



Tennessee Wastewater Systems, Inc.  
Docket 15-00025  
October 2016 Report Overview

Systems subject to Notice of Violations and other Corrective Orders:

**Starr Crest I\*** (NOV) – TDEC inspected the location and cleared the site.

**Starr Crest II** (NOV) – Repairs made; awaiting inspection by TDEC upon completion of upgraded system – TDEC has issued the modified operating permit and approved the construction plans.

**Smoky Village** (NOV) – Docket 16-00096 – TDEC will inspect once system upgrades are complete.

**Townsend Square\*** (NOV) – TDEC inspected the location and cleared the site.

**Summit View** – Docket 14-00136 – Still awaiting issuance of final permit. Draft permit issued December 2015. Public hearing held April 2016. TDEC will inspect once system upgrades are complete.

**Cedar Hill** – Docket 16-00096 - TDEC will inspect once system upgrades are complete.

**Maple Green** (NOV) – Docket 16-00096 – TDEC will inspect once system upgrades are complete.

**Smoky Cove\*** (NOV) – TDEC met with TWSI personnel on site and issues noted in the NOV are resolved.

**River Road\*\*** (NOV) – NOV issued for inspection done November 2015. TWSI is looking into and addressing the concerns raised and will respond in a timely manner.

\* Starr Crest I, Townsend Square, and Smoky Cove will be removed from the next update in November.

\*\* River Road is not included in the KPI Report because there is no discharge from the facility and is not monitored.

## Jeff Ridsen

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**From:** HAWKMS Agent <agent@hawkms.com>  
**Sent:** Saturday, October 1, 2016 7:50 AM  
**To:** Charles Hyatt; Brian Carter; Roy Denney  
**Cc:** Jeff Ridsen; Bob Pickney; Matt Pickney  
**Subject:** TRA KPI Compliance Report for 10/1/2016 7:50:07 AM

## TRA Flow KPI Report for 9/30/2016

Tracy Nichols	Permitted	Expected	Actual	% of Expected	AvgFlow	% o
Cedar Hill DCP	75000	18036	0	0.00	37.23	
Maple Green DCP	74000	39748	47020	1.18	47814.00	

Tony Smith	Permitted	Expected	Actual	% of Expected	AvgFlow	% o
Swan Harbour RSF	15800	1575	738	0.47	1539.07	
Tall Oaks RSF	45000	11900	8370	0.70	9394.33	

Jeremy Stewart	Permitted	Expected	Actual	% of Expected	AvgFlow	% o
Starr Crest II BC	28000	25550	23147	0.91	18391.03	
Summit View RSF	8000	5775	3630	0.63	5063.00	

## Jeff Ridsen

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**From:** George Garden <George.Garden@tn.gov>  
**Sent:** Tuesday, September 6, 2016 12:35 PM  
**To:** Jeff Ridsen  
**Cc:** Brad Harris; Charles Hyatt; George Bell  
**Subject:** RE: Townsend Town Square and Star Crest

There is no reason for an additional inspection at the two subject sites. The "as built" data for the disposal fields are fine. The fact that it is in GPS generated GIS is a plus for the operations and maintenance staff and we may need to rethink "as built" drawings in these cases. I am happy with the conversions that have been made to the three treatment and dosing processes I visited (Townsend Town Square, Starr Crest, and Elk Springs) and the standardization of the control packages and control rooms. I have to ponder how to square the Rules that require having approved construction drawings with the obviously good upgrades that are being executed in light of the delays inherent in the TWSI-TDEC-TRA-TWSI project loop.

I am somewhat concerned whether the soils at Townsend Town Square will hold up in the long term and hope that the drip hose "installed" on the surface will be buried and placed on contour to the extent possible at Elk Springs as was done at Starr Crest.

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**From:** Jeff Ridsen [mailto:Jeff.Ridsen@Adenus.com]  
**Sent:** Tuesday, September 06, 2016 10:24 AM  
**To:** Brad Harris; Charles Hyatt  
**Cc:** George Garden  
**Subject:** RE: Townsend Town Square and Star Crest

Brad –

I understand George Garden met with Bob Pickney and Stone Hanson over the weekend to assess the as-builts provided for Townsend Town Square and Star Crest I. I am following up to see if George is satisfied with the as-builts provided by TWSI and whether any additional inspection of the sites will be required.

Kind regards,

Jeff



### Jeff Ridsen

GENERAL COUNSEL

Adenus Group, LLC | 849 Aviation Pkwy, Smyrna, TN 37167  
Direct: 615.220.7171 | Toll Free: 888.4.ADENUS Ext: 145 | Mobile: 615.691.2018 | Fax: 615.220.7207

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**From:** Brad Harris [mailto:Brad.Harris@tn.gov]  
**Sent:** Tuesday, August 16, 2016 10:10 AM  
**To:** Charles Hyatt <Charles.Hyatt@Adenus.com>; Jeff Ridsen <Jeff.Ridsen@Adenus.com>  
**Cc:** George Garden <George.Garden@tn.gov>  
**Subject:** RE: Townsend Town Square and Star Crest

Charles,

Give me a day or two to get my schedule sorted out and check George Garden's availability. I don't really know what days I'm open until Jeff and George Bell finalize the deposition schedule. At any rate, I would assume we will be able to do the inspections in the next couple weeks.

Thanks,  
Brad

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**From:** Charles Hyatt [mailto:Charles.Hyatt@Adenus.com]  
**Sent:** Tuesday, August 16, 2016 9:25 AM  
**To:** Brad Harris; Jeff Ridsen  
**Cc:** George Garden  
**Subject:** RE: Townsend Town Square and Star Crest

Brad,

Just let us know the date and time and we will accommodate at your convenience.

Thanks  
Charles

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**From:** Brad Harris [mailto:Brad.Harris@tn.gov]  
**Sent:** Tuesday, August 16, 2016 9:23 AM  
**To:** Jeff Ridsen <Jeff.Ridsen@Adenus.com>  
**Cc:** George Garden <George.Garden@tn.gov>; Charles Hyatt <Charles.Hyatt@Adenus.com>  
**Subject:** RE: Townsend Town Square and Star Crest

Jeff,

Sorry I didn't get back with you Monday, I had to attend a funeral. I discussed the as-builts Friday with George. While the as-builts don't provide the detail expected, we are agreeable to move forward with inspections on these two sites in order to consider what system components are self-evident.

I assume I can email Charles and coordinate an inspection date. Either myself or George will conduct the inspection.

Hope this helps,  
Brad



**Brad C Harris P.E.**

Division of Water Resources / William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 11th Floor / Nashville, Tennessee 37243  
Direct (615) 532-5367 / [Brad.Harris@tn.gov](mailto:Brad.Harris@tn.gov)

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**From:** Jeff Riden [<mailto:Jeff.Riden@Adenus.com>]  
**Sent:** Friday, August 05, 2016 9:48 AM  
**To:** Brad Harris  
**Cc:** George Garden  
**Subject:** RE: Townsend Town Square and Star Crest

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Brad –

Thank you. I appreciate you and George revisiting this.

Kind regards,

Jeff



**Jeff Riden**  
GENERAL COUNSEL

Adenus Group, LLC | 849 Aviation Pkwy, Smyrna, TN 37167  
Direct: 615.220.7171 | Toll Free: 888.4.ADENUS Ext: 145 | Mobile: 615.691.2018 | Fax: 615.220.7207

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**From:** Brad Harris [<mailto:Brad.Harris@tn.gov>]  
**Sent:** Friday, August 5, 2016 9:43 AM  
**To:** Jeff Riden <[Jeff.Riden@Adenus.com](mailto:Jeff.Riden@Adenus.com)>  
**Cc:** George Garden <[George.Garden@tn.gov](mailto:George.Garden@tn.gov)>  
**Subject:** Townsend Town Square and Star Crest

Jeff,

I spoke with George this morning about the As-builts we discussed yesterday. He and I are planning to get together and revisit the issue first of week. I will get with you as soon as we get something together.

Brad



Brad C Harris P.E.

Division of Water Resources / William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 11th Floor / Nashville, Tennessee 37243  
Direct (615) 532-5367 / [Brad.Harris@tn.gov](mailto:Brad.Harris@tn.gov)

## Jeff Ridsen

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**From:** Michael Caudill <Michael.Caudill@tn.gov>  
**Sent:** Friday, September 23, 2016 11:34 AM  
**To:** Jeff Ridsen  
**Subject:** RE: TWSI Smoky Cove NOV

I did meet with Bob and staff at the site. They had addressed the concerns that were outlined in the NOV.

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**From:** Jeff Ridsen [Jeff.Ridsen@Adenus.com]  
**Sent:** Thursday, September 22, 2016 3:18 PM  
**To:** Michael Caudill  
**Subject:** RE: TWSI Smoky Cove NOV

Michael –

I understand you met with Bob Pickney and Stone out at Smoky Cove a week or so ago to look over the site and discuss the conditions reported in the NOV. Are there any outstanding issues that need to be addressed at the site or have your concerns been sufficiently addressed?

Kind regards,

Jeff



**Jeff Ridsen**  
GENERAL COUNSEL

Adenus Group, LLC | 849 Aviation Pkwy, Smyrna, TN 37167  
Direct: 615.220.7171 | Toll Free: 888.4.ADENUS Ext: 145 | Mobile: 615.691.2018 | Fax: 615.220.7207

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**From:** Michael Caudill [mailto:Michael.Caudill@tn.gov]  
**Sent:** Monday, August 29, 2016 5:57 PM  
**To:** Jeff Ridsen <Jeff.Ridsen@Adenus.com>  
**Subject:** RE: TWSI Smoky Cove NOV

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**From:** Jeff Ridsen [Jeff.Ridsen@Adenus.com]  
**Sent:** Monday, August 29, 2016 2:58 PM  
**To:** Michael Caudill  
**Subject:** TWSI Smoky Cove NOV

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Michael –

TWSI needs to respond to the NOV you issued for Smoky Cove by early next week. Can you provide me a copy of your inspection report, any field notes, and photos you took at the site? This information will allow us to respond timely and appropriately. Please let me know if you have any questions.

Kind regards,

Jeff



**Jeff Risdien**

GENERAL COUNSEL

Adenus Group, LLC | 849 Aviation Pkwy, Smyrna, TN 37167

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STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF WATER RESOURCES  
William R. Snodgrass - Tennessee Tower  
312 Rosa L. Parks Avenue, 11th Floor  
Nashville, Tennessee 37243-1102

September 19, 2016

Mr. Charles R. Hyatt  
CEO  
Adenus Group, LLC  
e-copy: Charles.Hyatt@adenus.com  
849 Aviation Parkway  
Smyrna, TN 37167

Subject: **Draft of State Operating Permit No. SOP-01033  
TN Wastewater Systems - Starr Crest II Resorts  
Sevierville, Sevier County, Tennessee**

Dear Mr. Hyatt:

Enclosed please find one copy of the draft state operating permit, which the Division of Water Resources (the division) proposes to issue. The issuance of this permit is contingent upon your meeting all of the requirements of the Tennessee Water Quality Control Act and the rules and regulations of the Tennessee Water Quality Control Board.

If you disagree with the provisions and requirements contained in the draft permit, you have thirty (30) days from the date of this correspondence to notify the division of your objections. If your objections cannot be resolved, you may appeal the issuance of this permit. This appeal should be filed in accordance with Section 69-3-110, Tennessee Code Annotated.

