

BEFORE THE TENNESSEE REGULATORY AUTHORITY

NASHVILLE, TENNESSEE

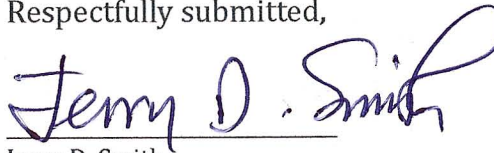
DATE: March 17, 2010

Petition of Swan Ridge MCM Utility, Inc. to
obtain a certificate of public convenience
and necessity for the service of the part of
Clay County, Tennessee known as Swan
Ridge Lake Resort, LLC and Mitchell Creek
Marina, LLC.

DOCKET NO. 10-00045

Swan Ridge MCM Utility, Inc. would like to submit this petition to service Swan
Ridge Lake Resort, LLC and Mitchell Creek Marina, LLC with wastewater treatment
service.

Respectfully submitted,

A handwritten signature in dark ink, reading "Jerry D. Smith". The signature is written in a cursive style with a large, looping "S" at the end.

Jerry D. Smith
Swan Ridge MCM Utility, Inc.
President
3403 Swan Ridge Road
Hilham, TN 38568
931-243-4871

Swan Ridge MCM Utility, Inc.

T.R.A.No.1
Section 1
Original Page 1

WASTEWATER UTILITY SERVICE

TITLE PAGE

**REGULATION AND SCHEDULE OF CHARGES GOVERNING THE PROVISION OF WASTEWATER UTILITY
SERVICE TO RESIDENCES AND BUSINESSES WITHIN THE STATE OF TENNESSEE**

This tariff contains the description, regulation and rates applicable to the furnishing of wastewater utility service provided by Swan Ridge MCM Utility, Inc. within the State of Tennessee. This tariff is on file with the Tennessee Regulatory Authority. Copies may be inspected during normal business hours at the Company's principal place of business at 3403 Swan Ridge Road Hilham, TN 38568.

Issued Date: _____

Effective _____

Issued by: Jerry D. Smith

Title: President

Swan Ridge MCM Utility, Inc.

T.R.A.No.1
Section 1

WASTEWATER UTILITY SERVICE

CHECK SHEET

Sheets of this tariff are effective as of the date shown at the bottom of the respective sheet(s).
Original and revised sheets as named below comprise all changes from the original sheet and are currently in effect as the date on the bottom of this sheet.

SECTION	SHEET	REVISION
1	1	Original
1	2	Original
1	3	Original
1	4	Original
1	5	Original
1	6	Original
2	1	Original
2	2	Original
2	3	Original
2	4	Original
2	5	Original
2	6	Original
2	7	Original
2	8	Original
3	1	Original
4	1	Original

 Issued Date: _____

 Effective _____

 Issued by: Jerry D. Smith

 Title: President

WASTEWATER UTILITY SERVICE

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WASTEWATER UTILITY SERVICE

SYMBOLS

The following symbols are used for the purpose indicated below:

- | | |
|---|--|
| C | Changed regulations or rate structure |
| D | Discontinued material |
| I | An increased rate |
| M | A move in the location of text |
| N | A new rate or regulation |
| R | A reduced rate |
| S | Reissued material |
| T | Change in text but no change in rate or regulation |

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WASTEWATER UTILITY SERVICE

TARRIFF FORMAT

- A. **Sheet numbering** – Sheet numbers appear in the upper right corner of the sheet. Sheets are numbered sequentially. However, new sheets are occasionally added to the tariff. When new sheet is added between sheets already in effect, a decimal is added. For example, a new sheet added between sheets 12 and 13 would be 12.1.
- B. **Sheet Revision Numbers** – Revision numbers also appear in the upper right corner of each sheet. These numbers are used to determine the most current sheet version on file with the TRA. For example, the 4th revised Sheet 12 cancels the 3rd revised Sheet 12. Because of various suspension periods, deferrals, etc., that the TRA follows in its tariff approval process, the most current sheet number on file with the TRA is not always the sheet in effect. Consult the Check Sheet for the sheet currently in effect.
- C. **Paragraph Numbering Sequence** – There are nine levels of paragraph coding. Each level of coding is subservient to the next higher level:

2.
2.1
2.1.1
2.1.1.A
2.1.1.A.1
2.1.1.A.1(a)
2.1.1.A.1(a).1
2.1.1.A.1(a).1.(i)
2.1.1.A.1(a).1.(i).(1)

D. Check Sheets – When a tariff filing is made with the TRA, an updated Check Sheet accompanies the tariff filing. The Check Sheet lists the sheets contained in the tariff, with a cross-referenced to the current revision number. When new sheets are added, the Check Sheet is changed to reflect the revision. All revisions made in a given filing are designated by an asterisk (*). There will be no other symbols used on this sheet if these are the only changes made to it (i.e., the format, etc. remain the same, just revised revision levels on some sheets.) The tariff user should refer to the latest Check Sheet to find out if a particular sheet is the most current on file with the TRA.

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WASTEWATER UTILITY SERVICE

DEFINITIONS

Certain terms used generally throughout this tariff for the Utility Service of this Company are defined below:

1. Company – Swan Ridge MCM Utility, Inc.
2. Engineer – the consulting engineer of Field's Engineering Consultant Services, LLC.
3. Customer – any person, firm, corporation, association or government unit furnished sewage by the Company.
4. Residential Property – property that is an established residence for a single family that is intended solely for the family's use.
5. Commercial Property – property that is used for commercial, overnight rental or institutional purposes.
6. Facilities – all equipment owned and operated by the Company.
7. TRA – the Tennessee Regulatory Authority.
8. Septic Pump Tank – the tank located near a customer's building, which accepts waste and contains a pump vault.
9. Septic Gravity Tank – the tank located near a customer's building, which accepts waste and contains an effluent filter.
10. Service Line – the line from the Septic Pump/Septic Gravity Tank to Collector Line.
11. Collector Line – the line from the Service Line to the Main Line.
12. Main Line – the line from the Collector Line to the treatment facility.
13. Building Outfall Line – the customers owned line that carries waste from the building to the Septic Pump Tanks/Septic Gravity Tank.
14. Pumping Station – a tank that contains pumps and receives effluent from Septic Gravity Tanks and/or Collector Lines.
15. Premises – shall mean customer's private property.
16. Service Connection – the point at which the service line to the wastewater system components at the customer's building is connected to the main wastewater collection system.

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Title: President

WASTEWATER UTILITY SERVICE

SECTION 2

RULES AND REGULATIONS

Governing the sewage collection and treatment systems of Swan Ridge MCM Utility, Inc.

Statement of Purpose

The general purpose of these rules and regulations is:

1. To establish procedures for furnishing sewage collection and treatment services on a uniform basis to customers within the Company's service area.
2. To provide standards and procedures for
 - a. Acceptable sewage characteristics
 - b. Protection of the integrity of the water tight system
 - c. Engineering design standards
 - d. Construction standards and inspection requirements
 - e. Quality of materials

Authorization of Rules and Regulations

Swan Ridge MCM Utility, Inc. is a corporation organized and engaged in business as a public utility in the State of Tennessee. The Company is regulated under the Certificate of Convenience and Necessity issued by the Tennessee Public Commission (PSC) on _____, 20____, under Docket No. _____, and subsequent certificates issued by the PSC and the TRA.

Effects of Rules and Regulations

All provisions of these rules and regulations shall be incorporated in each contract with each sewage system customer of the Company.

Issued Date: _____
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WASTEWATER UTILITY SERVICE

Utility Facilities on Private Property

The Company shall maintain all septic pump and septic gravity tanks, control systems and service lines required to provide sewer services on the Customer's premises. The Customer must execute an agreement that acknowledges the Company to have a perpetual easement in, over, under and upon the specified land of the Customer as shown on the property plat, with the right to operate and repair all components of the sewer system on the Customer's property, including but not limited to the septic tank and septic pump tank systems. The Customer must grant the Company permission to enter upon the Customer's property for any reason connected with the provision or removal of sewer service or collection therefore. The Customer must pay the Company \$800.00 as an initial connection fee. The Customer must also agree to allow the Company to install an approved cut off valve between the house and water supply and grant the Company exclusive rights to use such valve to cut off water in order to safely stop wastewater flow. The Customer understands there will be a charge of \$100.00 for installation of this valve. The Customer's Building Plumbing and Building Outfall Line shall be maintained by the Customer.

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WASTEWATER UTILITY SERVICE

Discontinuance of Service

Service under any application may be discontinued for the following reason:

1. Non-payment of bill as hereinafter set forth below.
2. For misrepresentation of application.
3. For adding to the property without notice to the Company.
4. For tampering with any service pipe, tank, control system, filter or any other facilities of the Company in any way whatsoever.
5. For violation of any rules of the Company.
6. For disconnecting or reconnecting service by any party, other than a duly authorized agent of the Company, without consent of the Company.

Non -Payment Penalties

The Customer agrees to promptly pay for service at the then current schedule or rates and fees and agrees to abide by and be subject to the Company's billing and cutoff procedures. Should the Customer not pay in accordance with the Company's rules, the Customer agrees to pay all reasonably incurred cost of collection of delinquent fees including attorney fees. A non-payment penalty of five percent (5%) of the total bill amount will be due after the due date shown on the bill. If payment is not received within fifteen (15) days after the due date, a 2nd notice will be sent to the Customer. If payment is not received within thirty (30) days, service will be turned off from the Customer's property as per the **Sewer Contract Agreement (Attachment I)** executed by the Customer with no additional being sent. No service shall be reconnected if disconnection for non-payment (or any other valid reason) until all charges have been paid, including disconnection fees, reconnection fees and all back payments due to the Company. The disconnection fee is \$40.00. The reconnection fee is \$50.00.

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WASTEWATER UTILITY SERVICE

Returned Checks

A check returned by the bank will incur a fee of \$25.00.

Changes in Ownership, Tenancy of Service

A new application and contract must be made and approved by the Company on any change in ownership of property, or tenancy, or in the service as described in the application. In the event of a failure of a new owner or tenant to make such application, the Company shall have the right to discontinue service until such new application is made and approved.

Sewer System Access Fee

The owner of each property parcel, which is provided a service connection when the sewer system is built, will be required to pay a sewer access fee of \$120.00 per year. This fee will be payable each July 1st. As each Customer attaches to the Service Connection and signs up for service, they will pay a pro-rated access fee for that year and thereafter the fee will not be charged.

Engineering, Materials and Construction Standards

1. General – This specification covers the type of sewer system required for various design conditions of sewers constructed by developers. The requirements called for are minimum in all cases. Bedding conditions, materials specifications, sealing requirements and installation methods are the responsibility of the design engineer and must be approved by the Company Engineer. Design and construction of sewer lines shall meet the requirements of the State of Tennessee Department of Environment. Any conflicts between company and state requirements shall be resolved so that the more restrictive shall govern.
2. All collection system components are to be watertight. This includes Building Outfall lines, all tanks, Collector Lines, Service Lines and Main Lines. Collector Lines and Main Lines are to be tested to 100 pounds per square inch of water pressure. Risers and lids are to be watertight.
3. Septic Pump and Septic Gravity Tanks are to be installed near the customer's building to be served. The tanks are to be set in a level condition and tested for water tightness before backfilling.

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Swan Ridge MCM Utility, Inc.

**T.R.A.No.1
Section 2**

WASTEWATER UTILITY SERVICE

4. All pipes are to be PVC. Classes and sizes will be per Engineer's design and in all cases Schedule 40 will be the minimum allowable.
5. Only wastewater drains are to be connected to the sewer system. No water sources such as roof drains, sump pumps, condensate lines and swimming pools shall be connected to the sewer system.

Special Pretreatment Sewage Requirements

For all sewage connections the Company reserves the right to require any non-residential user to provide special pre-treatment for any high strength effluent before discharge into its sewage system. The Company may, upon the basis of recognized engineering standards and treatment costs, increase the rate charged to cover the cost of treatment of high strength effluent or industrial waste, and may impose recognized engineering standards as to the minimum size of solids and constituents in such waste discharged into its sewage system.

Additionally, if excessive volumes of sewage are received, the Company reserves the right to require the Customer to monitor flow volume and increase surge holding capacity at the Customer's expense. All customers will be required to follow the Owners User Manual for an effluent collection system supplied by the lot owner with specifications supplied by the Company. **(Attachment 2)**. These requirements prohibit the dumping of any toxic chemicals that kill bacteria and disposal or an excessive amount of grease, among other things. All requirements (and notification of repair cost associated with the system abuse) are established in the Customer's Sewer Subscription Contract with the Company.

Damages

The Company shall in no event be responsible for maintaining any Building Outfall Line owned by the Customer, nor for damages created by sewage escaping there from, nor for defects in Customer's building lines or fixtures. The Customer shall at all times comply with all regulations of the TRA and of the Company

The Customer shall immediately repair all leaks in any building pipe or fixture on the premises of the Customer. On failure to repair any such leak, the service may be discontinued until repairs are made. Any customer found introducing prohibited substances into the waste water system is liable to pay the full cost of cleanup and the repair of any damage caused.

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Swan Ridge MCM Utility, Inc.

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Section 2

WASTEWATER UTILITY SERVICE

Inspection

All pipes, valves, and fixtures shall be subject to inspection by the Company or its duly appointed agent during reasonable hours.

In Event of Emergency

The Company shall not be liable to the Customer for interruption in service, or for damages or inconvenience as a result of any interruption, stoppage, etc., which was beyond the reasonable control of the Company. In case of emergency, call 931-243-4871.

Service Area

The Company will provide service within its current service area. Additions to the service area must be approved by TRA.

Extension Plan

The Company may furnish sewer service to property owners whose lands abut the Main Line of existing sewer systems. The sewer service charges listed in the sewer billing monthly rates do not include costs for constructing extensions to the sewer system. Any sewer system facilities required to service such abutting properties shall be constructed at the cost of those parties desiring same, and these facilities shall become the property of the Company to be credited to the account for Contribution in Aid of Construction. In addition, the Customer desiring to connect onto the system will pay treatment system facility costs. Sewer service to new areas within a service territory will be made available where it is technically feasible and the developer or property owner is willing to bear the expense of designing and building the sewer system.

Contributions in Aid of Construction

Sewer system facilities furnished by developers and property owners to the Company will be recognized as Contributions in Aid to Construction in the amount of actual cost of construction. Capital contributions from developers will be treated in like manner.

Contracts for Service

Each Customer before installation of service shall be required to execute on the appropriate forms furnished by the Company, a Sewer Subscription Contract.

Issued Date: _____
Issued by: Jerry D. Smith
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Swan Ridge MCM Utility, Inc.

**T.R.A.No.1
Section 2**

WASTEWATER UTILITY SERVICE

Customer Billing Forms

Customer billings will be sent monthly or annually to Customer for payment of a flat fee..

Individual Septic Tank and Pump Tank Requirements

Only the configurations listed on the individual Septic Tank and Pump Tank requirements list may be used. This list may be added to or taken from as needed.

Public Contact

Name: Jerry D. Smith

Address: 3403 Swan Ridge Road

Hilham, TN 38568

Phone: 931-243-4871

Fax: 931-243-4873

Email: sales@swanridgedevlopment.com

Tennessee Regulatory Authority Regulations

The Company, in its operation, shall conform to all the applicable rules and regulations promulgated from time to time by the Tennessee Regulatory Authority. The TRA can be reached by phone at 1-800-342-8359 or 615-741-2904

Issued Date: _____

Effective _____

Issued by: Jerry D. Smith

Title: President

Swan Ridge MCM Utility, Inc.

T.R.A.No.1
Section 3
Original Page 1

WASTEWATER UTILITY SERVICE

Section 3

RESIDENTIAL & COMMERCIAL SEWER SERVICE TERRITORIES

<u>Service Territory</u>	<u>County</u>	<u>TRA Docket #</u>	<u>Rate Class</u>
<u>Swan Ridge Lake Resort, LLC</u>	<u>Clay</u>	<u> </u>	<u>Class 1</u>
<u>Mitchell Creek Marina, LLC</u>	<u>Clay</u>	<u> </u>	<u>Class 1</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>

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Title: President

Effective

Swan Ridge MCM Utility, Inc.

T.R.A.No.1
Section 4

WASTEWATER UTILITY SERVICE

SECTION 4

RESIDENTIAL & COMMERCIAL RATE SHEET

<u>Rate Class</u> <u>1</u>	<u>Total</u>	<u>Escrow*</u>
<u>Pod System</u>	<u>2000</u>	<u> </u>
<u>Rate Class</u> <u> </u>	<u>Total</u>	<u>Escrow*</u>
<u>Sand Filter</u>	<u>44.53</u>	<u>10.13</u>

Fees: Non-Payment: 5% of Total Bill

Disconnection: \$40.00

Reconnection: \$50.00

Returned Check (NSF Fee): \$25.00

Access Fee: \$120.00/Year (See Rules and Regulations for Explanation)

*Escrow amount is included in the Total: \$4.17 for pumping septic tank and \$5.96 for septic pump and alarm replacement

Issued Date:

Effective

Issued by: Jerry D. Smith

Title: President

SEWER SERVICE CONTRACT

DATE: _____

PRINTED NAME_____
ADDRESS OF PROPERTY_____
MAILING ADDRESS_____
TELEPHONE NUMBER_____
EMAIL ADDRESS

I hereby make application to Swan Ridge MCM Utility, Inc. for sewer service at the address of property stated above. In consideration of the undertaking on the part of SRMCMU to furnish sewer service, I understand, covenant and agree as follows:

1. I understand that the components of a sewer system have been installed on the property referred to above, which is owned or occupied by me, and which is to be connected with a wastewater disposal system owned and/or maintained by SRMCMU. I warrant that any connection to and/or subsequent use to this system by the components on my property shall be in accordance with the Rules, Regulations and Plans of SRMCMU. Regarding my usage of the system components on my property, which are owned by me, I covenant to follow the guidelines set forth in the Owners User Manual. Should I violate these Rules and/or abuse or damage my components, I understand that I must bear the expense to repair or replace the same in accordance with the Plans of SRMCMU.
2. I acknowledge SRMCMU, its successors and assigns, have a perpetual easement in, over, under and upon the above specified land as shown on the property plat, with the right to operate and repair all components of the sewer system on my property, including but not limited to the septic tank and septic pump tank systems. I further grant SRMCMU permission to enter upon my property for any reason connected with the provision or removal of sewer service or collection therefore.
3. For all other plumbing and structures on the property, including the outfall line to the septic tank, I agree that I am responsible for all operation and repair thereof.
4. I agree to promptly pay for service at the then current schedule or rates and fees and agree to abide by and be subject to SRMCMU's billing and cutoff procedures. Should I not pay in accordance with SRMCMU's rules, I agree to pay all reasonably incurred cost of collection of delinquent fees including attorney fees.
5. I accept the current Rules and Regulations and the Rates and Fees Schedule and agree to abide by any amendments to such Schedules as approved by the Tennessee Regulatory Authority.
6. I agree that this Agreement shall remain in effect for as long as I own, reside upon or rent the above-described property. When such circumstances no longer exist, I agree to provide notice to SRMCMU at least thirty (30) days in advance of my vacating the property.
7. I agree to allow SRMCMU to install an approved cut off valve between the house and water supply and grant SRMCMU exclusive rights to use such valve to cut off water in order to safely stop wastewater flow. I understand there will be a charge of \$100.00 for installation of this valve.

