

Jeff Ridsen

From: HAWKMS Agent [agent@hawkms.com]
Sent: Tuesday, December 1, 2015 11:36 AM
To: Charles.Hyatt@adenus.com; Brian.Carter@adenus.com; Roy.Denney@adenus.com; John.Czahoroski@adenus.com
Cc: jeff.ridsen@adenus.com; bob.pickney@adenus.com; matt.pickney@adenus.com
Subject: TRA KPI Compliance Report for 12/1/2015 11:35:05 AM

TRA Flow KPI Report for 11/30/2015

Tracy Nichols	Permitted	Expected	Actual	% of Expected	AvgFlow	% of
Cedar Hill DCP	75000	18036	29227	1.62	6139.93	
Maple Green DCP	74000	38873	108820	2.80	43263.33	

Tony Smith	Permitted	Expected	Actual	% of Expected	AvgFlow	% of
Tall Oaks RSF	45000	11900	33890	2.85	13997.00	

Jeremy Stewart	Permitted	Expected	Actual	% of Expected	AvgFlow	% of
Starr Crest I RSF	8000	2275	5853	2.57	2239.13	
Starr Crest II BC	28000	23450	13236	0.56	22151.47	
Summit View RSF	8000	5775	5490	0.95	5064.67	

Stone Hanson	Permitted	Expected	Actual	% of Expected	AvgFlow	% of
Townsend Town Square RSF	3640	3640	515	0.14	1181.80	

Jeff Ridsen

From: Charles Hyatt [charles.hyatt@adenus.com]
Sent: Tuesday, December 1, 2015 10:12 AM
To: 'Jeff Ridsen'
Subject: FW: Permit
Attachments: SOP-01006_Dyer_Hollow_Mod_Final_Drip_Irrigation_Permit 2015.pdf

From: Hari Akunuri [mailto:Hari.Akunuri@tn.gov]
Sent: Monday, November 2, 2015 7:54 AM
To: Charles.Hyatt@adenus.com
Cc: Michelle Ramsey <Michelle.Ramsey@tn.gov>; Patsy Fulton <Patsy.Fulton@tn.gov>; Wade Murphy <Wade.Murphy@tn.gov>; Wade Murphy <Wade.Murphy@tn.gov>; Ann Morbitt <Ann.Morbitt@tn.gov>
Subject: 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, 11th Floor
Nashville, TN 37243
Email: Hari.Akunuri@tn.gov
Office: (615)532-0650
Fax: (615)532-0683

We accept and encourage electronic document submittals.

From: Brad Harris
Sent: Friday, October 30, 2015 10:20 AM
To: Hari Akunuri
Subject: Permits



Department of
**Environment &
Conservation**

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

Jeff Ridsen

From: John Czahoroski [John.Czahoroski@adenus.com]
Sent: Friday, November 6, 2015 3:26 PM
To: 'Charles Hyatt'; 'Jeff Ridsen'
Subject: FW: Repairs Made to Tall Oaks Drip Field by Tennessee Wastewater Systems, Inc.

FYI. There will not be a follow-up letter.



John Czahoroski

Operations & Maintenance Manager

Tennessee Wastewater Systems, Inc. | 851 Aviation Pkwy, Smyrna, TN 37167
Mobile: 865.809.8286 | Fax: 615.220.7207

From: Allen Rather [mailto:Allen.Rather@tn.gov]
Sent: Friday, November 06, 2015 9:40 AM
To: John Czahoroski
Cc: Billy Roach
Subject: RE: Repairs Made to Tall Oaks Drip Field by Tennessee Wastewater Systems, Inc.

This is fine John. Thanks.

From: John Czahoroski [john.czahoroski@adenus.com]
Sent: Friday, November 06, 2015 8:22 AM
To: Allen Rather
Cc: Billy Roach
Subject: RE: Repairs Made to Tall Oaks Drip Field by Tennessee Wastewater Systems, Inc.

Allen, is this email with photos I sent a sufficient response to your concerns in Tall Oaks or would you like me to follow up with an official letter also?

Thanks,

John Czahoroski
Operations & Maintenance Manager
Adenus Group, LLC
Mobile: 865-809-8286

-----Original Message-----

From: Allen Rather <Allen.Rather@tn.gov>
To: John Czahoroski <John.Czahoroski@adenus.com>, Billy Roach <Billy.Roach@tn.gov>, "william.roach@tn.gov" <william.roach@tn.gov>
Cc: 'Charles Hyatt' <charles.hyatt@adenus.com>, 'Jeff Ridsen' <Jeff.Ridsen@adenus.com>, Brad Harris <Brad.Harris@tn.gov>
Sent: Fri, 06 Nov 2015 7:34 AM
Subject: RE: Repairs Made to Tall Oaks Drip Field by Tennessee Wastewater Systems, Inc.