If you have questions, please contact the Knoxville Environmental Field Office at 1-888-891-TDEC; or, at this office, please contact Mr. Hari Akunuri at (615) 532-0650 or by E-mail at [Hari.Akunuri@tn.gov](mailto:Hari.Akunuri@tn.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Brad Harris".

Brad C. Harris, P.E.  
Manager, Land-Based Systems

Enclosure

cc: Permit File  
Knoxville Environmental Field Office  
Ms. Michelle Ramsey, Utilities Division, Tennessee Regulatory Authority, [michelle.ramsey@tn.gov](mailto:michelle.ramsey@tn.gov)  
Mr. Jeremy Stewart, Operator, TWSI, [jeramy.stewart@adenus.com](mailto:jeramy.stewart@adenus.com)  
Mr. Roy Denney, Chief Technical Officer, Adenus Group LLC, [roy.denney@adenus.com](mailto:roy.denney@adenus.com)

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

**Modification**

**Permit No. SOP-01033**

**PERMIT  
For the operation of Wastewater Treatment Facilities**

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

**PERMISSION IS HEREBY GRANTED TO**

**TN Wastewater Systems - Starr Crest II Resorts  
Sevierville, Sevier County, Tennessee**

**FOR THE OPERATION OF**

Septic tanks, effluent collection system, 4 BioClere recirculating treatment units, and drip irrigation system located at latitude 35.79535 and longitude -83.5186 in Sevier County, Tennessee to serve approximately 40 units in the Starr Crest II Resort. The design capacity of the system is .06 MGD.

This permit is issued as a result of the application filed on February 22, 2013, in the office of the Tennessee Division of Water Resources and in conformity with approved plans, specifications and other data submitted to the Department in support of the above application, all of which are filed with and considered as a part of this permit, together with the following named conditions and requirements.

**This permit shall become effective on:**

**This permit shall expire on: April 30, 2018**

**Issuance date:**

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**for Tisha Calabrese Benton  
Director**

**CN-0759**

**RDAs 2352 & 2366**

**A. GENERAL REQUIREMENTS**

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

<u>Parameter</u>	<u>Sample Type</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Measurement Frequency</u>
Flow *	Totalizer			Daily
BOD <sub>5</sub>	Grab	45 mg/l	N/A	Once/Year
Ammonia as N	Grab	Report	N/A	Once /Quarter

\* Report average daily flow for each calendar month.

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

Instances of ponding or pools under dry weather conditions shall be promptly investigated and remedied. Instances of ponding or pools, or any wastewater runoff shall be noted on the monthly operation report. The report shall include details regarding the location(s), determined cause(s), the actions taken to eliminate the ponding or pools, or any wastewater runoff, and the dates the corrective actions were made. Any wastewater runoff due to improper operation must be reported in writing to the Division of Water Resources, Knoxville Environmental Field Office within 5 days of discovery by the permittee.

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

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

- o the condition of the treatment facility security controls (doors, fencing, gates, etc.),
- o the condition of the drip area security controls (doors, fencing, gates, etc.),
- o the condition of the site signage,
- o the operational status of the mechanical parts of the treatment system (pumps, filters, telemetry equipment, etc.)

- o the condition of the UV bulbs (if applicable)

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

## **B. MONITORING PROCEDURES**

### **1. Representative Sampling**

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

Effluent to drip irrigation plots.

### **2. Test Procedures**

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

## **C. DEFINITIONS**

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

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

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

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

A "quarter" is defined as any one of the following three-month periods: January 1 through March 31, April 1 through June 30, July 1 through September 30, and/or October 1 through December 31.

## **D. REPORTING**

### **1. Monitoring Results**

Monitoring results shall be recorded monthly OR in accordance with the operating and maintenance inspection schedule in the permit administrative file record and submitted quarterly. The quarterly report shall detail the following:

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 Resources  
Knoxville Environmental Field Office  
3711 Middlebrook Pike  
Knoxville, TN 37921

The first operation report is due on the 15<sup>th</sup> of the month following the quarter containing the permit effective date. Until the construction of the treatment system is complete and the treatment system is placed into operation, operational reports shall report “monitoring not required”.

### **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.

### **4. Signatory Requirement**

All reports or information submitted to the commissioner shall be signed and certified by the persons identified in Rules 1200-4-5-.05(6)(a-c).

**E. SCHEDULE OF COMPLIANCE**

Full operational level shall be attained after the construction of the treatment system is complete and the treatment system is placed into operation.

**PART II**

**A. GENERAL PROVISIONS**

**1. Duty to Reapply**

The permittee is not authorized to discharge after the expiration date of this permit. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information and forms as are required to the Director of Water Resources (the "Director") no later than 180 days prior to the expiration date.

**2. Right of Entry**

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

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

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

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

**3. Availability of Reports**

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

#### 4. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems (and related appurtenances) for collection and treatment which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory and process controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. Backup continuous pH and flow monitoring equipment are not required.

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

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

The drip dispersal area shall not be used for vehicular traffic or vehicular parking. Dozers, trucks, tractors, and other heavy vehicles shall not be allowed to run over the drip dispersal area lines or other parts of the system.

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

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

- i. A description of the discharge and cause of noncompliance;
- ii. The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and
- iii. The steps being taken to reduce, eliminate, and prevent recurrence of the non complying discharge.

#### b. Scheduled Reporting

For instances of noncompliance which are not reported under subparagraph 2.a. above, the permittee shall report the noncompliance on the Quarterly Operation Report. The report shall contain all information concerning the steps taken, or planned, to reduce, eliminate, and prevent recurrence of the violation and the anticipated time the violation is expected to continue.

### 3. Overflow

a. "**Overflow**" means the unintended discharge to land or waters of Tennessee 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 on a quarterly basis. The data measurement period shall be sufficient to account for seasonal rainfall patterns and seasonal groundwater table elevations.

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

#### 4. Upset

a. "*Upset*" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. An upset shall constitute an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:

i. An upset occurred and that the permittee can identify the cause(s) of the upset;

ii. The permitted facility was at the time being operated in a prudent and workman-like manner and in compliance with proper operation and maintenance procedures;

iii. The permittee submitted information required under "Reporting of Noncompliance" within 24-hours of becoming aware of the upset (if this information is provided orally, a written submission must be provided within five days); and

iv. The permittee complied with any remedial measures required under "Adverse Impact."

## 5. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the waters of Tennessee resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

## 6. Bypass

a. "**Bypass**" is the intentional diversion of wastewater away from any portion of a treatment facility. "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 Resources 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 Resources 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 certified wastewater treatment operator and collection system shall be operated under the supervision of a the grade I certified collection system operator in accordance with the Water Environmental Health Act of 1984.

#### **B. PLACEMENT OF SIGNS**

The permittee shall place a sign at the entrance if the drip area if fenced or all reasonable 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

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

**C. ADDITION OF WASTE LOADS**

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

**D. SEPTIC TANK OPERATION**

The proper operation of this treatment system depends, largely, on the efficient use of the septic tank. The solids that accumulate in the tank shall be removed at a frequency that is sufficient to insure that the treatment plant will comply with the discharge requirements of this permit.

**E. SEPTAGE MANAGEMENT PRACTICES**

The permittee must comply with the provisions of Rule 1200-01-06-.22. If the septage is transported to another POTW for disposal, the permittee shall note the amount of septage wasted in gallons and name of the facility the hauler intends to use for disposal of the septage on the monthly operation report. Sludge or any other material removed by any treatment works must be disposed of in a manner which prevents its entrance into or pollution of any surface or subsurface waters. Additionally, the disposal of such sludge or other material must be in compliance with the Tennessee Solid Waste Disposal Act, TCA 68-31-101 et seq. and Tennessee Hazardous Waste Management Act, TCA 68-46-101 et seq.

**F. OWNERSHIP OF THE TREATMENT FACILITIES**

a. The permittee shall own the treatment facilities (and the land upon which they are constructed) including the land to be utilized for drip or spray irrigation. A perpetual easement (properly recorded) may be accepted in lieu of ownership. 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.

**Addendum to Rationale**  
**SOP-01033**  
**TWS, Inc. – Starr Crest II Resort**  
**September 2016**

The above referenced permit application was received on March 24, 2016, for modification. This modification includes two more BioClear recirculating units and more land is added for drip irrigation to increase the design capacity from 0.012 MGD to 0.06 MGD.

**Rationale**  
**SOP-01033**  
**TWS, Inc. – Starr Crest II Resort**  
**March 2013**

The above referenced permit application was received on February 22, 2013, for reissuance. The permit was modified on August 31, 2008 to resolve a permit appeal relative to disinfecting and drip site access requirements. The permit conditions continue to be based on the drip area being classified as inhibited assess. The previous permit acknowledged the original scope of service to 230 units with a design capacity of 0.069 MGD. According to the reissue application, 69,000 gpd is to be applied over 3.3 acres at 2-2.4 inches per week. That flow rate and area equate to more than 5 inches per week. The state design criteria allows only the maximum of 2.8 inches per week (0.25 gpd/sf) without design justification. Therefore, the proposed draft permit acknowledges the current scope of service to approximately 40 units in the Starr Crest II Resort and the design capacity of the system will be .012 MGD. Updated engineering justification and/or more land meeting design criteria will be required to serve 230 units with a design capacity of 0.069 MGD for proper drip irrigation operation.

Attachment 1  
STATE OF TENNESSEE  
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION**  
**DIVISION OF WATER RESOURCES-LAND BASED SYSTEMS UNIT**  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue  
Nashville, Tennessee 37243

MEMORANDUM

TO: Hari Akunuri, DWR-CO

FROM: Allen Rather, DWR- Land Based Systems Unit

DATE: 9/19/2016

SUBJECT: LCSS/SFDS (Class V Injection) Approval  
Starr Crest II Resort  
Sevierville, Sevier County, Tennessee  
UIC File SEV 0000073 SOP-01033

The Division of Water Resources has reviewed the submittal of an Application for Authorization to Operate a Class V Underground Injection Well (Large Capacity Septic System/Subsurface Fluid Disposal System) utilizing drip dispersal for the waste water at the Facility located at Sevierville, Sevier County, Tennessee. This Division approves the application dated 4/27/2016.

If at any time the Division learns that a ground water discharge system may be in violation of The Tennessee Water Quality Control Act, the Division shall:

- a. require the injector to apply for an individual permit;
- b. order the injector to take such actions including, where required, closure of the injection well as may be necessary to prevent the violation; or
- c. take enforcement action.

All groundwater discharge activities must operate in such a manner that they do not present a hazard to groundwater.

In accordance with Underground Injection Control (UIC) Rule 0400-45-06-.14 (3) "The owner of a Class V well shall be responsible for notifying the Department of change in ownership." This notification must be made to this Division within thirty (30) days of the change in ownership.

Also note that according to Underground Injection Control (UIC) Rule 0400-45-6-.14 (8)(d) "Upon completion of the well, the owner or operator must certify to the Department that the well has been completed in accordance with the approved construction plan, and must submit any other additional information required". The certification must be submitted to the UIC Program within thirty (30) days upon the completion/closure of the Class V well.

**This Division will require a minimum of seven (7) working days advance notice before the construction on the drip system is to begin to allow for a witness from this Division to be present.**

**No drip emitters are to discharge directly into an open throat or crevice in the subsurface. All drip lines are to be installed on contour.**

Our concurrence with your approach does not imply that this procedure is exempt from future changes or restrictions in the Underground Injection Control (UIC) Regulations, or any additional requirements set forth by the Division in order to protect the groundwater of Tennessee.

A copy of this authorization must be kept on site until the development has been completed and must be made available to inspection personnel.