SUBSCRIBERS SIGNATURE

OWNERS USER MANUAL

Welcome! You are hooked up to a state of the art wastewater treatment system. This environmentally friendly system does an excellent job of treating wastewater and returning it to the soil. It will do best if you follow the guidelines listed below:

Proper Use:

Direct all wastewater from the home into the septic tank. Any wastewater can contain disease causing organisms and pollutants.

Practice water conservation to avoid overloading the onsite sewage system. Repair dripping faucets and leaking toilets. Run dishwashers when full. Do not do all your laundry in one day. Space out the washing machine use over the week. Replace old fixtures with water saving fixtures.

Do not direct water from gutter downspouts, sump pump or subsurface drains into the septic tank. The sewage management system is designed based on an estimate daily water use. Excess water directed into the septic tank will cause hydraulic failure.

Use commercial bathroom cleaners and anti-bacterial soaps in moderation. Treatment in the wastewater system depends on natural bacteria. The Utility does not recommend the use of septic tank additives. These products are not necessary for proper system operation.

Do not plant trees or bushes on top of the septic tank or pump tank. Root intrusion may damage and block the line.

Do not dig without knowing the location of your septic and pump tank. Landscape the site to allow surface water to drain off these tanks. Divert roof drains from these tanks. Standing water over these tanks will cause increased load saturations and potential pump failure.

Do not park or drive over the septic and pump tank. This can damage or compromise the tanks.

Do not pour grease, oil, paint, or other chemical products down the drain. Do not put not-biodegradable items such as cigarette butts, feminine hygiene products, condoms, disposable diapers or other similar solid waste into the septic tank. Remember living microbes clean the wastewater.

Do not enter your septic or pump tank. Gases from inside the tank can be fatal. Keep the lids secure and screwed down.

Do not turn off the main circuit breaker to the wastewater pumps when going on vacation. The pumps will need to handle any infiltration into the system.

If there is a power failure, your alarm might go off when the power comes back on. Wait at least 2 hours; if the alarm is still going off please call the customer service number. If you have had no power failure and the alarm goes off, call customer service without delay.

Customer Service: 931-243-4871

3403 Swan Ridge Road
Hilham, TN 38568

Dear Swan Ridge MCM Utility, Inc. Customer

I would like to welcome you to Swan Ridge MCM Utility, Inc. and Swan Ridge Lake Resort, LLC. We, at Swan Ridge MCM Utility, Inc. look forward to providing the best and most environmentally friendly wastewater treatment service. First of all I would like to explain our rates for Swan Ridge Lake Resort, LLC.

We have two basic rates, one if you have not built your home yet, referred to as an access fee. The access fee is **\$120.00** dollars per year and is due on July 1st. What this fee pays for is the maintenance of the lines in the streets and the treatment plant components. Even if no homes are built in the subdivision, maintenance and test records must be maintained to meet state requirements. We use this fee to offset these costs so that when you are ready to connect, the system will be ready for you.

Our next rate is for homes on the system. This rate is **\$44.53** per month. For this payment we will treat the wastewater to the highest standards and dispose of it into a drip emitter field. We use AdvanTec Pod System for treating the wastewater because of its reliability and it can be maintained more cost effectively than other systems. This is a fully automated PLC controlled system for the utmost reliability. You will additionally install a septic and pump tank at your home at your expense. We will pump and maintain the septic tank, pump tank and components at no additional cost to you. It should be noted that we do not maintain any plumbing or unstop any blockages in your home or the outfall line to the septic tank.

Additional charges are as follows:

Service disconnects: \$40.00

Service reconnects (all past due amounts with late fees must be paid prior to reconnection: \$50.00

Returned Check Fee: \$25.00

A 5% late fee will be added to the total bill on the 10th of any month in which we have not received your payment.

A complete copy of our tariff or billing amounts is available for viewing at our office during normal business hours by appointment.

For connecting, we have a set of specifications that must be followed and are included in this packet. You must get a permit from Clay County Health Department before starting work. Before you can connect to the Swan Ridge MCM Utility, Inc. you must sign and return your Sewer Service Contract Agreement.

You will need to install a cut off valve between the house and water supply and grant Swan Ridge MCM Utility, Inc. exclusive rights to use such valve to cut off water in order to safely stop wastewater flow.

You will have an alarm post next to your pump tank or on your house. If there is a power failure, this alarm might go off after the power comes back on due to residual water needing to be pumped out. Wait at least 2 hours and if the alarm is still going off please call the customer service number. If you have had no power failure and the alarm goes off, call customer service without delay. If you need additional assistance, please call our Customer Service number, 931-243-4871.

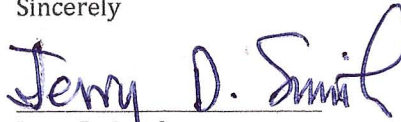
All payments will be sent to:

Swan Ridge MCM Utility, Inc.

3403 Swan Ridge Road
Hilham, TN 38568

Again I would like to welcome you to Swan Ridge MCM Utility, Inc. and Swan Ridge Lake Resort, LLC. We at Swan Ridge MCM Utility, Inc. will do our best to handle your wastewater service needs in an honest and professional manner.

Sincerely

A handwritten signature in blue ink that reads "Jerry D. Smith". The signature is written in a cursive style with a large, looping "S" at the end.

Jerry D. Smith
President
Swan Ridge MCM Utility, Inc.

Swan Ridge MCM Utility, Inc.

Individual septic tank and pump tank requirements.

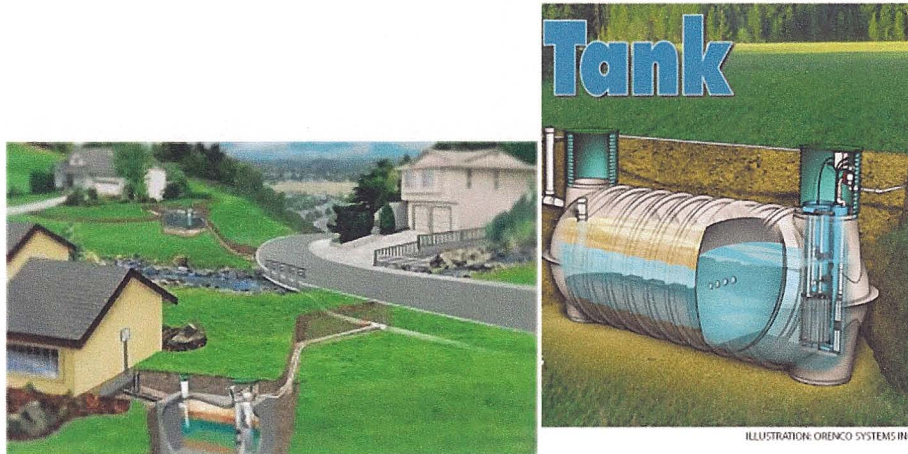
Only configurations and equipment approved by Swan Ridge MCM Utility, Inc. may be used. Not following these configurations shall be cause for disconnecting until the specifications are met.

Note: See **Attachment V-d** Titled: 'Installation Guide – ProStep Effluent Pump Package'

Local Installers: (If an installer does poor work, the Utility reserves the right to not allow him/her to do further work). To add your installer, please call the Utility first.

For additional technical assistance call Jerry D. Smith at 931-243-4871

Sketch of system installations at the home:



BEFORE THE TENNESSEE REGULATORY AUTHORITY

NASHVILLE, TENNESSEE

PETITION OF SWAN RIDGE MCM UTILITY, INC. TO OBTAIN
A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY
FOR THE SERVICE OF THE PART OF CLAY COUNTY,
TENNESSEE KNOWN AS SWAN RIDGE LAKE RESORT, LLC AND
MITCHELL CREEK MARINA, LLC

DOCKET NO. _____

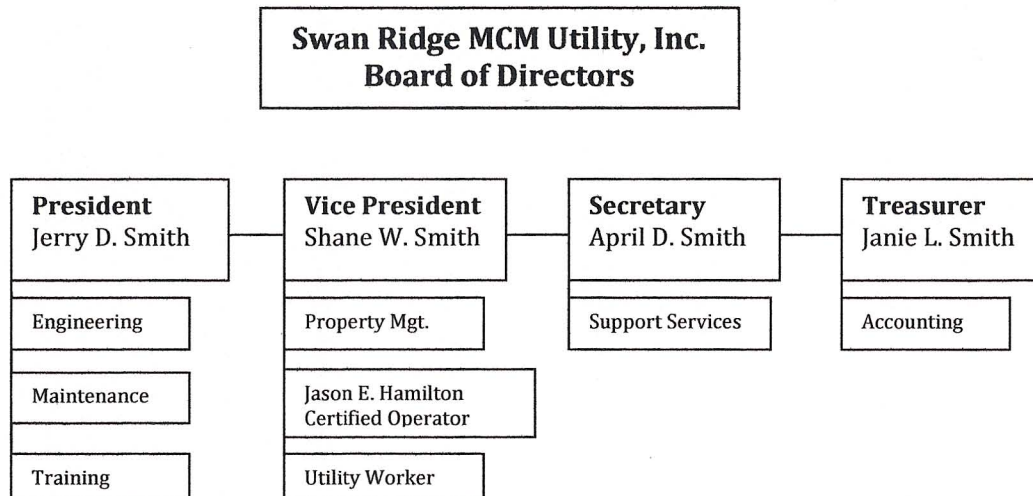
General Requirements:

- a) Swan Ridge MCM Utility, Inc. has received a letter from Swan Ridge Lake Resort, LLC and Mitchell Creek Marina, LLC. The letter requests we provide wastewater service to the part of Clay County known as Swan Ridge Lake Resort, LLC and Mitchell Creek Marina, LLC. Swan Ridge MCM Utility, Inc. contends that the City of Celina in Clay County has no plans to provide sewer service to Swan Ridge Lake Resort, LLC or Mitchell Creek Marina, LLC within the next twelve months. A substantial portion of the land in the Swan Ridge Lake Resort, LLC is not suitable for onsite septic systems. Mitchell Creek Marina, LLC is in the process of installing a sand filter system with drip field located on Corp of Engineer land. Swan Ridge MCM Utility, Inc. request the authority to provide utility service to this system and Swan Ridge Lake Resort, LLC's system
- b) 1. See attached letter marked II-b-1 (Page 1 & 2)
- c) 2. See attached letters marked II-b-2 (Page 1 & 2)
- d) See attached sworn testimony marked II-c (Page 1, 2, & 3)
- e) See attached-Water & Waste Water Certificate- Operator Jason E. Hamilton-marked II-d

Administrative Requirements:

- a. Swan Ridge MCM Utility, Inc.
3403 Swan Ridge Road
Hilham, TN 38568
931-243-4871

b.



c. **President**

Jerry D. Smith
3403 Swan Ridge Road
Hilham, TN 38568
Phone: 931-243-4871
Fax: 931-243-4873

Vice President

Shane W. Smith
3403 Swan Ridge Road
Hilham, TN 38568
Phone: 931-243-4871
Fax: 931-243-4873

Secretary

April D. Smith
3403 Swan Ridge Road
Hilham, TN 38568
Phone: 931-243-4871
Fax: 931-243-4873

Treasurer

Janie L. Smith
3403 Swan Ridge Road
Hilham, TN 38568
Phone: 931-243-4871
Fax: 931-243-4873

- d. See c) above, emergency contact.
- e. See letter State of Tennessee filing – Swan Ridge MCM Utility, Inc. **Attachment III-e**
- f. See Wastewater Operating Permit No-SOP-08004 Mitchell Creek Marina – **Attachment III-f**
- g. Swan Ridge MCM Utility, Inc. has no franchise agreements.
- h. Swan Ridge MCM Utility, Inc. is not located in other states, and has no other applications pending.
- i. Swan Ridge MCM Utility, Inc., is not currently involved with any mergers or acquisitions.

Managerial Requirements:

a) Degrees held by staff:

President – Jerry D. Smith
Mechanical Engineer – Tennessee Technological University
Vice President – Shane W. Smith
Business Management – Tennessee Technological University
Secretary – April D. Smith
Accounting – Tennessee Technological University
Treasurer – Janie L. Smith
Business Administration – Middle Tennessee State University

b) Professional licenses of staff and contractors:

Barry Field – PE
Brett Wyatt – EI
Ronnie Reece – PE
Jason E. Hamilton – Certified Operator – Attachment II-e

c) Experience of wastewater utility staff:

Jerry D. Smith founded and successfully ran several privately held companies beginning in 1970. They include Honest Abe Log Homes, Inc.; Swan Ridge Lake Resort, LLC; Mitchell Creek Marina, LLC; Rockcastle Farms, LLC; Green Forrest Wood Products, Inc.; Barky Beaver Mulch & Soil Mix, Inc.; Moss Sawmill, Inc.; Livingston Sawmill, Inc.; and Allons Sawmill, Inc.

Janie L. Smith manages the accounting operation for all the companies. Shane Smith manages Honest Abe Log Homes and all the companies producing wood products. April D. Smith manages Swan Ridge Lake Resort, Rockcastle Farms, and Mitchell Creek Marina.

Swan Ridge Lake Resort is approximately 800 acres with 400 lots. Owner financing is available with all the associated administrative work and internally managed. Rockcastle Farms is approximately 2700 acres with larger tracts offerings of 5 acres. Owner financing is available with all the associated administrative work included in the Swan Ridge operation.

Annual sales in recent years have been as high \$30 million, with employment levels at 200.

Technical Requirements:

- a) Operating Permit application is being filed with the Tennessee Department of Environmental and Conservation.
- b) Projected 5 year build out and cost analysis is to be \$500,000 for Mitchell Creek Marina, and \$450,000 for Swan Ridge Lake Resort. The estimates of 12 builds per year for 2013, 2014, and 2015 based on estimation from 5 years of experience selling Swan Ridge property and current economic conditions. There are 400 lots in the development, and approximately 100 need to be connected to the wastewater treatment plant. Twenty two lots have been sold to date. Mitchell Creek Marina operates a restaurant from April 1 until October 1 each year. We currently have 16 cabins attached to the system, and 60 houseboats. Mitchell Creek and Swan Ridge will be permitted for 30,000 gallons per day of wastewater treatment.
- c) Swan Ridge MCM Utility, Inc.
Proposed Tariffs: Swan Ridge Lake Resort, LLC
Sewage treatment service recommended rates: Rate to customers for will be \$44.53 per month. Our cost to operate the system is displayed in a five-year spreadsheet. (See attachment V-c)
Service Access Fee \$120 annually.
Bills are due on the first day of the month and considered late if not received by the 10th day of the month due.
A 5% of total bill amount to be added to bills not paid by the 10th of the month.
Bills over 30 days past due are subject to being disconnected. A service disconnect fee of \$40 will be charged. For service reconnect, all balance amounts plus \$50 will be charged.
A returned check fee of \$25.
Any damages to the sewage treatment system caused by anyone will be billed at actual cost of repair and loss of service. Types of damages include but are not limited to : Damages caused to the disconnect valve located at main line tap, to pipes or equipment caused during excavation by machine or hand, hazardous waste, industrial chemicals and other non household sewage added to the treatment system. Sewage added to the system not generated at the customer's residence is also prohibited.
- d) The area to be served will be limited to the subdivision known as Swan Ridge Lake Resort LLC, located on Swan Ridge Road in Clay County, Tennessee. The subdivision consist of approximately 800 acres and 400 lots. **(See Attachment V-a)** In addition, Mitchell Creek Marina will be served, located on Livingston Boat Dock Road, in Clay County, Tennessee. The marina consist of a restaurant, store, approximately 300 boat slips, (approved for 550 slips), and 26 cabins. **(See Attachment V-b)**
- e) Mitchell Creek Marina's system a sand filter with a drip field. Swan Ridge Lake Resort is an Advan-tec Pod system with a drip field.
- f) If all permitting is complete, Swan Ridge Lake Resort, LLC would start construction in 2010. Mitchell Creek Marina is currently under construction with approximately 99% complete and is permitted. **(See Attachment III-e)** Each system will handle 30,000 gallons per day.
- g) Jerry D. Smith
3403 Swan Ridge Road
Hilham, TN 38568
931-243-4871
- h) There are no complaints filed against Swan Ridge MCM Utility, Inc._

Financial Requirements:

- a) The developer, Swan Ridge Lake Resort LLC, has agreed to pay \$450,000 to install the system. The owner of Mitchell Creek Marina, LLC, (note: both Swan Ridge and Mitchell Creek have the same owner) has agreed to pay \$450,000 to install the complete system. The system at Swan Ridge Lake Resort, LLC will transfer the entire system including the drip field acreage to Swan Ridge MCM Utility, Inc. The system at Mitchell Creek Marina is located on Corp of Engineers property and the marina is operated as a lease. This arrangement will remain as is, with Swan Ridge MCM Utility, Inc. operating the wastewater system.
- b) Swan Ridge MCM Utility, Inc. will own the wastewater treatment plant and associated drip field at Swan Ridge Lake Resort. Swan Ridge MCM Utility, Inc. will show \$25,000 as a capital contribution on its books. The cost of the plant plus \$15,000 per acre for the drip field at Swan Ridge Lake Resort (approximately 6 acres). Mitchell Creek Marina's capital cost of equipment will be added to Swan Ridge MCM Utility, Inc. without a land addition given the lease arrangement with the Corp of Engineers.
- c) Chart of accounts. See sheet marked (ATTACHMENT V)
- d) Our CPA will use the Tax Basis Depreciation Rates considered with the MACRS tables. For the main plant we would use the MACRS 39 year table. For the blower and motors we would use the MACRS 7 year table. For the control system we would use the MACRS 5 year tables. And so on.
- e) Jerry D. Smith will provide \$25,000 of funding for start-up of Swan Ridge MCM Utility, Inc. The funding will be in the form of a loan to the corporation. These funds will be repaid at a later time, as Swan Ridge MCM Utility, Inc. is capable. If additional funding is needed, it will be provided in the same way. Additional labor will be provided as needed to offset any salary shortage that might occur.
- f) The first 5 years of projected cost and income estimate is provided with spreadsheet V-c 1-10 with explanation sheets. The electrical power estimates come from the spreadsheet marked VI-g2. These are based on anticipated run times and amperage draw. The mailing and printing of post card type billing is based on experience gained during market mailings in the past. The amounts are shown on spreadsheet marked VI-g-3. Insurance cost is anticipated to be \$5000 per year for its general liability insurance. Tax cost is estimates only and true cost must be determined. Accounting and tax preparation cost estimates are from our CPA. Maintenance contract is the labor cost to maintain the system through Jerry D. Smith's other company's maintenance department, as a subcontractor. Phone line prices are based on currently used lines.
- g) See Loan Agreement. (ATTACHMENT IV)

