TENNESSEE Wastewater
an Aqua Utility

851 Aviation Parkway
Smyrna, TN 37167

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

Systems subject to Notice of Violations and other Corrective Orders:

Starr Crest I (NOV) – Repairs made; As built drawings provided to TDEC as requested; awaiting inspection by TDEC

Starr Crest II (NOV) – Repairs made; awaiting inspection by TDEC – Awaiting TDEC approval of new plans and permit. TWSI and HOA working out financing arrangements.

Smoky Village (NOV) – Part of 14-00136 Docket – TDEC will inspect once system upgrades are complete.

Townsend Square (NOV) – Repairs made; As built drawings provided to TDEC as requested; awaiting inspection by TDEC

Summit View – Part of the 14-00136 Docket – Awaiting final permit issuance (draft permit issued in December 2015). TDEC will inspect once system upgrades are complete.

Cedar Hill – Part of the 14-00136 Docket

Maple Green (NOV) – Part of the 14-00136 Docket – TDEC will inspect once system upgrades are complete.

- NOTE – A Joint Motion to Open a New Docket was filed in Docket 14-00136 by TWSI and the Consumer Advocate in order to expedite the resolution of Maple Green, Cedar Hill, and Smoky Village. The Motion is scheduled to be heard at the Authority Conference on August 8, 2016.

Jeff Risden

From: HAWKMS Agent <agent@hawkms.com>
Sent: Friday, July 1, 2016 4:57 PM
To: Charles Hyatt; Brian Carter; Roy Denney
Cc: Jeff Risden; Bob Pickney; Matt Pickney
Subject: TRA KPI Compliance Report for 7/1/2016 4:57:10 PM

TRA Flow KPI Report for 6/30/2016

Tracy Nichols	Permitted	Expected	Actual	% of Expected	AvgFlow	% o
Cedar Hill DCP	75000	18036	0	0.00	0.00	
Maple Green DCP	74000	39573	34530	0.87	38609.33	

Tony Smith	Permitted	Expected	Actual	% of Expected	AvgFlow	% o
Swan Harbour RSF	15800	1575	1723	1.09	1953.40	
Tall Oaks RSF	45000	12250	9430	0.77	10302.67	

Jeramy Stewart	Permitted	Expected	Actual	% of Expected	AvgFlow	% o
Starr Crest I RSF	8000	2275	3216	1.41	3127.37	
Starr Crest II BC	28000	25550	6327	0.25	7866.50	
Summit View RSF	8000	5775	4340	0.75	7260.00	

Stone Hanson	Permitted	Expected	Actual	% of Expected	AvgFlow	% o
Townsend Town Square RSF	3640	3640	4786	1.31	3024.59	

Permit #	Permittee Name	County	EPO Office	Date Sampled	Flow Month 1	Flow Month 2	Flow Month 3	Ammonia	Nitrate	E-Coli	BOD
SOP-00016	Eagle Crest Resorts	Sevier	Knoxville	5/17/2016	3870	4141	5010	ND		>2400	
SOP-00088	Hidden Springs Resort	Sevier	Knoxville	5/17/2016	17553	21328	29089	38.10			
SOP-04004	Legacy Moutain East	Sevier	Knoxville	5/17/2016	15275	14538	15296	42.70			
SOP-01093	Starr Crest II Resorts	Sevier	Knoxville	4/22/2016, 5/17/2016, 6/14/2016	5402	4047	7867	31.40		>2400	
SOP-00019	Starr Crest Resort	Sevier	Knoxville	5/17/2016	2248	2548	3299	0.60		>2400	
SOP-06035	Summit View Resort	Sevier	Knoxville	5/17/2016	5999	3957	7281	0.14		3.00	
SOP-04025	Timber Tops Rental Center	Sevier	Knoxville	5/17/2016	3322	2960	3789	0.78			
	PERMIT MAX LIMIT							REPORT	REPORT	941	46
	PERMIT FREQUENCY OF ANALYSIS							1/quarter	1/quarter	1/quarter	1/year
	PERMIT SAMPLE TYPE							grab	grab	grab	grab

I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury

Signature of Operator _____ Date 7/8/2016

License Number 15952 Phone 615-220-7200

Analysis by outside laboratory Yes Laboratory Microbac

Signature of Principal Officer _____ Date 7-13-16

Comments:
Eagle Crest - cleaned UV
Starr Crest II - Site is fenced and permit modification should be issued soon (eliminating E-Coli requirement
Starr Crest I - Site is fenced and a permit modification eliminating e-coli requirement is in process

Permit #	Permittee Name	County	EPO Office	Date Sampled	Flow Month 1	Flow Month 2	Flow Month 3	Ammonia	Nitrate	E-Coli	BOD
SOP-05070	Elk Springs Resort	Sevier	Knoxville	4/20/2016	11902	9519	9639	17.10		(4/20)>2400, (5/24)>2400, (6/14)>2400	
SOP-02023	Falling Waters	Sevier	Knoxville	4/20/2016	9721	4620	8359	24.90			
SOP-05043	King Branch Road Wastewater Facility	Sevier	Knoxville	4/20/2016	826	1336	1145	29.70		>2400	
SOP-07021	Norton Creek - Hickory Gap STP	Sevier	Knoxville	4/20/2016	102	50	30	1.05		ND	
SOP-06038	Settler's Ridge Resort	Sevier	Knoxville	4/20/2016	2508	2882	5157	1.15		ND	
SOP-05039	Smoky Village Subdivision	Sevier	Knoxville	4/20/2016	1959	1979	4320	4.87			
SOP-02049	The Highlands Chalet Resort	Sevier	Knoxville	4/20/2016	1290	498	1169	16.80			
PERMIT MAX LIMIT								REPORT	REPORT	941	48
PERMIT FREQUENCY OF ANALYSIS								1/quarter	1/quarter	1/quarter	1/year
PERMIT SAMPLE TYPE								grab	grab	grab	grab

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Signature of Operator [redacted] Date 7/8/2016

License Number 15952 Phone 615-220-7200

Analysis by outside laboratory Yes Laboratory Microbac

Signature of Principal Officer [signature] Date 7-13-16

Comments:

Elk Springs is fenced, permit application is being submitted
King Branch - cleaned UV and changed timer setting for recirculation

Permit #	Permittee Name	County	EPO Office	Date Sampled	Flow Month 1	Flow Month 2	Flow Month 3	Ammonia	Nitrate	E.Coli	BOD
SOP-03002	Black Bear Ridge Resort	Sevier	Knoxville	4/12/2016	7336	3841	8535	48			
SOP-05077	Black Bear Ridge Resort #2	Sevier	Knoxville	4/12/2016	5450	4270	6377	38			
SOP-03056	Brownlee Commercial Building	Blount	Knoxville	4/12/2016	858	894	894	42			
SOP-05014	Fairway Vistas	Blount	Knoxville			0	0				June10/15.8
SOP-05045	German Creek Resort	Grainger	Knoxville	4/19/2016	8010	7323	8177	7	7.200		
SOP-05026	Grainger's Landing Condominiums	Grainger	Knoxville	4/19/2016	85	85	85	ND			16.700
SOP-04045	Legacy Preserve Resort Subdivision	Sevier	Knoxville	4/12/2016	768	9290	9849	30		ND	
SOP-03021	Smoky Cove Subdivision	Sevier	Knoxville	4/12/2016	11495	9419	8327	35			
SOP-05072	Sugar Loaf Ridge	Sevier	Knoxville	4/12/2016	400	353	840	4			
SOP-05003	TN State Bank - Wears Valley Branch	Sevier	Knoxville	4/19/2016	200	270	470	ND		60.000	
SOP-99016	Townsend Town Square	Blount	Knoxville	4/12/2016	1604	2363	9363	4			ND
SOP-04085	Trillium Cove Development	Blount	Knoxville	4/12/2016	2184	3250	9278	3		2400.000	
SOP-03031	Turner's Landing Subdivision	Hamblen	Knoxville	4/19/2016	2022	6099	6900	1			

PERMIT MAX LIMIT	REPORT	REPORT	941	46
PERMIT FREQUENCY OF ANALYSIS	1/quarter	1/quarter	1/quarter	1/year
PERMIT SAMPLE TYPE	grab	grab	grab	grab

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Signature of Operator [redacted] Date 7/8/2016

License Number 14079 Phone 615-220-7200

Analysis by outside laboratory Yes Laboratory Microbac

Signature of Principal Officer C A. Ao Date 7-13-16

Comments:
Fairway Vistas not in operation
Trillium Cove - System in process of upgrade/new control system

Permit #	Permittee Name	County	EPO Office	Date Sampled	Flow Month 1	Flow Month 2	Flow Month 3	Ammonia	Nitrate	E-Coli	BOD
SOP-11020	Tennessee Wastewater Systems, Inc. - Bluff at Bradberry Farms	Montgomery	Nashville	5/24/2016	1400	1900	1700	9.9	3.3		8
SOP-11014	Tennessee Wastewater Systems, Inc. - Meadowlands	Montgomery	Nashville	5/24/2016	1400	1100	1200	1	15		BDL
SOP-02014	Tennessee Wastewater Systems, Inc. - Muddy Branch	Montgomery	Nashville		No Discharge	No Discharge	No Discharge				
SOP-02038	Tennessee Wastewater Systems, Inc. - Southridge Estates Subdivision	Montgomery	Nashville		27000	28000	26500				
SOP-97007	Robertson County Board of Education - Kirkle Elementary School	Robertson	Nashville	5/24/2016	1500	1600	500	BDL			BDL
SOP-02020	Tennessee Wastewater Systems, Inc. - Cedar Hill Baptist Church	Robertson	Nashville	5/24/2016	50	50	50	1.2			
SOP-05039	Tennessee Wastewater Systems, Inc. - Cedar Hill Treatment Facility	Robertson	Nashville		No Discharge	No Discharge	No Discharge				
SOP-05057	Tennessee Wastewater Systems, Inc. - Cross Plains Treatment Facility	Robertson	Nashville		No Discharge	No Discharge	No Discharge				
SOP-01017	Tennessee Wastewater Systems, Inc. - Herndon's Bluegrass Market	Robertson	Nashville	5/24/2016	1000	1200	1000	18			
SOP-04051	Tennessee Wastewater Systems, Inc. - Huffines	Robertson	Nashville	5/24/2016	440	990	780	1.7			
SOP-01026	Tennessee Wastewater Systems, Inc. - Maple Green	Robertson	Nashville	5/24/2016	43400	44900	38700	29			
SOP-01029	Tennessee Wastewater Systems, Inc. - Pebble Brook Golf Course	Robertson	Nashville	6/8/2016	4300	5000	4500	0.1		BDL	
SOP-03015	Tennessee Wastewater Systems, Inc. - Sunnybrook Farms	Robertson	Nashville	5/24/2016	5200	6900	4400	BDL			
SOP-01006	Tennessee Wastewater Systems, Inc. - Dyers Hollow Treatment Facility	Stewart	Nashville	5/19/2016	7600	7500	8200	0.18			11
SOP-04022	Tennessee Wastewater Systems, Inc. - Deshea Creek	Sumner	Nashville	5/24/2016	950	1250	1100	BDL			BDL
SOP-98025	Lojac Enterprises - River Road Asphalt Plant	Davidson	Nashville	5/25/2016	50	50	50	8.2			27
	PERMIT MAX LIMIT							REPORT	REPORT	941	46
	PERMIT FREQUENCY OF ANALYSIS							1/quarter	1/quarter	1/quarter	1/year
	PERMIT SAMPLE TYPE							grab	grab	grab	grab

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Signature of Operator _____ Date 7/8/2016

License Number 15046 Phone 615-220-7200

Analysis by outside laboratory Yes Laboratory Microbac

Signature of Principal Officer _____ Date 7-13-16

Permit #	Permittee Name	County	EPO Office	Date Sampled	Flow Month 1	Flow Month 2	Flow Month 3	Ammonia	Nitrate	E.Coli	BOD
SOP-05051	Brigadoon Resort	Roane	Knoxville	4/11/2016	319	1181	0	2.60		26	
SOP-01024	Browning Subdivision	Knox	Knoxville	4/6/2016	520	810	560	0.47		nd	
SOP-05033	Griffits Mill Subdivision	Blount	Knoxville	5/9/2016	1750	1815	1612	14.30			
SOP-01009	Jackson Bend Subdivision	Blount	Knoxville	4/7/2016	3297	4559	5177	0.26			
SOP-05071	Lowes Ferry Landing	Blount	Knoxville	4/6/2016	4156	4271	5166	4.32			
SOP-99053	Swan Harbour Subdivision	Roane	Knoxville	4/6/2016	2350	2239	1853	nd			3.1
SOP-99024	Tall Oaks Subdivision	Blount	Knoxville	4/7/2016	9943	9699	10302	0.58			
SOP-07033	The Reserve on the TN River	Blount	Knoxville	4/7/2016	75	87	73	7.37			
SOP-99050	Windsor Pointe Subdivision	Campbell	Knoxville	4/6/2016	667	829	805	nd		980	
SOP-04047	Wyndsong Subdivision	Blount	Knoxville	4/7/2016	312	208	216	0.26		nd	
PERMIT MAX LIMIT								REPORT	REPORT	941	45.0
PERMIT FREQUENCY OF ANALYSIS								1/quarter	1/quarter	1/quarter	1/year
PERMIT SAMPLE TYPE								grab	grab	grab	grab

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Signature of Operator [redacted] Date 7/8/2016

License Number 15279 Phone 615-220-7200

Analysis by outside laboratory Yes Laboratory Microbac

Signature of Principal Officer [signature] Date 7-13-16

Jeff Risden

From: Roy Denney
Sent: Friday, August 5, 2016 10:10 AM
To: Jeff Risden
Subject: FW: Summit View Starr Crest II

From: Roy Denney
Sent: Wednesday, July 20, 2016 11:09 AM
To: 'George Garden' <George.Garden@tn.gov>
Subject: Summit View Starr Crest II

George,

I know you are at the conference this week, but I was hoping you knew the status of or knew who knows the status of the Summit View (SOP-06035) and Starr Crest II (SOP-01033) permits. We are three months out on additional data sent in on Starr Crest. We are three months after the public hearing on Summit View and almost one year out on the application.

Thanks,

Roy

Jeff Risden

From: Roy Denney
Sent: Friday, August 5, 2016 10:11 AM
To: Jeff Risden
Subject: FW: Summit View Starr Crest II

From: George Garden [mailto:George.Garden@tn.gov]
Sent: Thursday, July 21, 2016 9:15 AM
To: Roy Denney <Roy.Denney@Adenus.com>
Subject: Re: Summit View Starr Crest II

I have the plans with me in Memphis today to review.

Sent from my iPhone
George Garden, PE BCEE
Division of Water Resources

On Jul 20, 2016, at 11:08 AM, Roy Denney <Roy.Denney@Adenus.com> wrote:

> George,
>
> I know you are at the conference this week, but I was hoping you knew the status of or knew who knows the status of the Summit View (SOP-06035) and Starr Crest II (SOP-01033) permits. We are three months out on additional data sent in on Starr Crest. We are three months after the public hearing on Summit View and almost one year out on the application.
>
> Thanks,
>
> Roy

Jeff Risden

From: Roy Denney
Sent: Friday, August 5, 2016 10:10 AM
To: Jeff Risden
Subject: FW: 160304A_Denny_Summit View
Attachments: 2015.txt; 2016.txt

Importance: High

From: George Garden [mailto:George.Garden@tn.gov]
Sent: Wednesday, July 06, 2016 7:52 AM
To: Roy Denney <Roy.Denney@Adenus.com>
Subject: FW: 160304A_Denny_Summit View
Importance: High

We are trying to answer the public hearing inquiries. One of the contentions is that low flow shower heads and other water saving fixtures should have reduced flows since last summer. The attached sent via the email below are the latest flow data that I have. Can you send the 2016 file up to date? The attached goes through 3/2/2016. Thanks.

I am sure that on Friday that there will be questions on the differences in the meter and the MORs and DMRs during the overlapping and previous time period. I am assuming that the meter readings being reported on a daily basis are the basis for current DMRs and MORs and are accurate.

From: Roy Denney [mailto:Roy.Denney@Adenus.com]
Sent: Friday, March 04, 2016 3:54 PM
To: George Garden
Subject: 160304A_Denny_Summit View

Here are the full logs up to date.