Should you have any questions or comments please feel free to contact me at (615) 532-5819 or [allen.rather@tn.gov](mailto:allen.rather@tn.gov).

c: file



**Public Participation Opportunity  
Tennessee Department of Environment and Conservation (TDEC)  
Division of Water Resources (DWR)  
Notice Requesting Public Comments on Draft Permit Actions**

**September 19, 2016**

Public Notice Number: **MMXVI-018**  
Expiration Date: **October 24, 2016**

*The purpose of this notice is to advise the public of the following proposed permit actions and to solicit comments and information necessary to evaluate the potential impact of the proposed activities on human health and the environment.  
A list of Notices of Intent (NOIs) received by the DWR is available on our DataViewer web page :*

[Data Viewer \(click here\)](#)

### Individual NPDES Permits

#### ***Proposed Reissuances***

Applicant Name	<b>Franklin Water Reclamation Facility (WRF)</b>				
Permit Number	<b>TN0028827</b>	Permit Writer Initials	<b>VMJ</b>	Discharger rating	<b>Major</b>
County	<b>Williamson</b>	EFO Name	<b>Nashville</b>		
Street Address/Location	<b>135 Claude Yates Drive</b>				
City and/or Zip Code	<b>Franklin, TN 37064</b>				
Description of Activity	<b>treatment of municipal sewage and unrestricted non-potable reuse of treated effluent for 12 MGD design capacity. Application for proposed 16 MGD design capacity demonstrated de minimis degradation by adding treatment to keep pollutant loading unchanged</b>				
Effluent Description	<b>treated municipal wastewater from Outfall 001; also permitted for unrestricted non-potable reuse</b>				
Receiving Stream	<b>Harpeth River at at mile 85.2</b>				
Facility Latitude	<b>35.94</b>	Facility Longitude	<b>-86.87</b>		

### State Operation Permits

#### ***Proposed Modifications***

Applicant Name	<b>TN Wastewater Systems - Starr Crest II Resorts</b>				
Permit Number	<b>SOP-01033</b>	Permit Writer Initials	<b>HVA</b>	Discharger rating	<b>Minor</b>
County	<b>Sevier</b>	EFO Name	<b>Knoxville</b>		
Street Address/Location	Off Upper Middle Creek Road				
City and/or Zip Code	Sevierville, TN 37876				
Description of Activity	Septic tanks, effluent collection system, BioClere recirculating treatment unit, and drip irrigation. This modification adds two more BioClere units and increase drip dispersal to increase the design capacity from 0.012 to 0.06 MGD				
Wastewater Description	No discharge allowed from this system				
Receiving Stream	0.25 miles from unnamed tributary, 0.5 miles from Middle Creek				
Facility Latitude	35.80	Facility Longitude	-83.52		

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## POTW - Pretreatment Program Approvals:

None

The Division of Water Resources is authorized to approve local POTW Pretreatment Programs for the administration and enforcement of the National Pretreatment Standards of Performance for industrial users of the respective Publicly Owned Treatment Works listed in this notice. Additionally, the POTW Programs are required to prevent the introduction of pollutants into the POTW's which will interfere with their operation, including the use or disposal of sludge, and prevent the introduction of pollutants into the POTW's which will pass through the treatment works or be otherwise incompatible. All POTW Pretreatment Programs approved are in accordance with the Tennessee Water Quality Control Act, the federal Clean Water Act, and appropriate regulations.

End of List

### How to Comment:

TDEC is requesting public comment on this permit action. Obtaining a broad range of facts and opinions on Agency actions is one of the best ways to ensure quality decisions. Persons wishing to comment on the proposed action are invited to submit comments in writing to the Division of Water Resources at William R. Snodgrass - Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243-1102, Attn: Public Notice Coordinator, by fax number (615) 532-0686, or by E-mail at [Water.Permits@tn.gov](mailto:Water.Permits@tn.gov). Comments must be received by the public notice expiration date (October 24, 2016).

### How to Request a Public Hearing:

Interested persons may request in writing that the Director of the Division of Water Resources hold a public hearing on any application. The request must be filed by the public notice expiration date (October 24, 2016) and must indicate the interest of the party filing it and the reasons why such a hearing is warranted. When there is significant public interest for a hearing, a hearing will be conducted according to Division of Water Pollution Control Rule 0400-40-05-.06(12). Public hearings will be announced through another public notice.

### How the Department will Proceed:

The Director of the Division of Water Resources will determine the final permit action after considering comments submitted during the comment period, the hearing record, if any, and the requirements of the Federal and State acts and regulations.

### To Obtain Permit Details:

Copies of the application(s) and draft permit(s) are also available for public inspection by contacting TDEC at <http://state.tn.us/environment/field-offices.shtml>, by calling 1-888-891-TDEC (8332), or by visiting the following locations during normal business hours:

Environmental Field Office - Chattanooga  
1301 Riverfront Parkway, Suite 206  
Chattanooga, TN 37402  
(423) 634-5745  
Bledsoe, Bradley, Grundy, Hamilton, Marion, McMinn, Meigs, Polk, Rhea, Sequatchie

Environmental Field Office - Columbia  
1421 Hampshire Pike  
Columbia, TN 38401  
(931) 380-3371  
Bedford, Coffee, Franklin, Giles, Hickman, Lawrence, Lewis, Lincoln, Marshall, Maury, Moore, Perry, Wayne

Environmental Field Office - Cookeville  
1221 South Willow Avenue  
Cookeville, TN 38506

**NEW NUMBER (931) 520-6688 (effective 9/13/2016)**

Cannon, Clay, Cumberland, Fentress, Jackson, Macon, Overton, Pickett, Putnam, Smith, Van Buren, Warren, White

Environmental Field Office - Jackson  
1625 Hollywood Drive  
Jackson, TN 38305

(731) 512-1300

Benton, Carroll, Chester, Crockett, Decatur, De Kalb, Dyer, Gibson, Hardeman, Hardin, Haywood, Henderson, Henry, Lake, Lauderdale, Madison, McNairy, Obion, Weakley

Environmental Field Office - Johnson City  
2305 Silverdale Road  
Johnson City, TN 37601

(423) 854-5400

Carter, Greene, Hancock, Hawkins, Johnson, Sullivan, Unicoi, Washington

Environmental Field Office - Knoxville  
3711 Middlebrook Pike  
Knoxville, TN 37921

(865) 594-6035

Anderson, Blount, Campbell, Claiborne, Cocke, Grainger, Hamblen, Jefferson, Knox, Loudon, Monroe, Morgan, Roane, Scott, Sevier, Union

Environmental Field Office - Memphis  
8383 Wolf Lake Drive  
Bartlett, TN 38133-4119

(901) 371-3000

Fayette, Shelby, Tipton

Environmental Field Office - Nashville  
711 R.S. Gass Boulevard  
Nashville, TN 37243

(615) 687-7000

Cheatham, Davidson, Dickson, Houston, Humphreys, Montgomery, Robertson, Rutherford, Stewart, Sumner, Trousdale, Williamson, Wilson

<b>List of DWR Permit Writers</b>				
<b>AEOF</b>	Ms.	Ariel Wessel-Fuss	(615) 532-0642	Ariel.Wessel-Fuss@tn.gov
<b>ARa</b>	Mr.	Allen Rather	(615) 532-5819	Allen.Rather@tn.gov
<b>BCH</b>	Mr.	Brad Harris	(615) 532-5367	Brad.Harris@tn.gov
<b>BKC</b>	Mr.	Brian Canada	(615) 532-0660	Brian.Canada@tn.gov
<b>CEE</b>	Ms.	Caitlin Elam	(615) 532-0359	Caitlin.Elam@tn.gov
<b>HVA</b>	Mr.	Hari Akunuri	(615) 532-0650	Hari.Akunuri@tn.gov
<b>JAH</b>	Miss	Julie Harse	(615) 532-0682	Julie.Harse@tn.gov
<b>JCM</b>	Mr.	Jim McAdoo	(615) 532-0684	Jim.McAdoo@tn.gov
<b>JCN</b>	Mr.	John Newberry	(615) 532-7743	John.Newberry@tn.gov
<b>JWo</b>	Ms.	Jeanene Woodruff	(615) 532-0645	Jeanene.Woodruff@tn.gov
<b>MEP</b>	Ms.	Meghan Ploch	(615) 532-0646	Meghan.Ploch@tn.gov
<b>MTS</b>	Ms.	Maybelle T. Sparks	(615) 532-0651	Maybelle.Sparks@tn.gov
<b>PJH</b>	Mr.	Paul Higgins	(615) 532-1178	Paul.Higgins@tn.gov
<b>PLB</b>	Mr.	Lyle Bentley	(615) 532-0154	Lyle.Bentley@tn.gov
<b>RDB</b>	Mr.	Robert D. Baker	(615) 532-0710	Robert.D.Baker@tn.gov
<b>REA</b>	Mr.	Bob Alexander	(615) 532-0659	Robert.Alexander@tn.gov
<b>RGO</b>	Mr.	Robert O'Dette	(615) 253-5319	Robert.Odette@tn.gov
<b>RJW</b>	Mr.	Robert Wayne	(615) 532-0709	Robert.J.Wayne@tn.gov

<b>SEF</b>	Ms. Souraya Fathi	(615) 532-0485	Souraya.Fathi@tn.gov
<b>VLJ</b>	Ms. Vena Jones	(615) 253-5320	Vena.L.Jones@tn.gov
<b>VMJ</b>	Mr. Vojin Janjic	(615) 532-0670	Vojin.Janjic@tn.gov
<b>WDM</b>	Mr. Wade Murphy	(615) 532-0666	Wade.Murphy@tn.gov
<b>WML</b>	Mr. Mike Lee	(615) 532-0712	Mike.Lee@tn.gov
<b>WSH</b>	Mr. Scott Hall	(615) 532-0358	Scott.Hall@tn.gov

**State of Tennessee Antidegradation Policy:**

Antidegradation determinations have been made in regard to the permits referenced in this Public Notice. Tennessee’s Antidegradation Statement is found in Chapter 0400-40-03-.06 of the Rules of the Tennessee Department of Environment and Conservation. The primary purpose of the antidegradation policy is to establish a greater level of protection for those waters that are identified to be of high quality. Generally, there are two types of high quality waters. Some high quality waters are those at near pristine conditions. These Outstanding National Resource Waters (ONRWs) are specifically designated by the Tennessee Board of Water Quality, Oil and Gas and are afforded the greatest level of protection. No new discharges or expansion of existing discharges are allowed to result in degradation of the existing water quality. Waters determined to be high quality due to specialized uses and/or unique features and are identified by the Department as Exceptional Tennessee Waters are also protected against degradation.

Some degradation may be allowed in the Exceptional Tennessee Waters only if the Tennessee Board of Water Quality, Oil and Gas deems it economically and socially necessary. Other surface waters not specifically identified and/or designated as high quality are referred to as waters with available or unavailable conditions. Generally, new discharges or increases in existing discharges may be allowed in waters not identified as ONRWs or Exceptional Tennessee Waters. The Division of Water Resource’s evaluation of such discharges may include the following provisions:

- The proposed lowering of water quality by the discharge is necessary for economic growth or community benefit; the proposed discharge can not be mitigated by reasonable pollution prevention measures; and
- There is no other reasonable non-discharge alternative available to prevent the new/increased discharge to waters with available or unavailable conditions.

In all cases, the proposed discharge must meet water quality standards and fully protect all classified uses. Information used by the Division of Water Resources in evaluating any of the above provisions is available upon request.