Respectfully Submitted



Jerry D. Smith
3403 Swan Ridge Road
Hilham, TN 38568
931-243-4871

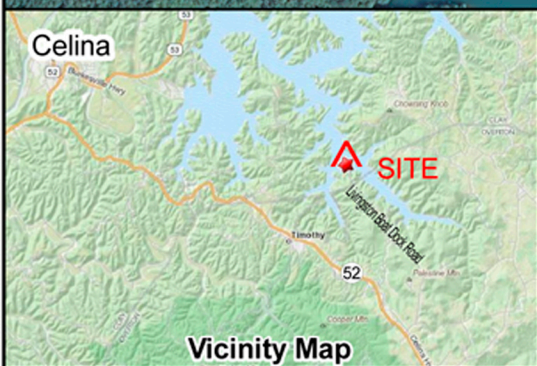
Attachment V-a



Swan Ridge Development Utility Area



Attachment V-b



Mitchell Creek Marina Utility Area



Anticipated Budget Cost July 1, 2010 - June 30, 2011	Monthly	Yearly	V-c-1 of 10
			Comments
Swan Ridge Lake Resort, LLC			
Maintenance Contract (new equipment) - 0 customers			
Accounting and tax preparation books setup			
Anticipated tax cost			
Plant operator salary and testing			Note: Swan Ridge Development - Not constructed
Letter of Credit cost			
Insurance			
Plant telephone line			
Plant electrical			
Billing cost			
Office telephone			
TRA inspection fee			
Non routine maintenance - (0 customers X escrow amt. =)			
Based on 5 year average expected time frame of following work performed at customer residence:			
Pumping of septic tank	\$250.00		
Replacing pump & alarm system	\$357.80		
Total	\$607.80		
\$607.80/5yrs/12 months = \$10.13 escrow amt/customer			
Estimate of scheduled equipment replacement: Warranty			
Mitchell Creek Marina, LLC			
Maintenance Contract			
Accounting and tax preparation books setup	\$150.00	\$1,800	
Anticipated tax cost	\$75.00	\$900	
Plant operator salary and testing	\$100	\$1,200	
Insurance	\$417	\$5,000	
Plant telephone line			Shared line with Swan Ridge Lake Resort
Plant electrical	\$432.86	\$5,194.32	
Billing cost	\$1.24	\$14.88	
Office telephone	\$30.00	\$360	Shared line with Swan Ridge Lake Resort
TRA inspection fee	0	\$100.00	
Estimate of scheduled equipment replacement: Warranty			
Total			
	\$1,206	\$14,569	

V-c-1 of 10 Explanation Sheet July 1, 2010 - June 30, 2011		Swan Ridge MCM Utility, Inc.
Swan Ridge Lake Resort, LLC		
Maintenance Contract (new equipment) - 0 customers		
Accounting and tax preparation books setup		
Anticipated tax cost		
Plant operator salary and testing	Note: Swan Ridge not constructed.	
Letter of Credit cost		
Insurance		
Plant telephone line		
Plant electrical		
Billing cost		
Office telephone		
TRA inspection fee		
Non routine maintenance - (0 customers X escrow amt. =)		
Based on 5 year average expected time frame of following		
work performed at customer residence:		
Pumping of septic tank	\$250.00	
Replacing pump & alarm system	\$357.80	
Total	\$607.80	
\$607.80/5yrs/12 months = \$10.13 escrow amt/customer		
Estimate of scheduled equipment replacement: Warranty		
Mitchell Creek Marina, LLC		
Maintenance Contract (1 Customer)		
Accounting and tax preparation books setup		
Anticipated tax cost		
Plant operator salary and testing	Estimate only. TDEC will not determine what testing is required until after the SOP is written. We estimate between \$100 - \$500 per month. Jason Hamilton is the certified plant operator and will be doing the testing.	
Insurance	Based on anticipated insurance cost for Swan Ridge MCM Utility, Inc.	
Plant telephone line	Swan Ridge MCM Utility, Inc. will use existing telephones.	
Plant electrical	This comes from sheet VI-g-2	
Billing cost	This comes from sheet VI-g-3	
Office telephone	Swan Ridge MCM Utility, Inc. will use existing telephones.	
TRA inspection fee	Unknown, \$100 per year estimate.	
Estimate of scheduled equipment replacement: Warranty	No anticipated costs because plant is new and under warranty.	

Anticipated Budget Cost July 1, 2011 - June 30, 2012	Monthly	Yearly	V-c-2 of 10
			Comments
Swan Ridge Lake Resort, LLC			
Maintenance Contract (new equipment) - 0 customers			
Accounting and tax preparation books setup			
Anticipated tax cost			
Plant operator salary and testing			Note: Swan Ridge Development - Not constructed
Letter of Credit cost			
Insurance			
Plant telephone line			
Plant electrical			
Billing cost			
Office telephone			
TRA inspection fee			
Non routine maintenance - (0 customers X escrow amt. =)			
Based on 5 year average expected time frame of following work performed at customer residence:			
Pumping of septic tank	\$250.00		
Replacing pump & alarm system	\$357.80		
Total	\$607.80		
\$607.80/5yrs/12 months = \$10.13 escrow amt/customer			
Estimate of scheduled equipment replacement: Warranty			
Mitchell Creek Marina, LLC			
Maintenance Contract			
Accounting and tax preparation books setup	\$150.00	\$1,800	
Anticipated tax cost	\$75.00	\$900	
Plant operator salary and testing	\$100	\$1,200	
Insurance	\$417	\$5,000	
Plant telephone line			Shared line with Swan Ridge Lake Resort
Plant electrical	\$432.86	\$5,194.32	
Billing cost	\$1.24	\$14.88	
Office telephone	\$30.00	\$360	Shared line with Swan Ridge Lake Resort
TRA inspection fee	0	\$100.00	
Estimate of scheduled equipment replacement: Warranty			
Total			
	\$1,206	\$14,569	

V-c-2 of 10 Explanation Sheet July 1, 2011 - June 30, 2012		Swan Ridge MCM Utility, Inc.
Swan Ridge Lake Resort, LLC		
Maintenance Contract (new equipment) - 0 customers		
Accounting and tax preparation books setup		
Anticipated tax cost		
Plant operator salary and testing	Note: Swan Ridge not constructed.	
Letter of Credit cost		
Insurance		
Plant telephone line		
Plant electrical		
Billing cost		
Office telephone		
TRA inspection fee		
Non routine maintenance - (0 customers X escrow amt. =)		
Based on 5 year average expected time frame of following		
work performed at customer residence:		
Pumping of septic tank	\$250.00	
Replacing pump & alarm system	\$357.80	
Total	\$607.80	
\$607.80/5yrs/12 months = \$10.13 escrow amt/customer		
Estimate of scheduled equipment replacement: Warranty		
Mitchell Creek Marina, LLC		
Maintenance Contract (1 Customer)		
Accounting and tax preparation books setup		
Anticipated tax cost		
Plant operator salary and testing	Estimate only. TDEC will not determine what testing is required until after the SOP is written. We estimate between \$100 - \$500 per month. Jason Hamilton is the certified plant operator and will be doing the testing.	
Insurance	Based on anticipated insurance cost for Swan Ridge MCM Utility, Inc.	
Plant telephone line	Swan Ridge MCM Utility, Inc. will use existing telephones.	
Plant electrical	This comes from sheet VI-g-2	
Billing cost	This comes from sheet VI-g-3	
Office telephone	Swan Ridge MCM Utility, Inc. will use existing telephones.	
TRA inspection fee	Unknown, \$100 per year estimate.	
Estimate of scheduled equipment replacement: Warranty		No anticipated costs because plant is new and under warranty.

Anticipated Budget Cost July 1, 2012 - June 30, 2013	Monthly	Yearly	V-c-3 of 10
			Comments
Swan Ridge Lake Resort, LLC			
Maintenance Contract (new equipment) - 12 customers			New Equipment
Accounting and tax preparation books setup			Covered in Mitchell Creek Numbers
Anticipated tax cost	\$50.00	\$600.00	
Plant operator salary and testing	\$100.00	\$1,200.00	
Letter of Credit cost			
Insurance			Covered in Mitchell Creek Numbers
Plant telephone line			Covered in Mitchell Creek Numbers
Plant electrical	\$146.30	\$1,755.60	
Billing cost	\$36.12	\$433.44	
Office telephone			
TRA inspection fee		\$100.00	
Non routine maintenance - (12 customers X escrow amt. =)	\$121.56	\$1,458.72	
Based on 5 year average expected time frame of following work performed at customer residence:			
Pumping of septic tank	\$250.00		
Replacing pump & alarm system	\$357.80		
Total	\$607.80		
\$607.80/5yrs/12 months = \$10.13 escrow amt/customer			
Estimate of scheduled equipment replacement: Warranty			
Mitchell Creek Marina, LLC			
Maintenance Contract			
Accounting and tax preparation books setup	\$150.00	\$1,800	
Anticipated tax cost	\$75.00	\$900	
Plant operator salary and testing	\$100	\$1,200	
Insurance	\$417	\$5,000	
Plant telephone line			Shared line with Swan Ridge Lake Resort
Plant electrical	\$432.86	\$5,194.32	
Billing cost	\$1.24	\$14.88	
Office telephone	\$30.00	\$360	Shared line with Swan Ridge Lake Resort
TRA inspection fee	0	\$100.00	
Estimate of scheduled equipment replacement: Warranty			
Total	\$1,660	\$20,117	

V-c-3 of 10 Explanation Sheet July 1, 2012 - June 30, 2013		Swan Ridge MCM Utility, Inc.
Swan Ridge Lake Resort, LLC		
Maintenance Contract (new equipment) - 0 customers		New Equipment
Accounting and tax preparation books setup		Covered in Mitchell Creek Numbers
Anticipated tax cost		Guess
Plant operator salary and testing		Estimation
Letter of Credit cost		
Insurance		Covered in Mitchell Creek Numbers
Plant telephone line		Covered in Mitchell Creek Numbers
Plant electrical		See V-g-2
Billing cost		See V-g-3
Office telephone		
TRA inspection fee		Estimation
Non routine maintenance - (12 customers X escrow amt. =>	Pumping Septic tanks \$250, Replacing pumps/alarms \$357.80=Total \$607.80/by5	
Based on 5 year average expected time frame of following		
work performed at customer residence:		
Pumping of septic tank	\$250.00	
Replacing pump & alarm system	\$357.80	
Total	\$607.80	
\$607.80/5yrs/12 months = \$10.13 escrow amt/customer		
Estimate of scheduled equipment replacement: Warranty		
Mitchell Creek Marina, LLC		
Maintenance Contract (1 Customer)		
Accounting and tax preparation books setup		
Anticipated tax cost		
Plant operator salary and testing		Estimate only. TDEC will not determine what testing is required until after the SOP is written. We estimate between \$100 - \$500 per month. Jason Hamilton is the certified plant operator and will be doing the testing.
Insurance		Based on anticipated insurance cost for Swan Ridge MCM Utility, Inc.
Plant telephone line		Swan Ridge MCM Utility, Inc. will use existing telephones.
Plant electrical		This comes from sheet VI-g-2
Billing cost		This comes from sheet VI-g-3
Office telephone		Swan Ridge MCM Utility, Inc. will use existing telephones.
TRA inspection fee		Unknown, \$100 per year estimate.
Estimate of scheduled equipment replacement: Warranty		No anticipated costs because plant is new and under warranty.

Anticipated Budget Cost July 1, 2013 - June 30, 2014	Monthly	Yearly	V-c-4 of 10 Comments
Swan Ridge Lake Resort, LLC			
Maintenance Contract (new equipment) - 12 customers			New Equipment
Accounting and tax preparation books setup			Covered in Mitchell Creek Numbers
Anticipated tax cost	\$50.00	\$600.00	
Plant operator salary and testing	\$100.00	\$1,200.00	
Letter of Credit cost			
Insurance			Covered in Mitchell Creek Numbers
Plant telephone line			Covered in Mitchell Creek Numbers
Plant electrical	\$146.30	\$1,755.60	
Billing cost	\$36.12	\$433.44	
Office telephone			
TRA inspection fee		\$100.00	
Non routine maintenance - (24 customers X escrow amt. =)	\$121.56	\$2,917.44	
Based on 5 year average expected time frame of following work performed at customer residence:			
Pumping of septic tank	\$250.00		
Replacing pump & alarm system	\$357.80		
Total	\$607.80		
\$607.80/5yrs/12 months = \$10.13 escrow amt/customer			
Estimate of scheduled equipment replacement: Warranty			
Mitchell Creek Marina, LLC			
Maintenance Contract			
Accounting and tax preparation books setup	\$150.00	\$1,800	
Anticipated tax cost	\$75.00	\$900	
Plant operator salary and testing	\$100	\$1,200	
Insurance	\$417	\$5,000	
Plant telephone line			Shared line with Swan Ridge Lake Resort
Plant electrical	\$432.86	\$5,194.32	
Billing cost	\$1.24	\$14.88	
Office telephone	\$30.00	\$360	Shared line with Swan Ridge Lake Resort
TRA inspection fee	0	\$100.00	
Estimate of scheduled equipment replacement: Warranty			
Total	\$1,660	\$21,576	

V-c-4 of 10 Explanation Sheet July 1, 2013 - June 30, 2014		Swan Ridge MCM Utility, Inc.
Swan Ridge Lake Resort, LLC		
Maintenance Contract (new equipment) - 0 customers		New Equipment
Accounting and tax preparation books setup		Covered in Mitchell Creek Numbers
Anticipated tax cost		Guess
Plant operator salary and testing		Estimation
Letter of Credit cost		
Insurance		Covered in Mitchell Creek Numbers
Plant telephone line		Covered in Mitchell Creek Numbers
Plant electrical		See V-g-2
Billing cost		See V-g-3
Office telephone		
TRA inspection fee		Estimation
Non routine maintenance - (24 customers X escrow amt. =)		Pumping Septic tanks \$250, Replacing pumps/alarms \$357.80=Total \$607.80/by5
Based on 5 year average expected time frame of following		
work performed at customer residence:		
Pumping of septic tank	\$250.00	
Replacing pump & alarm system	\$357.80	
Total	\$607.80	
\$607.80/5yrs/12 months = \$10.13 escrow amt/customer		
Estimate of scheduled equipment replacement: Warranty		
Mitchell Creek Marina, LLC		
Maintenance Contract (1 Customer)		
Accounting and tax preparation books setup		
Anticipated tax cost		
Plant operator salary and testing		Estimate only. TDEC will not determine what testing is required until after the SOP is written. We estimate between \$100 - \$500 per month. Jason Hamilton is the certified plant operator and will be doing the testing.
Insurance		Based on anticipated insurance cost for Swan Ridge MCM Utility, Inc.
Plant telephone line		Swan Ridge MCM Utility, Inc. will use existing telephones.
Plant electrical		This comes from sheet VI-g-2
Billing cost		This comes from sheet VI-g-3
Office telephone		Swan Ridge MCM Utility, Inc. will use existing telephones.
TRA inspection fee		Unknown, \$100 per year estimate.
Estimate of scheduled equipment replacement: Warranty		No anticipated costs because plant is new and under warranty.

Anticipated Budget Cost July 1, 2014 - June 30, 2015	Monthly	Yearly	V-c-5 of 10
			Comments
Swan Ridge Lake Resort, LLC			
Maintenance Contract (new equipment) - 12 customers			New Equipment
Accounting and tax preparation books setup			Covered in Mitchell Creek Numbers
Anticipated tax cost	\$50.00	\$600.00	
Plant operator salary and testing	\$100.00	\$1,200.00	
Letter of Credit cost			
Insurance			Covered in Mitchell Creek Numbers
Plant telephone line			Covered in Mitchell Creek Numbers
Plant electrical	\$146.30	\$1,755.60	
Billing cost	\$36.12	\$433.44	
Office telephone			
TRA inspection fee		\$100.00	
Non routine maintenance - (36 customers X escrow amt. =)	\$121.56	\$4,376.16	
Based on 5 year average expected time frame of following work performed at customer residence:			
Pumping of septic tank \$250.00			
Replacing pump & alarm system \$357.80			
Total \$607.80			
\$607.80/5yrs/12 months = \$10.13 escrow amt/customer			
Estimate of scheduled equipment replacement: Warranty			
Mitchell Creek Marina, LLC			
Maintenance Contract			
Accounting and tax preparation books setup	\$150.00	\$1,800	
Anticipated tax cost	\$75.00	\$900	
Plant operator salary and testing	\$100	\$1,200	
Insurance	\$417	\$5,000	
Plant telephone line			Shared line with Swan Ridge Lake Resort
Plant electrical	\$432.86	\$5,194.32	
Billing cost	\$1.24	\$14.88	
Office telephone	\$30.00	\$360	Shared line with Swan Ridge Lake Resort
TRA inspection fee	0	\$100.00	
Estimate of scheduled equipment replacement: Warranty			
Total	\$1,660	\$23,034	

V-c-5 of 10 Explanation Sheet July 1, 2014 - June 30, 2015		Swan Ridge MCM Utility, Inc.
Swan Ridge Lake Resort, LLC		
Maintenance Contract (new equipment) - 0 customers		New Equipment
Accounting and tax preparation books setup		Covered in Mitchell Creek Numbers
Anticipated tax cost		Guess
Plant operator salary and testing		Estimation
Letter of Credit cost		
Insurance		Covered in Mitchell Creek Numbers
Plant telephone line		Covered in Mitchell Creek Numbers
Plant electrical		See V-g-2
Billing cost		See V-g-3
Office telephone		
TRA inspection fee		Estimation
Non routine maintenance - (36 customers X escrow amt. =)		Pumping Septic tanks \$250, Replacing pumps/alarms \$357.80=Total \$607.80/by5
Based on 5 year average expected time frame of following		
work performed at customer residence:		
Pumping of septic tank	\$250.00	
Replacing pump & alarm system	\$357.80	
Total	\$607.80	
\$607.80/5yrs/12 months = \$10.13 escrow amt/customer		
Estimate of scheduled equipment replacement: Warranty		
Mitchell Creek Marina, LLC		
Maintenance Contract (1 Customer)		
Accounting and tax preparation books setup		
Anticipated tax cost		
Plant operator salary and testing		Estimate only. TDEC will not determine what testing is required until after the SOP is written. We estimate between \$100 - \$500 per month. Jason Hamilton is the certified plant operator and will be doing the testing.
Insurance		Based on anticipated insurance cost for Swan Ridge MCM Utility, Inc.
Plant telephone line		Swan Ridge MCM Utility, Inc. will use existing telephones.
Plant electrical		This comes from sheet VI-g-2
Billing cost		This comes from sheet VI-g-3
Office telephone		Swan Ridge MCM Utility, Inc. will use existing telephones.
TRA inspection fee		Unknown, \$100 per year estimate.
Estimate of scheduled equipment replacement: Warranty		No anticipated costs because plant is new and under warranty.