Roy

01/01/2015,Rainfall,000.00,inches,Supply Flow,008200,Gallons,Return Flow,00700,Gallons,Total Discharged,007500,Gallons,
01/02/2015,Rainfall,000.00,inches,Supply Flow,010890,Gallons,Return Flow,01080,Gallons,Total Discharged,009810,Gallons,
01/03/2015,Rainfall,000.00,inches,Supply Flow,008030,Gallons,Return Flow,00740,Gallons,Total Discharged,007290,Gallons,
01/04/2015,Rainfall,000.00,inches,Supply Flow,005520,Gallons,Return Flow,00510,Gallons,Total Discharged,005010,Gallons,
01/05/2015,Rainfall,000.00,inches,Supply Flow,002810,Gallons,Return Flow,00230,Gallons,Total Discharged,002580,Gallons,
01/06/2015,Rainfall,000.00,inches,Supply Flow,001740,Gallons,Return Flow,00130,Gallons,Total Discharged,001610,Gallons,
01/07/2015,Rainfall,000.00,inches,Supply Flow,001110,Gallons,Return Flow,00080,Gallons,Total Discharged,001030,Gallons,
01/08/2015,Rainfall,000.00,inches,Supply Flow,000010,Gallons,Return Flow,00000,Gallons,Total Discharged,000010,Gallons,
01/09/2015,Rainfall,000.00,inches,Supply Flow,001850,Gallons,Return Flow,00050,Gallons,Total Discharged,001800,Gallons,
01/10/2015,Rainfall,000.00,inches,Supply Flow,002980,Gallons,Return Flow,00270,Gallons,Total Discharged,002710,Gallons,
01/11/2015,Rainfall,000.00,inches,Supply Flow,003020,Gallons,Return Flow,00180,Gallons,Total Discharged,002840,Gallons,
01/12/2015,Rainfall,000.00,inches,Supply Flow,003350,Gallons,Return Flow,00240,Gallons,Total Discharged,003110,Gallons,
01/13/2015,Rainfall,000.00,inches,Supply Flow,000530,Gallons,Return Flow,00030,Gallons,Total Discharged,000500,Gallons,
01/14/2015,Rainfall,000.00,inches,Supply Flow,000560,Gallons,Return Flow,00040,Gallons,Total Discharged,000520,Gallons,
01/15/2015,Rainfall,000.00,inches,Supply Flow,001020,Gallons,Return Flow,00060,Gallons,Total Discharged,000960,Gallons,
01/16/2015,Rainfall,000.00,inches,Supply Flow,002230,Gallons,Return Flow,00170,Gallons,Total Discharged,002060,Gallons,
01/17/2015,Rainfall,000.00,inches,Supply Flow,000000,Gallons,Return Flow,00000,Gallons,Total Discharged,000000,Gallons,
01/18/2015,Rainfall,000.00,inches,Supply Flow,002770,Gallons,Return Flow,00230,Gallons,Total Discharged,002540,Gallons,
01/19/2015,Rainfall,000.00,inches,Supply Flow,002770,Gallons,Return Flow,00200,Gallons,Total Discharged,002570,Gallons,
01/20/2015,Rainfall,000.00,inches,Supply Flow,001140,Gallons,Return Flow,00090,Gallons,Total Discharged,001050,Gallons,
01/21/2015,Rainfall,000.00,inches,Supply Flow,001710,Gallons,Return Flow,00140,Gallons,Total Discharged,001570,Gallons,
01/22/2015,Rainfall,000.00,inches,Supply Flow,000000,Gallons,Return Flow,00000,Gallons,Total Discharged,000000,Gallons,
01/23/2015,Rainfall,000.00,inches,Supply Flow,000570,Gallons,Return Flow,00030,Gallons,Total Discharged,000540,Gallons,
01/24/2015,Rainfall,000.00,inches,Supply Flow,001120,Gallons,Return Flow,00050,Gallons,Total Discharged,001070,Gallons,

01/25/2015,Rainfall,000.00,inches,Supply Flow,003830,Gallons,Return Flow,00070,Gallons,Total Discharged,003760,Gallons,
01/26/2015,Rainfall,000.00,inches,Supply Flow,004640,Gallons,Return Flow,00430,Gallons,Total Discharged,004210,Gallons,
01/27/2015,Rainfall,000.00,inches,Supply Flow,002380,Gallons,Return Flow,00050,Gallons,Total Discharged,002330,Gallons,
01/28/2015,Rainfall,000.00,inches,Supply Flow,000000,Gallons,Return Flow,00000,Gallons,Total Discharged,000000,Gallons,
01/29/2015,Rainfall,000.00,inches,Supply Flow,001150,Gallons,Return Flow,00070,Gallons,Total Discharged,001080,Gallons,
01/30/2015,Rainfall,000.00,inches,Supply Flow,000080,Gallons,Return Flow,00000,Gallons,Total Discharged,000080,Gallons,
01/31/2015,Rainfall,000.00,inches,Supply Flow,000530,Gallons,Return Flow,00030,Gallons,Total Discharged,000500,Gallons,
02/01/2015,Rainfall,000.00,inches,Supply Flow,000520,Gallons,Return Flow,00020,Gallons,Total Discharged,000500,Gallons,
02/02/2015,Rainfall,000.00,inches,Supply Flow,001070,Gallons,Return Flow,00060,Gallons,Total Discharged,001010,Gallons,
02/03/2015,Rainfall,000.00,inches,Supply Flow,002860,Gallons,Return Flow,00160,Gallons,Total Discharged,002700,Gallons,
02/04/2015,Rainfall,000.00,inches,Supply Flow,002300,Gallons,Return Flow,00120,Gallons,Total Discharged,002180,Gallons,
02/05/2015,Rainfall,000.00,inches,Supply Flow,002240,Gallons,Return Flow,00150,Gallons,Total Discharged,002090,Gallons,
02/06/2015,Rainfall,000.00,inches,Supply Flow,002210,Gallons,Return Flow,00150,Gallons,Total Discharged,002060,Gallons,
02/07/2015,Rainfall,000.00,inches,Supply Flow,003510,Gallons,Return Flow,00180,Gallons,Total Discharged,003330,Gallons,
02/08/2015,Rainfall,000.00,inches,Supply Flow,005310,Gallons,Return Flow,00240,Gallons,Total Discharged,005070,Gallons,
02/09/2015,Rainfall,000.00,inches,Supply Flow,004750,Gallons,Return Flow,00460,Gallons,Total Discharged,004290,Gallons,
02/10/2015,Rainfall,000.00,inches,Supply Flow,002230,Gallons,Return Flow,00150,Gallons,Total Discharged,002080,Gallons,
02/11/2015,Rainfall,000.00,inches,Supply Flow,001140,Gallons,Return Flow,00080,Gallons,Total Discharged,001060,Gallons,
02/12/2015,Rainfall,000.00,inches,Supply Flow,001160,Gallons,Return Flow,00070,Gallons,Total Discharged,001090,Gallons,
02/13/2015,Rainfall,000.00,inches,Supply Flow,001170,Gallons,Return Flow,00090,Gallons,Total Discharged,001080,Gallons,
02/14/2015,Rainfall,000.00,inches,Supply Flow,005300,Gallons,Return Flow,00430,Gallons,Total Discharged,004870,Gallons,
02/15/2015,Rainfall,000.00,inches,Supply Flow,013130,Gallons,Return Flow,01370,Gallons,Total Discharged,011760,Gallons,
02/16/2015,Rainfall,000.00,inches,Supply Flow,012500,Gallons,Return Flow,01320,Gallons,Total Discharged,011180,Gallons,
02/17/2015,Rainfall,000.00,inches,Supply Flow,005960,Gallons,Return Flow,00520,Gallons,Total Discharged,005440,Gallons,

02/18/2015,Rainfall,000.00,inches,Supply Flow,003590,Gallons,Return Flow,00280,Gallons,Total Discharged,003310,Gallons,
02/19/2015,Rainfall,000.00,inches,Supply Flow,002980,Gallons,Return Flow,00160,Gallons,Total Discharged,002820,Gallons,
02/20/2015,Rainfall,000.00,inches,Supply Flow,004860,Gallons,Return Flow,00240,Gallons,Total Discharged,004620,Gallons,
02/21/2015,Rainfall,000.00,inches,Supply Flow,004920,Gallons,Return Flow,00120,Gallons,Total Discharged,004800,Gallons,
02/22/2015,Rainfall,000.00,inches,Supply Flow,010260,Gallons,Return Flow,00970,Gallons,Total Discharged,009290,Gallons,
02/23/2015,Rainfall,000.00,inches,Supply Flow,005600,Gallons,Return Flow,00460,Gallons,Total Discharged,005140,Gallons,
02/24/2015,Rainfall,000.00,inches,Supply Flow,005470,Gallons,Return Flow,00370,Gallons,Total Discharged,005100,Gallons,
02/25/2015,Rainfall,000.00,inches,Supply Flow,003800,Gallons,Return Flow,00340,Gallons,Total Discharged,003460,Gallons,
02/26/2015,Rainfall,000.00,inches,Supply Flow,004240,Gallons,Return Flow,00310,Gallons,Total Discharged,003930,Gallons,
02/27/2015,Rainfall,000.00,inches,Supply Flow,003750,Gallons,Return Flow,00300,Gallons,Total Discharged,003450,Gallons,
02/28/2015,Rainfall,000.00,inches,Supply Flow,004370,Gallons,Return Flow,00350,Gallons,Total Discharged,004020,Gallons,
03/01/2015,Rainfall,000.00,inches,Supply Flow,004970,Gallons,Return Flow,00410,Gallons,Total Discharged,004560,Gallons,
03/02/2015,Rainfall,000.00,inches,Supply Flow,004950,Gallons,Return Flow,00390,Gallons,Total Discharged,004560,Gallons,
03/03/2015,Rainfall,000.00,inches,Supply Flow,004220,Gallons,Return Flow,00340,Gallons,Total Discharged,003880,Gallons,
03/04/2015,Rainfall,000.00,inches,Supply Flow,002350,Gallons,Return Flow,00170,Gallons,Total Discharged,002180,Gallons,
03/05/2015,Rainfall,000.00,inches,Supply Flow,001680,Gallons,Return Flow,00110,Gallons,Total Discharged,001570,Gallons,
03/06/2015,Rainfall,000.00,inches,Supply Flow,006630,Gallons,Return Flow,00620,Gallons,Total Discharged,006010,Gallons,
03/07/2015,Rainfall,000.00,inches,Supply Flow,001760,Gallons,Return Flow,00130,Gallons,Total Discharged,001630,Gallons,
03/08/2015,Rainfall,000.00,inches,Supply Flow,002380,Gallons,Return Flow,00180,Gallons,Total Discharged,002200,Gallons,
03/09/2015,Rainfall,000.00,inches,Supply Flow,004810,Gallons,Return Flow,00410,Gallons,Total Discharged,004400,Gallons,
03/10/2015,Rainfall,000.00,inches,Supply Flow,004220,Gallons,Return Flow,00420,Gallons,Total Discharged,003800,Gallons,
03/11/2015,Rainfall,000.00,inches,Supply Flow,006360,Gallons,Return Flow,00620,Gallons,Total Discharged,005740,Gallons,
03/12/2015,Rainfall,000.00,inches,Supply Flow,007670,Gallons,Return Flow,00740,Gallons,Total Discharged,006930,Gallons,
03/13/2015,Rainfall,000.00,inches,Supply Flow,003760,Gallons,Return Flow,00330,Gallons,Total Discharged,003430,Gallons,

03/14/2015,Rainfall,000.00,inches,Supply Flow,008420,Gallons,Return Flow,00760,Gallons,Total Discharged,007660,Gallons,
03/15/2015,Rainfall,000.00,inches,Supply Flow,009080,Gallons,Return Flow,00830,Gallons,Total Discharged,008250,Gallons,
03/16/2015,Rainfall,000.00,inches,Supply Flow,006360,Gallons,Return Flow,00640,Gallons,Total Discharged,005720,Gallons,
03/17/2015,Rainfall,000.00,inches,Supply Flow,004420,Gallons,Return Flow,00410,Gallons,Total Discharged,004010,Gallons,
03/18/2015,Rainfall,000.00,inches,Supply Flow,003940,Gallons,Return Flow,00350,Gallons,Total Discharged,003590,Gallons,
03/19/2015,Rainfall,000.00,inches,Supply Flow,005680,Gallons,Return Flow,00510,Gallons,Total Discharged,005170,Gallons,
03/20/2015,Rainfall,000.00,inches,Supply Flow,005970,Gallons,Return Flow,00490,Gallons,Total Discharged,005480,Gallons,
03/21/2015,Rainfall,000.00,inches,Supply Flow,006960,Gallons,Return Flow,00620,Gallons,Total Discharged,006340,Gallons,
03/22/2015,Rainfall,000.00,inches,Supply Flow,005830,Gallons,Return Flow,00550,Gallons,Total Discharged,005280,Gallons,
03/23/2015,Rainfall,000.00,inches,Supply Flow,006510,Gallons,Return Flow,00660,Gallons,Total Discharged,005850,Gallons,
03/24/2015,Rainfall,000.00,inches,Supply Flow,006640,Gallons,Return Flow,00670,Gallons,Total Discharged,005970,Gallons,
03/25/2015,Rainfall,000.00,inches,Supply Flow,006770,Gallons,Return Flow,00720,Gallons,Total Discharged,006050,Gallons,
03/26/2015,Rainfall,000.00,inches,Supply Flow,005300,Gallons,Return Flow,00570,Gallons,Total Discharged,004730,Gallons,
03/27/2015,Rainfall,000.00,inches,Supply Flow,006900,Gallons,Return Flow,00770,Gallons,Total Discharged,006130,Gallons,
03/28/2015,Rainfall,000.00,inches,Supply Flow,007310,Gallons,Return Flow,00790,Gallons,Total Discharged,006520,Gallons,
03/29/2015,Rainfall,000.00,inches,Supply Flow,010050,Gallons,Return Flow,01130,Gallons,Total Discharged,008920,Gallons,
03/30/2015,Rainfall,000.00,inches,Supply Flow,008580,Gallons,Return Flow,00960,Gallons,Total Discharged,007620,Gallons,
03/31/2015,Rainfall,000.00,inches,Supply Flow,010800,Gallons,Return Flow,01190,Gallons,Total Discharged,009610,Gallons,
04/01/2015,Rainfall,000.00,inches,Supply Flow,006550,Gallons,Return Flow,00730,Gallons,Total Discharged,005820,Gallons,
04/02/2015,Rainfall,000.00,inches,Supply Flow,007360,Gallons,Return Flow,00790,Gallons,Total Discharged,006570,Gallons,
04/03/2015,Rainfall,000.00,inches,Supply Flow,005320,Gallons,Return Flow,00580,Gallons,Total Discharged,004740,Gallons,
04/04/2015,Rainfall,000.00,inches,Supply Flow,008650,Gallons,Return Flow,00970,Gallons,Total Discharged,007680,Gallons,
04/05/2015,Rainfall,000.00,inches,Supply Flow,012610,Gallons,Return Flow,01490,Gallons,Total Discharged,011120,Gallons,
04/06/2015,Rainfall,000.00,inches,Supply Flow,010800,Gallons,Return Flow,01220,Gallons,Total Discharged,009580,Gallons,

04/07/2015,Rainfall,000.00,inches,Supply Flow,006460,Gallons,Return Flow,00660,Gallons,Total Discharged,005800,Gallons,
04/08/2015,Rainfall,000.00,inches,Supply Flow,010450,Gallons,Return Flow,01130,Gallons,Total Discharged,009320,Gallons,
04/09/2015,Rainfall,000.00,inches,Supply Flow,010850,Gallons,Return Flow,01220,Gallons,Total Discharged,009630,Gallons,
04/10/2015,Rainfall,000.00,inches,Supply Flow,008410,Gallons,Return Flow,00870,Gallons,Total Discharged,007540,Gallons,
04/11/2015,Rainfall,000.00,inches,Supply Flow,009250,Gallons,Return Flow,00950,Gallons,Total Discharged,008300,Gallons,
04/12/2015,Rainfall,000.00,inches,Supply Flow,010200,Gallons,Return Flow,01100,Gallons,Total Discharged,009100,Gallons,
04/13/2015,Rainfall,000.00,inches,Supply Flow,008370,Gallons,Return Flow,00960,Gallons,Total Discharged,007410,Gallons,
04/14/2015,Rainfall,000.00,inches,Supply Flow,003990,Gallons,Return Flow,00370,Gallons,Total Discharged,003620,Gallons,
04/15/2015,Rainfall,000.00,inches,Supply Flow,003420,Gallons,Return Flow,00300,Gallons,Total Discharged,003120,Gallons,
04/16/2015,Rainfall,000.00,inches,Supply Flow,004350,Gallons,Return Flow,00400,Gallons,Total Discharged,003950,Gallons,
04/17/2015,Rainfall,000.00,inches,Supply Flow,002830,Gallons,Return Flow,00240,Gallons,Total Discharged,002590,Gallons,
04/18/2015,Rainfall,000.00,inches,Supply Flow,005290,Gallons,Return Flow,00450,Gallons,Total Discharged,004840,Gallons,
04/19/2015,Rainfall,000.00,inches,Supply Flow,009370,Gallons,Return Flow,00910,Gallons,Total Discharged,008460,Gallons,
04/20/2015,Rainfall,000.00,inches,Supply Flow,008440,Gallons,Return Flow,00840,Gallons,Total Discharged,007600,Gallons,
04/21/2015,Rainfall,000.00,inches,Supply Flow,005470,Gallons,Return Flow,00550,Gallons,Total Discharged,004920,Gallons,
04/22/2015,Rainfall,000.00,inches,Supply Flow,001810,Gallons,Return Flow,00120,Gallons,Total Discharged,001690,Gallons,
04/23/2015,Rainfall,000.00,inches,Supply Flow,002080,Gallons,Return Flow,00150,Gallons,Total Discharged,001930,Gallons,
04/24/2015,Rainfall,000.00,inches,Supply Flow,001690,Gallons,Return Flow,00090,Gallons,Total Discharged,001600,Gallons,
04/25/2015,Rainfall,000.00,inches,Supply Flow,001560,Gallons,Return Flow,00110,Gallons,Total Discharged,001450,Gallons,
04/26/2015,Rainfall,000.00,inches,Supply Flow,004640,Gallons,Return Flow,00410,Gallons,Total Discharged,004230,Gallons,
04/27/2015,Rainfall,000.00,inches,Supply Flow,006990,Gallons,Return Flow,00640,Gallons,Total Discharged,006350,Gallons,
04/28/2015,Rainfall,000.00,inches,Supply Flow,004440,Gallons,Return Flow,00390,Gallons,Total Discharged,004050,Gallons,
04/29/2015,Rainfall,000.00,inches,Supply Flow,002220,Gallons,Return Flow,00180,Gallons,Total Discharged,002040,Gallons,
04/30/2015,Rainfall,000.00,inches,Supply Flow,001910,Gallons,Return Flow,00140,Gallons,Total Discharged,001770,Gallons,