**State of Tennessee Policy of Non-Discrimination:**

Pursuant to the State of Tennessee’s policy of non-discrimination, the Tennessee Department of Environment and Conservation does not discriminate on the basis of race, sex, religion, color, national or ethnic origin, age, disability, or military service in its policies, or in the admission or access to, or treatment or employment in its programs, services or activities. Equal Employment Opportunity/Affirmative Action inquiries or complaints should be directed to the EEO/AA Coordinator, Office of General Counsel, William R. Snodgrass - Tennessee Tower, 312 Rosa L. Parks Avenue, 2nd Floor, Nashville, Tennessee 37243-1102, 1-888-867-7455. ADA inquiries or complaints should be directed to the ADA Coordinator, Human Resources Division, William R. Snodgrass - Tennessee Tower, 312 Rosa L. Parks Avenue, 2nd Floor, Nashville, Tennessee 37243-1102, 1-866-253-5827.

**Please bring this notice to the attention of persons you believe will be interested.**

## Jeff Ridsen

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**From:** Charles Hyatt  
**Sent:** Monday, September 19, 2016 3:46 PM  
**To:** Jeff Ridsen; Bob Pickney; Jeramy Stewart; Roy Denney  
**Subject:** Fwd: SOP-01033 signed draft and public notice  
**Attachments:** SOP-01033\_Modified\_Draft\_Drip\_Irrigation\_Permit 2016.pdf; MMXVI-018-PublicNotice-09-19-16.pdf

Get [Outlook for iOS](#)

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**From:** Hari Akunuri <Hari.Akunuri@tn.gov>  
**Sent:** Monday, September 19, 2016 2:43:42 PM  
**To:** Charles Hyatt  
**Cc:** Michelle Ramsey; Patsy Fulton; Brad Harris; John West  
**Subject:** SOP-01033 signed draft and public notice

All,

The attachments are the Draft Permit and the Public Notice document. If you have trouble opening them, please let me know. We do not plan to send out paper copies unless you instruct us otherwise. If you have any corrections, comments or questions, please contact me.

Please consider saving a copy of this email for your records.



Hari Akunuri  
TDEC/DWR  
William R. Snodgrass Tennessee Towers  
312 Rosa L. Park Avenue, 11<sup>th</sup> Floor  
Nashville, TN 37243  
Email: [Hari.Akunuri@tn.gov](mailto:Hari.Akunuri@tn.gov)  
Office: (615)532-0650  
Fax: (615)532-0683

We accept and encourage electronic document submittals.

---

**From:** Brad Harris  
**Sent:** Monday, September 19, 2016 2:27 PM  
**To:** Hari Akunuri  
**Subject:**



**Brad C Harris P.E.**

Division of Water Resources / William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 11th Floor / Nashville, Tennessee 37243  
Direct (615) 532-5367 / [Brad.Harris@tn.gov](mailto:Brad.Harris@tn.gov)

State of Tennessee  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF WATER RESOURCES  
William R. Snodgrass - Tennessee Tower  
312 Rosa L. Parks Avenue, 11<sup>th</sup> Floor  
Nashville, Tennessee 37243-1102

**MR. CHARLES R. HYATT  
ADENUS GROUP, LLC  
CEO  
849 AVIATION PARKWAY  
SMYRNA, TN 37167**



State of Tennessee  
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION**  
**DIVISION OF WATER RESOURCES**  
William R. Snodgrass - Tennessee Tower  
312 Rosa L. Parks Avenue, 11th Floor  
Nashville, Tennessee 37243-1102

September 19, 2016

Mr. Charles R. Hyatt  
CEO  
TN Wastewater Systems - Starr Crest II Resorts  
e-copy: Charles.Hyatt@adenus.com  
849 Aviation Parkway  
Smyrna, TN 37167

Subject: **Notice of Complete Application and Public Notice Requirements**  
**Permit Tracking No. SOP-01033**  
**TN Wastewater Systems - Starr Crest II Resorts**  
**Sevierville, Sevier County, Tennessee**

Dear Mr. Hyatt:

The Division of Water Resources (the division) acknowledges the receipt of a permit application in our office on September 16, 2016. Our review of the SOP permit application showed that you have submitted all the information required to initiate processing of the application. You are advised that this notice of complete application does not imply that the application will be approved or that a permit will be issued. Also, in accordance with rules of the Tennessee Department of Environment and Conservation, Division of Water Pollution Control, Chapter 0400-40-5-.05 (2):

*"This provision does not preclude the commissioner from later requesting additional material that subsequent to the notice of completeness is determined to be necessary for permit processing."*

If this is an application to renew an existing permit and your complete application was mailed to our office 180 days prior to the current permit expiration date, and the permit is not reissued by this date, discharges from the facility will be automatically authorized through administrative extension of the current permit.

If this is an application for a new or expanded discharge, please find attached a template of a public notice you must complete and post for a period of 30 days. This is required in accordance with Chapter 0400-40-5-.06 (1), which states:

*"For an individual application for a new or expanded discharge, the applicant shall notify the public of the application by posting a sign near the point of entrance to such facility and within view of a public road. The sign shall contain provisions as specified by the commissioner. The sign shall be of such size that is legible from the public road. Also the sign shall be maintained for at least thirty days following submittal of the application to the division."*

If you have questions, please contact the Knoxville Environmental Field Office at 1-888-891-TDEC; or, at this office, please contact Mr. Hari Akunuri at (615) 532-0650 or by E-mail at [Hari.Akunuri@tn.gov](mailto:Hari.Akunuri@tn.gov).

Sincerely,

Brad C. Harris, P.E.  
Manager, Land-Based Systems

cc: Permit File  
Knoxville Environmental Field Office  
Ms. Michelle Ramsey, Utilities Division, Tennessee Regulatory Authority, [michelle.ramsey@tn.gov](mailto:michelle.ramsey@tn.gov)  
Mr. Jeremy Stewart, Operator, TWSI, [jeramy.stewart@adenus.com](mailto:jeramy.stewart@adenus.com)  
Mr. Roy Denney, Chief Technical Officer, Adenus Group LLC, [roy.denney@adenus.com](mailto:roy.denney@adenus.com)

# PUBLIC NOTICE OF APPLICATION FOR PERMIT TO DISCHARGE/ DISPOSE OF WASTEWATER

Applicant Name and Address: \_\_\_\_\_

Permit Tracking Number: \_\_\_\_\_

Date this Notice was Posted: \_\_\_\_\_

Wastewater Source, Treatment, and Discharge/Disposal Description: \_\_\_\_\_

Discharge/Disposal is to/near the following stream: \_\_\_\_\_

**TO WHOM IT MAY CONCERN:** The application described above has been submitted for wastewater facility operation and discharge/disposal permit pursuant to The Tennessee Water Quality Act of 1977, TCA 69-3-108. The purpose of this notice is to advise all concerned of the proposal for which a permit is sought and to solicit comments and information necessary to evaluate the probable impact of the activities upon the respective water resources. The decision whether to issue or deny will in part be based upon that evaluation.

Persons wishing to comment on or object to the issuance of a proposed permit are invited to submit comments in writing to the address listed below. The applicant's name and permit number should be referenced. Written statements received on or before the date of expiration of the comment period will become part of the record and will be considered in the determination.

Interested persons may also request in writing that the Division hold a public hearing on any application. The request must be filed within the comment period and must indicate the interest of the person requesting and the reasons why a hearing is warranted. When there is sufficient public interest, the director shall hold a hearing in accordance with Rule 0400-40-5-.06 (12).

After consideration of comments submitted during the public comment period, the hearing record, if any, and the requirements of federal and State law, the director of the Division will make a determination regarding the final action on the permit. Permit applications, supporting documentation, and related comments are available for review and/or copying.

**Division of Water Resources  
William R. Snodgrass - Tennessee Tower  
312 Rosa L. Parks Avenue, 11<sup>th</sup> Floor  
Nashville, Tennessee 37243-1102**

### **Instructions for the Public Notice of Application Sign**

This sample Public Notice Sign is being provided for you to use. A Public Notice of Application sign must be displayed for a period of 30 days minimum. The purpose of the sign is to notify the public of its opportunity to comment, object, or to request a public hearing on the proposed permit action.

Pursuant to T.C.A. Rules, Chapter 0400-40-5-.06 (1) and (10), effective July 23, 2004, applicants for new or expanded discharges must notify the public by posting a sign near the point of the proposed facility entrance within view of a public road. The size must be of such size as to be legible from the public road.

It is recognized that it is impracticable print all of the required sign wording at a size that it can be read from the carriage way. Thus, to meet the intent of the rule, only the words "PUBLIC NOTICE" and "APPLICATION TO DISCHARGE/ DISPOSE OF WASTEWATER" must be readable from the carriage way. The remainder of the wording must be legible from the shoulder of the roadway.

Applicants should maintain some proof of sign posting and their compliance with the 30-day minimum posting period. Examples of proof could be dated photographs of the posted sign, an affidavit prepared by a witness of the posted sign, or confirmation by Division field staff.

Please be advised that in addition to this public notice of application, the Division will issue a Public Notice at the time a draft permit is proposed. Persons receiving this mailing include, but are not limited to, the applicant, governmental agencies with jurisdictions over the facility, federal and state agencies with jurisdiction over fish and wildlife resources and historic preservation, and interested persons having asked to be included on the public notice list.

## Jeff Ridsen

---

**From:** Charles Hyatt  
**Sent:** Monday, September 19, 2016 2:38 PM  
**To:** Roy Denney; Jeff Ridsen; Bob Pickney  
**Subject:** Fwd: SOP-01033Signed complete application letter  
**Attachments:** SOP-01033  
\_Starr\_Crest\_II\_Complete\_Application\_with\_Notice\_for\_New\_and\_Modified\_Permits.pdf

[Get Outlook for iOS](#)

---

**From:** Hari Akunuri <Hari.Akunuri@tn.gov>  
**Sent:** Monday, September 19, 2016 2:32:26 PM  
**To:** Charles Hyatt  
**Cc:** Michelle Ramsey; Patsy Fulton; Brad Harris; John West  
**Subject:** SOP-01033Signed complete application letter

All,  
The attachment is correspondence from TDEC. If you have trouble opening it, please let me know. We do not plan to send out a paper copy unless you instruct us otherwise. If you have questions about the contents of the document, please contact me.  
Please consider saving a copy of this email for your records.



Hari Akunuri  
TDEC/DWR  
William R. Snodgrass Tennessee Towers  
312 Rosa L. Park Avenue, 11<sup>th</sup> Floor  
Nashville, TN 37243  
Email: [Hari.Akunuri@tn.gov](mailto:Hari.Akunuri@tn.gov)  
Office: (615)532-0650  
Fax: (615)532-0683

We accept and encourage electronic document submittals.



**TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
NASHVILLE ENVIRONMENTAL FIELD OFFICE  
711 R. S. GASS BOULEVARD  
NASHVILLE, TENNESSEE 37243  
PHONE (615) 687-7000 STATEWIDE 1-888-891-8332 FAX (615) 687-7078**

September 20, 2016

**Certified Mail: 7014 2870 0001 3597 0411  
Return Receipt Requested**

Mr. Charles Hyatt, CEO  
Tennessee Wastewater Systems, Inc.  
Adenus Group, LLC  
849 Aviation Parkway  
Smyrna, TN 37167

**Re: Notice of Violation  
Compliance Evaluation Inspection  
Tennessee Wastewater Systems – River Road / Lost Hollow Subdivision Lagoon  
NPDES Permit # TN0074764, Cheatham County**

Dear Mr. Hyatt:

I would like to thank you and Brian Carter for meeting with George Garden, Michael Murphy, Zachary Coppa and me on November 2, 2015, to conduct a Compliance Evaluation Inspection of the Tennessee Wastewater Systems' River Road / Lost Hollow Subdivision Wastewater Treatment Lagoon.

