permitted. Equipment may be truck or trailer-mounted, or both, indicate all that applies. Soaps, detergents, and other chemicals used should be non-toxic and biodegradable. All "chemically enhanced" (soaps, detergents, and other chemicals) waste-wash waters must be collected for proper disposal. If no chemically enhanced washwaters are used, clear-wash waters may travel by sheet flow to a gravel or grassy area where there is no opportunity to enter waters of the state. There should be no discharge to a storm water inlet, ditch, conveyance, stream, etc. If you are unsure of your wash area drainage, contact the area Environmental Field Office (EFO) prior to setting up your wash operation.

Fees Refer to the TDEC-DWR Environmental Protection Fund Fee Rule 0400-40-11-.02. Links to publications are available on Department of Environment and Conservation, Division of Water Resources webpage and the webpage for the Tennessee Secretary of State.

Submitting the form and obtaining more information Note that this form must be signed by the chief executive officer, owner, or highest ranking elected official. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). Submit a complete application electronically to water.permits@tn.gov (preferred) or to the appropriate EFO for the county(ies) where the facility is located, addressed to **Attention: DWR, Permit Section.** Please keep a copy for your records.

| EFO | Street Address | Zip Code | EFO | Street Address | Zip Code |
|---|---|---|---|---|---|
| Memphis | 8383 Wolf Lake Drive, Bartlett | 38133 | Cookeville | 1221 South Willow Ave. | 38506 |
| Jackson | 1625 Hollywood Dr | 38305-4316 | Chattanooga | 1301 Riverfront Parkway Suite 206 | 37402 |
| Nashville | 711 R S Gass Boulevard | 37243 | Knoxville | 3711 Middlebrook Pike | 37921 |
| Columbia | 1421 Hampshire Pike | 38401 | Johnson City | 2305 Silverdale Road | 37601 |

Upon receipt of the required items, the division conducts a review of the material, and the applicant is notified of any deficiencies. When all the deficiencies have been corrected, the division makes a determination of whether to publish a draft permit. When a draft permit is generated, a public notice is issued and published in a local newspaper. The draft permit is then reviewed by the applicant, and division field staff. The general public also has an opportunity to review the permit. Based on public response, a public hearing may be held. After considering public comments and a final review, the permit may be issued. The entire process normally takes from five (5) to nine (9) months. Permits are normally valid for five (5) years, except those for pump and haul systems, which are generally valid for one (1) year.

The division has the right to inspect a facility when deemed necessary. In addition, the division has the right to revoke or suspend any permit for violation of permit conditions or any other provisions of the Tennessee Water Quality Control Act and other water pollution control rules.

The division is responsible for regulating any activity, which involves a potential discharge in order to protect waters of the State from pollution and to maintain the highest possible standards in water quality.