05/01/2015,Rainfall,000.00,inches,Supply Flow,002390,Gallons,Return Flow,00190,Gallons,Total Discharged,002200,Gallons,
05/02/2015,Rainfall,000.00,inches,Supply Flow,002330,Gallons,Return Flow,00180,Gallons,Total Discharged,002150,Gallons,
05/03/2015,Rainfall,000.00,inches,Supply Flow,004460,Gallons,Return Flow,00380,Gallons,Total Discharged,004080,Gallons,
05/04/2015,Rainfall,000.00,inches,Supply Flow,003370,Gallons,Return Flow,00280,Gallons,Total Discharged,003090,Gallons,
05/05/2015,Rainfall,000.00,inches,Supply Flow,002900,Gallons,Return Flow,00220,Gallons,Total Discharged,002680,Gallons,
05/06/2015,Rainfall,000.00,inches,Supply Flow,002520,Gallons,Return Flow,00210,Gallons,Total Discharged,002310,Gallons,
05/07/2015,Rainfall,000.00,inches,Supply Flow,004060,Gallons,Return Flow,00350,Gallons,Total Discharged,003710,Gallons,
05/08/2015,Rainfall,000.00,inches,Supply Flow,002550,Gallons,Return Flow,00190,Gallons,Total Discharged,002360,Gallons,
05/09/2015,Rainfall,000.00,inches,Supply Flow,002500,Gallons,Return Flow,00170,Gallons,Total Discharged,002330,Gallons,
05/10/2015,Rainfall,000.00,inches,Supply Flow,002590,Gallons,Return Flow,00220,Gallons,Total Discharged,002370,Gallons,
05/11/2015,Rainfall,000.00,inches,Supply Flow,004510,Gallons,Return Flow,00380,Gallons,Total Discharged,004130,Gallons,
05/12/2015,Rainfall,000.00,inches,Supply Flow,002050,Gallons,Return Flow,00150,Gallons,Total Discharged,001900,Gallons,
05/13/2015,Rainfall,000.00,inches,Supply Flow,002630,Gallons,Return Flow,00210,Gallons,Total Discharged,002420,Gallons,
05/14/2015,Rainfall,000.00,inches,Supply Flow,002110,Gallons,Return Flow,00180,Gallons,Total Discharged,001930,Gallons,
05/15/2015,Rainfall,000.00,inches,Supply Flow,002590,Gallons,Return Flow,00200,Gallons,Total Discharged,002390,Gallons,
05/16/2015,Rainfall,000.00,inches,Supply Flow,003140,Gallons,Return Flow,00230,Gallons,Total Discharged,002910,Gallons,
05/17/2015,Rainfall,000.00,inches,Supply Flow,004750,Gallons,Return Flow,00380,Gallons,Total Discharged,004370,Gallons,
05/18/2015,Rainfall,000.00,inches,Supply Flow,004880,Gallons,Return Flow,00420,Gallons,Total Discharged,004460,Gallons,
05/19/2015,Rainfall,000.00,inches,Supply Flow,002800,Gallons,Return Flow,00220,Gallons,Total Discharged,002580,Gallons,
05/20/2015,Rainfall,000.00,inches,Supply Flow,002690,Gallons,Return Flow,00220,Gallons,Total Discharged,002470,Gallons,
05/21/2015,Rainfall,000.00,inches,Supply Flow,002680,Gallons,Return Flow,00190,Gallons,Total Discharged,002490,Gallons,
05/22/2015,Rainfall,000.00,inches,Supply Flow,003300,Gallons,Return Flow,00250,Gallons,Total Discharged,003050,Gallons,
05/23/2015,Rainfall,000.00,inches,Supply Flow,002250,Gallons,Return Flow,00170,Gallons,Total Discharged,002080,Gallons,
05/24/2015,Rainfall,000.00,inches,Supply Flow,007670,Gallons,Return Flow,00660,Gallons,Total Discharged,007010,Gallons,

05/25/2015,Rainfall,000.00,inches,Supply Flow,011610,Gallons,Return Flow,01080,Gallons,Total Discharged,010530,Gallons,
05/26/2015,Rainfall,000.00,inches,Supply Flow,008550,Gallons,Return Flow,00810,Gallons,Total Discharged,007740,Gallons,
05/27/2015,Rainfall,000.00,inches,Supply Flow,005170,Gallons,Return Flow,00450,Gallons,Total Discharged,004720,Gallons,
05/28/2015,Rainfall,000.00,inches,Supply Flow,004650,Gallons,Return Flow,00390,Gallons,Total Discharged,004260,Gallons,
05/29/2015,Rainfall,000.00,inches,Supply Flow,005870,Gallons,Return Flow,00470,Gallons,Total Discharged,005400,Gallons,
05/30/2015,Rainfall,000.00,inches,Supply Flow,005660,Gallons,Return Flow,00460,Gallons,Total Discharged,005200,Gallons,
05/31/2015,Rainfall,000.00,inches,Supply Flow,009930,Gallons,Return Flow,01000,Gallons,Total Discharged,008930,Gallons,
06/01/2015,Rainfall,000.00,inches,Supply Flow,008480,Gallons,Return Flow,00790,Gallons,Total Discharged,007690,Gallons,
06/02/2015,Rainfall,000.00,inches,Supply Flow,006600,Gallons,Return Flow,00590,Gallons,Total Discharged,006010,Gallons,
06/03/2015,Rainfall,000.00,inches,Supply Flow,003600,Gallons,Return Flow,00310,Gallons,Total Discharged,003290,Gallons,
06/04/2015,Rainfall,000.00,inches,Supply Flow,003590,Gallons,Return Flow,00270,Gallons,Total Discharged,003320,Gallons,
06/05/2015,Rainfall,000.00,inches,Supply Flow,004760,Gallons,Return Flow,00410,Gallons,Total Discharged,004350,Gallons,
06/06/2015,Rainfall,000.00,inches,Supply Flow,004480,Gallons,Return Flow,00340,Gallons,Total Discharged,004140,Gallons,
06/07/2015,Rainfall,000.00,inches,Supply Flow,008530,Gallons,Return Flow,00830,Gallons,Total Discharged,007700,Gallons,
06/08/2015,Rainfall,000.00,inches,Supply Flow,005280,Gallons,Return Flow,00450,Gallons,Total Discharged,004830,Gallons,
06/09/2015,Rainfall,000.00,inches,Supply Flow,007660,Gallons,Return Flow,00670,Gallons,Total Discharged,006990,Gallons,
06/10/2015,Rainfall,000.00,inches,Supply Flow,009310,Gallons,Return Flow,00840,Gallons,Total Discharged,008470,Gallons,
06/11/2015,Rainfall,000.00,inches,Supply Flow,008270,Gallons,Return Flow,00710,Gallons,Total Discharged,007560,Gallons,
06/12/2015,Rainfall,000.00,inches,Supply Flow,007250,Gallons,Return Flow,00680,Gallons,Total Discharged,006570,Gallons,
06/13/2015,Rainfall,000.00,inches,Supply Flow,009710,Gallons,Return Flow,00940,Gallons,Total Discharged,008770,Gallons,
06/14/2015,Rainfall,000.00,inches,Supply Flow,011500,Gallons,Return Flow,01140,Gallons,Total Discharged,010360,Gallons,
06/15/2015,Rainfall,000.00,inches,Supply Flow,007230,Gallons,Return Flow,00670,Gallons,Total Discharged,006560,Gallons,
06/16/2015,Rainfall,000.00,inches,Supply Flow,007830,Gallons,Return Flow,00730,Gallons,Total Discharged,007100,Gallons,
06/17/2015,Rainfall,000.00,inches,Supply Flow,009050,Gallons,Return Flow,00870,Gallons,Total Discharged,008180,Gallons,

06/18/2015,Rainfall,000.00,inches,Supply Flow,009670,Gallons,Return Flow,00940,Gallons,Total Discharged,008730,Gallons,
06/19/2015,Rainfall,000.00,inches,Supply Flow,011020,Gallons,Return Flow,01150,Gallons,Total Discharged,009870,Gallons,
06/20/2015,Rainfall,000.00,inches,Supply Flow,010540,Gallons,Return Flow,01050,Gallons,Total Discharged,009490,Gallons,
06/21/2015,Rainfall,000.00,inches,Supply Flow,009320,Gallons,Return Flow,00920,Gallons,Total Discharged,008400,Gallons,
06/22/2015,Rainfall,000.00,inches,Supply Flow,008460,Gallons,Return Flow,00820,Gallons,Total Discharged,007640,Gallons,
06/23/2015,Rainfall,000.00,inches,Supply Flow,012150,Gallons,Return Flow,01320,Gallons,Total Discharged,010830,Gallons,
06/24/2015,Rainfall,000.00,inches,Supply Flow,014050,Gallons,Return Flow,01600,Gallons,Total Discharged,012450,Gallons,
06/25/2015,Rainfall,000.00,inches,Supply Flow,009560,Gallons,Return Flow,00970,Gallons,Total Discharged,008590,Gallons,
06/26/2015,Rainfall,000.00,inches,Supply Flow,013590,Gallons,Return Flow,01480,Gallons,Total Discharged,012110,Gallons,
06/27/2015,Rainfall,000.00,inches,Supply Flow,010870,Gallons,Return Flow,01160,Gallons,Total Discharged,009710,Gallons,
06/28/2015,Rainfall,000.00,inches,Supply Flow,013550,Gallons,Return Flow,01440,Gallons,Total Discharged,012110,Gallons,
06/29/2015,Rainfall,000.00,inches,Supply Flow,008930,Gallons,Return Flow,00950,Gallons,Total Discharged,007980,Gallons,
06/30/2015,Rainfall,000.00,inches,Supply Flow,009390,Gallons,Return Flow,00930,Gallons,Total Discharged,008460,Gallons,
07/01/2015,Rainfall,000.00,inches,Supply Flow,011850,Gallons,Return Flow,01320,Gallons,Total Discharged,010530,Gallons,
07/02/2015,Rainfall,000.00,inches,Supply Flow,005900,Gallons,Return Flow,00580,Gallons,Total Discharged,005320,Gallons,
07/03/2015,Rainfall,000.00,inches,Supply Flow,008180,Gallons,Return Flow,00810,Gallons,Total Discharged,007370,Gallons,
07/04/2015,Rainfall,000.00,inches,Supply Flow,010950,Gallons,Return Flow,01120,Gallons,Total Discharged,009830,Gallons,
07/05/2015,Rainfall,000.00,inches,Supply Flow,010880,Gallons,Return Flow,01180,Gallons,Total Discharged,009700,Gallons,
07/06/2015,Rainfall,000.00,inches,Supply Flow,011190,Gallons,Return Flow,01180,Gallons,Total Discharged,010010,Gallons,
07/07/2015,Rainfall,000.00,inches,Supply Flow,009480,Gallons,Return Flow,01010,Gallons,Total Discharged,008470,Gallons,
07/08/2015,Rainfall,000.00,inches,Supply Flow,007020,Gallons,Return Flow,00690,Gallons,Total Discharged,006330,Gallons,
07/09/2015,Rainfall,000.00,inches,Supply Flow,009180,Gallons,Return Flow,00920,Gallons,Total Discharged,008260,Gallons,
07/10/2015,Rainfall,000.00,inches,Supply Flow,011540,Gallons,Return Flow,01350,Gallons,Total Discharged,010190,Gallons,
07/11/2015,Rainfall,000.00,inches,Supply Flow,012820,Gallons,Return Flow,01410,Gallons,Total Discharged,011410,Gallons,

07/12/2015,Rainfall,000.00,inches,Supply Flow,013090,Gallons,Return Flow,01560,Gallons,Total Discharged,011530,Gallons,
07/13/2015,Rainfall,000.00,inches,Supply Flow,014210,Gallons,Return Flow,01730,Gallons,Total Discharged,012480,Gallons,
07/14/2015,Rainfall,000.00,inches,Supply Flow,011840,Gallons,Return Flow,01420,Gallons,Total Discharged,010420,Gallons,
07/15/2015,Rainfall,000.00,inches,Supply Flow,014710,Gallons,Return Flow,01890,Gallons,Total Discharged,012820,Gallons,
07/16/2015,Rainfall,000.00,inches,Supply Flow,016070,Gallons,Return Flow,02040,Gallons,Total Discharged,014030,Gallons,
07/17/2015,Rainfall,000.00,inches,Supply Flow,014060,Gallons,Return Flow,01750,Gallons,Total Discharged,012310,Gallons,
07/18/2015,Rainfall,000.00,inches,Supply Flow,012510,Gallons,Return Flow,01570,Gallons,Total Discharged,010940,Gallons,
07/19/2015,Rainfall,000.00,inches,Supply Flow,012680,Gallons,Return Flow,01510,Gallons,Total Discharged,011170,Gallons,
07/20/2015,Rainfall,000.00,inches,Supply Flow,010940,Gallons,Return Flow,01330,Gallons,Total Discharged,009610,Gallons,
07/21/2015,Rainfall,000.00,inches,Supply Flow,009780,Gallons,Return Flow,01160,Gallons,Total Discharged,008620,Gallons,
07/22/2015,Rainfall,000.00,inches,Supply Flow,010410,Gallons,Return Flow,01310,Gallons,Total Discharged,009100,Gallons,
07/23/2015,Rainfall,000.00,inches,Supply Flow,011560,Gallons,Return Flow,01450,Gallons,Total Discharged,010110,Gallons,
07/24/2015,Rainfall,000.00,inches,Supply Flow,009710,Gallons,Return Flow,01170,Gallons,Total Discharged,008540,Gallons,
07/25/2015,Rainfall,000.00,inches,Supply Flow,010210,Gallons,Return Flow,01210,Gallons,Total Discharged,009000,Gallons,
07/26/2015,Rainfall,000.00,inches,Supply Flow,011200,Gallons,Return Flow,01370,Gallons,Total Discharged,009830,Gallons,
07/27/2015,Rainfall,000.00,inches,Supply Flow,012290,Gallons,Return Flow,01560,Gallons,Total Discharged,010730,Gallons,
07/28/2015,Rainfall,000.00,inches,Supply Flow,011920,Gallons,Return Flow,01520,Gallons,Total Discharged,010400,Gallons,
07/29/2015,Rainfall,000.00,inches,Supply Flow,012770,Gallons,Return Flow,01650,Gallons,Total Discharged,011120,Gallons,
07/30/2015,Rainfall,000.00,inches,Supply Flow,015930,Gallons,Return Flow,02280,Gallons,Total Discharged,013650,Gallons,
07/31/2015,Rainfall,000.00,inches,Supply Flow,010820,Gallons,Return Flow,01450,Gallons,Total Discharged,009370,Gallons,
08/01/2015,Rainfall,000.00,inches,Supply Flow,010610,Gallons,Return Flow,01390,Gallons,Total Discharged,009220,Gallons,
08/02/2015,Rainfall,000.00,inches,Supply Flow,011430,Gallons,Return Flow,01550,Gallons,Total Discharged,009880,Gallons,
08/03/2015,Rainfall,000.00,inches,Supply Flow,010100,Gallons,Return Flow,01370,Gallons,Total Discharged,008730,Gallons,
08/04/2015,Rainfall,000.00,inches,Supply Flow,012520,Gallons,Return Flow,01700,Gallons,Total Discharged,010820,Gallons,