Mr. Carter was contacted by telephone on January 14, 2016, to obtain any updates to system status. He stated there had been no changes at the facility since the date of the inspection.

The following are key points of the inspection. Details of the findings of the inspection are contained in the attached inspection report.

**Permit**

1. The most recent NPDES permit expired on September 30, 2015. An application for renewal was received by the Division on March 24, 2015, but was found to be incomplete. A notice of incomplete application was sent by letter dated April 9, 2015, and additional information was required. To date, the required information has not been provided to the Division.
2. The prior NPDES permit was issued to Tennessee Wastewater Systems, Inc., which is a corporation owned by Adenus Group, LLC. However, the facility is located on property owned by Lost Hollow Limited Partnership.

**Site Review**

The system is not complete or fully operational, and is not constructed according to the engineering plans approved by the Division. The lagoon is providing biological treatment, but the system is not capable of disinfection, flow measurement or discharge.

1. The control building has not been constructed and there is no power supply available. There is no means of flow measurement. The approved engineering plans for this project included those items.

2. The chlorine contact chamber and control valves are not surrounded by fencing. The Division's Design Criteria for Sewage Works (Chapter 1, General Engineering Requirements, 1.3.5
3. Specifications) states that a fence is to surround all wastewater treatment systems. The approved engineering plans included fencing around all structures.
4. Portions of the discharge line are laid over the surface of the ground, and one pipe joint is disconnected between the valves and the contact chamber. The discharge line at the outfall point had been covered over with rip-rap, which has filled in with soil and vegetation. The exact location or condition of the pipe outlet could not be verified (NPDES Permit Part II., A. General Provisions, 4. Proper Operation & Maintenance).
5. The facility identification sign on the lagoon fence stated "Treated Domestic Wastewater", "On-Site Systems", gave an outdated phone contact number, and did not contain the current Division name. This does not meet the permit requirements or the Division's Design Criteria for Sewage Works, (Chapter 1, General Engineering Requirements, 1.3.5 Specifications). The term "treated domestic wastewater" is only appropriate to describe final effluent after disinfection.
6. The single outfall sign identified the discharge point as "Treated Domestic Wastewater Drip Irrigated Plots", did not contain the permit number or the appropriate wording required in the permit, and did not contain the current Division name (Part III, Other Requirements, B. Placement of Signs). The location should be identified as "Treated Domestic Wastewater Discharge".

#### Operation & Maintenance

1. Tennessee Wastewater Systems has a contract with Aenus Operations, LLC to provide a certified operator and to operate the wastewater treatment system.
2. The area inside the lagoon fence had been bush hogged recently, but vegetation had not been cleared down to the area along the water line. Heavy woody vegetation, high weeds, and tree saplings remained in that area. The woody vegetation and trees in the area surrounding the outlet standpipe and walkway structure had been partially cleared. We were advised that the trees were recently treated with herbicide to prevent re-growth. Adequate vegetation management has not been provided to maintain the integrity of the structure and to allow access and inspection during site visits or the compliance inspection. Keeping the embankments clear of heavy vegetation is necessary to allow routine inspection of the structure for damage due to borrowing animals or for leakage (NPDES Permit Part II., A. General Provisions, 4. Proper Operation & Maintenance).
3. The indentations and holes in one of the lagoon embankments appeared to be larger than during the previous compliance inspection. The embankment was too overgrown to adequately inspect for structural integrity or animal burrows (NPDES Permit Part II., A. General Provisions, 4. Proper Operation & Maintenance).
4. Despite filling with floodwaters in 2010, the lagoon has dropped back to the pre-flood water level. There have been no reported discharges from the system since lagoon construction in 2001. Wastewater levels have not been monitored to measure changes.
5. The chlorine contact chambers were overgrown with woody vegetation and trees and could not be adequately inspected (NPDES Permit Part II., A. General Provisions, 4. Proper Operation & Maintenance).

#### Records & Reports

1. Copies of the iPhone monthly site visit forms for the previous year were reviewed. The time of the facility site visits were not documented. The forms noted that the facility was fenced, but all

structures are not yet enclosed with fencing. No observations were documented of the wastewater level in the lagoon to monitor for water loss, leakage, or increasing levels.

2. The most recent certified operator form provided to the Division, signed September 3, 2015, lists Tracy Nichols as the certified operator in direct responsible charge for this facility. However, Mr. Carter's name has remained on the monthly operation reports (MORs) as the certified operator in charge and Larry Barnes is listed as the person conducting the monthly site visits on those forms. Mr. Carter's signature on the MORs is not original. For Mr. Nichols to serve as the operator in charge, he must directly supervise the work activities of Mr. Barnes and provide an original signature on the MORs.

#### Collection System

1. Information obtained during previous inspections had indicated that only four residential customers were connected to the system. On May 9, 2016, you provided a requested list of customers which included five locations. As stated in previous inspection letters (2001, 2003, 2008, 2015), no additional customers were to be connected to the system without advising the Division and obtaining prior approval, or completing the facility project and making all portions of the system functional. The permits states that the "permittee may not add wasteloads to the existing system without the knowledge and approval of the Division" (Part III, Other Requirements, C. Addition of Wasteloads). A review of Division records found that prior approval was given for only a total of two connections.
2. If it is not already available, an up to date collection system map must be developed, and amended to include all additions or changes to the system that are made in the future.

#### Conclusion

Some of the violations and compliance items cited in the previous inspection, Notice of Violation dated February 19, 2015, had not been corrected. The system is not complete and operational. The lagoon and structures present are not properly maintained to retain operational function, or to allow necessary routine inspection. The system should be completed, and maintained in operational condition. Prior inspections conducted in 2001, 2003, and 2008, also noted these items.

Not providing proper maintenance of the wastewater system, not meeting the conditions of the NPDES permit, and not providing reports signed by the certified operator in charge are violations of the NPDES permit and of the *Tennessee Water Quality Control Act*. Failure to complete system construction in accordance with approved engineering plans and specifications is also a violation of the *Act*.

Please provide a written response within 30 days of receipt of this letter stating what actions have been or will be taken to correct the violations and items listed in this inspection letter and report. The corrective action plan (CAP) should include specific corrective measures and dates of completion or a scheduled completion date for each item. The response should also include the following.

- An engineering evaluation of the structural integrity of the lagoon, the lagoon outlet structure, piping and chlorine contact chamber
- An up to date map of the collection system, an electronic copy of a GIS program map may be used

Mr. Charles Hyatt  
September 20, 2016  
Page 4

Again, I would like to thank you and Mr. Carter for your assistance during the inspection. If you have any questions or need additional information, please contact me at 615-687-7123, or e-mail at [Ann.Rochelle@tn.gov](mailto:Ann.Rochelle@tn.gov).

Sincerely,



Ann E. Rochelle, Environmental Consultant  
Division of Water Resources  
Nashville Environmental Field Office

Enclosure

Cc: Brian Carter, Adenus Operations  
Robert J. Pickney, Registered Agent, Lost Hollow Limited Partnership

**Compliance Evaluation Inspection Report**  
**Tennessee Wastewater Systems – River Road / Lost Hollow Subdivision Lagoon**  
**NPDES Permit # TN0074764, Cheatham County**

On November 2, 2015, George Garden, Michael Murphy, Zachary Coppa and I met with CEO Charles Hyatt and Brian Carter to conduct a Compliance Evaluation Inspection at the Tennessee Wastewater Systems' River Road / Lost Hollow Subdivision Wastewater Treatment Lagoon.

Mr. Carter was contacted by telephone on January 14, 2016. He stated there had been no changes at the facility since the date of the inspection.

The following is a report of the findings of that inspection.

**Permit**

1. The most recent NPDES permit became effective on November 1, 2010, and expired on September 30, 2015. An application for renewal was received by the Division on March 24, 2015, but was found to be incomplete. A letter from the Division, dated April 9, 2015, (copy attached) advised Chief Technical Officer Roy Denney that the application process had to be suspended until additional information was provided. To date, that information has not been provided to the Division.
2. The prior NPDES permit was issued to Tennessee Wastewater Systems, Inc., which is a corporation owned by Adenus Group, LLC. However, the facility is located on property owned by Lost Hollow Limited Partnership.

**Site Review**

1. The system was designed to consist of residential septic tanks with effluent filters, and a low pressure pipe system carrying flow to an anaerobic lagoon, followed by disinfection by chlorination. Permitted discharge is to the Cumberland River.
2. The control building has not been constructed and there is no power supply available. There is no means of flow measurement. The approved engineering plans for this project included these items. Some type of flow measurement device must be installed to meet the permit requirement for reporting of instantaneous flow readings. There is no means to measure the wastewater level in the lagoon so that fill or loss rates can be monitored.
3. The lagoon itself has a perimeter fence with a locked gate. The control valves for discharge and the chlorine contact chamber are located outside the lagoon fence. New posts were being placed to install a gate to keep livestock out of the area of the contact chambers. This will still not provide fencing to completely enclose the structure. The Division's Design Criteria for Sewage Works (Chapter 1, General Engineering Requirements, 1.3.5 Specifications) states that a fence is to surround all wastewater treatment plants (including lagoon systems). A complete enclosure fence around the control valves and the contact chambers should be installed that will both exclude livestock and prevent public access for purposes of safety and security of the system.
4. A system identification sign was posted on the fence but provided the name and phone number for the previous permit holder, On-Site Systems, and did not have the current Division name. It also stated "Treated Domestic Wastewater". That terminology should only be used for the treated final effluent after disinfection (at the outfall point) and not the wastewater in the lagoon. The lagoon should be identified as a wastewater treatment system (Division Design Criteria for Sewage Works, Chapter 1, General Engineering Requirements, 1.3.5 Specifications). An updated sign should be posted that provides the current identification and contact information.
5. A single sign, facing the river, was attached to a tree on the river bank near the outfall point. The wording on the sign identified the system as "Treated Domestic Wastewater Drip Irrigated Plots" and did not contain the permit number or appropriate wording to meet the requirements of the NPDES permit (Part III, Other Requirements, B. Placement of Signs), and did not contain the current Division

name. A double faced sign containing the correct wording to identify the discharge and provide contact information must be placed where it is visible from both the water and the land.