Anticipated Budget Cost July 1, 2010 - June 30, 2011	Projected Payments	Monthly Billing Amount	Yearly Billing Amount	V-c-6 of 10 Yearly Total
Swan Ridge Lake Resort, LLC				
Fees charged customers				
Non Resident Customer Access Fee				
Resident Customer Monthly Fee				
Late Fees and Back Payment				
Disconnect or Reconnect Fees				
Mitchell Creek Marina, LLC				
Customer Fee	12	\$2,000.00	\$24,000	\$24,000
Late Fees and Back Payment				
Interest Income amount				
CD letter of credit interest gained				
Total Yearly Income				\$24,000.00
Startup Capital (Stock Holders Loan)				\$25,000.00

V-c-6 of 10 Explanation Sheet July 1, 2010 - June 30, 2011 Swan Ridge Lake Resort, LLC	Swan Ridge MCM Utility, Inc.
Non-Resident Owner	
Resident Owner	
Late Fees and Back Payments	
Disconnect or Reconnect Fees	
Mitchell Creek Marina, LLC	Income based on \$2000 per month for a Total of \$24,000 per year. The plant is constructed to meet 100% capacity as of June 2010 of 30,000 gallons per day.
Start Up	There is a loan from share from shareholders in the sum of \$25,000 to capitalize the company.

Anticipated Budget Cost July 1, 2011 - June 30, 2012	Projected Payments	Monthly Billing Amount	Yearly Billing Amount	V-c-7 of 10 Yearly Total
Swan Ridge Lake Resort, LLC				
Fees charged customers				
Non Resident Customer Access Fee				
Resident Customer Monthly Fee				
Late Fees and Back Payment				
Disconnect or Reconnect Fees				
Mitchell Creek Marina, LLC				
Customer Fee	12	\$2,000.00	\$24,000	\$24,000
Late Fees and Back Payment				
Interest Income amount				
Total Yearly Income				\$24,000.00
Startup Capital (Stock Holders Loan)				\$25,000.00

V-c-7 of 10 Explanation Sheet July 1, 2011 - June 30, 2012 Swan Ridge Lake Resort, LLC	Swan Ridge MCM Utility, Inc.
Non-Resident Owner	
Resident Owner	
Late Fees and Back Payments	
Disconnect or Reconnect Fees	
Mitchell Creek Marina, LLC	Income based on \$2000 per month for a Total of \$24,000 per year. The plant is constructed to meet 100% capacity as of June 2010 of 30,000 gallons per day.
Start Up	There is a loan from share from shareholders in the sum of \$25,000 to capitalize the company.

Anticipated Budget Cost July 1, 2012 - June 30, 2013	Projected Payments	Monthly Billing Amount	Yearly Billing Amount	V-c-8 of 10 Yearly Total
Swan Ridge Lake Resort, LLC				
Fees charged customers				
Non Resident Customer Access Fee	2		\$120.00	\$240.00
Resident Customer Monthly Fee	12	\$44.53		\$6,412.32
Late Fees and Back Payment				
Disconnect or Reconnect Fees				
Mitchell Creek Marina, LLC				
Customer Fee	12	\$2,000.00	\$24,000	\$24,000
Late Fees and Back Payment				
Interest Income amount				
Total Yearly Income				\$30,652.32
Startup Capital (Stock Holders Loan)				\$25,000.00

V-c-8 of 10 Explanation Sheet July 1, 2012 - June 30, 2013 Swan Ridge Lake Resort, LLC	Swan Ridge MCM Utility, Inc.
Non-Resident Owner	2 lot owners with access charged \$120.00 per year
Resident Owner	12 resident owners. Income based on \$44.53 per month.
Late Fees and Back Payments	
Disconnect or Reconnect Fees	
Mitchell Creek Marina, LLC	Income based on \$2000 per month for a Total of \$24,000 per year. The plant is constructed to meet 100% capacity as of June 2010 of 30,000 gallons per day.
Start Up	There is a loan from share from shareholders in the sum of \$25,000 to capitalize the company.

Anticipated Budget Cost July 1, 2013 - June 30, 2014	Projected Payments	Monthly Billing Amount	Yearly Billing Amount	V-c-9 of 10 Yearly Total
Swan Ridge Lake Resort, LLC				
Fees charged customers				
Non Resident Customer Access Fee	4		\$120.00	\$480.00
Resident Customer Monthly Fee	24	\$44.53		\$12,824.64
Late Fees and Back Payment				
Disconnect or Reconnect Fees				
Mitchell Creek Marina, LLC				
Customer Fee	12	\$2,000.00	\$24,000	\$24,000
Late Fees and Back Payment				
Interest Income amount				
Total Yearly Income				\$37,304.64
Startup Capital (Stock Holders Loan)				\$25,000.00

V-c-9 of 10 Explanation Sheet July 1, 2013 - June 30, 2014 Swan Ridge Lake Resort, LLC	Swan Ridge MCM Utility, Inc.
Non-Resident Owner	4 lot owners with access charged \$120.00 per year
Resident Owner	24 resident owners. Income based on \$44.53 per month.
Late Fees and Back Payments	
Disconnect or Reconnect Fees	
Mitchell Creek Marina, LLC	Income based on \$2000 per month for a Total of \$24,000 per year. The plant is constructed to meet 100% capacity as of June 2010 of 30,000 gallons per day.
Start Up	There is a loan from share from shareholders in the sum of \$25,000 to capitalize the company.

Anticipated Budget Cost July 1, 2013 - June 30, 2014	Projected Payments	Monthly Billing Amount	Yearly Billing Amount	V-c-10 of 10 Yearly Total
Swan Ridge Lake Resort, LLC				
Fees charged customers				
Non Resident Customer Access Fee	6		\$120.00	\$720.00
Resident Customer Monthly Fee	36	\$44.53		\$19,236.96
Late Fees and Back Payment				
Disconnect or Reconnect Fees				
Mitchell Creek Marina, LLC				
Customer Fee	12	\$2,000.00	\$24,000	\$24,000
Late Fees and Back Payment				
Interest Income amount				
Total Yearly Income				\$43,956.96
Startup Capital (Stock Holders Loan)				\$25,000.00

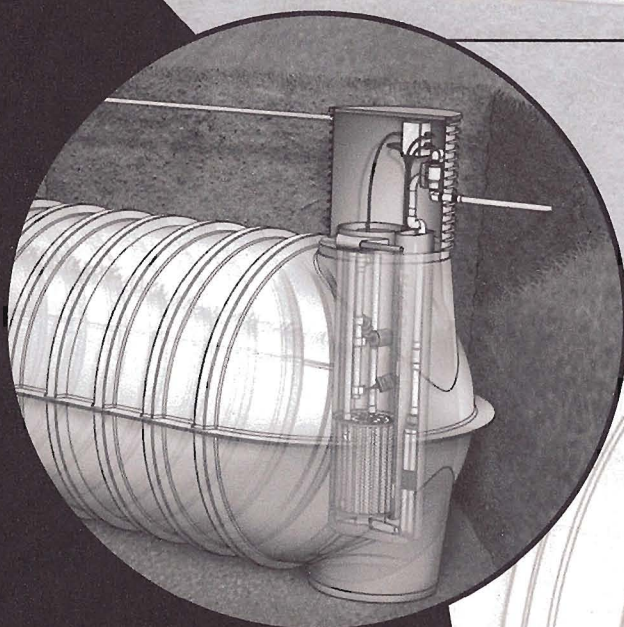
V-c-10 of 10 Explanation Sheet July 1, 2014- June 30, 2015	Swan Ridge MCM Utility, Inc.
Swan Ridge Lake Resort, LLC	
Non-Resident Owner	6 lot owners with access charged \$120.00 per year
Resident Owner	36 resident owners. Income based on \$44.53 per month.
Late Fees and Back Payments	
Disconnect or Reconnect Fees	
Mitchell Creek Marina, LLC	Income based on \$2000 per month for a Total of \$24,000 per year. The plant is constructed to meet 100% capacity as of June 2010 of 30,000 gallons per day.
Start Up	There is a loan from share from shareholders in the sum of \$25,000 to capitalize the company.

Installation Guide

**ProSTEP™ Effluent
Pump Packages**

Residential Applications

***An illustrated step-by-step guide
for installing an Orenco Systems
ProSTEP™ Effluent Pump Package***



Orenco Systems®
Incorporated

*Changing the Way the
World Does Wastewater®*

**800-348-9843
www.orenco.com**

NIM-EPS-1
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Installation Guide: *ProSTEP™ Effluent Pump Packages*

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Reference Documents

This manual covers installation of all components of a ProSTEP™ Pump Package for typical systems.

If you have custom installation procedures, refer to the documentation that came with your custom components. This document also refers to a number of other documents that can be found on our online Document Library for more detailed instructions. Some of these documents include the following:

- *Access Riser Instructions (NIN-RLA-RR-1)*
- *Discharge Plumbing Assembly Installation, Operation, and Maintenance Instructions (NIN-HV-HV-2)*
- *Float Switch Assembly Installation, Operation, and Maintenance Instructions (NIN-MF-MF-1)*
- *Float Collar Instruction Guide (NIN-MF-MFC-1)*
- *Splice Box Installation, Operation, and Maintenance Instructions (EIN-SB-SB-1)*
- *Explosion-Proof Cord Connector Installation Instructions (EIN-SB-SBX-1)*

To access our online Document Library, go to www.orenco.com.

Products described in this manual are covered by U.S. patents 5,492,635 and 4,439,323.

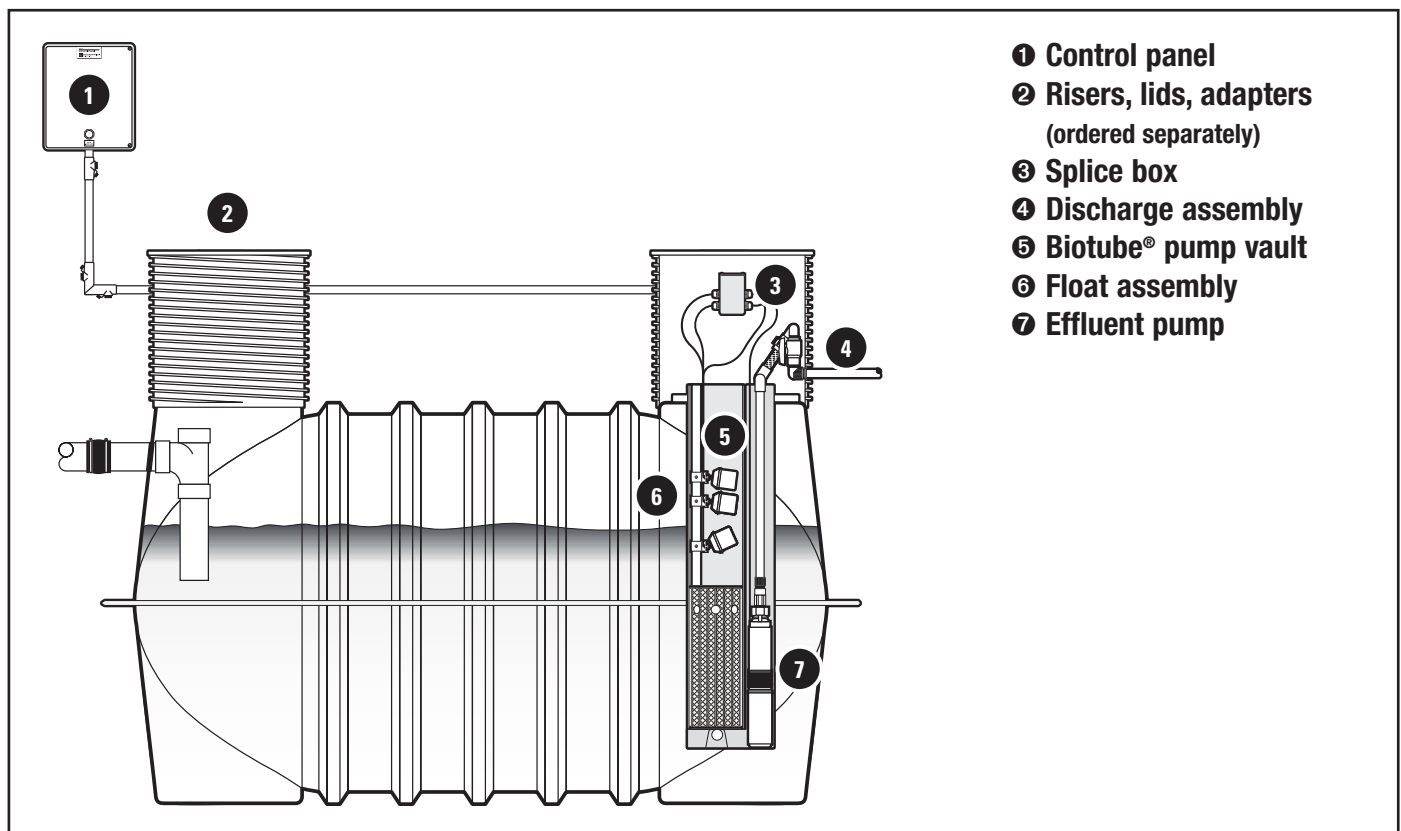
Before You Begin

At Orenco, we've worked hard to make your installation as easy and "hassle-free" as possible. The ProSTEP™ Pump Package comes as a totally integrated package that can be installed in most tanks in a matter of hours. All components are designed to fit together well, and field cuts are kept to a minimum.

Before you begin installing your Orenco ProSTEP™ Pump Package, read this entire manual. You'll save yourself time and money on installation day, and you'll reduce the potential for call-backs. In particular, review the preparation steps and the installation sequence before doing anything. First, make sure the watertight tank has been installed according to the manufacturer's instructions, and that it has been tested for watertightness. If required by the tank manufacturer, all backfilling should be completed as well.

Check the Package!

When your equipment arrives, be sure to check your ProSTEP™ Pump Package for all components. Each Orenco pump package comes with a control panel, splice box, discharge assembly, Biotube® pump vault, float assembly, and effluent pump.



Since there is so much variation in tank sizes, you must order risers, lids, and riser-to-tank adapters separately. You will also need ADH100 and MA320 adhesives, or SS115 or SS140 if you're using an Orenco fiberglass tank, and perhaps bolt-down kits, grommets, and conduit seals, all of which are available in Orenco's Product Catalog. If you don't have an Orenco Product Catalog, call 800-348-9843 to request one, or go to www.orenco.com and click on "Product Catalog" to access it online.

NOTE: All pipe diameters given are U.S. nominal IPS pipe sizes. If you are using metric pipe, you may need adapters to connect to the U.S. fittings supplied.

Step 1: Install Access Risers

Orenco fiberglass tanks accept a 24-in. riser with no adapter needed, or a 30-in. riser with an FRTA30-FRP adapter. A concrete tank may have tank adapters cast in. If adapters have not been installed, see *Access Risers and Tank Adapters* (NIN-RLA-RR-1) for instructions on how to install bolt-down adapters.*

Step 1a: Orient risers with grommets in the directions shown on your engineering plans. For any risers that will have electrical conduits running to them, try to orient electrical grommets to minimize the number of bends. (National Electrical Code limits the sum of all bends in a run to 360 degrees.)

NOTE: If you need to install a grommet, see Appendix 1 before proceeding.

Step 1b: Wipe the areas to be bonded with a clean rag to ensure a clean, dry bonding surface that is free of debris.

Concrete tanks:

Step 1c: To bond a riser to an Orenco tank adapter, select the appropriate adhesive and apply it to the adapter following the instructions in *Access Risers and Tank Adapters* (NIN-RLA-RR-1).

Step 1d: Carefully slide the riser onto the adapter. Orient the riser correctly before the adhesive starts to set.

Step 1e: If you are using both types of adhesive, apply a bead of ADH100 adhesive to the inside of the adapter and riser joint. Use a putty knife or similar tool to form a continuous fillet between the tank adapter and the inside of the riser.

Orenco fiberglass tanks:

Step 1f: If you are using an Orenco fiberglass tank with a 24-in riser, use a methacrylate adhesive, such as MA320, SS115, or SS140, to attach the riser. It is hard to stabilize this kind of joint during curing, and ADH100 takes longer to cure. However, you can use ADH100 to make a watertight fillet inside the joint after the riser is attached.



MA320 adhesive on bolt-down riser lid adapter



ADH100 adhesive

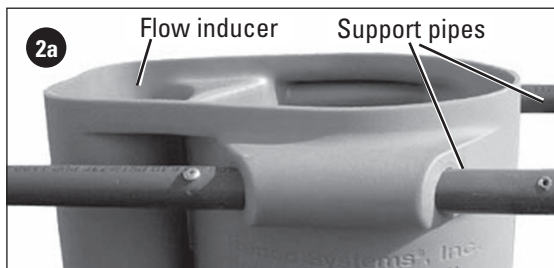


* You can find this document in Orenco's online Document Library at www.orenco.com.