08/05/2015,Rainfall,000.00,inches,Supply Flow,014410,Gallons,Return Flow,02070,Gallons,Total Discharged,012340,Gallons,
08/06/2015,Rainfall,000.00,inches,Supply Flow,012950,Gallons,Return Flow,01780,Gallons,Total Discharged,011170,Gallons,
08/07/2015,Rainfall,000.00,inches,Supply Flow,012890,Gallons,Return Flow,01760,Gallons,Total Discharged,011130,Gallons,
08/08/2015,Rainfall,000.00,inches,Supply Flow,012850,Gallons,Return Flow,01740,Gallons,Total Discharged,011110,Gallons,
08/09/2015,Rainfall,000.00,inches,Supply Flow,010170,Gallons,Return Flow,01340,Gallons,Total Discharged,008830,Gallons,
08/10/2015,Rainfall,000.00,inches,Supply Flow,009160,Gallons,Return Flow,01230,Gallons,Total Discharged,007930,Gallons,
08/11/2015,Rainfall,000.00,inches,Supply Flow,012840,Gallons,Return Flow,01780,Gallons,Total Discharged,011060,Gallons,
08/12/2015,Rainfall,000.00,inches,Supply Flow,012780,Gallons,Return Flow,01780,Gallons,Total Discharged,011000,Gallons,
08/13/2015,Rainfall,000.00,inches,Supply Flow,012260,Gallons,Return Flow,01710,Gallons,Total Discharged,010550,Gallons,
08/14/2015,Rainfall,000.00,inches,Supply Flow,011640,Gallons,Return Flow,01580,Gallons,Total Discharged,010060,Gallons,
08/15/2015,Rainfall,000.00,inches,Supply Flow,007800,Gallons,Return Flow,01000,Gallons,Total Discharged,006800,Gallons,
08/16/2015,Rainfall,000.00,inches,Supply Flow,009300,Gallons,Return Flow,01290,Gallons,Total Discharged,008010,Gallons,
08/17/2015,Rainfall,000.00,inches,Supply Flow,010360,Gallons,Return Flow,01390,Gallons,Total Discharged,008970,Gallons,
08/18/2015,Rainfall,000.00,inches,Supply Flow,010380,Gallons,Return Flow,01440,Gallons,Total Discharged,008940,Gallons,
08/19/2015,Rainfall,000.00,inches,Supply Flow,009170,Gallons,Return Flow,01210,Gallons,Total Discharged,007960,Gallons,
08/20/2015,Rainfall,000.00,inches,Supply Flow,009330,Gallons,Return Flow,01290,Gallons,Total Discharged,008040,Gallons,
08/21/2015,Rainfall,000.00,inches,Supply Flow,012650,Gallons,Return Flow,01760,Gallons,Total Discharged,010890,Gallons,
08/22/2015,Rainfall,000.00,inches,Supply Flow,004780,Gallons,Return Flow,00600,Gallons,Total Discharged,004180,Gallons,
08/23/2015,Rainfall,000.00,inches,Supply Flow,003780,Gallons,Return Flow,00480,Gallons,Total Discharged,003300,Gallons,
08/24/2015,Rainfall,000.00,inches,Supply Flow,003800,Gallons,Return Flow,00480,Gallons,Total Discharged,003320,Gallons,
08/25/2015,Rainfall,000.00,inches,Supply Flow,002170,Gallons,Return Flow,00240,Gallons,Total Discharged,001930,Gallons,
08/26/2015,Rainfall,000.00,inches,Supply Flow,001140,Gallons,Return Flow,00130,Gallons,Total Discharged,001010,Gallons,
08/27/2015,Rainfall,000.00,inches,Supply Flow,001620,Gallons,Return Flow,00170,Gallons,Total Discharged,001450,Gallons,
08/28/2015,Rainfall,000.00,inches,Supply Flow,002770,Gallons,Return Flow,00320,Gallons,Total Discharged,002450,Gallons,

08/29/2015,Rainfall,000.00,inches,Supply Flow,001650,Gallons,Return Flow,00170,Gallons,Total Discharged,001480,Gallons,
08/30/2015,Rainfall,000.00,inches,Supply Flow,001640,Gallons,Return Flow,00170,Gallons,Total Discharged,001470,Gallons,
08/31/2015,Rainfall,000.00,inches,Supply Flow,001120,Gallons,Return Flow,00120,Gallons,Total Discharged,001000,Gallons,
09/01/2015,Rainfall,000.00,inches,Supply Flow,001640,Gallons,Return Flow,00160,Gallons,Total Discharged,001480,Gallons,
09/02/2015,Rainfall,000.00,inches,Supply Flow,000560,Gallons,Return Flow,00060,Gallons,Total Discharged,000500,Gallons,
09/03/2015,Rainfall,000.00,inches,Supply Flow,001690,Gallons,Return Flow,00130,Gallons,Total Discharged,001560,Gallons,
09/04/2015,Rainfall,000.00,inches,Supply Flow,001900,Gallons,Return Flow,00220,Gallons,Total Discharged,001680,Gallons,
09/05/2015,Rainfall,000.00,inches,Supply Flow,002000,Gallons,Return Flow,00140,Gallons,Total Discharged,001860,Gallons,
09/06/2015,Rainfall,000.00,inches,Supply Flow,007530,Gallons,Return Flow,00900,Gallons,Total Discharged,006630,Gallons,
09/07/2015,Rainfall,000.00,inches,Supply Flow,015660,Gallons,Return Flow,02020,Gallons,Total Discharged,013640,Gallons,
09/08/2015,Rainfall,000.00,inches,Supply Flow,008020,Gallons,Return Flow,00810,Gallons,Total Discharged,007210,Gallons,
09/09/2015,Rainfall,000.00,inches,Supply Flow,003980,Gallons,Return Flow,00360,Gallons,Total Discharged,003620,Gallons,
09/10/2015,Rainfall,000.00,inches,Supply Flow,001110,Gallons,Return Flow,00060,Gallons,Total Discharged,001050,Gallons,
09/11/2015,Rainfall,000.00,inches,Supply Flow,001110,Gallons,Return Flow,00060,Gallons,Total Discharged,001050,Gallons,
09/12/2015,Rainfall,000.00,inches,Supply Flow,003940,Gallons,Return Flow,00300,Gallons,Total Discharged,003640,Gallons,
09/13/2015,Rainfall,000.00,inches,Supply Flow,006940,Gallons,Return Flow,00680,Gallons,Total Discharged,006260,Gallons,
09/14/2015,Rainfall,000.00,inches,Supply Flow,004550,Gallons,Return Flow,00380,Gallons,Total Discharged,004170,Gallons,
09/15/2015,Rainfall,000.00,inches,Supply Flow,003460,Gallons,Return Flow,00280,Gallons,Total Discharged,003180,Gallons,
09/16/2015,Rainfall,000.00,inches,Supply Flow,003970,Gallons,Return Flow,00310,Gallons,Total Discharged,003660,Gallons,
09/17/2015,Rainfall,000.00,inches,Supply Flow,002890,Gallons,Return Flow,00220,Gallons,Total Discharged,002670,Gallons,
09/18/2015,Rainfall,000.00,inches,Supply Flow,002830,Gallons,Return Flow,00200,Gallons,Total Discharged,002630,Gallons,
09/19/2015,Rainfall,000.00,inches,Supply Flow,005740,Gallons,Return Flow,00480,Gallons,Total Discharged,005260,Gallons,
09/20/2015,Rainfall,000.00,inches,Supply Flow,007730,Gallons,Return Flow,00790,Gallons,Total Discharged,006940,Gallons,
09/21/2015,Rainfall,000.00,inches,Supply Flow,009500,Gallons,Return Flow,01030,Gallons,Total Discharged,008470,Gallons,

09/22/2015,Rainfall,000.00,inches,Supply Flow,005170,Gallons,Return Flow,00430,Gallons,Total Discharged,004740,Gallons,
09/23/2015,Rainfall,000.00,inches,Supply Flow,001730,Gallons,Return Flow,00130,Gallons,Total Discharged,001600,Gallons,
09/24/2015,Rainfall,000.00,inches,Supply Flow,001110,Gallons,Return Flow,00060,Gallons,Total Discharged,001050,Gallons,
09/25/2015,Rainfall,000.00,inches,Supply Flow,002310,Gallons,Return Flow,00160,Gallons,Total Discharged,002150,Gallons,
09/26/2015,Rainfall,000.00,inches,Supply Flow,003700,Gallons,Return Flow,00270,Gallons,Total Discharged,003430,Gallons,
09/27/2015,Rainfall,000.00,inches,Supply Flow,006960,Gallons,Return Flow,00610,Gallons,Total Discharged,006350,Gallons,
09/28/2015,Rainfall,000.00,inches,Supply Flow,007620,Gallons,Return Flow,00710,Gallons,Total Discharged,006910,Gallons,
09/29/2015,Rainfall,000.00,inches,Supply Flow,004610,Gallons,Return Flow,00370,Gallons,Total Discharged,004240,Gallons,
09/30/2015,Rainfall,000.00,inches,Supply Flow,006480,Gallons,Return Flow,00630,Gallons,Total Discharged,005850,Gallons,
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10/02/2015,Rainfall,000.00,inches,Supply Flow,006980,Gallons,Return Flow,00650,Gallons,Total Discharged,006330,Gallons,
10/03/2015,Rainfall,000.00,inches,Supply Flow,008090,Gallons,Return Flow,00750,Gallons,Total Discharged,007340,Gallons,
10/04/2015,Rainfall,000.00,inches,Supply Flow,008990,Gallons,Return Flow,00940,Gallons,Total Discharged,008050,Gallons,
10/05/2015,Rainfall,000.00,inches,Supply Flow,009390,Gallons,Return Flow,00900,Gallons,Total Discharged,008490,Gallons,
10/06/2015,Rainfall,000.00,inches,Supply Flow,004010,Gallons,Return Flow,00310,Gallons,Total Discharged,003700,Gallons,
10/07/2015,Rainfall,000.00,inches,Supply Flow,006460,Gallons,Return Flow,00550,Gallons,Total Discharged,005910,Gallons,
10/08/2015,Rainfall,000.00,inches,Supply Flow,007790,Gallons,Return Flow,00780,Gallons,Total Discharged,007010,Gallons,
10/09/2015,Rainfall,000.00,inches,Supply Flow,008190,Gallons,Return Flow,00760,Gallons,Total Discharged,007430,Gallons,
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10/11/2015,Rainfall,000.00,inches,Supply Flow,012180,Gallons,Return Flow,01360,Gallons,Total Discharged,010820,Gallons,
10/12/2015,Rainfall,000.00,inches,Supply Flow,010720,Gallons,Return Flow,01160,Gallons,Total Discharged,009560,Gallons,
10/13/2015,Rainfall,000.00,inches,Supply Flow,008140,Gallons,Return Flow,00780,Gallons,Total Discharged,007360,Gallons,
10/14/2015,Rainfall,000.00,inches,Supply Flow,009450,Gallons,Return Flow,00980,Gallons,Total Discharged,008470,Gallons,
10/15/2015,Rainfall,000.00,inches,Supply Flow,008580,Gallons,Return Flow,00870,Gallons,Total Discharged,007710,Gallons,

10/16/2015,Rainfall,000.00,inches,Supply Flow,006890,Gallons,Return Flow,00660,Gallons,Total Discharged,006230,Gallons,
10/17/2015,Rainfall,000.00,inches,Supply Flow,007520,Gallons,Return Flow,00760,Gallons,Total Discharged,006760,Gallons,
10/18/2015,Rainfall,000.00,inches,Supply Flow,009990,Gallons,Return Flow,01110,Gallons,Total Discharged,008880,Gallons,
10/19/2015,Rainfall,000.00,inches,Supply Flow,008080,Gallons,Return Flow,00850,Gallons,Total Discharged,007230,Gallons,
10/20/2015,Rainfall,000.00,inches,Supply Flow,007800,Gallons,Return Flow,00800,Gallons,Total Discharged,007000,Gallons,
10/21/2015,Rainfall,000.00,inches,Supply Flow,011360,Gallons,Return Flow,01420,Gallons,Total Discharged,009940,Gallons,
10/22/2015,Rainfall,000.00,inches,Supply Flow,005200,Gallons,Return Flow,00550,Gallons,Total Discharged,004650,Gallons,
10/23/2015,Rainfall,000.00,inches,Supply Flow,005860,Gallons,Return Flow,00670,Gallons,Total Discharged,005190,Gallons,
10/24/2015,Rainfall,000.00,inches,Supply Flow,006620,Gallons,Return Flow,00700,Gallons,Total Discharged,005920,Gallons,
10/25/2015,Rainfall,000.00,inches,Supply Flow,011810,Gallons,Return Flow,01510,Gallons,Total Discharged,010300,Gallons,
10/26/2015,Rainfall,000.00,inches,Supply Flow,009240,Gallons,Return Flow,01080,Gallons,Total Discharged,008160,Gallons,
10/27/2015,Rainfall,000.00,inches,Supply Flow,006380,Gallons,Return Flow,00800,Gallons,Total Discharged,005580,Gallons,
10/28/2015,Rainfall,000.00,inches,Supply Flow,003560,Gallons,Return Flow,00410,Gallons,Total Discharged,003150,Gallons,
10/29/2015,Rainfall,000.00,inches,Supply Flow,004070,Gallons,Return Flow,00460,Gallons,Total Discharged,003610,Gallons,
10/30/2015,Rainfall,000.00,inches,Supply Flow,003600,Gallons,Return Flow,00430,Gallons,Total Discharged,003170,Gallons,
10/31/2015,Rainfall,000.00,inches,Supply Flow,002570,Gallons,Return Flow,00270,Gallons,Total Discharged,002300,Gallons,
11/01/2015,Rainfall,000.00,inches,Supply Flow,005180,Gallons,Return Flow,00610,Gallons,Total Discharged,004570,Gallons,
11/02/2015,Rainfall,000.00,inches,Supply Flow,007520,Gallons,Return Flow,01000,Gallons,Total Discharged,006520,Gallons,
11/03/2015,Rainfall,000.00,inches,Supply Flow,005290,Gallons,Return Flow,00710,Gallons,Total Discharged,004580,Gallons,
11/04/2015,Rainfall,000.00,inches,Supply Flow,003880,Gallons,Return Flow,00510,Gallons,Total Discharged,003370,Gallons,
11/05/2015,Rainfall,000.00,inches,Supply Flow,004440,Gallons,Return Flow,00560,Gallons,Total Discharged,003880,Gallons,
11/06/2015,Rainfall,000.00,inches,Supply Flow,006410,Gallons,Return Flow,00880,Gallons,Total Discharged,005530,Gallons,
11/07/2015,Rainfall,000.00,inches,Supply Flow,006840,Gallons,Return Flow,00960,Gallons,Total Discharged,005880,Gallons,
11/08/2015,Rainfall,000.00,inches,Supply Flow,010270,Gallons,Return Flow,01560,Gallons,Total Discharged,008710,Gallons,

11/09/2015,Rainfall,000.00,inches,Supply Flow,009890,Gallons,Return Flow,01580,Gallons,Total Discharged,008310,Gallons,
11/10/2015,Rainfall,000.00,inches,Supply Flow,009510,Gallons,Return Flow,01590,Gallons,Total Discharged,007920,Gallons,
11/11/2015,Rainfall,000.00,inches,Supply Flow,005270,Gallons,Return Flow,00850,Gallons,Total Discharged,004420,Gallons,
11/12/2015,Rainfall,000.00,inches,Supply Flow,004210,Gallons,Return Flow,00550,Gallons,Total Discharged,003660,Gallons,
11/13/2015,Rainfall,000.00,inches,Supply Flow,002690,Gallons,Return Flow,00340,Gallons,Total Discharged,002350,Gallons,
11/14/2015,Rainfall,000.00,inches,Supply Flow,004850,Gallons,Return Flow,00700,Gallons,Total Discharged,004150,Gallons,
11/15/2015,Rainfall,000.00,inches,Supply Flow,009810,Gallons,Return Flow,01460,Gallons,Total Discharged,008350,Gallons,
11/16/2015,Rainfall,000.00,inches,Supply Flow,009030,Gallons,Return Flow,01440,Gallons,Total Discharged,007590,Gallons,
11/17/2015,Rainfall,000.00,inches,Supply Flow,004930,Gallons,Return Flow,00780,Gallons,Total Discharged,004150,Gallons,
11/18/2015,Rainfall,000.00,inches,Supply Flow,001640,Gallons,Return Flow,00280,Gallons,Total Discharged,001360,Gallons,
11/19/2015,Rainfall,000.00,inches,Supply Flow,001880,Gallons,Return Flow,00280,Gallons,Total Discharged,001600,Gallons,
11/20/2015,Rainfall,000.00,inches,Supply Flow,001890,Gallons,Return Flow,00280,Gallons,Total Discharged,001610,Gallons,
11/21/2015,Rainfall,000.00,inches,Supply Flow,003040,Gallons,Return Flow,00440,Gallons,Total Discharged,002600,Gallons,
11/22/2015,Rainfall,000.00,inches,Supply Flow,007720,Gallons,Return Flow,01230,Gallons,Total Discharged,006490,Gallons,
11/23/2015,Rainfall,000.00,inches,Supply Flow,007630,Gallons,Return Flow,01290,Gallons,Total Discharged,006340,Gallons,
11/24/2015,Rainfall,000.00,inches,Supply Flow,006800,Gallons,Return Flow,01190,Gallons,Total Discharged,005610,Gallons,
11/25/2015,Rainfall,000.00,inches,Supply Flow,006270,Gallons,Return Flow,01110,Gallons,Total Discharged,005160,Gallons,
11/26/2015,Rainfall,000.00,inches,Supply Flow,005900,Gallons,Return Flow,01080,Gallons,Total Discharged,004820,Gallons,
11/27/2015,Rainfall,000.00,inches,Supply Flow,006170,Gallons,Return Flow,01150,Gallons,Total Discharged,005020,Gallons,
11/28/2015,Rainfall,000.00,inches,Supply Flow,006540,Gallons,Return Flow,01190,Gallons,Total Discharged,005350,Gallons,
11/29/2015,Rainfall,000.00,inches,Supply Flow,006710,Gallons,Return Flow,01220,Gallons,Total Discharged,005490,Gallons,
11/30/2015,Rainfall,000.00,inches,Supply Flow,006850,Gallons,Return Flow,01220,Gallons,Total Discharged,005630,Gallons,
12/01/2015,Rainfall,000.00,inches,Supply Flow,006360,Gallons,Return Flow,00870,Gallons,Total Discharged,005490,Gallons,
12/02/2015,Rainfall,000.00,inches,Supply Flow,006070,Gallons,Return Flow,00680,Gallons,Total Discharged,005390,Gallons,