### **Operation & Maintenance**

1. Tennessee Wastewater Systems has a contract whereby Adenus Operations, LLC provides a certified operator and operates the wastewater treatment system. Mr. Carter is Operations Manager for Adenus. Lawrence (Larry) Barnes was listed with the Division as the operator in charge for this facility until September 2015. The most recent certified operator form provided to the Division, signed September 3, 2015, lists Tracy Nichols as the certified operator in direct responsible charge for this facility. Mr. Barnes has continued to conduct the monthly site visits as indicated on the site visit forms. If Mr. Barnes conducts the site visits, then in order for Mr. Nichols to serve as the certified operator in direct responsible charge, he must directly supervise Mr. Barnes' work activities at the system.
2. The area inside the lagoon fence had been bush hogged recently, and vegetation on the lagoon banks was cleared down to the area along the water line. There was still heavy woody vegetation, high weeds, and tree saplings in the remaining area. Some of the tree samplings had been cut around the lagoon outfall structure and the walkway was now accessible. There was still dense woody growth and small tree samplings surrounding and under the walkway around the outfall standpipe. This prevented access and close inspection of the standpipe structure and effluent piping. This area should be completely cleared the heavy vegetation to allow inspection during each site visit (NPDES Permit Part II., A. General Provisions, 4. Proper Operation & Maintenance).
3. We were advised that the trees were recently treated with herbicide to prevent re-growth. The remaining areas need to be cleared and kept cleared to prevent deep rooted woody vegetation from penetrating the lagoon embankments and causing damage or structural instability of the treatment unit. Keeping the embankments clear of heavy vegetation is necessary to allow routine inspection of the structure for damage due to borrowing animals or for leakage (NPDES Permit Part II., A. General Provisions, 4. Proper Operation & Maintenance).
4. During this inspection and during the last inspection, areas of the lagoon embankment on the side adjacent to the river were observed to have indentations and holes in the bank at water level. The indentations or holes appeared to be larger than observed in the previous inspection. These areas in particular should be cleared and checked to determine if there are animal burrows or areas of structural instability (NPDES Permit Part II., A. General Provisions, 4. Proper Operation & Maintenance). Placement of fluorescent dye along this bank and at these locations could be helpful in determining if there is any leakage.
5. There have been no discharges reported from the system since it began operation in 2001. The wastewater level appears to be at close to the same level as observed in past inspections. There is currently no means to monitor the wastewater level, and no observations of the levels are included in the site visit forms. Some means should be provided to use for measuring the wastewater levels during the site visits.
6. The effluent line leading from the discharge valves to the chlorine contact chambers was visible, laying on the surface of the ground. A section of the PVC pipe was disconnected prior to reaching the contact chambers (NPDES Permit Part II., A. General Provisions, 4. Proper Operation & Maintenance). The discharge valves are kept closed. The PVC valves have no protective structure around them and have become partially buried in the leaf litter and vegetation. The valve structures and connected piping should be cleared of any accumulated material or vegetation and should be protected against damage (NPDES Permit Part II., A. General Provisions, 4. Proper Operation & Maintenance). The valves should be checked during each inspection and this noted on the site visit forms.
7. As noted in the previous inspection, the area surrounding the below ground contact chambers was overgrown with deep rooted woody vegetation, trees and weeds. This obscured the structures and prevented close inspection to determine the condition of the treatment units. This deep rooted growth

can damage the structures and interfere with operation of those treatment units in the future. The area surrounding the structures should be cleared and vegetation kept under control. Before being put into service, these structures, the valves and piping will have to be tested to determine there is no damage and that all are still in good working order (NPDES Permit Part II., A. General Provisions, 4. Proper Operation & Maintenance).

8. The outfall pipe could not be observed. You advised us that the discharge pipe was above the current water level in the river (Cheatham Reservoir), but was covered with rip rap. The area was found to be covered over with small size rip rap, soil, and encroaching vegetation. Because of these conditions, it could not be determined exactly where the pipe outlet is located, whether the pipe might be blocked by this material or whether a discharge could actually occur through the pipe (NPDES Permit Part II., A. General Provisions, 4. Proper Operation & Maintenance). The outfall area should be kept clear of vegetation to prevent root damage to the outfall line and to allow routine inspection during site visits. The path should be maintained open to allow access.

### **Records & Reports**

1. Electronic site visit forms are completed by Adenus Operations personnel using an iPhone program which sends the information to be saved on a central computer system where it can be printed out later. Where system information is stored electronically, suitable backup and electronic safeguards should be provided to prevent loss of data. The NPDES permit requires that all records be maintained on file for a minimum of three years, with the exception of sludge disposal records.
2. Copies of the monthly site visit forms for the previous year were requested, and were provided in electronic form following the inspection. The following review items need to be addressed:
  - The date of the inspections is documented on the forms, but the time is not included. The time should be added to the forms and documented.
  - The item "treatment facility fenced" should not be indicated as "yes" until a fence surrounding the control valves and chlorine contact chambers is completed.
  - An item should be added for documenting the wastewater level in the lagoon, or the information can be included in the comments area of the form. It is essential to monitor water levels to detect loss or leakage and later to determine when discharge will be necessary.
3. Records must be maintained of the septic tank inspections as part of the system maintenance records. Records must also be maintained whenever solids are removed from the tanks, including the disposal method and location of disposal. The permit requires that the sludge disposal records be maintained for a period of five years.
4. The MOR/DMR forms are prepared monthly and submitted monthly as required by the permit. The date and time of the monthly site inspections are not recorded on the MOR/DMR forms. This information must be included.
5. Mr. Carter's signature is given on the MOR/DMR forms as certified operator. The signature appears to be copied on all the reports. Although Mr. Carter is a certified operator, the certified wastewater treatment system operator in direct responsible charge for this facility, Mr. Nichols, must sign these reports. The designated operator in charge can be changed at any time, but the Division's Compliance & Enforcement Section must be advised in writing of that change. Original report forms and signatures are required for any self-monitoring reports submitted to the Division.

### **Collection System**

1. The customers own the septic tanks located at each residence, and are responsible for any repairs due to leakage. The utility is responsible for maintaining the tanks, filters, and collection system lines.
2. The tanks are checked every three years by using a sludge judge, and the utility is responsible for pumping and disposing of the solids as needed.
3. Information obtained during previous inspections had indicated that only four residential customers were connected to the system. On May 9, 2016, you provided a requested list of customers which included five locations. As stated in previous inspection letters, no additional customers were to be

connected to the system without advising the Division and obtaining prior approval, or completing the facility project and making all portions of the system functional. A review of Division records found that prior approval was given for only a total of two connections.

4. As stated in previous inspection letters (2001, 2003, 2008, 2015), no additional customers are to be connected to the system without advising the Division in advance and obtaining prior approval, or completing the facility project and making all portions of the system functional. The permits states that the "permittee may not add wasteloads to the existing system without the knowledge and approval of the Division" (Part III, Other Requirements, C. Addition of Wasteloads).
5. If it is not already available, an up to date collection system map must be developed, and amended to include all additions or changes to the system that are made in the future.

#### Conclusion

The system is not complete and operational at this time. The lagoon is serving as a storage area for the wastewater where biological treatment is occurring, but it is not capable of disinfection or discharge through the permitted outfall point. The lagoon was filled and flood waters reached a point several feet above the top of the embankments during the 2010 flood. However, the lagoon did not retain the flood waters and went back down to the current water level, below the level of the designed discharge outlet pipe. The long term overgrowth of deep rooted woody vegetation and trees, and/or animal burrows may have compromised the structural integrity of the lagoon, chlorine contact chambers and piping. The entire system should be cleared of the woody vegetation, and the lagoon, piping and contact chamber tested for leakage. The system should then be completed per approved engineering plans and maintained in a condition capable of proper operation and discharge.

Inspection Report by Ann Rochelle



STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF WATER RESOURCES  
William R. Snodgrass - Tennessee Tower  
312 Rosa L. Parks Avenue, 11<sup>th</sup> Floor  
Nashville, Tennessee 37243-1102

September 9, 2016

Mr. Charles R. Hyatt, CEO  
Adenus Group, LLC  
e-copy: Charles.Hyatt@adenus.com  
849 Aviation Parkway  
Smyrna, TN 37167

**Re: State Operating Permit No. SOP-00019  
TN Wastewater Systems - Starr Crest Resort  
Pigeon Forge, Sevier County, Tennessee**

Dear Mr. Hyatt:

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

Please be advised that a petition for permit appeal may be filed, pursuant to T.C.A. Section 69-3-105, subsection (i), by the permit applicant or by any aggrieved person who participated in the public comment period or gave testimony at a formal public hearing whose appeal is based upon any of the issues that were provided to the commissioner in writing during the public comment period or in testimony at a formal public hearing on the permit application. Additionally, for those permits for which the department gives public notice of a draft permit, any permit applicant or aggrieved person may base a permit appeal on any material change to conditions in the final permit from those in the draft, unless the material change has been subject to additional opportunity for public comment. Any petition for permit appeal under this subsection (i) shall be filed with the technical secretary of the Water Resources Board within thirty (30) days after public notice of the commissioner's decision to issue or deny the permit. A copy of the filing should also be sent to TDEC's Office of General Counsel.

If you have questions, please contact the Knoxville Environmental Field Office at 1-888-891-TDEC; or, at this office, please contact Mr. Hari Akunuri at (615) 532-0650 or by E-mail at [Hari.Akunuri@tn.gov](mailto:Hari.Akunuri@tn.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Brad C. Harris".

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

Enclosure

cc/ec: Land-based Systems File  
Knoxville Environmental Field Office  
Ms. Michelle Ramsey, Utilities Division, Tennessee Regulatory Authority, [michelle.ramsey@tn.gov](mailto:michelle.ramsey@tn.gov)  
Ms. Patsy Fulton, Utility Rate Specialist, Tennessee Regulatory Authority, [Patsy.Fulton@tn.gov](mailto:Patsy.Fulton@tn.gov)

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

**Modification**

**Permit No. SOP-00019**

**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**

**TN Wastewater Systems, Inc. - Starr Crest Resort  
Pigeon Forge, Sevier County, Tennessee**

**FOR THE OPERATION OF**

Septic tanks, effluent collection system, recirculating sand filter and drip irrigation system located at latitude 35.798611 and longitude -83.511111 in Sevier County, Tennessee to serve approximately 30 units in the Starr Crest Resort. The design capacity of the system is .008 MGD.

This permit is issued as a result of the application filed on April 29, 2013, in the office of the Tennessee Division of Water Resources and in conformity with approved plans, specifications and other data submitted to the Department in support of the above application, all of which are filed with and considered as a part of this permit, together with the following named conditions and requirements.

**This permit shall become effective on: October 1, 2016**

**This permit shall expire on: June 30, 2018**

**Issuance date: September 1, 2016**



---

**for Tisha Calabrese Benton  
Director**

CN-0759

RDAs 2352 & 2366

A. GENERAL REQUIREMENTS

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

<u>Parameter</u>	<u>Sample Type</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Measurement Frequency</u>
Flow *	Totalizer			Daily
BOD <sub>5</sub>	Grab	45 mg/l	N/A	Once/Year
Ammonia as N	Grab	Report	N/A	Once /Quarter

\* Report average daily flow for each calendar month.

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

This permit allows the operation of a wastewater drip irrigation system. There shall be no discharge of wastewater to any surface stream or any location where it is likely to enter surface waters. There shall be no discharge of wastewater to any open throat sinkhole. In addition, the drip irrigation system shall be operated in a manner preventing the creation of a health hazard or a nuisance.

Instances of ponding or pools under dry weather conditions shall be promptly investigated and remedied. Instances of ponding or pools, or any wastewater runoff shall be noted on the monthly operation report. The report shall include details regarding the location(s), determined cause(s), the actions taken to eliminate the ponding or pools, or any wastewater runoff, and the dates the corrective actions were made. Any wastewater runoff due to improper operation must be reported in writing to the Division of Water Resources, Knoxville Environmental Field Office within 5 days of discovery by the permittee.

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

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

- the condition of the treatment facility security controls (doors, fencing, gates, etc.),
- the condition of the drip area security controls (doors, fencing, gates, etc.),
- the condition of the site signage,
- the operational status of the mechanical parts of the treatment system (pumps, filters, telemetry equipment, etc.)
- the condition of the UV bulbs (if applicable)

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

## **B. MONITORING PROCEDURES**

### **1. Representative Sampling**

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

Effluent to drip irrigation plots.