All tanks:

Step 1g: After the adhesives have set, test the watertightness of the tank and the riser joint. To do this, cap the tank's inlet pipe, and place two inches (50 mm) of appropriate backfill material on top of the tank. Then fill the tank with clean water to a level two inches (50 mm) above the adhesive joint in the riser. Do not allow the water level to rise more than three inches (75 mm) into the riser, because structural damage to the tank may occur.

CAUTION: Check the tank manufacturer's guidelines before filling the tank. Some tank manufacturers require a partial or complete backfill before a tank is filled.



Step 2: Install Biotube® Pump Vault

The Biotube pump vault is suspended in the tank by Schedule 80 support pipes (unless it is designed specifically to rest on the bottom of the tank). The vault comes with a Biotube filter cartridge, float stem bracket, and support pipes. Each pump vault houses either one (simplex) or two (duplex) high-head effluent pumps, discharge assemblies, Biotube filter cartridge, float switch assembly, and float stem bracket.

Step 2a: The Biotube pump vault comes with standard length support pipes preinstalled for a 24-in. riser. If you are using a 30-in. riser, longer support pipes are packed with the pump vault. Remove the 24-in. support pipes. Detach the longer pipes from the packaging material and remove one screw from each pipe. Slide the longer support pipes through the holes in the support brackets at the top of the vault, and reinstall the screws. If you need longer support pipes, contact Orenco Systems or your local distributor.

Step 2b: Gently lower the vault into position in the access riser. The support pipes should rest on top of the tank (unless the vault was designed specifically to rest on the tank bottom).

Step 2c: If you have deep access risers, you can extend the Biotube cartridge handles with 1-in. PVC pipe to facilitate maintenance. Remove the setscrews from the crossbar, install extension pipes, and reinstall the crossbar.

IMPORTANT: If the tank is full of sewage, rest the vault on top of the liquid surface and lower it by filling the vault with water (from a hose) to prevent any floating materials from entering the vault through the inlet holes, as well as to counteract the buoyancy of the empty vault.

Step 3: Install Splice Box

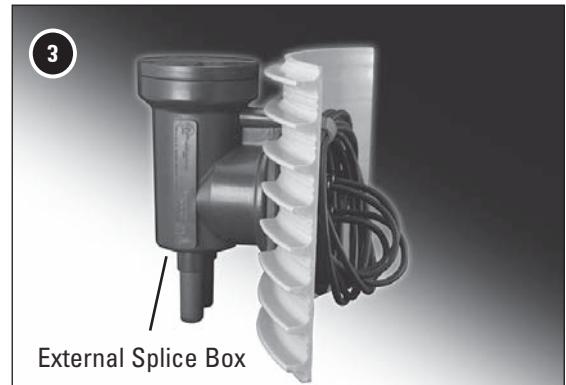
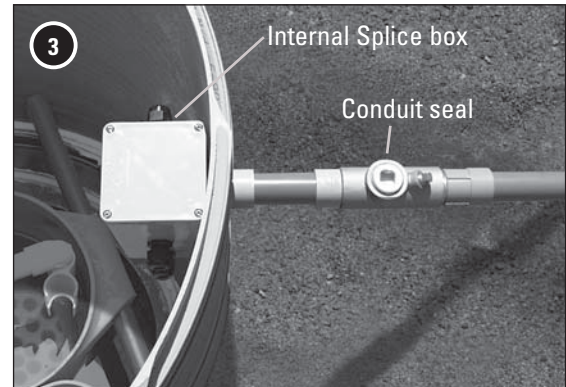
The electrical splice box provides a safe and legal space for splicing cables from pumps or float switches. The splice box comes with waterproof wire nuts necessary to splice the float and pump cords.

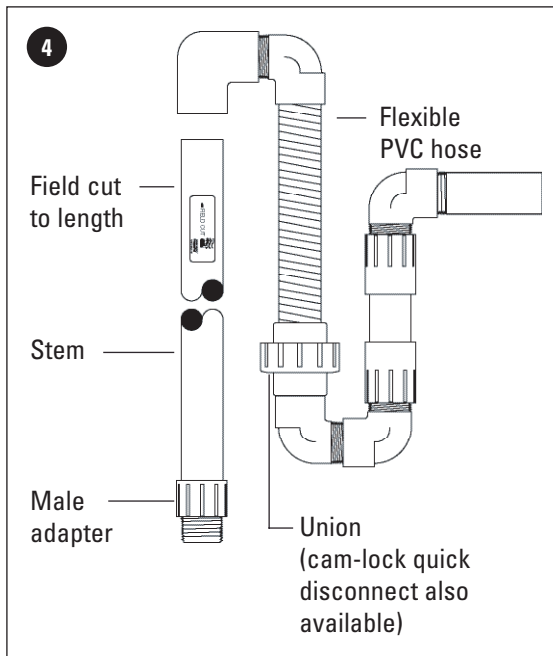
Two types of splice boxes, internally mounted and externally mounted, are available. The conventional Internal Splice Box is mounted inside the riser a few inches below the lid, and the conduit to the control panel penetrates the riser through a grommeted hole. Orenco's External Splice Box mounts in a larger grommeted hole and is secured to the outside of the riser by a bolt.

To install the Internal Splice Box, lubricate both the outside of the conduit coupling and the grommet with pipe lubricant or an equivalent product. Slide the coupling through the grommet in the access riser wall. Make sure the box is pushed snug against the wall, allowing for removal of any pumping equipment. Use conduit seals to ensure that condensation and gases do not affect the system.

If you are using an External Splice Box, the necessary 5-in. hole and screw hole should already be cut. If you need to cut the holes, use the template and instructions supplied with the splice box. Install the grommet with a bead of ADH100 adhesive. Lubricate the splice box with pipe lubricant and push it through the grommeted hole from the outside of the riser. From the inside of the riser, drive the supplied screw through the washer and the hook-and-loop strip into the hole in the splice box to secure it. If you will be using only one of the conduit hubs, glue the supplied plug into the other one.

NOTE: Detailed installation instructions are shipped inside both kinds of splice boxes. See Appendix 2 for splice box wiring instructions.





Step 4: Install Pump and Discharge Assembly

The discharge assembly carries effluent from the effluent pump to the transport pipe.

Step 4a: Apply Teflon® tape or paste to the threads of the pump discharge, and screw the male adapter at the bottom of the discharge plumbing assembly stem into the pump discharge.

Step 4b: For risers 24 in. (610 mm) or less in height, lower the pump and discharge plumbing assembly stem into the flow inducer and mark the stem 1 in. (25 mm) above the top of the flow inducer. (If the riser height is greater than 24 in., refer to NIN-HV-HV-2* for more detailed instructions.) Cut the stem at the mark and glue the cut end of the stem to the upper portion of the assembly, allowing the glue to set. Carefully lower the pump and discharge assembly into the flow inducer.

IMPORTANT: Do not use the pump cable to lower the pump!

Step 4c: Using pipe lubricant or an equivalent product, lubricate the access riser grommet and the gray Schedule 80 nipple on the discharge assembly. Push the nipple through the grommet.

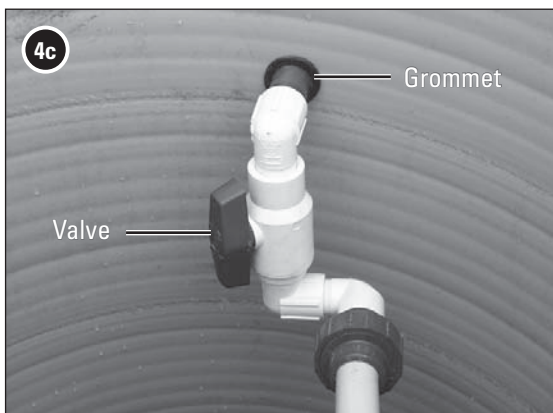
Step 4d: Exercise the (optional) ball valve or gate valve by rotating the handle back and forth to assure that there is enough operating room for the handle.

Step 4e: Glue a slip × slip coupling (or external flex connector, if used) to the end of the nipple extending from the access riser.

Step 4f: Glue the transport pipe to the coupling on the end of the flex connection.

Step 4g: Position the vault in the riser so that the support pipes do not interfere with plumbing or wiring. Be sure that the discharge assembly does not interfere with removal of the float stem or the Biotube cartridge. If you place it correctly, the vault should clear the splice box and discharge assembly when you remove it.

NOTE: Firmly tighten all connections in the discharge assembly by hand. Do not use a tool.



* You can find this document in Orenco's online Document Library at www.orenco.com.

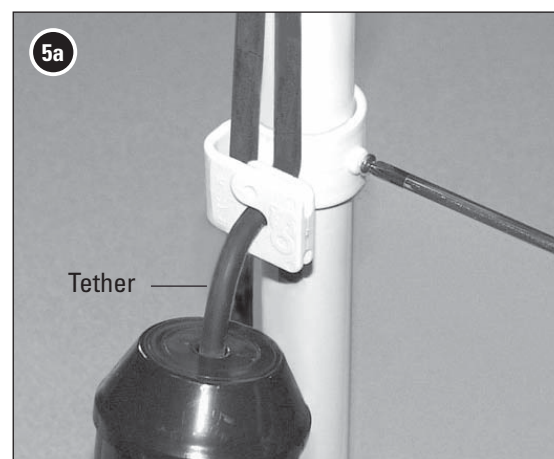
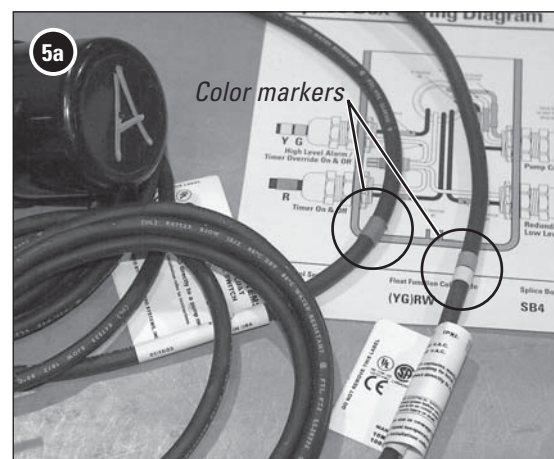
Step 5: Install Float Assembly

The float switch assembly mounts in the pump vault by clipping into the float bracket. You can detach the assembly without removing either the Biotube cartridge or pump vault.

IMPORTANT: *Float positions are critical and should be set according to the engineering plans. Make sure the floats can move freely without interfering with each other and that they do not come in contact with the vault wall.*

Step 5a: Each float cable is provided with a color marker that indicates the function of the float. Make sure your float cable markers correspond with the testing instructions and splice box wiring diagrams. (If the testing instructions or splice box wiring diagrams do not match your float cable marker colors, contact Orenco Systems or your local distributor for assistance.)

The two most common pumping systems are “on-demand” and “timed.” On-demand systems typically use the **Y/G** (yellow/green), **Y/G/W** (yellow/green/white), **Y/B/R** (yellow/blue/red), or **Y/B/R/W** (yellow/blue/red/white) float set; timed systems typically use the **YG/R/W** (yellow-green/red/white) float set. (Refer to the table below.) If your system differs from these types, refer to the instructions included with your control panel.

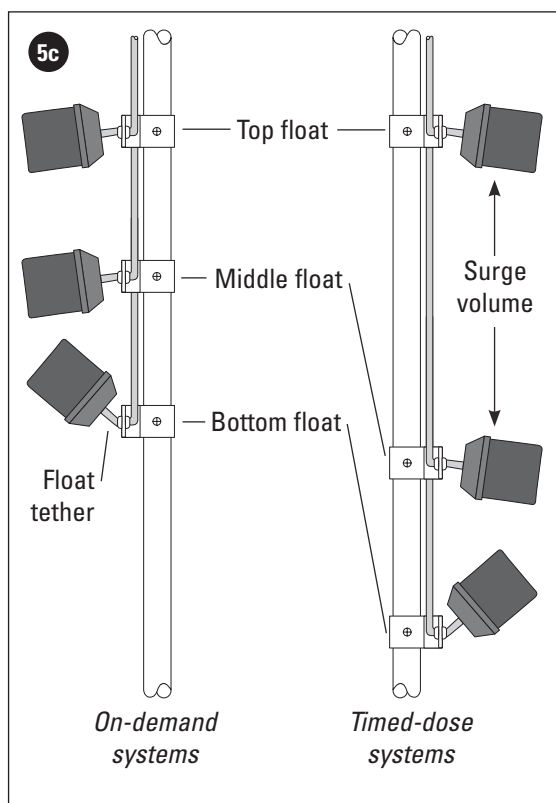


Float Functions and Color Marker Tags

Float	On-Demand		Timed Dose
Top	Y High-level alarm	Y High-level alarm	YG High-level alarm/timer override
Middle	G Pump on/off	B Pump on R Pump off	R Timer on/off
Bottom (opt.)	W Redundant off/low-level alarm	W Redundant off/low-level alarm	W Redundant off/low-level alarm

Step 5b: The floats are assembled in an offset alignment so that they will not interfere with each other. If you notice a float interfering with another, you can adjust it by loosening the setscrew in the float collar with a Phillips screwdriver. Slowly back the screw out of the collar to a point at which the collar may be adjusted. Do not back the screw completely out of the collar. Rotate the collar on the stem until the float switches can move freely past one another. Tighten the setscrew and recheck.

WARNING: *Do not alter the float tether lengths. Altering tether lengths may disrupt proper operation of the assembly.*



Step 5c: Although float switches are assembled at the factory for the appropriate depths, compare the float settings with the project plans and specifications. If you need to adjust a setting, loosen the setscrew as described in Step 5b and follow the instructions below with respect to the system in use:

On-demand systems. Measuring from the setscrew, the top float is normally set 1 in. to 2 in. (25 to 50 mm) below the tank inlet invert. The pump on/off (middle) float should be set 4.5 in. (115 mm) below the top float. The redundant off (bottom) float should be set 3.5 in. (90 mm) below the middle float.* (Make sure the bottom float does NOT rest on top of the Biotube cartridge, or it might not operate correctly in a low-level situation.)

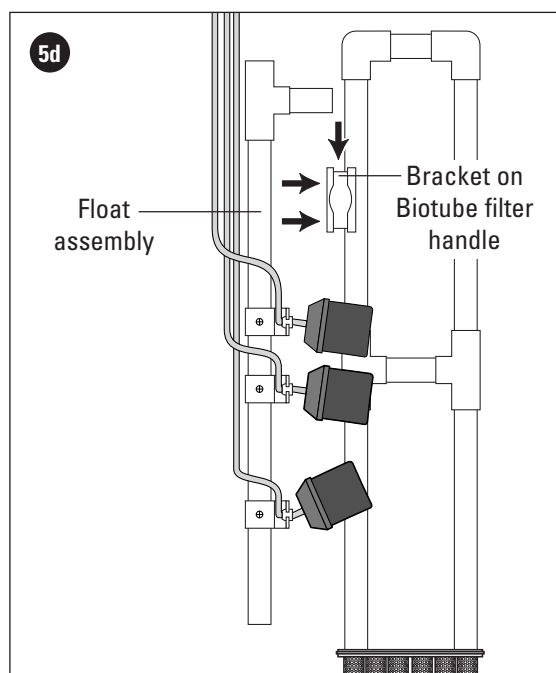
Timed dose systems. Measuring from the setscrew, the top float is normally set 1 in. to 2 in. (25 to 50 mm) below the tank inlet invert. The bottom float should be positioned no closer than 1.5 in. (40 mm) from the top of the Biotube cartridge.* (Make sure the bottom float does NOT rest on top of the cartridge, or it might not operate correctly in a low-level situation.) The middle float in timed dose systems marks the lower boundary of the surge volume, with the top (high-level alarm) float marking the upper boundary. For most residential applications, the recommended surge volume is approximately 150 to 250 gal. (570 to 950 L). Adjust the middle float switch to the desired level and tighten the setscrew.

WARNING: The float stem provided is the maximum length possible without interfering with the pump minimum liquid level or screened pump vault intake ports. Never lengthen the float stem without prior approval from Orenco. Lengthening of the float stem will void the warranty.

Step 5d: Replace the float assembly in the float bracket. Make sure the assembly snaps fully into the float bracket.

Step 5e: Wrap the excess float cord cables around the splice box and tie them together to prevent them from slipping back into the vault and interfering with the operation of the floats. (See photo on page 13.)

Step 5f: To make servicing easier, glue a 1-in. diameter PVC pipe into the float assembly handle to extend the handle within reach of the lid.



* These are standard settings. Make sure float level settings meet state and local regulations.

Step 6: Install Control Panel

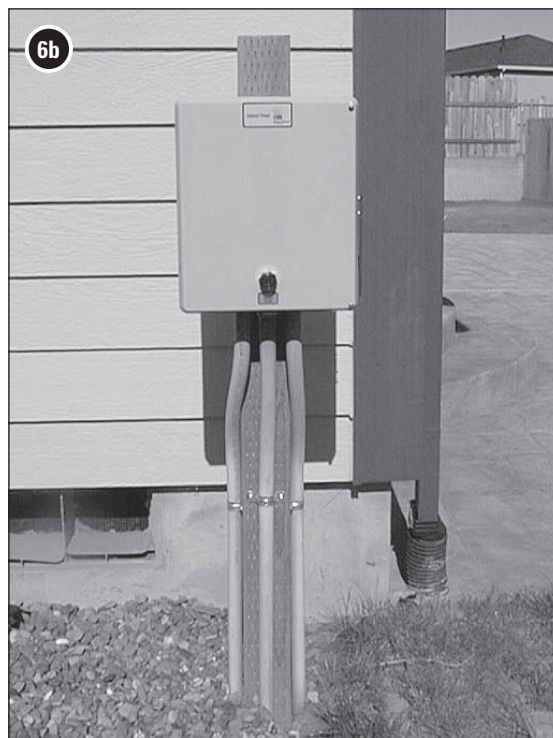
For complete control panel installation instructions, see the installation manual for the electrical control panel that comes with your system. These instructions are tucked into the door pouch inside the control panel.*

Step 6a: Make sure the instructions and items supplied conform to state and local regulations.

Step 6b: A qualified and licensed electrician should install and service the panel and ancillary wiring in compliance with the National Electrical Code, as well as state and local codes. (Wiring diagrams can be found in the installation manual* that comes with the panel.) Wiring will include the following items:

- a) Incoming power to the panel. There may be one or more circuits required, depending upon the number of pumps and local electrical codes.
- b) Wiring from the control panel to the pump and floats.
- c) Wiring to a discharge pump and floats (if applicable).