Thanks John. Billy will contact you in a couple of weeks to do the site inspection for the renewal of German Creek. Have a good weekend.

Allen

From: John Czahoroski [John.Czahoroski@adenus.com]
Sent: Thursday, November 05, 2015 3:29 PM
To: Allen Rather; Billy Roach; william.roach@tn.gov
Cc: 'Charles Hyatt'; 'Jeff Ridsen'
Subject: Repairs Made to Tall Oaks Drip Field by Tennessee Wastewater Systems, Inc.

*** This is an EXTERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - OIR-Security. ***

Allen, Billy:

During your inspection of the Tall Oaks drip field yesterday, November 4th, 2015 in Blount County, you found two areas that exhibited signs of a leak. This morning, both areas in the drip field were examined for leaks and the broken tubing was repaired by 12:00 noon today.

The first leak area, which was in the area of the manifold pipes, had a leak in the transition tubing between the 2-inch manifold and the drip tubing. The repair is shown in the attached photo #1.

The second leak area, which was about 25 feet from the sand filter, actually had two leaks in the drip tubing. These repairs are shown in photos #2 and #3.

I trust this response addresses the concerns you expressed about this drip field yesterday. If you have any further concerns or need more information regarding these repairs, please do not hesitate to contact me.

Sincerely,



John Czahoroski

Operations & Maintenance Manager

Tennessee Wastewater Systems, Inc. | 851 Aviation Pkwy, Smyrna, TN 37167
Mobile: 865.809.8286 | Fax: 615.220.7207

Jeff Ridsen

From: John Czahoroski [John.Czahoroski@adenus.com]
Sent: Wednesday, December 2, 2015 6:00 PM
To: 'Jeff Ridsen'
Subject: For Your TRA Report from East TN #2 of 2

Jeff, this is the rest of the email sequence concerning the repairs made to the Tall Oaks drip field in Blount County. This was my written documentation that Allen Rather considered the matter closed. There was nothing else in the month of November.



John Czahoroski

Operations & Maintenance Manager

Tennessee Wastewater Systems, Inc. | 851 Aviation Pkwy, Smyrna, TN 37167
Mobile: 865.809.8286 | Fax: 615.220.7207

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Cc: Billy Roach
Subject: RE: Repairs Made to Tall Oaks Drip Field by Tennessee Wastewater Systems, Inc.

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Cc: Billy Roach
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Allen, is this email with photos I sent a sufficient response to your concerns in Tall Oaks or would you like me to follow up with an official letter also?

Thanks,

John Czahoroski
Operations & Maintenance Manager
Adenus Group, LLC
Mobile: 865-809-8286

-----Original Message-----

From: Allen Rather <Allen.Rather@tn.gov>
To: John Czahoroski <John.Czahoroski@adenus.com>, Billy Roach <Billy.Roach@tn.gov>, "william.roach@tn.gov" <william.roach@tn.gov>
Cc: 'Charles Hyatt' <charles.hyatt@adenus.com>, 'Jeff Ridsen' <Jeff.Ridsen@adenus.com>, Brad Harris <Brad.Harris@tn.gov>
Sent: Fri, 06 Nov 2015 7:34 AM
Subject: RE: Repairs Made to Tall Oaks Drip Field by Tennessee Wastewater Systems, Inc.

Thanks John. Billy will contact you in a couple of weeks to do the site inspection for the renewal of German Creek. Have a good weekend.

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Sent: Thursday, November 05, 2015 3:29 PM
To: Allen Rather; Billy Roach; william.roach@tn.gov
Cc: 'Charles Hyatt'; 'Jeff Riden'
Subject: Repairs Made to Tall Oaks Drip Field by Tennessee Wastewater Systems, Inc.

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Allen, Billy:

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I trust this response addresses the concerns you expressed about this drip field yesterday. If you have any further concerns or need more information regarding these repairs, please do not hesitate to contact me.

Sincerely,



John Czahoroski

Operations & Maintenance Manager

Tennessee Wastewater Systems, Inc. | 851 Aviation Pkwy, Smyrna, TN 37167
Mobile: 865.809.8286 | Fax: 615.220.7207

Roy Denney

From: Brad Harris <Brad.Harris@tn.gov>
Sent: Wednesday, November 25, 2015 10:01 AM
To: Roy Denney
Subject: Automatic reply: Maple Green and Cedar Hill Permit Modifications

I will be out of the office through 11/29/15. Please contact 615-532-0761 if you need immediate attention or email Cheryl.Montoya@tn.gov.

