



September 2, 2022

Tennessee Department of Environment & Conservation  
Division of Water Resources  
c/o Brad Harris, P.E  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 11th Floor  
Nashville, Tennessee 37243-1102

RE: Bradley County, Tennessee  
State Operating Permit – Graywood Farms North  
Bradley County, TN  
OHM Project Number: 0563220150

Dear Mr. Harris:

Ocoee Utility District (the District) is pleased to submit a State Operating Permit (SOP) application for the Graywood Farms North Residential Subdivision for review by TDEC. The proposed application seeks to provide sewer service to 57-single family homes with the District serving as operator of the collection and treatment system.

Project Description

The project consists of the installation of a STEP system with a low-pressure force main collector discharging to a 20,000 gpd drip-dispersal wastewater treatment plant. Approximately 2,750 LF of 2-inch force main will be installed and each of the 57 homes will be equipped with a 1,500-gallon STEP system.

Conclusion

The attachments for review and approval will include: Application for a State Operating Permit (SOP) (CN 1251, Rev. 03-19), Soils Map and Pedon Descriptions, General System Layout, and Engineering Report. By separate cover from Ocoee UD, a fee payment in the amount of \$750 per TAC Fund Fee Rule 0400-40-11-.02 for a 20,000 GPD Treatment Facility was mailed (copy of the check attached).

Thank you for your review and consideration of this project.

Sincerely,  
OHM Advisors

A handwritten signature in black ink that reads "Bruce Parola". The signature is written in a cursive style and is positioned above a horizontal line.

Bruce Parola, E.I.T.

Encl: SOP Application



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

**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: Ocoee Utility District (applicant):

Permittee Address: 5631 Waterlevel Highway S.E. Cleveland, TN 37323-8758

|   |   |           |                 |
|---|---|-----------|-----------------|
| Official Contact: Tim Lawson (Ocoee UD) | Title or Position: General Manager        |           |                 |
| Mailing Address: P.O. Box 305           | City: Cleveland                           | State: TN | Zip: 37361-0305 |
| Phone number(s): (423) 559-8505         | E-mail: Tim Lawson (timoud@bellsouth.net) |           |                 |

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| Optional Contact: OHM Advisors            | Title or Position: Engineer                          |           |            |
| Address: 209 10th Avenue South, Suite 154 | City: Nashville                                      | State: TN | Zip: 37203 |
| Phone number(s): (615) 649-5250           | E-mail: Chris Strupp (chris.strupp@ohm-advisors.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<br>Tim Lawson | Signature<br> | Date<br>08/30/2022 |
|---|---------------|--------------------|

|   |  |  |                         |
|---|--|--|-------------------------|
| <b>Facility Identification:</b>   |  | <b>Existing Permit No.</b>   |                         |
| Facility Name:  | Graywood Farms North Residential Subdivision |  | County: Bradley         |
| Facility Address or Location:   | 738 Old Charleston Road Cleveland, TN 37312  |  | Latitude: 35.2274402    |
|   |  |  | Longitude: -084.7941318 |
| Name and distance to nearest receiving waters: Rattlesnake Branch; 500 Feet   |  |  |                         |
| 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: Ocoee Utility District   |  |  |                         |
| Operator address: 5631 Waterlevel Highway, Cleveland, TN 37203  |  |  |                         |
| 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)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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. Applicant will own and maintain WWTP and permit upon completion and acceptance. |  |  |                         |
| <b>Complete the following information explaining the entity type, number of design units, and daily design wastewater flow:</b>   |  |  |                         |
| <u>Entity Type</u>  | <u>Number of Design Units</u>                |  | <u>Flow (gpd)</u>       |
| <input type="checkbox"/> City, town or county   | No. of connections:                          |  |                         |
| <input checked="" type="checkbox"/> Subdivision   | No. of homes: 57                             | Avg. No. bedrooms per home: 4  | 350 gpd/home (0.02 MGD) |
| <input type="checkbox"/> School   | No. of students:                             | Size of cafeteria(s):<br>No. of showers:                                   |                         |
| <input type="checkbox"/> Apartment  | No. of units:                                | No. units with Washer/Dryer hookups:<br><br>No. units without W/D hookups: |                         |
| <input type="checkbox"/> Commercial Business  | No. of employees:                            | Type of business:  |                         |
| <input type="checkbox"/> Industry   | No. of employees:                            | Product(s) manufactured:   |                         |
| <input type="checkbox"/> Resort   | No. of units:                                |  |                         |
| <input type="checkbox"/> Camp   | No. of hookups:                              |  |                         |
| <input type="checkbox"/> RV Park  | No. of hookups:                              | No. of dump stations:  |                         |
| <input type="checkbox"/> Car Wash   | No. of bays:                                 |  |                         |
| <input type="checkbox"/> Other  |  |  |                         |
| Describe the type and frequency of activities that result in wastewater generation.   |  |  |                         |

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| <b>Engineering Report (required for collection systems and/or land application treatment systems):</b>   | <input type="checkbox"/> N/A   |
| <input checked="" type="checkbox"/> Prepared in accordance with Rule 0400-40-05-.03 and Section 1.2 of the State of Tennessee <a href="#">Design Criteria for Sewage Works</a> |  |
| <input checked="" type="checkbox"/> Attached, or   |  |
| <input type="checkbox"/> Previously submitted and entitled:  | Approved? <input type="checkbox"/> Yes. Date: <input type="checkbox"/> No            |
| Operation and Maintenance Inspection Schedule Submitted:   | Approved? <input type="checkbox"/> Yes. Date: <input checked="" type="checkbox"/> No |