NOTE: While we do not recommend installing a control panel against the wall of a bedroom, living room, or other living space, you could mount it on a 4 × 4 post adjacent to such a wall.



Step 7: Backfill Installation

Step 7a: Backfill the excavation. Follow the tank manufacturer's guidelines for backfilling the tanks.

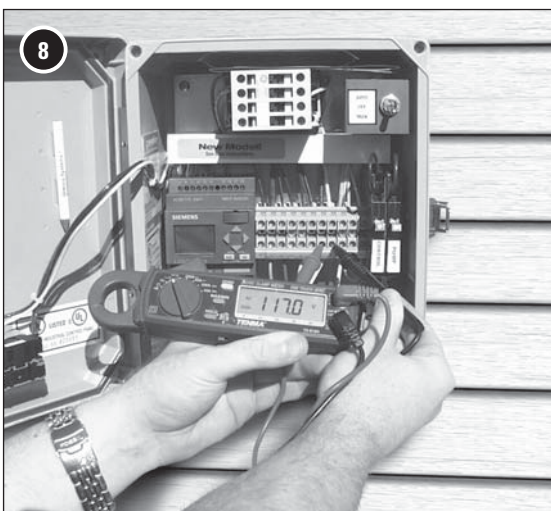
Step 7b: Be sure to backfill evenly and carefully around the riser and all pipes and conduit, so that no breakage occurs. Native material is acceptable if it has no large or sharp rocks that may damage the tank walls. If native material is not usable, backfill with sand or pea gravel. Slope the ground away from the tanks to prevent surface water from ponding on or around them. Cold weather installation may require pea gravel backfill around risers to prevent frost heave.

After backfilling is complete, risers should protrude one to three inches (25 to 75 mm) above grade to allow for settling of the tank.

IMPORTANT: Make sure that all riser lids are secure before backfilling.



* If the instructions are missing or have been removed from the door pouch inside the control panel, call Orenco for a replacement or download a copy of the instructions from our online Document Library at www.orenco.com.



Start-Up Instructions for All Systems

Step 1: Use the log sheet from the door pouch inside the control panel to document measurements and other data.

NOTE: All panels are tested before leaving the factory. If a panel has a functional problem, check the wiring diagrams for proper wiring.

Step 2: Before proceeding, fully open the ball valve on the discharge plumbing assembly and make sure the pump is submerged.

Step 3: Raise the bottom float to simulate normal operation.

Step 4: Check the automatic operation of the high level alarm. Raise the top float to activate the red light and audible alarm. If the light does not illuminate, check it for damage that may have occurred during shipping. Press the “silence” button on the front of the panel enclosure to silence the alarm. The light should stay on. Lowering the float should cause the light to go off.

Step 5: Check the static voltage of the pump. Set the MOA (Manual/Off/Automatic) switch to the OFF position. Using standard electrical probes, measure the incoming voltage by touching one probe to the top wire of the pump breaker and the other to a neutral terminal. Record voltages on the label provided in the control panel.

Step 6: Set the MOA switch in the control panel to MAN (manual). Make sure the pump is running. Orenco pumps have a 1/8-inch (3-mm) bypass orifice in the discharge head. During the pumping cycle, some noise as a result of the recirculation within the flow inducer is to be expected.

Step 7: Measure the amperage of the pump by placing a loop ammeter around one of the wire loops above the pump circuit breaker. (Make sure not to use the control panel’s wire loop.) Record this value on the label provided in the control panel.

Step 8: Using standard electrical probes, measure the dynamic voltage of the pump by touching the probes to the pump terminals in the control panel while the pump is running. (Refer to the wiring diagrams for your panel for the exact terminals.) Record this value on the label provided in the control panel.

NOTE: There should be no more than a 10% difference between static and dynamic voltage. If the voltage drop is greater than 10%, ensure that the wire between the pump and the control panel is the correct size.

Step 9: Perform float test. See instructions that follow for on-demand and timed systems.

Float Test for On-Demand Systems

Set the MOA switch to automatic (AUTO) before testing the floats. You can raise or lower the floats by dipping the float tree into water.

For Y/G or Y/G/W systems

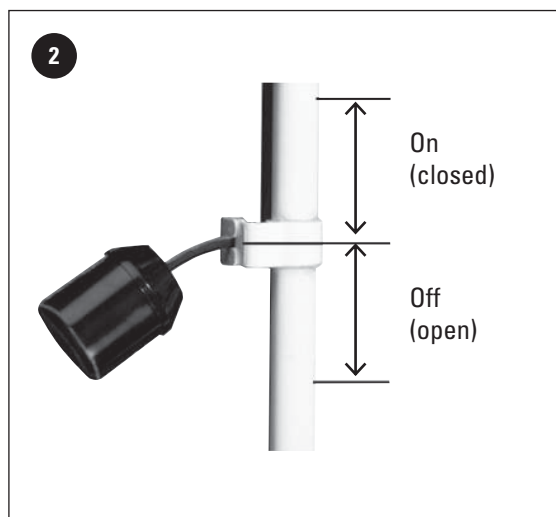
Step 1: To check the pump on/off float, raise the white float, if present, then raise the green float. The pump should engage. When you lower the green float, the pump should shut off.

Step 2: To check the redundant off float, raise first the white, then the green float to engage the pump. While keeping the green float up, lower the white float. The pump should shut off, and the audible and visible alarms should engage.

For Y/B/R or Y/B/R/W systems

Step 1: To check the pump on and pump off floats, raise first the white float, if present, then the red, then the blue float to engage the pump. Lower the blue float, then the red. The pump should stay on when you lower the blue float, but shut off when you lower the red float.

Step 2: To check the redundant off float, raise first the white, then the red, then the blue floats to engage the pump. While keeping the red float up, lower the white float. The pump should shut off, and the audible and visible alarms should engage.



Float Test for Timed Systems (with MVP Panel)

NOTE: All panels are tested before leaving the factory. If a panel has a functional problem, check the wiring diagrams for proper wiring.

Step 1: Familiarize yourself with the types of alarms. Whenever an alarm condition occurs, the audible alarm will sound, and the red light on the front of the panel will illuminate. You can silence the audible portion of all alarms by pushing the illuminated light. You can determine the type of alarm condition by the steady/blinking status of the alarm light:

- Steady light: high-level alarm
- Blinking light: low-level alarm

You can also determine the float positions and alarm conditions by viewing the LCD screen inside the control panel.

Step 2: To test the operation of the floats, remove the float stem from the pump vault. All floats go from “open” to “closed” position when the liquid level is near the center of the float collar. The differential (drawdown) of the float is approximately 1/8 in. (3 mm).

Drop the bottom float to its open (down) position to verify operation of the low-level alarm. The audible alarm should sound and the red alarm light should blink. When the low-level alarm is activated, the pump should also be inoperable. Verify this by flipping the MOA switch to manual. During normal system operation, the bottom float will be in its closed (up) position.

Keeping the bottom float up, raise the top float to its closed (up) position. The high-level alarm should sound, and the red alarm light should shine steadily. During normal system operation, the top float will be in its open (down) position.

NOTE: When the high-level alarm has been activated, the system will run off the override timer for a minimum of three cycles after the top float has dropped. To take the system out of override and resume normal operation, switch the controls circuit breaker to “off” and back to “on.”

Step 3: Set the panel's programmable timer:

- a. Press the **ESC** key.
- b. Press the down arrow key to select "Set Param."
- c. Press the **OK** key.

WARNING: Do not select "Stop." Selecting this option will erase the panel programming and will require an EEPROM (not shipped with the panel) to reprogram. If you inadvertently press the OK button while "Stop" is highlighted, select "No" on the confirmation screen and press OK to go back to the timer setting menu.

- d. Use the up and down arrow keys to scroll through the parameters. When you find one you wish to alter, press the **OK** key.
- e. Use the left and right arrow keys to highlight the character you wish to change. When the cursor is over the character, use the up and down arrow keys to change its value. When you are satisfied with the value, press the **OK** key.
- f. To set other parameters, repeat the previous two steps.
- g. Press the **ESC** key twice to exit.

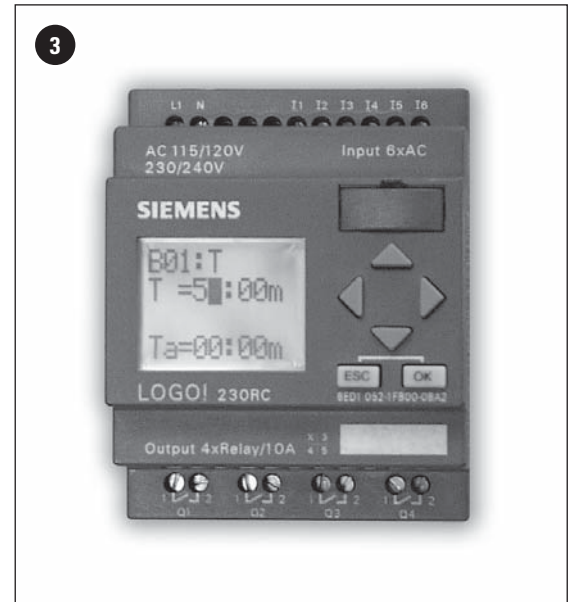
NOTE: More detailed timer setting instructions can be found in the control panel's door pouch.*

Step 4: Test the timer. (To do this, you may need to adjust the timer settings. Repeat Step 4 and set the timer for 40 seconds on, 40 seconds off.)

To simulate normal operation, the bottom float should be in the up position.

- a. Raise the middle float to activate the timer. The timer will start in the "off" phase.
- b. Run the pump through a few cycles to ensure that it turns on and off with the timer.

NOTE: If you changed the timer for this test, repeat Step 3 to set the timer for normal operation.



* If the instructions are missing or have been removed from the door pouch inside the control panel, call Orenco for a replacement or download a copy of the instructions from our online Document Library at www.orenco.com.



The pump can be removed without disconnecting the power cable.



When the union is disconnected, there should be enough clearance to allow removal of the vault.

Check for Easy Pump Vault Removal

The ability to easily remove the Biotube pump vault for maintenance is essential and depends on careful installation in accordance with Orenco instructions. To be certain that the components have been correctly installed and to avoid future maintenance problems, practice the removal process below.

- Completely close the ball valve on the discharge assembly.
- Disconnect the PVC union next to the ball valve.
- Remove the pump from its flow inducer and set it aside on the lid to protect it from mud or sand. (You do not need to disconnect the pump's electrical cord.)
- Remove the float assembly from the vault and set it aside.
- Pull the Biotube pump vault out of the tank. There should be enough clearance between the ball valve and splice box to allow unhindered removal of the vault, as shown in the photo at left.

After you are satisfied that you can successfully remove the vault, lower the vault back into the tank and replace the float assembly. To prevent the vault from floating, run clear water (from a hose) into it to sink it. Then do the following:

- Lower the pump into the flow inducer and reconnect the discharge assembly. Make sure all threaded connections in the discharge assembly are hand-tight. Do not use a tool.
- Open the ball valve completely.
- Secure the access riser lid.

Before Leaving the Site

Make sure all these activities have been performed:

- Valves are back in their recommended positions.
- Discharge assembly threaded connections are hand-tight.
- Control panels have been set to automatic and circuit breakers have all been switched back on.
- Household water lines have been turned back on.
- Lids and lid bolts are properly in place and secure.

CAUTION: AN UNLOCKED LID OR OPEN TANK ACCESS IS A SAFETY HAZARD! The tank access lid must be properly secured to the riser at all times. If bolts are lost or damaged, contact Orenco or your local distributor immediately for replacements.

Brief Maintenance Summary

Whenever servicing a wastewater treatment system...

- Wear clothing that covers all parts of the body exposed to wastewater or effluent and personal protection equipment (rubber gloves, goggles) whenever handling components that come in contact with wastewater or effluent.
- Practice proper personal hygiene after service is complete.
- When working with electrical components, switch off the power at the service entrance panel and set the circuit breakers to OFF. If the control panel is not within view of the pumping system, use lockout/tagout procedures.

NOTE: For complete maintenance instructions, search Orenco's online Document Library. (Look under "Instructions, General" in the "Search by Category" function.)

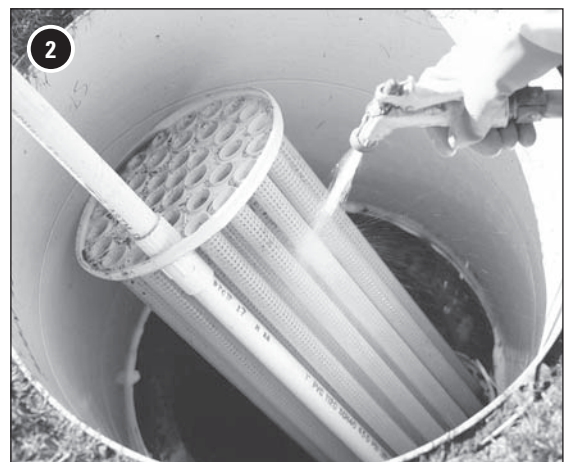
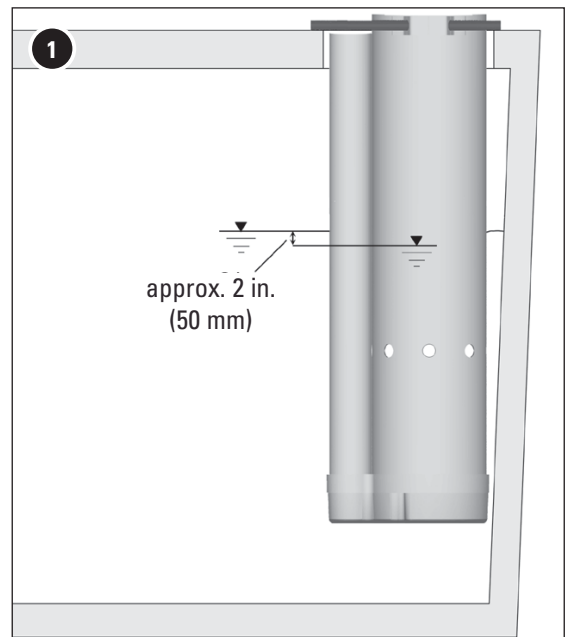
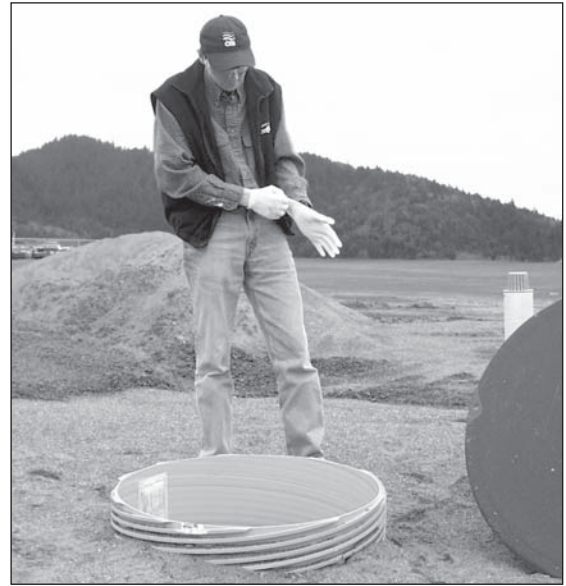
Biotube Pump Vault Maintenance

Step 1: Determine whether the Biotube filter needs cleaning. Turn the pump on by flipping the MOA switch in the control panel to MAN. Let the pump run about 30 seconds and watch inside the Biotube pump vault for any noticeable difference between the vault's liquid level and the tank liquid level. Flip the MOA switch back to AUTO. If the liquid level difference between the inside and outside of the vault reaches about two inches (50 mm) or more, or if the low-level alarm is activated, the Biotube cartridge may need to be cleaned.

Step 2: If the Biotube filter needs cleaning, do the following:

- Switch the MOA switch and the circuit breakers in the control panel to OFF.
- Slide the Biotube cartridge out of the pump vault.
- Hold the Biotube cartridge over an open inlet of the tank or primary compartment.
- Carefully spray the build-up into the tank (not into the pump vault).
- If there are significant solids in the vault, remove and clean the vault too.

Step 3: Pull the pump and place it on a cleanable surface, like the riser lid, or in a plastic trash can. Check the intake screen; wash off particles as necessary. Record the kinds of particles (cigarette butts, hair, lint, kitty litter, cloth wipes, gum, grease build-up, etc.) on a system maintenance log and report your findings to the user/homeowner (for education).



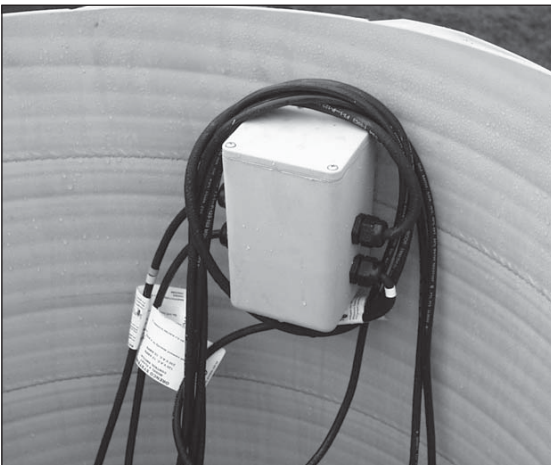


Float Assembly Maintenance

Clean off any solids buildup on floats. Verify that floats are properly secured to the float stem. Verify that float cords are neatly wrapped inside the riser so that they cannot interfere with the operation of the floats.

With the MOA switch set to AUTO, simulate system operation by lifting the floats in the same order that the liquid would lift them (bottom, middle, then top). Remove any inoperative float and replace it with a new one.

Refer to *Float Collar Instruction Guide* (NIN-MF-MFC-1)* and the maintenance section of *Float Switch Assembly Instructions* (NIN-MF-MF-1)* for more detailed information on float assembly repair/replacement.



Splice Box Maintenance

IMPORTANT: Before doing any work on the wiring to the level control floats and pump in the vault or in the control panel, switch the circuit breakers in the panel to their OFF positions and switch off the power to the system at the service entrance panel.

Remove splice box lid and check for moisture. (Some condensation is normal.) Inspect the splice box to ensure lid and connections are secure.

If the splice box was submerged, or if there is a crack in the conduit, there may be water in the splice box. If this is the case, remove water from the splice box with a syringe, sponge, or similar method.

Refer to document NIN-SB-SB-1* for instructions to splice the float wire to the wire from the control panel. Attach the common wire with the other commons using the waterproof wire nut. It may be necessary to replace this wire nut with a new watertight wire nut. Always use watertight wire nuts or heat-shrink splice kits for all connections!