12/03/2015,Rainfall,000.00,inches,Supply Flow,005550,Gallons,Return Flow,00780,Gallons,Total Discharged,004770,Gallons,
12/04/2015,Rainfall,000.00,inches,Supply Flow,005540,Gallons,Return Flow,00910,Gallons,Total Discharged,004630,Gallons,
12/05/2015,Rainfall,000.00,inches,Supply Flow,005950,Gallons,Return Flow,00920,Gallons,Total Discharged,005030,Gallons,
12/06/2015,Rainfall,000.00,inches,Supply Flow,006150,Gallons,Return Flow,00930,Gallons,Total Discharged,005220,Gallons,
12/07/2015,Rainfall,000.00,inches,Supply Flow,006410,Gallons,Return Flow,00940,Gallons,Total Discharged,005470,Gallons,
12/08/2015,Rainfall,000.00,inches,Supply Flow,006660,Gallons,Return Flow,00950,Gallons,Total Discharged,005710,Gallons,
12/09/2015,Rainfall,000.00,inches,Supply Flow,006450,Gallons,Return Flow,00900,Gallons,Total Discharged,005550,Gallons,
12/10/2015,Rainfall,000.00,inches,Supply Flow,004610,Gallons,Return Flow,00550,Gallons,Total Discharged,004060,Gallons,
12/11/2015,Rainfall,000.00,inches,Supply Flow,005040,Gallons,Return Flow,00600,Gallons,Total Discharged,004440,Gallons,
12/12/2015,Rainfall,000.00,inches,Supply Flow,004700,Gallons,Return Flow,00600,Gallons,Total Discharged,004100,Gallons,
12/13/2015,Rainfall,000.00,inches,Supply Flow,006140,Gallons,Return Flow,00790,Gallons,Total Discharged,005350,Gallons,
12/14/2015,Rainfall,000.00,inches,Supply Flow,006850,Gallons,Return Flow,00920,Gallons,Total Discharged,005930,Gallons,
12/15/2015,Rainfall,000.00,inches,Supply Flow,006580,Gallons,Return Flow,00870,Gallons,Total Discharged,005710,Gallons,
12/16/2015,Rainfall,000.00,inches,Supply Flow,004030,Gallons,Return Flow,00480,Gallons,Total Discharged,003550,Gallons,
12/17/2015,Rainfall,000.00,inches,Supply Flow,003580,Gallons,Return Flow,00410,Gallons,Total Discharged,003170,Gallons,
12/18/2015,Rainfall,000.00,inches,Supply Flow,002770,Gallons,Return Flow,00290,Gallons,Total Discharged,002480,Gallons,
12/19/2015,Rainfall,000.00,inches,Supply Flow,003020,Gallons,Return Flow,00320,Gallons,Total Discharged,002700,Gallons,
12/20/2015,Rainfall,000.00,inches,Supply Flow,003380,Gallons,Return Flow,00360,Gallons,Total Discharged,003020,Gallons,
12/21/2015,Rainfall,000.00,inches,Supply Flow,006330,Gallons,Return Flow,00750,Gallons,Total Discharged,005580,Gallons,
12/22/2015,Rainfall,000.00,inches,Supply Flow,007200,Gallons,Return Flow,00930,Gallons,Total Discharged,006270,Gallons,
12/23/2015,Rainfall,000.00,inches,Supply Flow,006970,Gallons,Return Flow,00950,Gallons,Total Discharged,006020,Gallons,
12/24/2015,Rainfall,000.00,inches,Supply Flow,006800,Gallons,Return Flow,00940,Gallons,Total Discharged,005860,Gallons,
12/25/2015,Rainfall,000.00,inches,Supply Flow,006790,Gallons,Return Flow,00960,Gallons,Total Discharged,005830,Gallons,
12/26/2015,Rainfall,000.00,inches,Supply Flow,007160,Gallons,Return Flow,00960,Gallons,Total Discharged,006200,Gallons,

12/27/2015,Rainfall,000.00,inches,Supply Flow,007540,Gallons,Return Flow,00970,Gallons,Total Discharged,006570,Gallons,
12/28/2015,Rainfall,000.00,inches,Supply Flow,007800,Gallons,Return Flow,00990,Gallons,Total Discharged,006810,Gallons,
12/29/2015,Rainfall,000.00,inches,Supply Flow,008140,Gallons,Return Flow,00990,Gallons,Total Discharged,007150,Gallons,
12/30/2015,Rainfall,000.00,inches,Supply Flow,008400,Gallons,Return Flow,00980,Gallons,Total Discharged,007420,Gallons,
12/31/2015,Rainfall,000.00,inches,Supply Flow,008710,Gallons,Return Flow,00990,Gallons,Total Discharged,007720,Gallons,

01/01/2016,Rainfall,000.00,inches,Supply Flow,008940,Gallons,Return Flow,00980,Gallons,Total Discharged,007960,Gallons,
01/02/2016,Rainfall,000.00,inches,Supply Flow,009140,Gallons,Return Flow,00970,Gallons,Total Discharged,008170,Gallons,
01/03/2016,Rainfall,000.00,inches,Supply Flow,009440,Gallons,Return Flow,00970,Gallons,Total Discharged,008470,Gallons,
01/04/2016,Rainfall,000.00,inches,Supply Flow,009600,Gallons,Return Flow,00970,Gallons,Total Discharged,008630,Gallons,
01/05/2016,Rainfall,000.00,inches,Supply Flow,009750,Gallons,Return Flow,00950,Gallons,Total Discharged,008800,Gallons,
01/06/2016,Rainfall,000.00,inches,Supply Flow,004220,Gallons,Return Flow,00380,Gallons,Total Discharged,003840,Gallons,
01/07/2016,Rainfall,000.00,inches,Supply Flow,002690,Gallons,Return Flow,00240,Gallons,Total Discharged,002450,Gallons,
01/08/2016,Rainfall,000.00,inches,Supply Flow,002290,Gallons,Return Flow,00200,Gallons,Total Discharged,002090,Gallons,
01/09/2016,Rainfall,000.00,inches,Supply Flow,001870,Gallons,Return Flow,00170,Gallons,Total Discharged,001700,Gallons,
01/10/2016,Rainfall,000.00,inches,Supply Flow,002360,Gallons,Return Flow,00200,Gallons,Total Discharged,002160,Gallons,
01/11/2016,Rainfall,000.00,inches,Supply Flow,002820,Gallons,Return Flow,00250,Gallons,Total Discharged,002570,Gallons,
01/12/2016,Rainfall,000.00,inches,Supply Flow,002400,Gallons,Return Flow,00210,Gallons,Total Discharged,002190,Gallons,
01/13/2016,Rainfall,000.00,inches,Supply Flow,002420,Gallons,Return Flow,00200,Gallons,Total Discharged,002220,Gallons,
01/14/2016,Rainfall,000.00,inches,Supply Flow,001480,Gallons,Return Flow,00120,Gallons,Total Discharged,001360,Gallons,
01/15/2016,Rainfall,000.00,inches,Supply Flow,001980,Gallons,Return Flow,00150,Gallons,Total Discharged,001830,Gallons,
01/16/2016,Rainfall,000.00,inches,Supply Flow,002010,Gallons,Return Flow,00160,Gallons,Total Discharged,001850,Gallons,
01/17/2016,Rainfall,000.00,inches,Supply Flow,007290,Gallons,Return Flow,00620,Gallons,Total Discharged,006670,Gallons,
01/18/2016,Rainfall,000.00,inches,Supply Flow,007380,Gallons,Return Flow,00630,Gallons,Total Discharged,006750,Gallons,
01/19/2016,Rainfall,000.00,inches,Supply Flow,005430,Gallons,Return Flow,00400,Gallons,Total Discharged,005030,Gallons,
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01/21/2016,Rainfall,000.00,inches,Supply Flow,003510,Gallons,Return Flow,00130,Gallons,Total Discharged,003380,Gallons,
01/22/2016,Rainfall,000.00,inches,Supply Flow,004670,Gallons,Return Flow,00340,Gallons,Total Discharged,004330,Gallons,
01/23/2016,Rainfall,000.00,inches,Supply Flow,003630,Gallons,Return Flow,00250,Gallons,Total Discharged,003380,Gallons,
01/24/2016,Rainfall,000.00,inches,Supply Flow,006760,Gallons,Return Flow,00540,Gallons,Total Discharged,006220,Gallons,

01/25/2016,Rainfall,000.00,inches,Supply Flow,007270,Gallons,Return Flow,00470,Gallons,Total Discharged,006800,Gallons,
01/26/2016,Rainfall,000.00,inches,Supply Flow,003200,Gallons,Return Flow,00250,Gallons,Total Discharged,002950,Gallons,
01/27/2016,Rainfall,000.00,inches,Supply Flow,004200,Gallons,Return Flow,00310,Gallons,Total Discharged,003890,Gallons,
01/28/2016,Rainfall,000.00,inches,Supply Flow,005320,Gallons,Return Flow,00370,Gallons,Total Discharged,004950,Gallons,
01/29/2016,Rainfall,000.00,inches,Supply Flow,005280,Gallons,Return Flow,00380,Gallons,Total Discharged,004900,Gallons,
01/30/2016,Rainfall,000.00,inches,Supply Flow,005330,Gallons,Return Flow,00370,Gallons,Total Discharged,004960,Gallons,
01/31/2016,Rainfall,000.00,inches,Supply Flow,007910,Gallons,Return Flow,00580,Gallons,Total Discharged,007330,Gallons,
02/01/2016,Rainfall,000.00,inches,Supply Flow,008280,Gallons,Return Flow,00580,Gallons,Total Discharged,007700,Gallons,
02/02/2016,Rainfall,000.00,inches,Supply Flow,008070,Gallons,Return Flow,00620,Gallons,Total Discharged,007450,Gallons,
02/03/2016,Rainfall,000.00,inches,Supply Flow,003760,Gallons,Return Flow,00260,Gallons,Total Discharged,003500,Gallons,
02/04/2016,Rainfall,000.00,inches,Supply Flow,006440,Gallons,Return Flow,00480,Gallons,Total Discharged,005960,Gallons,
02/05/2016,Rainfall,000.00,inches,Supply Flow,002690,Gallons,Return Flow,00190,Gallons,Total Discharged,002500,Gallons,
02/06/2016,Rainfall,000.00,inches,Supply Flow,002720,Gallons,Return Flow,00180,Gallons,Total Discharged,002540,Gallons,
02/07/2016,Rainfall,000.00,inches,Supply Flow,003800,Gallons,Return Flow,00250,Gallons,Total Discharged,003550,Gallons,
02/08/2016,Rainfall,000.00,inches,Supply Flow,004300,Gallons,Return Flow,00280,Gallons,Total Discharged,004020,Gallons,
02/09/2016,Rainfall,000.00,inches,Supply Flow,002210,Gallons,Return Flow,00130,Gallons,Total Discharged,002080,Gallons,
02/10/2016,Rainfall,000.00,inches,Supply Flow,006570,Gallons,Return Flow,00440,Gallons,Total Discharged,006130,Gallons,
02/11/2016,Rainfall,000.00,inches,Supply Flow,001130,Gallons,Return Flow,00060,Gallons,Total Discharged,001070,Gallons,
02/12/2016,Rainfall,000.00,inches,Supply Flow,002270,Gallons,Return Flow,00150,Gallons,Total Discharged,002120,Gallons,
02/13/2016,Rainfall,000.00,inches,Supply Flow,003900,Gallons,Return Flow,00240,Gallons,Total Discharged,003660,Gallons,
02/14/2016,Rainfall,000.00,inches,Supply Flow,006760,Gallons,Return Flow,00440,Gallons,Total Discharged,006320,Gallons,
02/15/2016,Rainfall,000.00,inches,Supply Flow,007350,Gallons,Return Flow,00470,Gallons,Total Discharged,006880,Gallons,
02/16/2016,Rainfall,000.00,inches,Supply Flow,005730,Gallons,Return Flow,00340,Gallons,Total Discharged,005390,Gallons,
02/17/2016,Rainfall,000.00,inches,Supply Flow,003460,Gallons,Return Flow,00190,Gallons,Total Discharged,003270,Gallons,

02/18/2016,Rainfall,000.00,inches,Supply Flow,002340,Gallons,Return Flow,00140,Gallons,Total Discharged,002200,Gallons,
02/19/2016,Rainfall,000.00,inches,Supply Flow,004640,Gallons,Return Flow,00250,Gallons,Total Discharged,004390,Gallons,
02/20/2016,Rainfall,000.00,inches,Supply Flow,004720,Gallons,Return Flow,00280,Gallons,Total Discharged,004440,Gallons,
02/21/2016,Rainfall,000.00,inches,Supply Flow,005220,Gallons,Return Flow,00320,Gallons,Total Discharged,004900,Gallons,
02/22/2016,Rainfall,000.00,inches,Supply Flow,008040,Gallons,Return Flow,00500,Gallons,Total Discharged,007540,Gallons,
02/23/2016,Rainfall,000.00,inches,Supply Flow,005250,Gallons,Return Flow,00330,Gallons,Total Discharged,004920,Gallons,
02/24/2016,Rainfall,000.00,inches,Supply Flow,002830,Gallons,Return Flow,00150,Gallons,Total Discharged,002680,Gallons,
02/25/2016,Rainfall,000.00,inches,Supply Flow,001680,Gallons,Return Flow,00080,Gallons,Total Discharged,001600,Gallons,
02/26/2016,Rainfall,000.00,inches,Supply Flow,000550,Gallons,Return Flow,00030,Gallons,Total Discharged,000520,Gallons,
02/27/2016,Rainfall,000.00,inches,Supply Flow,002840,Gallons,Return Flow,00150,Gallons,Total Discharged,002690,Gallons,
02/28/2016,Rainfall,000.00,inches,Supply Flow,005860,Gallons,Return Flow,00350,Gallons,Total Discharged,005510,Gallons,
02/29/2016,Rainfall,000.00,inches,Supply Flow,004710,Gallons,Return Flow,00270,Gallons,Total Discharged,004440,Gallons,
03/01/2016,Rainfall,000.00,inches,Supply Flow,001150,Gallons,Return Flow,00050,Gallons,Total Discharged,001100,Gallons,
03/02/2016,Rainfall,000.00,inches,Supply Flow,001750,Gallons,Return Flow,00090,Gallons,Total Discharged,001660,Gallons,
03/03/2016,Rainfall,000.00,inches,Supply Flow,001710,Gallons,Return Flow,00080,Gallons,Total Discharged,001630,Gallons,
03/04/2016,Rainfall,000.00,inches,Supply Flow,000570,Gallons,Return Flow,00030,Gallons,Total Discharged,000540,Gallons,

Jeff Risden

From: Roy Denney
Sent: Friday, August 5, 2016 10:10 AM
To: Jeff Risden
Subject: FW: 160304A_Denny_Summit View

From: George Garden [mailto:George.Garden@tn.gov]
Sent: Wednesday, July 06, 2016 10:07 AM
To: Roy Denney <Roy.Denney@Adenus.com>
Subject: RE: 160304A_Denny_Summit View

Thanks, Roy. Appreciate the help.

How is the 15 acres in the Logue Road system panning out?

From: Roy Denney [mailto:Roy.Denney@Adenus.com]
Sent: Wednesday, July 06, 2016 9:57 AM
To: George Garden
Subject: RE: 160304A_Denny_Summit View

Here is the current flow data for 2016. I haven't had a chance to look at it in depth but it appears there are some high usage weekends exceeding design capacity. Without knowing there occupancy rates it's hard to drw a meaningful correlation.

From: George Garden [mailto:George.Garden@tn.gov]
Sent: Wednesday, July 06, 2016 7:52 AM
To: Roy Denney <Roy.Denney@Adenus.com>
Subject: FW: 160304A_Denny_Summit View
Importance: High

We are trying to answer the public hearing inquiries. One of the contentions is that low flow shower heads and other water saving fixtures should have reduced flows since last summer. The attached sent via the email below are the latest flow data that I have. Can you send the 2016 file up to date? The attached goes through 3/2/2016. Thanks.

I am sure that on Friday that there will be questions on the differences in the meter and the MORs and DMRs during the overlapping and previous time period. I am assuming that the meter readings being reported on a daily basis are the basis for current DMRs and MORs and are accurate.

From: Roy Denney [mailto:Roy.Denney@Adenus.com]
Sent: Friday, March 04, 2016 3:54 PM
To: George Garden
Subject: 160304A_Denny_Summit View

Here are the full logs up to date.

Roy

Jeff Risden

From: Charles Hyatt
Sent: Tuesday, August 2, 2016 9:49 AM
To: Jeff Risden; Bob Pickney
Subject: Fwd: SOP-00019 Signed complete application letter
Attachments: SOP-00019_Notice_of_Complete_Application for Modification for starr crest.pdf

Get Outlook for iOS

---------- Forwarded message ----------
From: **"Hari Akunuri"** <Hari.Akunuri@tn.gov>
Date: Tue, Aug 2, 2016 at 9:47 AM -0500
Subject: SOP-00019 Signed complete application letter
To: "Charles Hyatt" <Charles.Hyatt@Adenus.com>
Cc: "Michelle Ramsey" <Michelle.Ramsey@tn.gov>, "Patsy Fulton" <Patsy.Fulton@tn.gov>, "Brad Harris" <Brad.Harris@tn.gov>, "Allen Rather" <Allen.Rather@tn.gov>, "John West" <John.West@tn.gov>

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.