### **2. Test Procedures**

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

## **C. DEFINITIONS**

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

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

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

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

A "quarter" is defined as any one of the following three-month periods: January 1 through March 31, April 1 through June 30, July 1 through September 30, and/or October 1 through December 31.

## **D. REPORTING**

### **1. Monitoring Results**

Monitoring results shall be recorded monthly OR in accordance with the operating and maintenance inspection schedule in the permit administrative file record and submitted quarterly. The quarterly report shall detail the following:

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 Resources  
Knoxville Environmental Field Office  
3711 Middlebrook Pike  
Knoxville, TN 37921

The first operation report is due on the 15<sup>th</sup> of the month following the quarter containing the permit effective date. Until the construction of the treatment system is complete and the treatment system is placed into operation, operational reports shall report “monitoring not required”.

### **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.

### **4. Signatory Requirement**

All reports or information submitted to the commissioner shall be signed and certified by the persons identified in Rules 1200-4-5-.05(6)(a-c).

## **E. SCHEDULE OF COMPLIANCE**

Full operational level shall be attained after the construction of the treatment system is complete and the treatment system is placed into operation.

## **PART II**

### **A. GENERAL PROVISIONS**

#### **1. Duty to Reapply**

The permittee is not authorized to discharge after the expiration date of this permit. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information and forms as are required to the Director of Water Resources (the "Director") no later than 180 days prior to the expiration date.

#### **2. Right of Entry**

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

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

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

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

#### **3. Availability of Reports**

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

#### **4. Proper Operation and Maintenance**

The permittee shall at all times properly operate and maintain all facilities and systems (and related appurtenances) for collection and treatment which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory and process controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. Backup continuous pH and flow monitoring equipment are not required.

The monitoring frequency stated in this permit shall not be construed as specifying a minimum level of operator attention to the facility. It is anticipated that visits to the treatment facility by the operator will occur at intervals frequent enough to assure proper operation and maintenance, but

in no case less than one visit every fourteen days OR in accordance with an operating and maintenance inspection schedule in the permit administrative file record. If monitoring reports, division's inspection reports, or other information indicates a problem with the facility, the permittee may be subject to enforcement action and/or the permit may be modified to include increased parameter monitoring, increased monitoring frequency or other requirements as deemed necessary by the division to correct the problem. The permittee shall ensure that the certified operator is in charge of the facility and observes the operation of the system frequently enough to ensure its proper operation and maintenance regardless of the monitoring frequency stated in the permit

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

The drip dispersal area shall not be used for vehicular traffic or vehicular parking. Dozers, trucks, tractors, and other heavy vehicles shall not be allowed to run over the drip dispersal area lines or other parts of the system.

#### 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 unintended discharge to land or waters of Tennessee 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 on a quarterly basis. The data measurement period shall be sufficient to account for seasonal rainfall patterns and seasonal groundwater table elevations.

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

#### 4. Upset

a. "**Upset**" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. An upset shall constitute an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- i. An upset occurred and that the permittee can identify the cause(s) of the upset;
- ii. The permitted facility was at the time being operated in a prudent and workman-like manner and in compliance with proper operation and maintenance procedures;
- iii. The permittee submitted information required under "Reporting of Noncompliance" within 24-hours of becoming aware of the upset (if this information is provided orally, a written submission must be provided within five days); and
- iv. The permittee complied with any remedial measures required under "Adverse Impact."

#### 5. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the waters of Tennessee resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### 6. Bypass

a. "**Bypass**" is the intentional diversion of wastewater away from any portion of a treatment facility. "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 Resources 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 Resources 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.

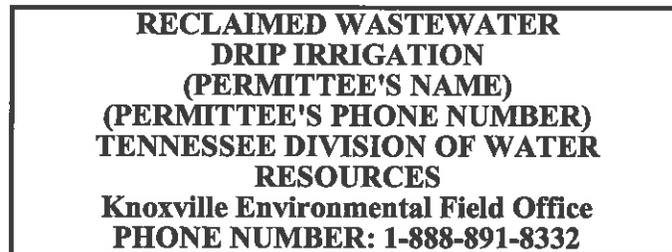
**PART III  
OTHER REQUIREMENTS**

**A. CERTIFIED OPERATOR**

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

**B. PLACEMENT OF SIGNS**

The permittee shall place a sign at the entrance if the drip area if fenced or all reasonable 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



**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 Rule 1200-01-06-.22. If the septage is transported to another POTW for disposal, the permittee shall note the amount of septage wasted in gallons and name of the facility the hauler intends to use for disposal of the septage on the monthly operation report. Sludge or any other material removed by any treatment works must be disposed of in a manner which prevents its entrance into or pollution of any surface or subsurface waters. Additionally, the disposal of such sludge or other material must be in compliance with the Tennessee Solid Waste Disposal Act, TCA 68-31-101 et seq. and Tennessee Hazardous Waste Management Act, TCA 68-46-101 et seq.

**F. OWNERSHIP OF THE TREATMENT FACILITIES**

a. The permittee shall own the treatment facilities (and the land upon which they are constructed) including the land to be utilized for drip or spray irrigation. A perpetual easement (properly recorded) may be accepted in lieu of ownership. 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.

Attachment 1  
STATE OF TENNESSEE  
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION**  
**DIVISION OF WATER RESOURCES-WATER SUPPLY BRANCH**  
**GROUND WATER MANAGEMENT SECTION**  
9th Floor, 401 Church Street  
Nashville, Tennessee 37243-1549

**MEMORANDUM**

**TO:** Hari Akunuri, WPC-CO

**FROM:** Allen Rather, DWS- Ground Water Management Section

**DATE:** 4/29/2013

**SUBJECT:** LCSS/SFDS (Class V Injection) Approval  
Starr Crest Resort  
Pigeon Forge, Sevier County, Tennessee  
UIC File SEV 0000074 SOP-00019

The Division of Water Resources has reviewed the submittal of an Application for Authorization to Operate a Class V Underground Injection Well (Large Capacity Septic System/Subsurface Fluid Disposal System) utilizing conventional disposal for the waste water at the Starr Crest Resort located at Pigeon Forge, Sevier County, Tennessee. This Division approves the application dated 4/19/2013.

If at any time the Division learns that a ground water discharge system may be in violation of The Tennessee Water Quality Control Act, the Division shall:

- a. require the injector to apply for an individual permit;
- b. order the injector to take such actions including, where required, closure of the injection well as may be necessary to prevent the violation; or
- c. take enforcement action.

All groundwater discharge activities must operate in such a manner that they do not present a hazard to groundwater.

Adenus shall also conduct a monthly visual inspection of the complete drip field looking for any signs of failure.

In accordance with Underground Injection Control (UIC) Rule 1200-4-6-.14 (3) "The owner of a Class V well shall be responsible for notifying the Department of change in ownership." This notification must be made to this Division within thirty (30) days of the change in ownership.

Also note that according to Underground Injection Control (UIC) Rule 1200-4-6-.14 (8)(d) "Upon completion of the well, the owner or operator must certify to the Department that the well has been completed in accordance with the approved construction plan, and must submit any other additional information required". The certification must be submitted to the UIC Program within thirty (30) days upon the completion/closure of the Class V well.

This Division will require a minimum of seven (7) working days advance notice before the construction on the drip system is to begin to allow for a witness from this Division to be present.

No drip emitters are to discharge directly into an open throat or crevice in the subsurface. All drip lines are to be installed on contour.

Our concurrence with your approach does not imply that this procedure is exempt from future changes or restrictions in the Underground Injection Control (UIC) Regulations, or any additional requirements set forth by the Division in order to protect the groundwater of Tennessee.

A copy of this authorization must be kept on site until the development has been completed and must be made available to inspection personnel.

Should you have any questions or comments please feel free to contact me at (615) 532-5819 or [allen.rather@tn.gov](mailto:allen.rather@tn.gov).

c: file

**Modification  
SOP-00019  
TN Wastewater Systems - Star Crest Resort  
July 26, 2016**

The division received a letter on July 21, 2016, from Mr. Charles Hyatt, TWS, Inc., requesting permit modification. All drip fields are fenced sufficiently to prevent or impede unauthorized entry. The division is granting the request to require drip-area fencing and delete the *E. coli* limit and monitoring requirement.



STATE OF TENNESSEE  
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION**  
**DIVISION OF WATER RESOURCES**

William R. Snodgrass - Tennessee Tower  
312 Rosa L. Parks Avenue, 11<sup>th</sup> Floor  
Nashville, Tennessee 37243-1102

September 9, 2016

Mr. Charles R. Hyatt, CEO  
Adenus Group, LLC  
e-copy: Charles.Hyatt@adenus.com  
849 Aviation Parkway  
Smyrna, TN 37167

**Re: State Operating Permit No. SOP-99016**  
**TN Wastewater Systems - Townsend Town Square**  
**Townsend, Blount County, Tennessee**

Dear Mr. Hyatt:

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

Please be advised that a petition for permit appeal may be filed, pursuant to T.C.A. Section 69-3-105, subsection (i), by the permit applicant or by any aggrieved person who participated in the public comment period or gave testimony at a formal public hearing whose appeal is based upon any of the issues that were provided to the commissioner in writing during the public comment period or in testimony at a formal public hearing on the permit application. Additionally, for those permits for which the department gives public notice of a draft permit, any permit applicant or aggrieved person may base a permit appeal on any material change to conditions in the final permit from those in the draft, unless the material change has been subject to additional opportunity for public comment. Any petition for permit appeal under this subsection (i) shall be filed with the technical secretary of the Water Resources Board within thirty (30) days after public notice of the commissioner's decision to issue or deny the permit. A copy of the filing should also be sent to TDEC's Office of General Counsel.

If you have questions, please contact the Knoxville Environmental Field Office at 1-888-891-TDEC; or, at this office, please contact Mr. Hari Akunuri at (615) 532-0650 or by E-mail at [Hari.Akunuri@tn.gov](mailto:Hari.Akunuri@tn.gov).

Sincerely,

Brad C. Harris, P.E.  
Manager, Water-based Systems

Enclosure

cc/cc: Land-based Systems File  
Knoxville Environmental Field Office  
Ms. Michelle Ramsey, Utilities Division, Tennessee Regulatory Authority, [michelle.ramsey@tn.gov](mailto:michelle.ramsey@tn.gov)  
Ms. Patsy Fulton, Utility Rate Specialist, Tennessee Regulatory Authority, [Patsy.Fulton@tn.gov](mailto:Patsy.Fulton@tn.gov)

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

**Modification**

**Permit No. SOP-99016**

**PERMIT  
For the operation of Wastewater Treatment Facilities**

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

**PERMISSION IS HEREBY GRANTED TO**

**TN Wastewater Systems - Townsend Town Square  
Townsend, Blount County, Tennessee**

**FOR THE OPERATION OF**

Septic tanks, recirculating sand filter, ultraviolet disinfection and drip irrigation system located at latitude 35.679722 and longitude -83.740556 in Blount County, Tennessee to serve commercial business in Townsend Town Square. The design capacity of the system is .00364 MGD.

This permit is issued as a result of the application filed on June 1, 2011, in the office of the Tennessee Division of Water Resources and in conformity with approved plans, specifications and other data submitted to the Department in support of the above application, all of which are filed with and considered as a part of this permit, together with the following named conditions and requirements.