* You can find these documents in Orenco's online Document Library at www.orenco.com.

Appendix 1: Grommet Installation Instructions

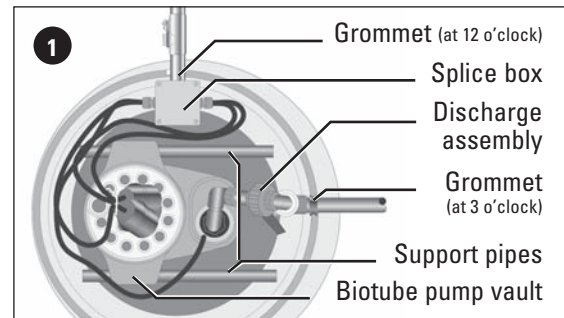
Step 1: To install grommets in the field, first mark the riser for location of the grommets. (For Perma-Loc risers, you should try to avoid cutting through the pipe seam — the extra thick rib — unless it is unavoidable.)

Step 2: Using a 4-in. (100-mm) grinder or other cutting tool, notch through the PVC ribs to the wall of the PVC riser. Remove an area of ribbing equal to approximately 1 in. (25 mm) larger than the grommet diameter.

Step 3: Using a hammer and chisel, break the notched ribs from the riser. Use a grinder to remove any remaining rib material so that you are left with a smooth area, ensuring a watertight fit. (Hole saws with attached pocket cutters are available from Orenco; they cut away the ribs as the hole is cut, eliminating the need to notch and break the ribs.)

Step 4: Using the *Grommet Hole Saw Sizing Chart* below, select a hole saw for the grommet installation and drill out the opening. (If you are using pipe and grommets other than U.S. nominal sizes, ascertain the correct hole size for your grommet.) Use a deburring tool or knife to deburr the edges of the opening, being careful not to enlarge the opening.

Step 5: Install the grommet in the riser. Apply a bead of ADH100 adhesive to the groove of the grommet prior to insertion into the riser hole. This will make the grommet more secure and will overcome any imperfections in the drilled hole.



Grommet Hole Saw Sizing Chart

Grommet Size (in.) Pipe Diameter	Hole Size (in.)
1/2	1
3/4	1-1/4
1	1-9/16*
1-1/4	1-3/4*
1-1/2	2-1/8*
2	2-3/4*
3	3-7/8
4	5

NOTE:
Grommet size = nominal (IPS) pipe size. For more information about grommet dimensions and actual pipe O.D., see Orenco's *Grommet Submittal (NSU-RLA-PG-1)*, available from the Document Library at www.orenco.com.

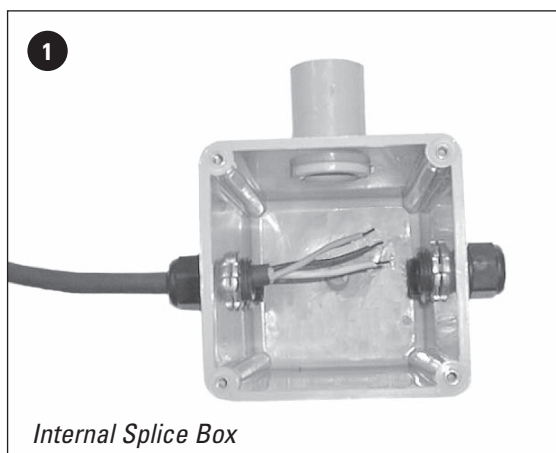
* Hole saw provided with installer's kit



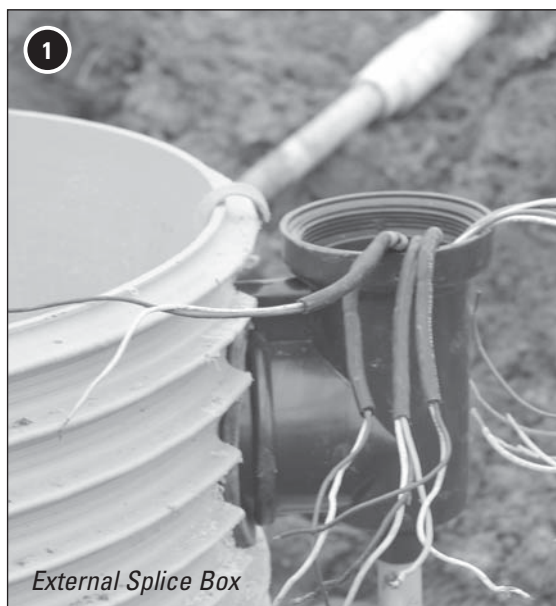
Internal Splice Box



External Splice Box



Internal Splice Box



External Splice Box

Appendix 2: Splice Box Wiring Instructions

This appendix covers simple splice box wiring instructions. For more detailed explanations with field wiring sizes, recommended breaker sizes, and field wire color charts, refer to *Splice Box Installation, Operation, and Maintenance Instructions* (EIN-SB-SB-1).^{*} For explosion-proof (Class I, Division 1) splice boxes, see *Explosion-Proof Cord Connector Installation Instructions* (EIN-SB-SBX-1).^{*} For the External Splice Box, see EIN-SBEX-1. These instructions also come inside each splice box.

All splice boxes are provided with waterproof wire nuts necessary to splice the appropriate floats and pumps.

Step 1: Push the appropriate pump and float wires through the watertight cord grips into the electrical splice box. Leave an adequate length of electrical cable coiled inside the riser to allow for easy removal of the pump and float assembly. Do not remove the colored markers or the paper tags from the float cables, and do not try to thread the markers and tag through the cord grip. Tighten the cord grips by hand, not by tool; then test the tightness of the cord grips by tugging on each cable. A cable is secure when the cord grip is tight enough to prevent slippage. Adequate lengths of cable should be left within the splice box to allow easy removal for future disconnecting and resplicing.

Step 2: Run properly sized wires from the control panel to the splice box. The wires can be brought through a conduit, or can be direct buried using suitable direct-burial wire. Conduit that enters the splice box must be sealed with a conduit seal or acceptable watertight cord connection, to prevent the infiltration of water into the splice box. The number of wires required depends on the control panel and the number of floats and pumps used. Refer to the Splice Box Wiring diagram provided for the control panel and check the float arrangement for your system to determine the number of wires you need.

Wires should be color-coded or otherwise marked to help wire the control panel. The wire color chart in EIN-SB-SB-1^{*} lists common colors recommended for each of the wires. Colors may refer to either the color of the wire's insulating jacket or the color of an electrical tape marker.

^{*} You can find this document in Orenco's online Document Library at www.orenco.com.

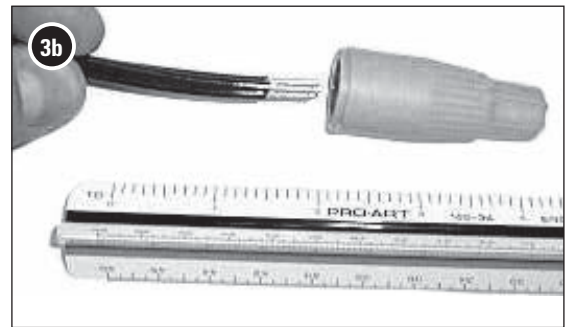
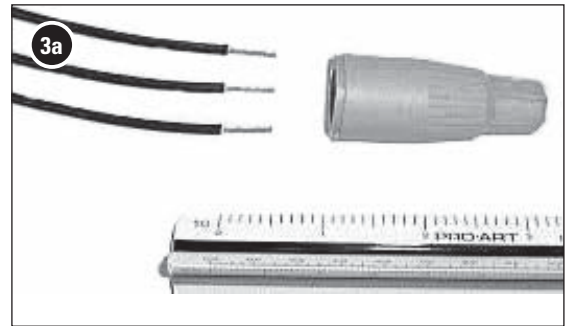
Make all splices within the splice box waterproof using wire nuts or butt connectors and heat-shrink tubing as shown on the appropriate splice box diagram. The splices must be waterproof! Splices that are not waterproof may cause a malfunction of the pump controls if water should leak into the splice box. Refer to the wiring diagrams for instructions on how to connect the float switches.

Step 3: Splice connections with waterproof wirenuts.

- a. Remove approximately 1/2 in. (12 mm) of insulation from the end of each wire to be connected. Prevent frayed strands as much as possible.
- b. Do not pretwist entire wire bundle. Only twist individual stranded wires slightly if needed. Hold wire bundle firmly 2 in. (50 mm) from wire ends. Fully insert all the wires together through the sealant into the connector. Continuing to hold wires firmly, twist connector clockwise onto wires.
- c. Once a connection is made, tug on each wire entering the connector to check the mechanical connection.

NOTE: Watertight connectors are not reusable. To change a splice, twist off and replace with a new connector.

Step 4: After the wires are connected, seal around them where the conduits enter the splice box with approved electrical silicone sealant.



[illegible]

Residential Applications



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UPPER CUMBERLAND ELECTRIC MEMBERSHIP CORPORATION

GENERAL POWER RATE--SCHEDULE GSA

(March 2010)*

Availability

This rate shall apply to the firm power requirements (where a customer's contract demand is 5,000 kW or less) for electric service to commercial, industrial, and governmental customers, and to institutional customers including, without limitation, churches, clubs, fraternities, orphanages, nursing homes, rooming or boarding houses, and like customers. This rate shall also apply to customers to whom service is not available under any other resale rate schedule.

Character of Service

Alternating current, single- or three-phase, 60 hertz. Power shall be delivered at a service voltage available in the vicinity or agreed to by Distributor.

Base Charges

1. If (a) the higher of (i) the customer's currently effective contract demand, if any, or (ii) its highest billing demand during the latest 12-month period is not more than 50 kW and (b) customer's monthly energy takings for any month during such period do not exceed 15,000 kWh:

Customer Charge: \$14.50 per delivery point per month

Energy Charge: 9.349¢ per kWh per month

2. If (a) the higher of (i) the customer's currently effective contract demand or (ii) its highest billing demand during the latest 12-month period is greater than 50 kW but not more than 1,000 kW or (b) if the customer's billing demand is less than 50 kW and its energy takings for any month during such period exceed 15,000 kWh:

Customer Charge: \$40.25 per delivery point per month

Demand Charge: First 50 kW of billing demand per month, no demand charge

Excess over 50 kW of billing demand per month, at \$15.16 per kW

Energy Charge: First 15,000 kWh per month at 9.415¢ per kWh

Additional kWh per month at 4.658¢ per kWh

325

3. If the higher of (a) the customer's currently effective contract demand or (b) its highest billing demand during the latest 12-month period is greater than 1,000 kW:

Customer Charge: \$57.50 per delivery point per month

Demand Charge: First 1,000 kW of billing demand per month, at \$14.67 per kW

Excess over 1,000 kW of billing demand per month, at \$16.65 per kW, plus an additional

\$16.65 per kW per month for each kW, if any, of the amount by which the customer's billing demand exceeds the higher of 2,500 kW or its contract demand

Energy Charge: 4.658¢ per kWh per month

Adjustment

The base demand and energy charges shall be increased or decreased in accordance with the current Adjustment Addendum published by TVA. (In addition, such charges shall be increased or decreased to correspond to increases or decreases determined by TVA under Adjustment 2 or Adjustment 4 of the wholesale power rate schedule applicable under contractual arrangements between TVA and Distributor.)

Determination of Demand

Distributor shall meter the demands in kW of all customers having loads in excess of 50 kW. The metered demand for any month shall be the highest average during any 30-consecutive-minute period of the month of the load metered in kW. The measured demand for any month shall be the higher of the highest average during any 30-consecutive-minute period of the month of (a) the load metered in kW or (b) 85 percent of the load in kVA plus an additional 10 percent for that part of the load over 5,000 kVA, and such measured demand shall be used as the billing demand, except that the billing demand for any month shall in no case be less than 30 percent of the higher of the currently effective contract demand or the highest billing demand established during the preceding 12 months.

Minimum Bill

The monthly bill under this rate schedule shall not be less than the sum of (a) the base customer charge, (b) the base demand charge, as adjusted, applied to the customer's billing demand, and (c) the base energy charge, as adjusted, applied to the customer's energy takings; provided, however, that, under 2 of the Base Charges, the monthly bill shall in no event be less than the sum of (a) the base customer charge and (b) 20 percent of the portion of the base demand charge, as adjusted, applicable to the second block (excess over 50 kW) of billing demand, multiplied by the higher of the customer's currently effective contract demand or its highest billing demand established during the preceding 12 months.

Distributor may require minimum bills higher than those stated above.

Seasonal Service

Customers who contract for service on a seasonal basis shall be limited to 2,500 kW and shall pay the above charges, as adjusted, plus an additional seasonal use charge equal to (1) 1.33¢ per kWh per month under 1 of the Base Charges, (2) the sum of 1.33¢ per kWh for the first 15,000 kWh per month and \$4.00 per kW per month of billing demand in excess of 50 kW under 2 of the Base Charges, and (3) \$4.00 per kW per month of billing demand under 3 of the Base Charges. Consistent with Distributor's standard policy, the customer may arrange for seasonal testing of equipment during offpeak hours.

For such customers, the minimum bill provided for above shall not apply. Distributor may require additional charges to provide recovery of costs for customer-specific distribution facilities.

Contract Requirement

Distributor may require contracts for service provided under this rate schedule. Customers whose demand requirements exceed 50 kW shall be required to execute contracts and such contracts shall be for an initial term of at least 1 year. The customer shall contract for its maximum requirements, which shall not exceed the amount of power capable of being used by customer, and Distributor shall not be obligated to supply power in greater amount at any time than the customer's currently effective contract demand. If the customer uses any power other than that supplied by Distributor under this rate schedule, the contract may include other special provisions. The rate schedule in any power contract shall be subject to adjustment, modification, change, or replacement from time to time as provided under the power contract between Distributor and TVA.

Payment

Bills under this rate schedule will be rendered monthly. Any amount of bill unpaid after due date specified on bill may be subject to additional charges under Distributor's standard policy.

Single-Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery and metering point, and at a single voltage. If service is supplied to the same customer through more than one point of delivery or at different voltages, the supply of service at each delivery and metering point and at each different voltage shall be separately metered and billed.

Service is subject to Rules and Regulations of Distributor.


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Rate Information

Residential Rate Schedule - Schedule RS

Energy Charge	(Cents per kWh)
First 300 kWh	.07984
301-1000 kWh	.07684
Over 1000 kWh	.07384

Customer Charge (Minimum bill): \$13.27 No kWh

General Power Rate – Schedule GSA

DEMAND FROM 0 TO 50 kW AND kWh LESS THAN 15,000

Energy Charge	(Cents per kWh)
First 300 kWh	.09313
301-900 kWh	.08813
Over 900 kWh	.08563

Customer Charge (Minimum bill): \$17.50 No kWh

DEMAND FROM 51 kW TO 1,000 kW OR kWh GREATER THAN 15,000

Demand	Charge
First 50 kW	No Charge
Additional kW (per kW)	\$13.98
Energy Charge	(Cents per kWh)
First 15,000 kWh	.08763
Additional kWh	.04206

Customer Charge: \$50.00 (Minimum Bill) No kWh

DEMAND OF 1000 kW OR GREATER

Demand	Charge
First 1,000	\$14.08
1,001-2,500	\$15.83
Over 2,500	\$16.33

Energy Charge: (kWh .04306)

Customer Charge: \$100.00 (Minimum Bill) No kWh

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[View & Pay Bill](#)
[Vegetation Management](#)
[Links](#)

Anticipated Annual Billing Cost				VI-g-3		
Billing Cost						
Postage		\$0.44				
Printing		\$0.80				
Total Cost		\$1.24				
Non Residents -	Total Cumulative			2	2	2
Residents-	Total Cumulative			12	24	36
		2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Annual	(# non resident customers)			\$240.00	\$240.00	\$240.00
Monthly	(# resident customers X12)			\$178.56	\$357.12	\$578.88
Late Notice						
Mitchell Creek	(1 Customer X 12)	\$14.88	\$14.88	\$14.88	\$14.88	\$14.88
Total Billings						
Annual Cost	(total billing cost X total billings)=	\$14.88	\$14.88	\$433.44	\$612.00	\$833.76

II-6-1

1 of 2

City of Celina
Celina, TN 38551

February 17, 2010

Swan Ridge MCM Utility, Inc
3403 Swan Ridge Rd
Hilham, TN 38568

Dear Sirs/Madam

The Celina Utility District does provide sewer services for much of the Celina City residents, but does not have service in the area of Swan Ridge or Mitchell Creek. Further, we have no plans in the future of servicing their area.

We have no conflict with you providing your own services.

Sincerely,

Willie P. Kerr

Willie Kerr, Mayor
City of Celina

II-b-1
2 of 2

145 Cordell Hull Drive
P.O. Box 387
Celina, TN 38551
Phone: 931-243-2161

Clay County Government

February 18, 2010

Swan Ridge MCM Utility, Inc.
3403 Swan Ridge Rd.
Hilham, TN 38568

Dear Sir/Madam:

Clay County has no wastewater treatment centers. You may proceed with no conflict from Clay County regarding your services.

If you need additional information, please feel free to contact my office at the number listed above.

Sincerely,



Dale Reagan
Clay County Mayor

Home of Beautiful Dale Hollow Lake



11-6-2
10F2

Swan Ridge Lake Resort
3403 Swan Ridge Rd
Hilham, TN 38568
931-243-4871

February 17, 2010

Swan Ridge MCM Utility, Inc.
3403 Swan Ridge Road
Hilham, TN 38568

Dear Sirs/Madam:

Swan Ridge Lake Resort, LLC would like to request Swan Ridge MCM Utility, Inc. to provide waste water services to the Swan Ridge Lake Resort Development. There is no sewer available in this area and soils in the development are not suitable for onsite septic.

Sincerely,

J. D. Smith



II-b-2
2 of 2

Wednesday, February 17, 2010

Swan Ridge MCM Utility, Inc.
3403 Swan Ridge Road
Hilham, TN 38568

Dear Sir/Madam,

Mitchell Creek Marina, LLC is requesting that Swan Ridge MCM Utility, Inc. provides waste water services to Mitchell Creek Marina, to include the septic for houseboats, rentals and restaurant. There is no sewer available in this area. The soils in this area are not suitable for onsite septic.

Sincerely,

JD Smith, Owner

II - c
10F3

1. BEFORE THE TENNESSEE REGULATORY AUTHORITY

2. NASHVILLE, TENNESSEE

3.