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| <b>Wastewater Collection System:</b>   | <input type="checkbox"/> N/A |
| System type (i.e., gravity, low pressure, vacuum, combination, etc.): STEP   |                              |
| System Description: STEP system with low pressure force main collector discharging to a drip-dispersal WWTP  |                              |
| Describe methods to prevent and respond to any bypass of treatment or discharges (i.e., power failures, equipment failures, heavy rains, etc.): <small>Min. 24-hours storage. Power failure will not allow the STEP pumps to transfer the effluent to the WWTP. OUD will be alerted by remote alarm.</small> |                              |
| In the event of a system failure describe means of operator notification: SCADA  |                              |
| List the <b>emergency</b> contact(s) (name/phone): Buck Owen; (423) 331-4970   |                              |
| For low-pressure systems, who is responsible for maintenance of STEP/STEG tanks and pumps or grinder pumps (list all contact information)?<br>Buck Owen; buckoud@yahoo.com; (423) 331-4970<br>Clay Underdown; clayunderdown@yahoo.com; (423) 716-1653  |                              |
| Approximate length of sewer (excluding private service lateral): 2,750 Linear Feet   |                              |
| Number/hp of lift stations: N/A / Number/hp of lift pumps 57 / 0.5 hp  |                              |
| Number/volume of low pressure and or grinder pump tanks /  |                              |
| Number/volume septic tanks 57 / 1,500 Gallons  |                              |
| Attach a schematic of the collection system. <input checked="" type="checkbox"/> Attached  |                              |
| 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):  |                              |
| <u>Tie-in Point</u>  | <u>Latitude (xx.xxxx°)</u>   |
| <u>Longitude (xx.xxxx°)</u>  |                              |
|  |                              |
|  |                              |

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| <b>Land Application Treatment System:</b>   | <input type="checkbox"/> N/A  |
| Type of Land Application Treatment System: <input checked="" type="checkbox"/> Drip <input type="checkbox"/> Spray <input type="checkbox"/> Other, explain:   |   |
| Type of treatment facility preceding land application (recirculating media filters, lagoons, other, etc.):  | Recirculating media filter  |
| Attach a treatment schematic. <input checked="" type="checkbox"/> Attached  |   |
| Describe methods to prevent and respond to any bypass of treatment or discharges (i.e., power failures, equipment failures, heavy rains, etc.):   | Min. 24-hours storage. Power failure will not allow the STEP pumps to transfer the effluent to the WWTP. OUD will be alerted by remote alarm. |
| For New or Modified Projects:<br>Name of Developer for the project:   | Riverstone Construction, LLC  |
| Developer address and phone number:   | 9018 Ooltewah Georgetown Rd Ste 126, Ooltewah, TN 37363<br>(423) 954-7550   |
| For land application, list: Proposed acreage involved:  | 170,000 SF (3.90266 Ac.)  |
| Inches/week gpd/sq.ft loading rate to be applied:   | 0.25 gpd/sf   |
| Is wastewater disinfection proposed? UV Treatment   |   |
| <input checked="" type="checkbox"/> Yes Describe land application area access:  | WWTP/Land Application driveway access off residential street  |
| <input type="checkbox"/> No Describe how access to the land application area will be restricted:  | Fencing   |
| <b>Attach required additional Engineering Report Information (see <a href="#">website</a> for more information)</b>   |   |
| <input checked="" type="checkbox"/> 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.   |   |
| <input checked="" type="checkbox"/> 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. |   |
| <input checked="" type="checkbox"/> 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.                         |   |
| <input checked="" type="checkbox"/> 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.  |   |
| <input checked="" type="checkbox"/> 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.  |   |

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| <p><b>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:</b></p> | <input checked="" type="checkbox"/> 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

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| <p><b>Pump and Haul:</b></p> | <input checked="" type="checkbox"/> N/A |
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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.):



|   |   |
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| <b>Holding Ponds (for non-domestic wastewater only):</b>  | <input checked="" type="checkbox"/> N/A |
| Pond use: <input type="checkbox"/> Recirculation <input type="checkbox"/> Sedimentation <input type="checkbox"/> Cooling <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No  |   |
| If so, describe disposal plan:  |   |
| Is the pond ever dewatered? <input type="checkbox"/> Yes <input type="checkbox"/> No  |   |
| If so, describe the purpose for dewatering and procedures for disposal of wastewater and/or sludge:   |   |
| Is(are) the pond(s) aerated? <input type="checkbox"/> Yes <input type="checkbox"/> 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.)? <input type="checkbox"/> Yes <input type="checkbox"/> No |   |
| Describe the liner material (if soil liner is used give the compaction specifications):   |   |
| Is there an emergency overflow structure? <input type="checkbox"/> Yes <input type="checkbox"/> No  |   |
| <i>If so, provide a design drawing of structure.</i>  |   |
| Are monitoring wells or lysimeters installed near or around the pond(s)? <input type="checkbox"/> Yes <input type="checkbox"/> No   |   |
| <i>If so, provide location information and describe monitoring protocols (attach additional sheets as necessary):</i>   |   |





**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

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

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](mailto: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.

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