TN Department of Environment & Conservation

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.

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

August 2, 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-99016**
TN Wastewater Systems - Townsend Town Square
Townsend, Blount 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*.

Sincerely,

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
Ms. Patsy Fulton, Utility Rate Specialist, Tennessee Regulatory Authority, Patsy.Fulton@tn.gov

TENNESSEEE 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

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 Aquare. 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:

This permit shall expire on: August 31, 2017

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:

Parameter	Sample Type	Daily Maximum	Monthly Average	Measurement Frequency
Flow *	Totalizer			Daily
BOD_5	Grab	**45** mg/l	N/A	Once/year
Ammonia as N	Grab	**Report**	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:

- 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 15th 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 reasonsable 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:

Name	Representing
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.

c: Brad Harris, GWP- NCO
file

Modification
SOP-99016
TN Wastewater Systems - Townsend Town Suare
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 Risden

From: Roy Denney
Sent: Friday, August 5, 2016 10:11 AM
To: Jeff Risden
Subject: FW: SOP-01033 Signed incomplete application
Attachments: SOP-01033_Starr_ Crest_ II Letter_ of_ Incomplete_ Application.pdf

From: Hari Akunuri [mailto:Hari.Akunuri@tn.gov]
Sent: Wednesday, July 27, 2016 8:06 AM
To: Charles Hyatt <Charles.Hyatt@Adenus.com>
Cc: Michelle Ramsey <Michelle.Ramsey@tn.gov>; Patsy Fulton <Patsy.Fulton@tn.gov>; Roy Denney <Roy.Denney@Adenus.com>; Jeramy Stewart <Jeramy.Stewart@adenus.com>; George Garden <George.Garden@tn.gov>; Brad Harris <Brad.Harris@tn.gov>; Allen Rather <Allen.Rather@tn.gov>; John West <John.West@tn.gov>
Subject: SOP-01033 Signed incomplete application

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.

TN Department of Environment & Conservation

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.

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

7/25/2016

Roy Denney, P.E.
CTO Adenus Group
e-copy: roy.denney@adenus.com
Address: 849 Aviation Way
Smyrna, TN 37167

Subject: **County: Sevier**
Project: Starr Crest II SOP-01033

Dear Mr. Denney:

The Division of Water Resources recently conducted a review of the Plans and Engineering Report for the proposed modification to the above referenced site. The engineering report nor the plans addressed all the criteria relevant to the projectl. To expedite the review process, Attachment 1 is included. It is a matrix containing requirements for preliminary and final engineering submittals broken down by project type. This project includes a decentralized wastewater treatment plant (category DC in the matrix), and land application (LA) and also force main for the STEP system (FM) if this submission is to be considered to include the collection system as well. Applicable items on the attachment are highlighted and particular deficiencies added to the line item in bullet format. The submission is considerably short of generally accepted wastewater engineering standards and a resubmission is requested. This is the second submission of this project; please provide an additional plans and engineering report review fee with the third submission.

The following paragraphs in italics from the original review in April remain appropriate: *The system is currently permitted for 12,000 gpd flow. The proposal is to increase the capacity to 60,000 gpd by adding two Bioclere 30/32 units and additional drip dispersal area. The additional soils area submitted is supportive of approximately 30,000 gpd at .25gpd/ft2. In order to process your request, we need soils information on the original dispersal site detailing the area available with a scaled layout of the initial system and the proposed area for additional drip. Also,since the concern is peak flows, consideration for mass balance as described in Chapter 1 Design Criteria needs to be addressed.*

Chapter 1. Section 1.2.5.5 "The Division requires the submittal of a mass balance for all plants. The mass balances must include loadings to each unit process, operations, including all recycle, and side stream flows. Mass balances must include the following initial and design operating conditions: maximum, minimum, and average flow, BOD and suspended solids loadings; and maximum, minimum, and average nutrient loadings, especially nitrogen for plants with considerable industrial loadings and/or where nutrient removal (is a consideration)."

Further, all of the property in question is currently owned by the Starr Crest Home Owner's Association. Consequently, you must provide either proof of ownership or a legal deeded easement for the property

where the existing system is installed and the proposed area for the modification. At a minimum, the SOP application states: "If the applicant listed above does not yet own the facility /site or if the applicant will not be the operator, explain how and when the ownership will be transferred or describe the contractrual arrangement and renewal terms of the contract for operations."

If you have any questions, please contact me at 615-253-9934 or by email at george.garden@tn.gov.

Sincerely,

George C Garden, P.E. BCEE
Division of Water Resources

cc: Water-Based Systems File
Mr. Michael Atchley, Unit Manager, TDEC Division of Water Resources, Micheal.Atchley@tn.gov
Mr. Brad Harris, P.E./Mr. Hari Akunuri – TDEC Division of Water Resources

Attached: Annotated Decentralized Treatment/Land Application/Force Main Project Requirements

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

MR. CHARLES R. HYATT
CEO
ADENUS GROUP, LLC
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

August 2, 2016

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

Subject: **Notice of Complete Application for SOP Permit Number SOP-00019**
TN Wastewater Systems - Starr Crest Resort
Pigeon Forge, Sevier County, Tennessee

Dear Mr. Hyatt:

The Division of Water Resources (the division) acknowledges the receipt of a permit application in our office on July 21, 2016. Rules of the Tennessee Department of Environment and Conservation, Division of Water Pollution Control, Chapter 0400-40-5-.05 (2): *Permit Application, Issuance*, state, in part:

> *"The applicant will be provided notice of completeness of the application and re-submitted material within 30 days of a determination that such material constitutes a complete application. 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."*

Our review of the SOP permit application showed that you have submitted all the information required for the permit reissuance. If your complete application was mailed to our office 180 days prior to the current permit expiration date of June 30, 2018, and the permit is not reissued by that date, discharges from the facility will be automatically authorized through administrative extension of the current permit.

If you have questions, please contact the division at your local 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*.

Sincerely,

Hari V. Akunuri/gw

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

cc: Permit Section File
Ms. Michelle Ramsey, Utilities Division, Tennessee Regulatory Authority, michelle.ramsey@tn.gov
Ms. Patsy Fulton, Utility Rate Specialist, Tennessee Regulatory Authority, Patsy.Fulton@tn.gov

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

July 25, 2016

Public Notice Number: **MMXVI-014**
Expiration Date: August 29, 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	**Benton STP**				
Permit Number	**TN0067334**	Permit Writer Initials	**JCM**	Discharger rating	**Minor**
County	Polk			EFO Name	**Chattanooga**
Street Address/Location	320 Town Creek Road				
City and/or Zip Code	Benton, TN 37307				
Description of Activity	Treatment of municipal sewage				
Effluent Description	treated municipal wastewater from Outfall 001				
Receiving Stream	Four Mile Creek Mile 1.7				
Facility Latitude	35.18	Facility Longitude		-84.66	

Applicant Name	**Carter County Work Camp**				
Permit Number	**TN0061531**	Permit Writer Initials	**REA**	Discharger rating	**Minor**
County	Carter			EFO Name	**Johnson City**
Street Address/Location	Old Railroad Grade Road				
City and/or Zip Code	Roan Mountain, TN 37687				
Description of Activity	treatment of domestic wastewater by extended aeration				
Effluent Description	treated domestic wastewater from Outfall 001				
Receiving Stream	Doe River at mile 18.0				
Facility Latitude	36.21	Facility Longitude		-82.11	

Applicant Name	**Illinois Central Railroad - Harrison Yard**
Permit Number	**TN0077941** Permit Writer Initials **JCM** Discharger rating **Minor**
County	Shelby EFO Name **Memphis**
Street Address/Location	2921 Old Horn Lake Road
City and/or Zip Code	Memphis, TN 38109
Description of Activity	Active rail yard for locomotive fueling, servicing, rail car repair, railroad marshaling, and hopper car cleaning facility.
Effluent Description	industrial storm water runoff from Outfall 601
Receiving Stream	unnamed tributary at mile 0.5 to Nonconnah Creek at mile 2.1
Facility Latitude	35.07 Facility Longitude -90.07

Applicant Name	**Texas Eastern Transmission, LP - Gladeville**
Permit Number	**TN0067237** Permit Writer Initials **AEWF** Discharger rating **Minor**
County	Wilson EFO Name **Nashville**
Street Address/Location	7555 Franklin Road
City and/or Zip Code	Lebanon, TN 37090
Description of Activity	Natural Gas Transmission
Effluent Description	treated non-process wastewater and stormwater runoff through Outfall 001 and treated groundwater and stormwater through Outfall 002 and 003
Receiving Stream	unnamed tributary of Sinking Creek for Outfall 001 and a wet weather conveyance along Central Pike to an unnamed tributary of Sinking Creek for Outfalls 002 and 003
Facility Latitude	36.14 Facility Longitude -86.41

State Operation Permits

Proposed Modifications

Applicant Name	**Aqua Green Utility - Peninsula**
Permit Number	**SOP-09022** Permit Writer Initials **HVA** Discharger rating **Minor**
County	Jefferson EFO Name **Knoxville**
Street Address/Location	1631 Emerald Pointe Blvd: Douglas Lake off Parrotts Chapel Road in the Shady Grove Area
City and/or Zip Code	Dandridge, TN 37725
Description of Activity	Septic tanks, effluent collection system, fixed film biological treatment, UV disinfection and 1.62 acre drip irrigation.This modification includes a drip-area fence requirement and deletes the E. coli monitoring requirement.
Wastewater Description	No discharge allowed from this system
Receiving Stream	N/A
Facility Latitude	35.94 Facility Longitude -83.44

Applicant Name	**EnergySolutions Secured, LLC, dba Atkins Nuclear Secured-USDOE Y-12 National Security Complex Site (formerly EnergySolutions)**
Permit Number	**SOP-00004** Permit Writer Initials **WDM** Discharger rating **Minor**
County	Anderson EFO Name **Knoxville**
Street Address/Location	Bear Creek Road, Y-12 Plant Site, 9983-BX and 9983-BL
City and/or Zip Code	Oak Ridge, TN 37831
Description of Activity	Pump & haul sewerage system from Y-12 to a municipal STP; Modification changes permittee name and deletes 1 of 2 activity sites that will no longer be used (site at Building 9983-BX).
Wastewater Description	a holding tank/haul system to dispose of domestic wastewater from a facility located at Y-12 Plant and Bear Creek Road in Oak Ridge, Anderson County.
Receiving Stream	N/A
Facility Latitude	35.98 Facility Longitude -84.28

Proposed New Issuances

Applicant Name	**Boxwell Reservation, Boy Scouts of America**			
Permit Number	**SOP-16017**	Permit Writer Initials **HVA**	Discharger rating **Minor**	
County	Wilson		EFO Name **Nashville**	
Street Address/Location	1260 Creighton Lane			
City and/or Zip Code	Lebanon, TN 37087			
Description of Activity	Septic tanks, collection system, recirculating sand filter and UV disinfection			
Wastewater Description	No discharge allowed from this system			
Receiving Stream	N/A			
Facility Latitude	36.31	Facility Longitude	-86.46	

Applicant Name	**CUDRC - Clearview Acres SD**			
Permit Number	**SOP-16018**	Permit Writer Initials **HVA**	Discharger rating **Minor**	
County	Rutherford		EFO Name **Nashville**	
Street Address/Location	along Walnut Grove Road (Hwy west of Hwy 231)			
City and/or Zip Code				
Description of Activity	Septic tanks, effluent collection system, recirculating sand filter and fenced drip			
Wastewater Description	No direct discharge allowed from this system			
Receiving Stream	N/A			
Facility Latitude	35.72	Facility Longitude	-86.43	

Applicant Name	**Carmax Auto Superstores, Inc. #6082**			
Permit Number	**SOP-16019**	Permit Writer Initials **WDM**	Discharger rating **Minor**	
County	Sullivan		EFO Name **Johnson City**	
Street Address/Location	449 Pinnacle Pkwy			
City and/or Zip Code	Bristol, TN 37620			
Description of Activity	Mobile carwash without chemical additives with wash water collection, treatment and onsite discharge to public sewer			
Wastewater Description	No discharge allowed			
Receiving Stream	NA			
Facility Latitude	36.59	Facility Longitude	-82.27	

Proposed Reissuances

Applicant Name	**City of Henry**			
Permit Number	**SOP-03054**	Permit Writer Initials **HVA**	Discharger rating **Minor**	
County	Henry		EFO Name **Jackson**	
Street Address/Location	Dogwood Street			
City and/or Zip Code	Henry, TN 38231			
Description of Activity	STEP, two stage wetlands - subsurface followed by open cell and drip irrigation			
Wastewater Description	No discharge allowed			
Receiving Stream	N/A			
Facility Latitude	36.20	Facility Longitude	-88.42	

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*. Comments must be received by the public notice expiration date (August 29, 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 (August 29, 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
(931) 432-4015
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

List of DWR Permit Writers

AEWF	Ms.	Ariel Wessel-Fuss	(615) 532-0642	Ariel.Wessel-Fuss@tn.gov
ARa	Mr.	Allen Rather	(615) 532-5819	Allen.Rather@tn.gov
BCH	Mr.	Brad Harris	(615) 532-5367	Brad.Harris@tn.gov
BKC	Mr.	Brian Canada	(615) 532-0660	Brian.Canada@tn.gov
CEE	Ms.	Caitlin Elam	(615) 532-0359	Caitlin.Elam@tn.gov
HVA	Mr.	Hari Akunuri	(615) 532-0650	Hari.Akunuri@tn.gov
JAH	Miss	Julie Harse	(615) 532-0682	Julie.Harse@tn.gov
JCM	Mr.	Jim McAdoo	(615) 532-0684	Jim.McAdoo@tn.gov
JCN	Mr.	John Newberry	(615) 532-7743	John.Newberry@tn.gov
JWo	Ms.	Jeanene Woodruff	(615) 532-0645	Jeanene.Woodruff@tn.gov
MEP	Ms.	Meghan Ploch	(615) 532-0646	Meghan.Ploch@tn.gov
MTS	Ms.	Maybelle T. Sparks	(615) 532-0651	Maybelle.Sparks@tn.gov
PJH	Mr.	Paul Higgins	(615) 532-1178	Paul.Higgins@tn.gov
PLB	Mr.	Lyle Bentley	(615) 532-0154	Lyle.Bentley@tn.gov
PMS	Mr.	Phil Simmons	(615) 532-0358	Phil.Simmons@tn.gov
RDB	Mr.	Robert D. Baker	(615) 532-0710	Robert.D.Baker@tn.gov
REA	Mr.	Bob Alexander	(615) 532-0659	Robert.Alexander@tn.gov
RGO	Mr.	Robert O'Dette	(615) 253-5319	Robert.Odette@tn.gov

RJW	Mr.	Robert Wayne	(615) 532-0709	Robert.J.Wayne@tn.gov
SEF	Ms.	Souraya Fathi	(615) 532-0485	Souraya.Fathi@tn.gov
VLJ	Ms.	Vena Jones	(615) 253-5320	Vena.L.Jones@tn.gov
VMJ	Mr.	Vojin Janjic	(615) 532-0670	Vojin.Janjic@tn.gov
WDM	Mr.	Wade Murphy	(615) 532-0666	Wade.Murphy@tn.gov
WML	Mr.	Mike Lee	(615) 532-0712	Mike.Lee@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

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 Risden

From: Charles Hyatt
Sent: Tuesday, July 26, 2016 1:21 PM
To: George Garden
Cc: Roy Denney; Jeff Risden; Bob Pickney; Chris Leauber (cleauber@wwawc.com); tvwhite@tewlawfirm.com
Subject: Timeline

George,

I understand that Roy and you are making steps towards a resolution for the Pine Creek permit. I am trying to understand the expectation of timeline on Pine Creek permit as well as Summit View and Starr Crest II. Developers and HOA's are asking me when these items will be resolved. I can't give them an expected timeline as we do not have an expectation of the timeframe from TDEC.

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Again, thanks for the effort and support and I look forward to resolving these issues promptly.

Charles

Jeff Risden

From: George Garden <George.Garden@tn.gov>
Sent: Tuesday, July 26, 2016 5:37 PM
To: Charles Hyatt
Cc: Roy Denney; Jeff Risden; Bob Pickney; Chris Leauber (cleauber@wwawc.com); tvwhite@tewlawfirm.com
Subject: Timeline Status
Attachments: 160725_Letter of Incomple Application for Starr Crest II.doc; 160725_Starr Crest II APPENDIX 1 Requirements Matrix.docx

Charles, thank you for your direct inquiry. I will try to answer your questions as best I can as of right now.

I assume by the Pine Creek permit you are referring to the Water and Wastewater Authority of Wilson County (WWA-WC) Logue Road system. I have read and reviewed the "Rule 408 Settlement Discussions" dated July 25, 2016 from Bill Penny and responded internally with my recommendations. I waited until I had received Roy's additional calculations adding the Delacy and Guethlein development land application sites to inform my opinion. While there are still some issues, I believe that there is now a basis to move forward and a high probability that a modified SOP can be negotiated. In many ways the Logue Road permit is an exception within the state and we are trying to work within those exceptional circumstances and still be as consistent across the board as we can. I can say that we are actively looking at Bill Penny's proposal now.