**This permit shall become effective on: October 1, 2016**

**This permit shall expire on: August 31, 2017**

**Issuance date: September 1, 2016**



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**for Tisha Calabrese Benton  
Director**

**A. GENERAL REQUIREMENTS**

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

<u>Parameter</u>	<u>Sample Type</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Measurement Frequency</u>
Flow *	Totalizer			Daily
BOD <sub>5</sub>	Grab	45 mg/l	N/A	Once/year
Ammonia as N	Grab	<b>Report</b>	N/A	Once /Quarter

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

This permit allows the operation of a wastewater drip irrigation system. There shall be no discharge of wastewater to any surface stream or any location where it is likely to enter surface waters. There shall be no discharge of wastewater to any open throat sinkhole. In addition, the drip irrigation system shall be operated in a manner preventing the creation of a health hazard or a nuisance.

Instances of ponding or pools under dry weather conditions shall be promptly investigated and remedied. Instances of ponding or pools, or any wastewater runoff shall be noted on the monthly operation report. The report shall include details regarding the location(s), determined cause(s), the actions taken to eliminate the ponding or pools, or any wastewater runoff, and the dates the corrective actions were made. Any wastewater runoff due to improper operation must be reported in writing to the Division of Water Resources, Knoxville Environmental Field Office within 5 days of discovery by the permittee.

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

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

- o the condition of the treatment facility security controls (doors, fencing, gates, etc.),

- the condition of the drip area security controls (doors, fencing, gates, etc.),
- the condition of the site signage,
- the operational status of the mechanical parts of the treatment system (pumps, filters, telemetry equipment, etc.)
- the condition of the UV bulbs (if applicable)

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

## **B. MONITORING PROCEDURES**

### **1. Representative Sampling**

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

Effluent to drip irrigation plots.

### **2. Test Procedures**

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

## **C. DEFINITIONS**

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

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

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

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

A "quarter" is defined as any one of the following three-month periods: January 1 through March 31, April 1 through June 30, July 1 through September 30, and/or October 1 through December 31.

## **D. REPORTING**

### **1. Monitoring Results**

Monitoring results shall be recorded monthly OR in accordance with the operating and maintenance inspection schedule in the permit administrative file record and submitted quarterly. The quarterly report shall detail the following:

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 Resources  
Knoxville Environmental Field Office  
3711 Middlebrook Pike  
Knoxville, TN 37921

The first operation report is due on the 15<sup>th</sup> of the month following the quarter containing the permit effective date. Until the construction of the treatment system is complete and the treatment system is placed into operation, operational reports shall report “monitoring not required”.

### **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.

### **4. Signatory Requirement**

All reports or information submitted to the commissioner shall be signed and certified by the persons identified in Rules 1200-4-5-.05(6)(a-c).

## **E. SCHEDULE OF COMPLIANCE**

Full operational level shall be attained after the construction of the treatment system is complete and the treatment system is placed into operation.

## **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 notification of permittee and presentation of credentials:

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

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

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

#### **3. Availability of Reports**

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

#### **4. Proper Operation and Maintenance**

The permittee shall at all times properly operate and maintain all facilities and systems (and related appurtenances) for collection and treatment which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory and process controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to

achieve compliance with the conditions of the permit. Backup continuous pH and flow monitoring equipment are not required.

The monitoring frequency stated in this permit shall not be construed as specifying a minimum level of operator attention to the facility. It is anticipated that visits to the treatment facility by the operator will occur at intervals frequent enough to assure proper operation and maintenance, but in no case less than one visit every fourteen days OR in accordance with an operating and maintenance inspection schedule in the permit administrative file record. If monitoring reports, 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 charge of the facility and observes the operation of the system frequently enough to ensure its proper operation and maintenance regardless of the monitoring frequency stated in the permit

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

The drip dispersal area shall not be used for vehicular traffic or vehicular parking. Dozers, trucks, tractors, and other heavy vehicles shall not be allowed to run over the drip dispersal area lines or other parts of the system.

#### 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 unintended discharge to land or waters of Tennessee 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 on a quarterly basis. The data measurement period shall be sufficient to account for seasonal rainfall patterns and seasonal groundwater table elevations.

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

#### 4. Upset

a. "*Upset*" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. An upset shall constitute an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- i. An upset occurred and that the permittee can identify the cause(s) of the upset;
- ii. The permitted facility was at the time being operated in a prudent and workman-like manner and in compliance with proper operation and maintenance procedures;
- iii. The permittee submitted information required under "Reporting of Noncompliance" within 24-hours of becoming aware of the upset (if this information is provided orally, a written submission must be provided within five days); and
- iv. The permittee complied with any remedial measures required under "Adverse Impact."

#### 5. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the waters of Tennessee resulting from noncompliance with this permit, including such accelerated or

additional monitoring as necessary to determine the nature and impact of the noncomplying discharge. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

## 6. Bypass

a. "**Bypass**" is the intentional diversion of wastewater away from any portion of a treatment facility. "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 Resources 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 Resources 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 certified wastewater treatment operator and collection system shall be operated under the supervision of a the grade I certified collection system operator in accordance with the Water Environmental Health Act of 1984.

**B. PLACEMENT OF SIGNS**

The permittee shall place a sign at the entrance if the drip area if fenced or all reasonable 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

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

### **C. ADDITION OF WASTE LOADS**

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

### **D. SEPTIC 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 Chapter 0400-48-01-.22. If the septage is transported to another POTW for disposal, the permittee shall note the amount of septage wasted in gallons and 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. 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.

**Rationale  
Proposed Changes to SOP Permit  
August 2012**

The final permit is revised at issuance to address comments received by the permittee regarding effluent limiting and monitoring, site inspection frequency, entry notification and signage requirements. The revisions reflect an understanding reached regarding these and other issues between division staff and representatives of the permittee in a May 21, 2012, meeting held in the offices of the Division of Water Resources. The following persons were present at that meeting:

<u>Name</u>	<u>Representing</u>
Charles Hyatt	Adenus
Brian Carter	Adenus
Bob Pickney	Adenus
David Henry	TDEC-OGC
Hari Akunuri	TDEC-WPC
Wade Murphy	TDEC-WPC

These changes are not intended to resolve issues specifically as they relate to joint Underground Injection Control (UIC) authorization for the drip irrigation area covered by these SOPs.

Attachment 1  
STATE OF TENNESSEE  
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION**  
**DIVISION OF WATER SUPPLY**  
**GROUND WATER MANAGEMENT SECTION**  
9th Floor, 401 Church Street  
Nashville, Tennessee 37243-1549

**MEMORANDUM**

TO: Hari Akunuri, WPC-CO

FROM: Allen Rather, DWS- Ground Water Management Section

DATE: 8/01/2011

SUBJECT: LCSS/SFDS (Class V Injection) Approval  
Townsend Town Square  
Townsend, Blount County, Tennessee  
UIC File BLO 0000069 SOP-99016

The Division of Water Supply has reviewed the submittal of an Application for Authorization to Operate a Class V Underground Injection Well (Large Capacity Septic System/Subsurface Fluid Disposal System) utilizing drip disposal for the waste water at the Townsend Town Square located at Townsend, Blount County, Tennessee. This Division approves the application dated 6/01/2011.

If at any time the Division learns that a ground water discharge system may be in violation of The Tennessee Water Quality Control Act, the Division shall:

- a. require the injector to apply for an individual permit;
- b. order the injector to take such actions including, where required, closure of the injection well as may be necessary to prevent the violation; or
- c. take enforcement action.

All groundwater discharge activities must operate in such a manner that they do not present a hazard to groundwater.

Tennessee Wastewater Systems, Inc shall also conduct a monthly visual inspection of the complete drip field looking for any signs of failure.

In accordance with Underground Injection Control (UIC) Rule 1200-4-6-.14 (3) “ The owner of a Class V well shall be responsible for notifying the Department of change in ownership.” This notification must be made to this Division within thirty (30) days of the change in ownership.

Also note that according to Underground Injection Control (UIC) Rule 1200-4-6-.14 (8)(d) “Upon completion of the well, the owner or operator must certify to the Department that the well has been completed in accordance with the approved construction plan, and must submit any other additional information required”. The certification must be submitted to the UIC Program within thirty (30) days upon the completion/closure of the Class V well.

Our concurrence with your approach does not imply that this procedure is exempt from future changes or restrictions in the Underground Injection Control (UIC) Regulations, or any additional requirements set forth by the Division in order to protect the groundwater of Tennessee.

This Division will require a minimum of seven (7) working days advance notice before the construction on the drip system is to begin to allow for a witness from this Division to be present.

No drip emitters are to discharge directly into an open throat or crevice in the subsurface. All drip lines are to be installed on contour.

A copy of this authorization must be kept on site until the development has been completed and must be made available to inspection personnel.

Should you have any questions or comments please feel free to contact me at (615) 532-5819 or [allen.rather@tn.gov](mailto:allen.rather@tn.gov).

c: Brad Harris, GWP- NCO  
file

**Modification  
SOP-99016  
TN Wastewater Systems - Townsend Town Square  
July 26, 2016**

The division received a letter on July 21, 2016, from Mr. Charles Hyatt, TWS, Inc., requesting permit modification. All drip fields are fenced sufficiently to prevent or impede unauthorized entry. The division is granting the request to require drip-area fencing and delete the *E. coli* limit and monitoring requirement.

## Jeff Ridsen

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**From:** Charles Hyatt  
**Sent:** Friday, September 9, 2016 1:40 PM  
**To:** Jeff Ridsen; Bob Pickney; Jeramy Stewart  
**Subject:** Fwd: SOP-99016 Signed final permit  
**Attachments:** SOP-99016\_Modified\_Townsend\_Final\_Permit\_2016.pdf

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**From:** Hari Akunuri <Hari.Akunuri@tn.gov>  
**Sent:** Friday, September 9, 2016 1:28:31 PM  
**To:** Charles Hyatt  
**Cc:** Woody Smith; Michelle Ramsey; Patsy Fulton; Brad Harris  
**Subject:** SOP-99016 Signed final permit

All,  
The attachment is the Final Permit. If you have trouble opening it, please let me know. We do not plan to send out a paper copy unless you instruct us otherwise. If you have questions about the contents of the document, please contact me.  
Please consider saving a copy of this email for your records.



Hari Akunuri  
TDEC/DWR  
William R. Snodgrass Tennessee Towers  
312 Rosa L. Park Avenue, 11<sup>th</sup> Floor  
Nashville, TN 37243  
Email: [Hari.Akunuri@tn.gov](mailto:Hari.Akunuri@tn.gov)  
Office: (615)532-0650  
Fax: (615)532-0683

We accept and encourage electronic document submittals.

## Jeff Riden

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**From:** Charles Hyatt  
**Sent:** Friday, September 9, 2016 1:52 PM  
**To:** Jeff Riden; Bob Pickney; Jeramy Stewart  
**Subject:** Fwd: SOP-00019 Signed final permit  
**Attachments:** SOP-00019\_Modificatio\_Starr Crest\_Final\_Drip\_Irrigation\_Permit 2016.pdf

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**From:** Hari Akunuri <Hari.Akunuri@tn.gov>  
**Sent:** Friday, September 9, 2016 1:43:12 PM  
**To:** Charles Hyatt  
**Cc:** John West; Michelle Ramsey; Patsy Fulton; Brad Harris  
**Subject:** SOP-00019 Signed final permit

All,  
The attachment is the Final Permit. If you have trouble opening it, please let me know. We do not plan to send out a paper copy unless you instruct us otherwise. If you have questions about the contents of the document, please contact me.  
Please consider saving a copy of this email for your records.



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