Thanks,
Brad Harris

Roy Denney

From: Roy Denney <roy.denney@adenus.com>
Sent: Wednesday, November 25, 2015 10:01 AM
To: brad.harris@tn.gov
Cc: Jeff Riden (Jeff.Riden@adenus.com); charles.hyatt@adenus.com
Subject: Maple Green and Cedar Hill Permit Modifications
Attachments: Cedar Hill Letter.pdf; Maple Green Letter.pdf

Brad,

Please see the attached comments on behalf of Adenus and TWSI regarding the permit modifications to SOP-05039 and SOP-01028.

Thank you,

Roy


Roy Denney, P.E.
CTO

Adenus Solutions Group, LLC | 849 Aviation Pkwy, Smyrna, TN 37167
Direct: +1 615.220.7200 | Toll Free: +1 888.4.ADENUS Ext: 150 | Mobile: 615.691.2913 | Fax: 615.220.7207



Brad Harris, PE
Division of Water Resources
Tennessee Tower
312 Rosa L Parks Ave. 11th Floor
Nashville, Tennessee 37243-1102

November, 25 2015

Subject: Comments to Proposed Draft Permit SOP – 05039
Cedar Hill Treatment System

Dear Mr. Harris;

On behalf of Tennessee Wastewater Systems, Inc., we object to the reference of this facility, designed in accordance with the technical literature based on hundreds of existing systems provided by WEF and the EPA and then at the request of the Division of Water Resources (the Division) reevaluated and redesigned based on WEF FD-16, as an “experimental system”. This is a system designed and based on readily available information and utilizing well published design models and calculations agreed upon by the Division.

We disagree with the following permit modifications:

A. General Requirements

We disagree with the need for the additional monitoring as laid out in the draft permit. The rationale for the collection of the data is broad and fails to indicate why any of these monitoring parameters are relevant or how they can be applied to a land disposal system. Some insight, as to why the rate payers should be paying for the collection of data either readily available to the Division through other means or of minimal value to indicate the treatment efficiency of the system, should be given.

We discussed the necessity of an influent flow meter in a small system with a synthetic liner sitting on compacted soils with the Chief Engineer with the Division and found it to be superfluous; the current design does not include an influent flow meter. We do not feel this data will provide any meaningful data for this site.

We disagree with the need to redundantly report the effluent flow for the system.

The water purchase information is not information readily available to Tennessee Wastewater Systems, Inc (TWSI). We are not aware of the existence of a daily water usage information source; however it is within the purview of the Division to subpoena that information from the appropriate utility if such information is needed.

CBOD5 is probably a better test of the treatment efficiency and effluent quality of treatment systems treating septic tank effluent and utilizing drip disposal, however previous discussions to this end have shown no consideration by the division on this point for compliance testing as an alternative to BOD5 and Ammonia testing. As such this test provides no value to the rate payer or to the Division's compliance group. This is an extraneous and unnecessary test. Total Nitrogen is not relevant to this system. This system is utilizing drip disposal. Current information and industry guidance indicates that the level of nitrogen in drip effluent does not impact ground water quality and that over treatment may reduce the capacity of the soils to uptake nitrogen in general.

Total Suspended Solids is not a relevant to this system. Suspended solids are not a pollutant in drip irrigation. In as far as the possibility of TSS creating an issue with the operation of the equipment, the operator will monitor the operation of onsite equipment routinely. This does not require laboratory testing.

E. coli is not a relevant parameter for this system. The treated effluent is being disposed of in a drip field on a fence property with signage indicating the nature of the site. Water Level in the treatment cells is a function of operator input, flow, and rainfall. This number is expected to vary in the course of standard operation and will not provide a meaningful input.

pH and D.O. monitoring are particularly cumbersome and expensive testing that provides limit information regarding the effluent quality of the system. This added expense to monitor the quality of water in the middle of the treatment train is unnecessary.

Rainfall data is collected by numerous monitoring stations throughout the state and historical information is available to TDEC online and has been presented to Adenus before. There is no explanation given in the rational for this data collection.

Part III – Other Requirements

c. Addition of Waste Loads

This site has a permitted capacity independent of the existing service connections. TWSI will notify the Division in the event that the capacity of the system needs to be increased or as stated in the engineering report and plans should the need to construct addition treatment cells be needed. The restriction as stated arbitrarily restricts the capacity of the treatment system. Treatment flow is reported in the MOR. This additional restriction is unnecessary.