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Beneficial Reuse requires an increased degree of trust between the regulated community and the regulators. It stands on the basis that the reclaimed water producer, whose product is monitored relatively infrequently, and the reuser of the product will exercise independent care beyond that required in normal permit (NPDES or SOP) situations to protect public health, public perception of the industry, and the environment. That trust factor has taken a hit this calendar year. I too hope that factor can be established/reestablished in short order so that the Logue Road system and other WWA-WC systems can be dealt with expeditiously.

TN Department of Environment & Conservation

George C. Garden, P.E. BCEE| Chief Engineer
Division of Water Resources
11th Floor, William R. Snodgrass TN Tower
312 Rosa L. Parks Avenue
Nashville TN 37243-1102
p. 615-253-9934 c. 615-416-0164
george.garden@tn.gov

From: Charles Hyatt [mailto:Charles.Hyatt@Adenus.com]
Sent: Tuesday, July 26, 2016 1:21 PM
To: George Garden
Cc: Roy Denney; Jeff Risden; Bob Pickney; Chris Leauber (cleauber@wwawc.com); tvwhite@tewlawfirm.com
Subject: Timeline

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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

7/25/2016

Roy Denney, P.E.
CTO Adenus Group
e-copy: roy.denney@adenus.com
Address: 849 Aviation Way
Smyrna, TN 37167

Subject: **County: Sevier**
Project: Starr Crest II SOP-01033

Dear Mr. Denney:

The Division of Water Resources recently conducted a review of the Plans and Engineering Report for the proposed modification to the above referenced site. The engineering report nor the plans addressed all the criteria relevant to the projectl. To expedite the review process, Attachment 1 is included. It is a matrix containing requirements for preliminary and final engineering submittals broken down by project type. This project includes a decentralized wastewater treatment plant (category DC in the matrix), and land application (LA) and also force main for the STEP system (FM) if this submission is to be considered to include the collection system as well. Applicable items on the attachment are highlighted and particular deficiencies added to the line item in bullet format. The submission is considerably short of generally accepted wastewater engineering standards and a resubmission is requested. This is the second submission of this project; please provide an additional plans and engineering report review fee with the third submission.

The following paragraphs in italics from the original review in April remain appropriate: *The system is currently permitted for 12,000 gpd flow. The proposal is to increase the capacity to 60,000 gpd by adding two Bioclere 30/32 units and additional drip dispersal area. The additional soils area submitted is supportive of approximately 30,000 gpd at .25gpd/ft2. In order to process your request, we need soils information on the original dispersal site detailing the area available with a scaled layout of the initial system and the proposed area for additional drip. Also,since the concern is peak flows, consideration for mass balance as described in Chapter 1 Design Criteria needs to be addressed.*

Chapter 1. Section 1.2.5.5 "The Division requires the submittal of a mass balance for all plants. The mass balances must include loadings to each unit process, operations, including all recycle, and side stream flows. Mass balances must include the following initial and design operating conditions: maximum, minimum, and average flow, BOD and suspended solids loadings; and maximum, minimum, and average nutrient loadings, especially nitrogen for plants with considerable industrial loadings and/or where nutrient removal (is a consideration)."

Further, all of the property in question is currently owned by the Starr Crest Home Owner's Association. Consequently, you must provide either proof of ownership or a legal deeded easement for the property

where the existing system is installed and the proposed area for the modification. At a minimum, the SOP application states: "If the applicant listed above does not yet own the facility /site or if the applicant will not be the operator, explain how and when the ownership will be transferred or describe the contractrual arrangement and renewal terms of the contract for operations."

If you have any questions, please contact me at 615-253-9934 or by email at george.garden@tn.gov.

Sincerely,

George C Garden, P.E. BCEE
Division of Water Resources

cc: Water-Based Systems File
Mr. Michael Atchley, Unit Manager, TDEC Division of Water Resources, Micheal.Atchley@tn.gov
Mr. Brad Harris, P.E. – TDEC -Division of Water Resources, Brad.Harris@tn.gov
Mr. Hari Akunuri – TDEC – Division of Water Resources, Hari.Akunuri@tn.gov

Attached: Annotated Decentralized Treatment/Land Application/Force Main Project Requirements

APPENDIX 1-B-1

PRELIMINARY DISCUSSION

ITEM #		DESCRIPTION	TF	DC	SLS	FM	GR	LA	RH	RU
		LEGEND								
		Treatment Facility **(generally conventional treatment with discharge to surface waters via NPDES permit and capacity >30,000 gallons per day; reuse and land application may be included)**	X							
		Decentralized **facility (generally on-site treatment systems with discharge to land application or reuse via SOP and capacity </= 30,000 gpd; reuse and surface discharge may be included)**		X						
		Sewer Lift Station **(generally wastewater pumping system within collection system or in treatment facility or decentralized treatment facility.)**			X					
		Force Main **(generally pressurized closed conduit system for transmission of wastewater; may be included in TF, DC and SLS categories.)**				X				
		Gravity **Collection Piping (generally closed conduit system for transmission of wastewater by gravity flow open to the atmosphere; may be included in TF, DC, SLS categories.)**					X			
		Land Application **(Chapter 16 and 17 of Design Criteria) of treated wastewater; may be included in TF and DC categories.)**						X		
		Sewer *Rehabilitation* (gravity or force main or associated appurtenances such as manholes)							X	
		Wastewater Reuse (may be included with TF, DC, SLS, FM or LA categories.)								X
		PRELIMINARY DISCUSSION FORMAT								
		(To discuss scope of project and format of preliminary discussion, contact Land Based Systems (615-xxx-xxxx) for systems primarily discharging to land application or reuse systems; contact Water Based Systems (615-xxx-xxxx) for systems primarily discharging to surface waters. More formal meeting format is recommended for larger, more complex and/or controversial projects.)								
		Face-to-Face Meeting with Division of Water Resources and potentially Funding Agency representatives highly recommended; handouts by owner/designer and Division coordinated beforehand.	X	?				?		?
		Telephone Conference level meeting with previously delivered/distributed handouts to cover agenda items.		X	X	X	X	X	X	X
		Letter/email with appropriate attachments			?	?	?		?	
I.		**AGENDA ITEMS FOR PRELIMINARY DISCUSSION**								
	A.	Identity of applicant; permittee; consulting engineer; funding agencies if applicable	X	X	X	X	X	X	X	X
	B.	Project purpose and objective	X	X	X	X	X	X	X	X
	C.	Preliminary Engineering Report (including life cycle alternative cost analyses requirements for funding agency; permitting issues or equipment/process selection anticipated; plant expansion vs. I&I reduction will always be required if applicable.)	X	X	X	X	X	X	X	X
	D.	Map of general service area, probable site and construction area; adjacent properties; significant waters of the state or geological features potentially impacted; property boundaries involved.	X	X	X		X	X	X	X
	E.	System capacity (ADDWF, ADF, Peak Flow; Design Flow; Influent loads at ADDWF, ADF and Design Flow)								

		AGENDA ITEMS FOR PRELIMINARY DISCUSSION (continuation)								
ITEM #		DESCRIPTION	TF	DC	SLS	FM	GR	LA	RH	RU
	F.	Receiving waters status; land application site suitability for wastewater assimilation; reuse options, categories for reclaimed water and required treatment quality to qualify for reuse.	X	X				X		X
	G.	Permits: individual/General NPDES or SOP; Individual/General Construction; Individual/General ARAP; Stormwater permits and requirements; Reuse addendums; Other permits; Schedule of permit applications and integration with plans and specification submittals; Compliance and enforcement issues if applicable.	X	X	X	X	X	X	X	X
	H.	Reliability class of components	X	X	X					X
	I.	Preliminary Engineering Submittal Requirements: Engineering Report and Preliminary Plan Sheets	X	X	X	X	X	X	X	X
II.		POST-PRELIMINARY DISCUSSION ACTIONS								
		Meeting Minutes prepared and reviewed by participants including anticipated fees and submission requirements; anticipated submittal schedule and coordination with funding , action items, information requirements and locations; Preliminary Design Submittals: Preliminary Plans and Engineering Report requirements.	X	X	X	X	X	X	X	X

		APPENDIX 1-B-2								
		PRELIMINARY DESIGN SUBMISSION								
ITEM #		DESCRIPTION	TF	DC	SLS	FM	GR	LA	RH	RU
I.		**PRELIMINARY PLANS (DRAWINGS) SUBMITTAL (may be included in Engineering Report submitted coincidently).**								
	A.	Cover Sheet with site location, project name, permittee signature (submittal approval), design professional seal (indicating preliminary submittal – not for construction), architectural/code standards; seismic design standards; anticipated table of contents indicating preliminary sheets included	X	X	X	X	X	X	X	X
	B.	Existing facilities site plan (collection and/or treatment system); indicating anticipated demolition and renovation, rehabilitation or replacement. • **Show existing configuration (plant and disposal field)(recommend on separate sheet). (Conventional format is to screen back existing and darken new.)**	?	?	?	?	?	?	X	?
	C.	Nature and extent of the service area including existing and projected development • **Is this intended to be approval for the STEP system as well?** • **What is the flow data for the existing development?**	X	X	X		X	X	X	X
	D.	Proposed site plan(s) including surveyed property boundaries, plat identification information, adjacent property ownership and plat identification, proposed facility and major pipeline locations, existing and proposed easements; existing wetlands, streams/wet weather conveyances, sinkholes, wooded and open areas, 100 year flood elevation (and 500 year if USDA RDA funding is to be utilized). • **Property lines? Surveyed boundaries? Plat information? Adjacent property ownership from tax maps?** • **Pipelines for new or existing incomplete; should extend from lots to disposal field headers inclusive on at least some drawing or combination of drawings; label size of lines** • **What is the box with the triangle where the STEP lines from the each residence come together? (Sheet 2 of 7)** • **Even though this is modification of an existing system, there has been no attempt to reflect the existing as a record drawing. There is not contour modifications for roads or lots and, most important no indication how stormwater flow will be diverted from the disposal fields.**	X	X	X	X	X	X	X	X
	E.	Soil map(s) for proposed disposal areas with contours, pit sites, proposed disposal/drip/spray zones delineated • **Please provide a soil map with the plans; superimpose the disposal field on the soil map for clarity.** • **Provide detail requested above on the soil maps.**						X		X
	F.	Process flow diagram (or Process and Instrumentation Diagram, P&ID)) depicting overall process piping with diameter, material, and design flow indicated, processes equipment (indicating critical design parameters), instrumentation equipment and control devices; diagram should differentiate between piping and signal flow paths, between parameter transmission and control signal paths, between local, remote and SCADA control panels, between existing elements and proposed (hydraulic profile for simple	X	X	X			X		X

		projects may be included.) • **Process flow diagram particularly important; indicate existing and modification for expansion for treatment plant and for disposal drip fields in accordance with description in the basic item above.**								
	G.	Structure footprints with major equipment locations • **Are you a structural engineer? Water stops in tank? Water stops on pipe penetrations? Pour joints?**	X	X	X			X		X
	H.	Plant and yard piping, force main, gravity lines (may be single lines for preliminary submittal); hydraulic profile at ADDWF, Design and Peak Flows • **Hydraulics at existing and peak flows.**	X	X	X	X	X	X		
	I.	Pump station and storage basin elevations or cross section with control levels/set points and volumes between control levels indicated • **Please**	X	X	X					X
	J.	One line electrical distribution diagram showing normal, secondary and standby powerd • **Please. There should be an existing and proposed.**	X	X	X					X
	K.	Sewer system annotated with standard or equivalent material conditions and rationale for rehab work extent as derived from flow monitoring/SSES investigations.							X	

ITEM #		DESCRIPTION	TF	DC	SLS	FM	GR	LA	RH	RU
II.		ENGINEERING REPORT								
	A.	Basis for influent flow characterization (Estimates from Design Criteria-Chapter 2, flow monitoring or other current data, sampling, pretreatment program, industrial owner projections, population trends, population predictions, etc.) • **How does your flow data match your sq. ft. rental vs flow?**	X	X	X	X	X	X	X	X
	B.	Characterization of flow (diurnal patterns, ADDWF, ADF, Design Flow, Peak Flow; organic and industrial inorganic loads (CBOD5, NH3-N, H2S, pH, TN, TP, (COD), alkalinity); grit and trash loading estimates or data • **Your should have this by now.**	X	X	X	X	X	X	X	X
	C.	Unit process design parameters (referenced to Design Criteria chapters 2-17; or pertinent data on systems not covered by Design Criteria); equipment selection rationale should demonstrate appropriateness of capacity and capability throughout range of operation currently (ADDWF-Peak Flow) and existing to 20 year design flow in order to meet discharge permit, land application conditions or reuse conditions. (Life cycle alternative analyses for process or equipment selected if not previously provided in PER or as requested at time of preliminary discussion.) • **Hydraulic and nutrient capacity of Bioclere selected.**	X	X	X					X
	D.	Pump hydraulics (System curves superimposed on pump curves for minimum and maximum head conditions and anticipated range of pipe friction estimates including C=130 Hazen-Williams friction coefficient) • **Pumps for STEP if this is supposed to be the design for that system.** • **H-Q and system curve for STEP pump (at least worst case)** • **Pump hydraulics for treatment and dosing pumps; H-Q and system curves super-imposed for design flows for worst case.**	X	X	X			X		X
	E.	Chemical feed pump selection data demonstrating ability to meet range of target concentrations over process flow rates • NA	X	X	X					?
	F.	Chemical storage volumes and environments to meet requirements • NA	X	X	X					
	G.	Reliability levels for equipment, appropriate redundancy and ability to isolate for maintenance and operational conditions • **See Design Criteria Chapter 1**	X	X	X					X
	H.	Energy saving solutions considered (e.g., variable speed drives on pumps and blowers, denitrification capability, timers on blowers based on DO or ORP instrumentation)	X		X					X
	I.	Odor control consideration	X		X					
	J.	Corrosion control consideration	X		X					
	K.	Velocities in gravity sewers and mitigation if required					X			

	L.	Calculations for nutrient and hydraulic loading for land application areas; emergency storage for spray application systems • NA						X		
	M.	Flow data (from temporary or permanent flow meters, pump run-times, pump power consumption, overflows as a function of rain fall events, influent flow meters at pump stations or wastewater treatment plant versus rainfall events) in existing collection system • **See item B above.**	X	?	X	X	X			
	N.	Justification for rehabilitation methodology, scope and site selection; methods to be used to ensure quality control and to reduce failures of rehab pipe at connection to manholes; method to measure reduction in flows							X	
	O.	Potential reuse sales; required quality; example reuse contracts; meter locations and sampling plan to determine delivery of appropriate quality reclaimed water.	X							X
	Q.	Status and coverage of all required/anticipated permits including State, federal, and local, outlined	X	X		X		X		X
	R.	Tables demonstrating unit process conformance to the appropriate Design Criteria requirements or justification for systems not addressed or whose performance is outside the Design Criteria accepted performance. (Checklists being developed and included in Design Criteria may be used for this purpose.)	X	X	X	X	X	X	X	

		APPENDIX 1-B-3								
		FINAL PLANS, SPECIFICATIONS, CONSTRUCTION DOCUMENTS SUBMISSION								
ITEM #		DESCRIPTION	TF	DC	SLS	FM	GR	LA	RH	RU
I.		**Final Plans**								
	A.	Implement the approved preliminary plans	X	X	X	X	X	X	X	X
	B.	Safety features included: handrails; chemical storage compatibility; eye wash stations; egress; ventilation	X	X	X					
	C.	Maintainability: adequate equipment isolation; redundancy; drains for tanks and lines to support repair; accessibility	X	X	X					
	D.	Piping and storage tank material-liquid compatibility	X	?	?					
	E.	Erosion control system implemented; post –construction stormwater features shown; final site contours	X	X	X	X	X	?		?
II.		**Specifications**								
	A.	Performance specifications or specific equipment called out in the technical specifications for all critical process equipment	X	X	X			X		
	B.	SCADA or instrumentation and controls sequence of operation included	X	X	X			X		
	C.	Permit required monitoring and sampling locations included at appropriate locations	X	X				?		X
	D.	Stormwater permits (SWPPP, ARAP, SWP)/provisions and wetlands protection implemented	X	?	?	?	?	?		?
	E.	Training and start-up provisions for operators and maintenance crew provided in specifications	X	?	?			?		?
	F.	Inspections (substantial completion and final completion)/punch lists/acceptance tests/close-out/record drawings/warranty provisions included and verification by engineer, contractor, owner, funding agencies and TDEC representative; provisions to withhold final payment until all issues resolved.	X	X	X	X	X	X	X	X
III.		**Engineering Report**								
		Revisions only required if changes from the preliminary submission have occurred that alter the basis of design	?	?	?	?	?	?	?	?