4. MARCH 15, 2010

5.

6. IN RE:)

7.)

8. PETITION OF SWAN RIDGE MCM UTILITY INC. TO OBTAIN)

9. A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY) DOCKET NO: _____

10. FOR THE SERVICE PART OF CLAY COUNTY, TENNESSEE)

11. KNOWN AS SWAN RIDGE LAKE RESORT, LLC)

12. AND MITCHELL CREEK MARINA, LLC)

13.

14.

15. SWAN RIDGE LAKE RESORT, LLC AND MITCHELL CREEK MARINA, LLC

16. PRE-FILED DIRECT TESTIMONY OF JERRY D SMITH

17.

18. Q. State your name for the record and your position with the Petitioner, Swan Ridge

19. MCM Utility, Inc.

20. A. Jerry D Smith: I am the president of Swan Ridge MCM Utility Inc.

21. Q. What is the business of Swan Ridge MCM Utility Inc.?

22. A. To provide environmentally friendly and affordable wastewater service to communities
23. where wastewater service is not currently available.

24. Q. Is there a need for wastewater service in the proposed development?

25. A. Yes, we have been requested to provide wastewater service by Mitchell Creek Marina, LLC
26. and Swan Ridge Lake Resort, LLC. I have included a copy of the letter requesting that
27. the service be provided. I have contacted the other utilities in the area and they have
28. no plans to service this area. additionally most of the soils in this development are not
29. suitable for septic systems.

30. Q. What services will Swan Ridge MCM Utility, Inc provide to Swan Ridge Lake Resort, LLC
31. and Mitchell Creek Marina, LLC?

32. A. Swan Ridge MCM Utility will provide wastewater service: Including pumping and

33. maintenance of the step systems at individual homes and at the marina. Maintaining
34. the community main lines. Maintaining and operating the treatment plant and drip
35. field. All operation and maintenance will be done in a manner as to meet all
36. requirements of the state operating permit.

37. Q. **Does Swan Ridge MCM Utility Inc. have the technical, managerial, and financial**
38. **capability to provide wastewater service to Swan Ridge Lake Resort, LLC and Mitchell**
39. **Creek Marina, LLC?**

40. A. Yes, Swan Ridge MCM Utility Inc. staff and associates have all the necessary technical
41. managerial, and financial capability to provide wastewater service to Swan Ridge Lake
42. Resort, LLC and Mitchell Creek Marina, LLC. I currently own and operate Honest Abe
43. Log Homes, Barky Beaver Mulch Inc. These companies are professional and we have
44. financial and managerial experience to operate such companies. Swan Ridge MCM
45. Utility, Inc. employed Professional Engineering Services, Inc. of 7A Cook Street, Sparta,
46. Tennessee 38583. Ronnie Reece, Chief Engineer, who has experience designing,
47. permitting and inspecting the system we installed at Mitchell Creek Marina, LLC.
48. Fields Engineering of Crossville, Tennessee is designing the Swan Ridge Lake Resort, LLC
49. system and will inspect the construction as per codes required for the state of Tennessee.

50. Q. **Will Swan Ridge MCM Utility Inc. abide by all applicable Tennessee statutes and TRA**
51. **rules governing wastewater utilities?**

52. A. Yes, Swan Ridge MCM Utility Inc. will abide by all applicable Tennessee statutes and TRA
53. rules governing wastewater utilities. Including but not limited to TRA Rule Chapters
54. 1220-1-1, 1220-4-1 and 1220-4-13.

55. Q. **How many customers will be served in this development?**

56. A. Swan Ridge MCM Utility Inc. will service 80 residential wastewater customers once the
57. subdivision is built out and one marina on Dale Hollow Lake, which has seasonal
58. wastewater demand of restrooms, restaurant and approximately 200 houseboats and
59. 20 rental cabins. There will be two separate treatment centers for the marina and the
60. Swan Ridge Lake Resort, LLC residential customers.

61. Q. **Identify any complaints filed with any state regulatory agency involving Swan Ridge**
62. **MCM Utility Inc.**

63. A. There have never been any complaints filed against Swan Ridge MCM Utility Inc.

64. Q **Does this conclude your pre-filed testimony?**

65. A. Yes.

66.

67. I swear that the foregoing testimony is true and correct to the best of my knowledge
68. and belief.

69.

70.

Jerry D. Smith

71.

Jerry D. Smith

72.

President

73.

Swan Ridge MCM Utility Inc.

74.

75.

76.

77.

Subscribed and sworn to me this 15th day of March, 2010

78.

79.

Notary Public Debra J. Smith

80.

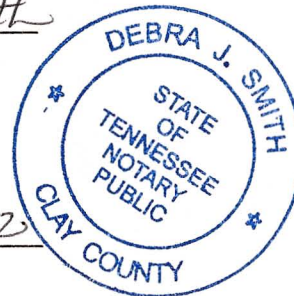
81.

County of CLAY

82.

83.

My Commission Expires 9-10-2012



CERTIFICATE OF SERVICE

The undersigned hereby certifies that the above and foregoing pre-filed direct testimony of Jerry D Smith has been served upon the Tennessee Regulatory Authority, 460 James Robertson Parkway, Nashville, Tennessee 37243. By method of hand delivered.

On this 15th day of March, 2010

Jerry D. Smith

Jerry D. Smith



III e
STATE OF TENNESSEE
Tre Hargett, Secretary of State
Division of Business Services
312 Rosa L. Parks Avenue
6th Floor, William R. Snodgrass Tower
Nashville, TN 37243

Swan Ridge MCM Utility, Inc.
3403 Swan Ridge Rd.
Hilham, TN 38568 USA

February 5, 2010

Filing Acknowledgment

Please review the filing information below and notify our office immediately of any discrepancies.

Control # :	623558	Formation Locale:	Clay County
Filing Type:	Corporation For-Profit - Domestic	Date Formed:	02/05/2010
Filing Date:	02/05/2010 8:43 AM	Shares of Stock:	100
Status:	Active	Fiscal Year Close	12
Duration Term:	Perpetual	Annual Rpt Due:	04/01/2011
		Image # :	6648-2451

Document Receipt

Receipt # : 51956	Filing Fee:	\$100.00
Payment-Check/MO - JAMES D. WHITE, JR., Celina, TN		\$100.00

Registered Agent Address

Doug Smith
3403 Swan Ridge Rd.
Hilham, TN 38568 USA

Congratulations on the successful filing of your **Charter** for **Swan Ridge MCM Utility, Inc.** in the State of Tennessee which is effective on the date shown above. You must also file this document in the office of the Register of Deeds in the county where the entity has its principal office if such principal office is in Tennessee.

You must file an Annual Report with this office on or before the Annual Report Due Date noted above and maintain a Registered Office and Registered Agent. Failure to do so will subject the business to Administrative Dissolution/Revocation.


Tre Hargett, Secretary of State
Business Services Division

State of Tennessee



Department of State

Corporate Filings
312 Eighth Avenue North
6th Floor, William R. Snodgrass Tower
Nashville, TN 37243

CHARTER (For-Profit Corporation)

RECEIVED
STATE OF TENNESSEE

2010 FEB -5 AM 8:43

FILED

TRE HARGETT
SECRETARY OF STATE

The undersigned acting as incorporator(s) of a for-profit corporation under the provisions of the Tennessee Business Corporation Act adopts the following Articles of Incorporation.

1. The name of the corporation is:

Swan Ridge MCM Utility, Inc.

[NOTE: Pursuant to Tennessee Code Annotated § 48-14-101(a)(1), each corporation name must contain the words corporation, incorporated, or company or the abbreviation corp., inc., or co.]

2. The number of shares of stock the corporation is authorized to issue is: 100

3. The name and complete address of the corporation's initial registered agent and office located in the State of Tennessee is:

Doug Smith

3403 Swan Ridge Rd., Hilham

TN 38568

(Name)

(Street Address)

(City)

(State/Zip Code)

Clay

(County)

4. List the name and complete address of each incorporator:

James D. White, Jr. P.O. Box 333, Celina, TN 38551

(Name)

(Include: Street Address, City, State and Zip Code)

(Name)

(Street Address, City, State and Zip Code)

(Name)

(Street Address, City, State and Zip Code)

5. The complete address of the corporation's principal office is:

3403 Swan Ridge Rd., Hilham

TN 38568

(Street Address)

(City)

(State/County/Zip Code)

6. The corporation is for profit.

7. If the document is not to be effective upon filing by the Secretary of State, the delayed effective date and time are:

Date _____, _____, Time _____ (Not to exceed 90 days.)

8. Other provisions:

2-2-10

Signature Date

James D. White, Jr.
Incorporator's Name (typed or printed)

Incorporator's Signature

6648.2451

LAW OFFICE
JAMES D. WHITE, JR.
101 GREEN STREET
CELINA, TENNESSEE 38551
TELEPHONE: (931) 243-3535
TELEFAX: (931) 243-3902

JAMES D. WHITE, JR.

RECEIVED
STATE OF TENNESSEE
2010 FEB -5 AM 8:43
MAILING ADDRESS
P.O. BOX 333
CELINA, TENNESSEE 38551
TREAS. HARRITT
SECRETARY OF STATE

6648-2452

February 2, 2010

State of Tennessee
Department of State
Corporate Filings
312 Eighth Avenue North
6th Floor, William R. Snodgrass Tower
Nashville, TN 37243

Re: Swan Ridge MCM Utility, Inc.

Dear Sir/Madam:

Enclosed herewith please find the charter for the above referenced corporation along with a check in the amount of One Hundred Dollars (\$100.00) for the filing fee.

If you have any questions, please feel free to contact me.

Thanking you in advance for your anticipated cooperation, I am

Yours very truly,

James D. White, Jr.

JDW:mg

Enclosures

THIS LOAN AGREEMENT AND PROMISSORY NOTE, is made this 15th day of March, 2010, by and among Swan Ridge MCM Utility Inc (hereinafter, known as "BORROW") and the share holders of Swan Ridge MCM Utility Inc.

LENDER shall collectively be known herein as "the Parties". In determining the rights and duties of the Parties under this Loan Agreement, the entire document must be read as a whole.

PROMISSORY NOTE

FOR VALUE RECEIVED, BORROWER promises to pay to the order of LENDER, the sum of \$25,000.00 dollars together with interest thereon at a rate of 0 percent (%) per annum on the unpaid balance with interest to be compounded annually (hereinafter, "the Loan Amount").

ADDITIONAL LOAN TERMS

The BORROW and LENDER, hereby further set forth their rights and obligations to one another under this Loan Agreement and Promissory Note and agree to be legal bound as follows:

Loan Repayment Terms.

BORROWER may make payment(s) to LENDER in amounts and at times as it chooses upon the Loan Amount.

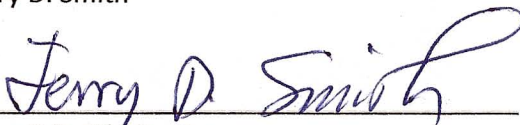
Method of Loan Payment.

The BORROWER shall make all payments called for under this loan agreement by sending check or other negotiable instrument made payable to the following individual or entity at the address indicated:

Jerry D. or Janie Smith
9980 Clay County Hwy
Moss, TN 38575



President/Swan Ridge MCM Utility Inc.
Jerry D. Smith



Jerry D Smith, Parties



Janie Smith, Parties

**TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER POLLUTION CONTROL
6th Floor, L & C Annex
401 Church Street
Nashville, TN 37243-1534**

Permit No. SOP-08004

**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

**Mitchell Creek Marina, LLC
Athens, ~~Gl~~ay County, Tennessee
Hilons
FOR THE OPERATION OF**

24 grinder pumping stations with 3200 feet low pressure collection system, recirculating media filter, UV disinfection and 3.73 acre drip irrigation system located at latitude 36.5147222 and longitude -85.385000 in Clay County, Tennessee to serve 322 boat slips, 22 cabins and a restaurant in the Mitchell Creek Marina, LLC. The design capacity of the system is .03 MGD.

This permit is issued as a result of the application filed on January 17, 2008, in the office of the Tennessee Division of Water Pollution Control 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:

This permit shall expire on:

Issuance date:

**Paul E. Davis
Director
Division of Water Pollution Control**

CN-0759

RDA's 2352 & 2366

PART I**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>Sampling Point</u>	<u>Measurement Frequency</u>
Flow	instantaneous		*	1/month
BOD ₅	grab	45 mg/l	*	1/quarter
Nitrate as N	grab	20 mg/l	*	1/quarter
Ammonia as N	grab	Report	*	1/quarter
<i>E. Coli</i>	grab	941 colonies/100 ml	*	1/quarter

* Effluent to the drip irrigation plots.

The permittee must disinfect the wastewater in order to meet the above *E. Coli* limit.

This permit allows the operation of a wastewater drip irrigation system. The operation should be *such that there is no contamination of and no wastewater discharge to any surface or subsurface stream* because of collected pools of water called "ponding", irrigation into karst features or because of improper irrigation. Any runoff due to improper operation must be reported in writing to the Division of Water Pollution Control, Cookeville Environmental Field Office within 5 days of the incident. In addition, the drip irrigation system must be operated in a manner preventing the creation of a public health hazard or a public/private nuisance.

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.

C. DEFINITIONS

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

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

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.

D. REPORTING

1. Monitoring Results

Monitoring results shall be recorded monthly 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. Operation reports and any communication regarding compliance with the conditions of this permit must be sent to:

Division of Water Pollution Control
Cookeville Environmental Field Office
1221 South Willow Avenue
Cookeville, TN 38506

The first operation report is due on the 15th of the month following permit effectiveness

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 1200-4-5-.07(4)(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.

E. SCHEDULE OF COMPLIANCE

Full operational level shall be attained from the effective date of this permit.

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 Pollution Control (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 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 Pollution Control.

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 per month. If discharge monitoring reports, WPC 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 responsible charge of the facility and observes the operation of the system frequently enough to ensure its proper operation and maintenance regardless of the effluent monitoring frequency stated in the permit."

- b. 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 69-108-(F) 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 assistance center 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 to land or water of wastes 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. 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.
- d. 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. 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 Pollution Control EFC 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. **"Severe property damage"** means substantial physical damage to property, damage to the treatment facilities which would cause 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.
- b. Bypasses are prohibited unless all of the following 3 conditions are met:
- i. The bypass is unavoidable to prevent loss of life, personal injury, or severe property damage;

ii. There are no feasible alternatives to bypass, such as the construction and use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up 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 preventative maintenance;

iii. The permittee submits notice of an unanticipated bypass to the Division of Water Pollution Control in the appropriate Environmental Field Office within 24 hours of becoming aware of the bypass (if this information is provided orally, a written submission must be provided within five days). When the need for the bypass is foreseeable, prior notification shall be submitted to the director, if possible, at least 10 days before the date of the bypass.

c. Bypasses not exceeding permit limitations are allowed **only** if the bypass is necessary for essential maintenance to assure efficient operation. All other bypasses are prohibited. Allowable bypasses not exceeding limitations are not subject to the reporting requirements of 6.b.iii, above.

7. Washout

a. For domestic wastewater plants only, a "washout" shall be defined as loss of Mixed Liquor Suspended Solids (MLSS) of 30.00% or more. This refers to the MLSS in the aeration basin(s) only. This does not include MLSS decrease due to solids wasting to the sludge disposal system. A washout can be caused by improper operation or from peak flows due to infiltration and inflow.

b. A washout is prohibited. If a washout occurs the permittee must report the incident to the Division of Water Pollution Control in the appropriate Environmental Field Office within 24 hours by telephone. A written submission must be provided within five days. The washout must be noted on the discharge monitoring report. Each day of a washout is a separate violation.

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.

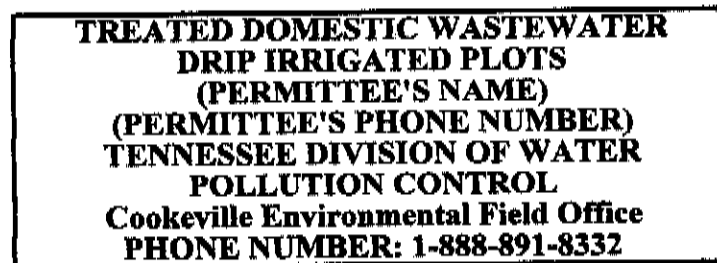
PART III OTHER REQUIREMENTS

A. CERTIFIED OPERATOR

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

B. PLACEMENT OF SIGNS

The permittee shall place a sign at all approaches to the drip irrigation lot. 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 and have a white background with black letters.



No later than sixty (60) days from the effective date of the permit, the permittee shall have the above sign(s) on display in the location specified.

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 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 40 CFR Part 503. If the septage is transported to another POTW for disposal, the permittee shall note the amount of septage wasted in gallons, % solids of septage wasted and the name of the facility to which the septage was taken 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. DRIP SITE MANAGEMENT

The drip irrigation system must have appropriate site management practices to ensure that the nitrogen design assumptions will be achieved. The cover crop must be able to uptake the prescribed amount of nitrogen (100 lbs/acre/year). This requirement shall not be construed to warrant any use of the harvested product and the permittee shall assume full responsibility for its proper use or disposal.

G. 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 drip or spray irrigation. 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 treatment system.

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 even 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 Regulatory Authority), or another public agency.

Serial No. 1023

State of Tennessee

Department of Environment and Conservation



Water and Wastewater Operator Certification Board

Issues This

Certificate of Competency

as Testimony That

Jason E. Hamilton

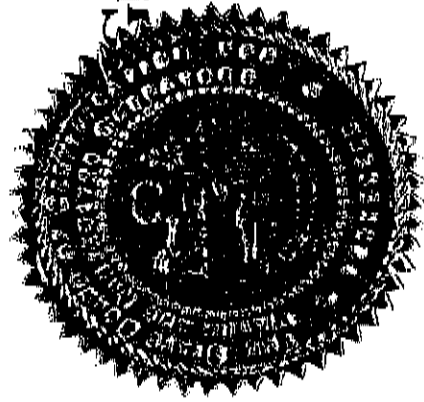
has satisfactorily fulfilled the requirements set forth by the

Water and Wastewater Operator Certification Board.

and is therefore, by these presents, entitled to recognition as a

Grade I Wastewater Treatment Plant Operator

In Witness Whereof, we have subscribed our names and affixed our Seal



November 3, 1993

Certificate No. 411-23-5870 Dated

Monte E. Lord
Board Chairman

Recommended

Approved

Commissioner.

James H. Byrnes
Board Secretary

Attest