Rationale

We object to the use of the term 'experimental system'. The plans were prepared using existing data and design documents no different from any other treatment system in the state. Further, no reasoning is given for the arbitrary selection of 5 years or the prescribed battery of monitoring. The testing goes beyond the scope of a decentralized land based system.



849 Aviation Parkway
Smyrna, TN 37167

If you have any questions regarding these comments please contact myself at
roy.denney@adenus.com.

Sincerely,


Roy Denney, PE

CTO, Adenus Group, LLC

cc: Charles Hyatt, CEO, Adenus Group LLC; President Tennessee Wastewater Systems, Inc.
Jeff Riden, General Counsel, Adenus Group LLC



Brad Harris, PE
Division of Water Resources
Tennessee Tower
312 Rosa L Parks Ave. 11th Floor
Nashville, Tennessee 37243-1102

November, 25 2015

Subject: Comments to Proposed Draft Permit SOP – 01028
Maple Green Reclamation System

Dear Mr. Harris;

On behalf of Tennessee Wastewater Systems, Inc., we object to the reference of this facility, designed in accordance with the technical literature based on hundreds of existing systems provided by WEF and the EPA and then at the request of the Division of Water Resources (the Division) reevaluated and redesigned based on WEF FD-16, as an "experimental system". This is a system designed and based on readily available information and utilizing well published design models and calculations agreed upon by the Division.

The design flow for Maple Green Reclamation Facility should be 90,000 Gallons per day to reflect the total permitted soils area and treatment capacity.

We disagree with the following permit modifications:

A. General Requirements

We disagree with the need for the additional monitoring as laid out in the draft permit. The rationale for the collection of the data is broad and fails to indicate why any of these monitoring parameters are relevant or how they can be applied to a land disposal system. Some insight, as to why the rate payers should be paying for the collection of data either readily available to the Division through other means or of minimal value to indicate the treatment efficiency of the system, should be given.

We discussed the necessity of an influent flow meter in a small system with a synthetic liner sitting on compacted soils with the Chief Engineer with the Division and found it to be superfluous; the current design does not include an influent flow meter. We do not feel this data will provide any meaningful data for this site.

We disagree with the need to redundantly report the effluent flow for the system.

CBOD5 is probably a better test of the treatment efficiency and effluent quality of treatment systems treating septic tank effluent and utilizing drip disposal, however previous discussions to this end have shown no consideration by the division on this point for compliance testing

as an alternative to BOD5 and Ammonia testing. As such this test provides no value to the rate payer or to the Division's compliance group. This is an extraneous and unnecessary test. Total Nitrogen is not relevant to this system. This system is utilizing drip disposal. Current information and industry guidance indicates that the level of nitrogen in drip effluent does not impact ground water quality and that over treatment may reduce the capacity of the soils to uptake nitrogen in general.

Total Suspended Solids is not a relevant to this system. Suspended solids are not a pollutant in drip irrigation. In as far as the possibility of TSS creating an issue with the operation of the equipment, the operator will monitor the operation of onsite equipment routinely. This does not require laboratory testing.

E. coli is not a relevant parameter for this system. The treated effluent is being disposed of in a drip field on a fence property with signage indicating the nature of the site. Water Level in the treatment cells is a function of operator input, flow, and rainfall. This number is expected to vary in the course of standard operation and will not provide a meaningful input.

pH and D.O. monitoring are particularly cumbersome and expensive testing that provides limit information regarding the effluent quality of the system. This added expense to monitor the quality of water in the middle of the treatment train is unnecessary.

Rainfall data is collected by numerous monitoring stations throughout the state and historical information is available to TDEC online and has been presented to Adenus before. There is no explanation given in the rational for this data collection.

Part III – Other Requirements

c. Addition of Waste Loads

This site has a permitted capacity independent of the existing service connections. TWSI will notify the Division in the event that the capacity of the system needs to be increased or as stated in the engineering report and plans should the need to construct addition treatment cells be needed. The restriction as stated arbitrarily restricts the capacity of the treatment system. Treatment flow is reported in the MOR. This additional restriction is unnecessary.

Rationale

We object to the use of the term 'experimental system'. The plans were prepared using existing data and design documents no different from any other treatment system in the state. Further, no reasoning is given for the arbitrary selection of 5 years or the prescribed battery of monitoring. The testing goes beyond the scope of a decentralized land based system.

If you have any questions regarding these comments please contact myself at roy.denney@adenus.com.



849 Aviation Parkway
Smyrna, TN 37167

Sincerely,


Roy Denney, PE
CTO, Adenus Group, LLC

cc: Charles Hyatt, CEO, Adenus Group LLC; President Tennessee Wastewater Systems, Inc.
Jeff Ridsen, General Counsel, Adenus Group LLC