ABBREVIATIONS/DEFINITIONS	
ADDWF	Average Daily Dry Weather Flow (average daily flow of lowest 5 day consecutive period within last 5 years or since last major rehabilitation or construction affecting collection system flows; assumed to be baseline flow without significant rain derived Inflow and infiltration addition (RDI&I)))
ADF	Average Daily Flow over 5 years or since the last major rehabilitation or construction affecting collection system flows
Design Flow	Average Daily Flow for which the plant is designed; assumed to include projected growth for 20 years unless otherwise indicated
Peak Flow	Highest 15 minute flow observed in last year
Influent Loads	Raw wastewater flow characteristics in terms of [mg/L] of the constituents; constituents of concern include CBOD5, TSS, NH3-N, TN, TP; depending on process or collection system can include other parameters of concern; pH in common pH units; temperature in degrees C;

Jeff Risden

From: Charles Hyatt
Sent: Wednesday, July 27, 2016 8:11 AM
To: George Garden
Cc: Roy Denney; Jeff Risden; Bob Pickney; Chris Leauber (cleauber@wwawc.com); tvwhite@tewlawfirm.com
Subject: RE: Timeline Status

George,

Thanks for the prompt response. Not sure I got a reasonable expectation of a timeline, but appreciate the comments provided. Again, I can't emphasize enough, if the Department is waiting on information, please let me know for I can provide that information all at once, rather than wait two or three months and then "I need more information".

In regards to Summit View, I will keep my comments brief due to litigation issues. I feel the Department is trying to overstep its Authority in reviewing these plans and ultimately, this is why we have ended up in litigation over the recent years. We have submitted plans for 18,000 gpd with soils and engineering plans. The question is: Does the plans and soils support 18,000 gpd permit application? If I submitted plans for 40,000 gpd with all the necessary support, it should not be the Department's authority to act as the Utility Operator to determine if 40,000 or 18,000 is too much. We have provided you with historical flows and all the engineering requirements to evaluate the expansion. I do not understand why it is taking the Department so long to review these plans. I guess these answers will come out in due process.

Again, thanks for the prompt response and we look forward to resolving these outstanding issues in a timely manner with a reasonable expectation of the outcome.

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To: Charles Hyatt <Charles.Hyatt@Adenus.com>
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Summit View. Not sure of the schedule right now. A lot of moving parts.

The Beneficial Reuse of Reclaimed Wastewater. I'm sure when the external review committee was being formed it was believed a law firm representing you was included. I can assure you that nobody, but nobody, has had more of an influence on the development of reuse policy in Tennessee than TWSI/Adenus. Thank you for your assistance.

Beneficial Reuse requires an increased degree of trust between the regulated community and the regulators. It stands on the basis that the reclaimed water producer, whose product is monitored relatively infrequently, and the reuser of the product will exercise independent care beyond that required in normal permit (NPDES or SOP) situations to protect public health, public perception of the industry, and the environment. That trust factor has taken a hit this calendar year. I too hope that factor can be established/reestablished in short order so that the Logue Road system and other WWA-WC systems can be dealt with expeditiously.

TN Department of Environment & Conservation

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From: Charles Hyatt [mailto:Charles.Hyatt@Adenus.com]
Sent: Tuesday, July 26, 2016 1:21 PM
To: George Garden
Cc: Roy Denney; Jeff Risden; Bob Pickney; Chris Leauber (cleauber@wwawc.com); tvwhite@tewlawfirm.com
Subject: Timeline

George,

I understand that Roy and you are making steps towards a resolution for the Pine Creek permit. I am trying to understand the expectation of timeline on Pine Creek permit as well as Summit View and Starr Crest II. Developers and HOA's are asking me when these items will be resolved. I can't give them an expected timeline as we do not have an expectation of the timeframe from TDEC.

In regards to Pine Creek, I hope everyone understands the importance of resolving the issues in a timely manner. We have a tremendous amount of economic development waiting on the progress of sewer in the Gladeville area. The infrastructure is in the ground to discharge Reuse water in certain areas today. Every day that we delay in getting these areas permitted for discharge of Reuse water, the larger the water imbalance will become later in the year. I know Roy and you have been exchanging information and hopefully you have all the data that is needed to make a determination of the permit re-issuance. If there is information that is needed or expected from the Department, please let me know so I can work on providing that information promptly.

I certainly appreciate the effort and support you are making towards the land application program. Again, I request that a representative of Adenus or Water and Wastewater Authority to be a part of your Reuse Committee. We have been and are a significant proponent of reuse and one of the largest uses or reuse today in Tennessee. I do not understand why we were not invited to be a member of the committee.

Again, thanks for the effort and support and I look forward to resolving these issues promptly.

Charles

APPENDIX 1-B-1										
PRELIMINARY DISCUSSION										
ITEM #		DESCRIPTION	TF	DC	SLS	FM	GR	LA	RH	RU
		LEGEND								
		Treatment Facility **(generally conventional treatment with discharge to surface waters via NPDES permit and capacity >30,000 gallons per day; reuse and land application may be included)**	X							
		Decentralized **facility (generally on-site treatment systems with discharge to land application or reuse via SOP and capacity </= 30,000 gpd; reuse and surface discharge may be included)**		X						
		Sewer Lift Station **(generally wastewater pumping system within collection system or in treatment facility or decentralized treatment facility.)**			X					
		Force Main **(generally pressurized closed conduit system for transmission of wastewater; may be included in TF, DC and SLS categories.)**				X				
		Gravity **Collection Piping (generally closed conduit system for transmission of wastewater by gravity flow open to the atmosphere; may be included in TF, DC, SLS categories.)**					X			
		Land Application **(Chapter 16 and 17 of Design Criteria) of treated wastewater; may be included in TF and DC categories.)**						X		
		Sewer *Rehabilitation* (gravity or force main or associated appurtenances such as manholes)							X	
		Wastewater Reuse (may be included with TF, DC, SLS, FM or LA categories.)								X
		PRELIMINARY DISCUSSION FORMAT								
		(To discuss scope of project and format of preliminary discussion, contact Land Based Systems (615-xxx-xxxx) for systems primarily discharging to land application or reuse systems; contact Water Based Systems (615-xxx-xxxx) for systems primarily discharging to surface waters. More formal meeting format is recommended for larger, more complex and/or controversial projects.)								
		Face-to-Face Meeting with Division of Water Resources and potentially Funding Agency representatives highly recommended; handouts by owner/designer and Division coordinated beforehand.	X	?				?		?
		Telephone Conference level meeting with previously delivered/distributed handouts to cover agenda items.		X	X	X	X	X	X	X
		Letter/email with appropriate attachments			?	?	?		?	
I.		**AGENDA ITEMS FOR PRELIMINARY DISCUSSION**								
	A.	Identity of applicant; permittee; consulting engineer; funding agencies if applicable	X	X	X	X	X	X	X	X
	B.	Project purpose and objective	X	X	X	X	X	X	X	X
	C.	Preliminary Engineering Report (including life cycle alternative cost analyses requirements for funding agency; permitting issues or equipment/process selection anticipated; plant expansion vs. I&I reduction will always be required if applicable.)	X	X	X	X	X	X	X	X
	D.	Map of general service area, probable site and construction area; adjacent properties; significant waters of the state or geological features potentially impacted; property boundaries involved.	X	X	X		X	X	X	X
	E.	System capacity (ADDWF, ADF, Peak Flow; Design Flow; Influent loads at ADDWF, ADF and Design Flow)								

		AGENDA ITEMS FOR PRELIMINARY DISCUSSION (continuation)								
ITEM #		DESCRIPTION	TF	DC	SLS	FM	GR	LA	RH	RU
	F.	Receiving waters status; land application site suitability for wastewater assimilation; reuse options, categories for reclaimed water and required treatment quality to qualify for reuse.	X	X				X		X
	G.	Permits: individual/General NPDES or SOP; Individual/General Construction; Individual/General ARAP; Stormwater permits and requirements; Reuse addendums; Other permits; Schedule of permit applications and integration with plans and specification submittals; Compliance and enforcement issues if applicable.	X	X	X	X	X	X	X	X
	H.	Reliability class of components	X	X	X					X
	I.	Preliminary Engineering Submittal Requirements: Engineering Report and Preliminary Plan Sheets	X	X	X	X	X	X	X	X
II.		POST-PRELIMINARY DISCUSSION ACTIONS								
		Meeting Minutes prepared and reviewed by participants including anticipated fees and submission requirements; anticipated submittal schedule and coordination with funding , action items, information requirements and locations; Preliminary Design Submittals: Preliminary Plans and Engineering Report requirements.	X	X	X	X	X	X	X	X

		APPENDIX 1-B-2 PRELIMINARY DESIGN SUBMISSION								
ITEM #		DESCRIPTION	TF	DC	SLS	FM	GR	LA	RH	RU
I.		**PRELIMINARY PLANS (DRAWINGS) SUBMITTAL (may be included in Engineering Report submitted coincidently).**								
	A.	Cover Sheet with site location, project name, permittee signature (submittal approval), design professional seal (indicating preliminary submittal – not for construction), architectural/code standards; seismic design standards; anticipated table of contents indicating preliminary sheets included	X	X	X	X	X	X	X	X
	B.	Existing facilities site plan (collection and/or treatment system); indicating anticipated demolition and renovation, rehabilitation or replacement. • **Show existing configuration (plant and disposal field)(recommend on separate sheet). (Conventional format is to screen back existing and darken new.)**	?	?	?	?	?	?	X	?
	C.	Nature and extent of the service area including existing and projected development • **Is this intended to be approval for the STEP system as well?** • **What is the flow data for the existing development?**	X	X	X		X	X	X	X
	D.	Proposed site plan(s) including surveyed property boundaries, plat identification information, adjacent property ownership and plat identification, proposed facility and major pipeline locations, existing and proposed easements; existing wetlands, streams/wet weather conveyances, sinkholes, wooded and open areas, 100 year flood elevation (and 500 year if USDA RDA funding is to be utilized). • **Property lines? Surveyed boundaries? Plat information? Adjacent property ownership from tax maps?** • **Pipelines for new or existing incomplete; should extend from lots to disposal field headers inclusive on at least some drawing or combination of drawings; label size of lines** • **What is the box with the triangle where the STEP lines from the each residence come together? (Sheet 2 of 7)** • **Even though this is modification of an existing system, there has been no attempt to reflect the existing as a record drawing. There is not contour modifications for roads or lots and, most important no indication how stormwater flow will be diverted from the disposal fields.**	X	X	X	X	X	X	X	X
	E.	Soil map(s) for proposed disposal areas with contours, pit sites, proposed disposal/drip/spray zones delineated • **Please provide a soil map with the plans; superimpose the disposal field on the soil map for clarity.** • **Provide detail requested above on the soil maps.**						X		X
	F.	Process flow diagram (or Process and Instrumentation Diagram, P&ID)) depicting overall process piping with diameter, material, and design flow indicated, processes equipment (indicating critical design parameters), instrumentation equipment and control devices; diagram should differentiate between piping and signal flow paths, between parameter transmission and control signal paths, between local, remote and SCADA control panels, between existing elements and proposed (hydraulic profile for simple	X	X	X			X		X

		projects may be included.) • **Process flow diagram particularly important; indicate existing and modification for expansion for treatment plant and for disposal drip fields in accordance with description in the basic item above.**								
	G.	Structure footprints with major equipment locations • **Are you a structural engineer? Water stops in tank? Water stops on pipe penetrations? Pour joints?**	X	X	X			X		X
	H.	Plant and yard piping, force main, gravity lines (may be single lines for preliminary submittal); hydraulic profile at ADDWF, Design and Peak Flows • **Hydraulics at existing and peak flows.**	X	X	X	X	X	X		
	I.	Pump station and storage basin elevations or cross section with control levels/set points and volumes between control levels indicated • **Please**	X	X	X					X
	J.	One line electrical distribution diagram showing normal, secondary and standby powerd • **Please. There should be an existing and proposed.**	X	X	X					X
	K.	Sewer system annotated with standard or equivalent material conditions and rationale for rehab work extent as derived from flow monitoring/SSES investigations.							X	

ITEM #		DESCRIPTION	TF	DC	SLS	FM	GR	LA	RH	RU
II.		**ENGINEERING REPORT**								
	A.	Basis for influent flow characterization (Estimates from Design Criteria-Chapter 2, flow monitoring or other current data, sampling, pretreatment program, industrial owner projections, population trends, population predictions, etc.) • **How does your flow data match your sq. ft. rental vs flow?**	X	X	X	X	X	X	X	X
	B.	Characterization of flow (diurnal patterns, ADDWF, ADF, Design Flow, Peak Flow; organic and industrial inorganic loads (CBOD5, NH3-N, H2S, pH, TN, TP, (COD), alkalinity); grit and trash loading estimates or data • **Your should have this by now.**	X	X	X	X	X	X	X	X
	C.	Unit process design parameters (referenced to Design Criteria chapters 2-17; or pertinent data on systems not covered by Design Criteria); equipment selection rationale should demonstrate appropriateness of capacity and capability throughout range of operation currently (ADDWF-Peak Flow) and existing to 20 year design flow in order to meet discharge permit, land application conditions or reuse conditions. (Life cycle alternative analyses for process or equipment selected if not previously provided in PER or as requested at time of preliminary discussion.) • **Hydraulic and nutrient capacity of Bioclere selected.**	X	X	X					X
	D.	Pump hydraulics (System curves superimposed on pump curves for minimum and maximum head conditions and anticipated range of pipe friction estimates including C=130 Hazen-Williams friction coefficient) • **Pumps for STEP if this is supposed to be the design for that system.** • **H-Q and system curve for STEP pump (at least worst case)** • **Pump hydraulics for treatment and dosing pumps; H-Q and system curves super-imposed for design flows for worst case.**	X	X	X			X		X
	E.	Chemical feed pump selection data demonstrating ability to meet range of target concentrations over process flow rates • NA	X	X	X					?
	F.	Chemical storage volumes and environments to meet requirements • NA	X	X	X					
	G.	Reliability levels for equipment, appropriate redundancy and ability to isolate for maintenance and operational conditions • **See Design Criteria Chapter 1**	X	X	X					X
	H.	Energy saving solutions considered (e.g., variable speed drives on pumps and blowers, denitrification capability, timers on blowers based on DO or ORP instrumentation)	X		X					X
	I.	Odor control consideration	X		X					
	J.	Corrosion control consideration	X		X					
	K.	Velocities in gravity sewers and mitigation if required					X			

	L.	Calculations for nutrient and hydraulic loading for land application areas; emergency storage for spray application systems • NA						X		
	M.	Flow data (from temporary or permanent flow meters, pump run-times, pump power consumption, overflows as a function of rain fall events, influent flow meters at pump stations or wastewater treatment plant versus rainfall events) in existing collection system • **See item B above.**	X	?	X	X	X			
	N.	Justification for rehabilitation methodology, scope and site selection; methods to be used to ensure quality control and to reduce failures of rehab pipe at connection to manholes; method to measure reduction in flows							X	
	O.	Potential reuse sales; required quality; example reuse contracts; meter locations and sampling plan to determine delivery of appropriate quality reclaimed water.	X							X
	Q.	Status and coverage of all required/anticipated permits including State, federal, and local, outlined	X	X		X		X		X
	R.	Tables demonstrating unit process conformance to the appropriate Design Criteria requirements or justification for systems not addressed or whose performance is outside the Design Criteria accepted performance. (Checklists being developed and included in Design Criteria may be used for this purpose.)	X	X	X	X	X	X	X	

		APPENDIX 1-B-3								
		FINAL PLANS, SPECIFICATIONS, CONSTRUCTION DOCUMENTS SUBMISSION								
ITEM #		DESCRIPTION	TF	DC	SLS	FM	GR	LA	RH	RU
I.		Final Plans								
	A.	Implement the approved preliminary plans	X	X	X	X	X	X	X	X
	B.	Safety features included: handrails; chemical storage compatibility; eye wash stations; egress; ventilation	X	X	X					
	C.	Maintainability: adequate equipment isolation; redundancy; drains for tanks and lines to support repair; accessibility	X	X	X					
	D.	Piping and storage tank material-liquid compatibility	X	?	?					
	E.	Erosion control system implemented; post –construction stormwater features shown; final site contours	X	X	X	X	X	?		?
II.		Specifications								
	A.	Performance specifications or specific equipment called out in the technical specifications for all critical process equipment	X	X	X			X		
	B.	SCADA or instrumentation and controls sequence of operation included	X	X	X			X		
	C.	Permit required monitoring and sampling locations included at appropriate locations	X	X				?		X
	D.	Stormwater permits (SWPPP, ARAP, SWP)/provisions and wetlands protection implemented	X	?	?	?	?	?		?
	E.	Training and start-up provisions for operators and maintenance crew provided in specifications	X	?	?			?		?
	F.	Inspections (substantial completion and final completion)/punch lists/acceptance tests/close-out/record drawings/warranty provisions included and verification by engineer, contractor, owner, funding agencies and TDEC representative; provisions to withhold final payment until all issues resolved.	X	X	X	X	X	X	X	X
III.		Engineering Report								
		Revisions only required if changes from the preliminary submission have occurred that alter the basis of design	?	?	?	?	?	?	?	?

ABBREVIATIONS/DEFINITIONS	
ADDWF	Average Daily Dry Weather Flow (average daily flow of lowest 5 day consecutive period within last 5 years or since last major rehabilitation or construction affecting collection system flows; assumed to be baseline flow without significant rain derived Inflow and infiltration addition (RDI&I)))
ADF	Average Daily Flow over 5 years or since the last major rehabilitation or construction affecting collection system flows
Design Flow	Average Daily Flow for which the plant is designed; assumed to include projected growth for 20 years unless otherwise indicated
Peak Flow	Highest 15 minute flow observed in last year
Influent Loads	Raw wastewater flow characteristics in terms of [mg/L] of the constituents; constituents of concern include CBOD5, TSS, NH3-N, TN, TP; depending on process or collection system can include other parameters of concern; pH in common pH units; temperature in degrees C;