Exhibit No.:	
Issue(s):	*Quality of Service*
Witness:	*Curt B. Gateley*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Direct Testimony*
Case No.:	*WR-2023-0006*
Date Testimony Prepared:	*May 26, 2023*

MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

WATER, SEWER, & STEAM DEPARTMENT

DIRECT TESTIMONY
Cost of Service

OF

CURT B. GATELEY

CONFLUENCE RIVERS UTILITY OPERATING COMPANY, INC.

CASE NO. WR-2023-0006

Jefferson City, Missouri
May 26, 2023

DIRECT TESTIMONY OF

CURT B. GATELEY

CONFLUENCE RIVERS UTILITY OPERATING COMPANY, INC.

CASE NO. WR-2023-0006

Q. Please state your name and business address.

A. My name is Curtis B. Gateley. My business address is 200 Madison Street, Jefferson City, Missouri 65101.

Q. By whom are you employed and in what capacity?

A. I am employed by the Missouri Public Service Commission ("Commission") as the Manager of the Water, Sewer, and Steam Department.

Q. Please describe your educational background, work experience, and any cases in which you have previously filed testimony before this Commission.

A. My credentials and a listing of cases in which I have filed testimony previously before this Commission are attached to this direct testimony as Schedule CBG-d1.

Q. What is the purpose of your direct testimony?

A. The purpose of my direct testimony is to bring to the Commission's attention certain data collection and management problems, as well as staffing and logistical problems with Confluence Rivers Utility Operating Company, Inc. ("Confluence"), and recommend the Commission order Confluence to rectify these problems within the next year.

DATA COLLECTION AND MANAGEMENT

Q. Why is it important for Staff to have accurate usage data?

A. As part of the audit that Staff conducts to determine revenue requirement, Staff must know the amount of water a company sold during the test year. Staff must also know the

amount of non-revenue water during the test year. This is used to calculate any adjustments Staff makes to variable costs associated with producing water, such as electricity, chemicals, etc. Staff also uses this information to ensure that a company is taking appropriate steps to control non-revenue water.

Q. What is "non-revenue water" and why is it important to control non-revenue water?

A. Some amount of water produced by a utility is always "lost", whether to leaks, theft, faulty meters, flushing, fire fighting, etc. This "lost" water has a cost to produce, and is a missed opportunity for a company to collect revenue. Knowing how much water a company produces, and how much it sold, is critical so that a company can take steps to mitigate the causes of water loss. A small amount of water will be lost to leaks, as no distribution is perfectly leak proof.

Q. How did Staff calculate non-revenue water in this case?

A. Staff submitted data requests ("DRs") requesting sales volumes at customer meters, as well as the volumes read by the master meters where the water is produced.[1] [2] For Confluence, the water source is almost entirely from company-owned wells. Staff then attempted to subtract water produced from gallons sold. Water loss is then expressed as a percentage. For example, if the master meter shows the company pumped 10,000 gallons to customers, but customer meters showed only 8,000 gallons sold, then 2,000 gallons, or 20%, was lost. Unfortunately, because the data submitted by Confluence has many errors and blanks, Staff is unable to examine the percentage of non-revenue water at any of Confluences systems.

[1] Confluence response to DR Nos. 0070 and 0071.
[2] A master meter measures the water produced at the water treatment system or well. It shows how much water was sent out to customers.

Q. Can you describe these errors and blanks?

A. Examples include master meter readings that appear to have the decimal in the wrong place, inconsistencies in volume pumped from one month to the next, and increases and decreases in volume over the course of the last two years at a system with a steady number of customers. There are also many records of Confluence not billing a customer for any usage, such as a customer using approximately 5,000 gallons for two months, then zero usage for two months, then back to previous usage totals. It is possible for a person to be gone from their home for two months, or for a home to be vacant because it is up for sale. But the number of records where Confluence did not record the customer usage does not reflect an occasional vacant home.

Q. Does Confluence's master meter records accurately reflect the volume produced for any system?

A. Yes, there are some systems for which master meter records do appear reasonable.

Q. Does Confluence have accurate customer usage information for any system?

A. It is possible that some of this data during some months is accurate. But overall, I do not consider the data reliable.

Q. Why are you certain that the volumes are inaccurate?

A. Because the percentage of non-revenue water reflected by these volumes is highly improbable at most of the systems, and physically impossible at others. For example, at Majestic Lakes, Confluence's data shows they lost between 96% and 70% of the water they produced. A small system losing 96% of the water it produces would mean the system likely wasn't even pressurized, and water wouldn't be getting to customers. In some months at

various systems, Confluence's records show they sold more water than they produced. Some examples of this analysis are shown in Schedule CBG-d2.

Q. Besides harming the company financially, what are the ramifications to customers experiencing too much water loss?

A. If water is not accurately metered, a company may seek additional revenue to cover their cost of service. To cover this inflated cost of service the company may collect more money from the customers than is necessary.

Q. Could some of the inaccurate customer sales records be due to employees reading the customer meters incorrectly?

A. Yes. While some of the records could be from poorly functioning meters, employees could also be reading meters incorrectly. Or, in the case of some of the records showing no water sold, failing to read the meters at all.

Q. Have these inaccurate readings caused problems with customer bills?

A. Yes. These inaccurate readings translate into customers not receiving accurate bills. I did not attempt to analyze every instance of legitimate zero usage versus instances of Confluence incorrectly billing due to estimated bills or failure to bill for usage. There are errors in the data representing too much usage as well. On one occasion Confluence issued a bill for 4.7 million gallons of usage, which was found to be an incorrect meter read.[3]

Q. Isn't it standard practice for a utility's billing software to flag usage that is out of the normal for review, so that bills that are obviously incorrect do not get issued?

A. Yes. Most utility companies' billing systems will flag bills that are obviously incorrect. It is not clear whether Confluence's system does this. A billed usage of 4.7 million

[3] DR No. 0071.3.

gallons is unrealistic for a residential customer, and Confluence should not have issued that bill. It is physically impossible for that much water to flow through a 1" meter in a month, much less a 5/8" meter. It turned out this customer used less than 15,000 gallons the first month that meter was reread. This illustrates the need for more oversight and auditing of data collection.

Q. What is Staff's recommendation for the Commission to order resolve the problems with data collection?

A. It is Staff's recommendation that the Commission orders that Confluence:

- Test all of its master meters for accuracy within six months of the effective date of the report and order in this case, except for master meters that have passed testing or were installed within the past 12 months;
- Install master meters at any of its facilities that presently lack a master meter within 12 months of the report and order in this case;
- Test or install a master meter at any future acquisitions within 90 days of closing on the assets; and
- Test or replace all customer meters in accordance with 20 CSR 4240-10.030(38) within five years, or before its next rate case, whichever comes first. For any system Confluence has acquired for which it has no record of the age of the meters, it should be ordered to assume that all meters are greater than ten years old.

STAFFING AND LOGISTICS

Q. Can you describe the staffing and logistical problems at Confluence?

A. Based on information collected by Staff from Confluence, before and during this general rate case, in response to complaint investigations, and in response to compliance issues

discovered during inspections, it has been demonstrated that Confluence's lack of dedicated personnel needed to oversee operations and contract operators in Missouri cannot continue. In addition, Confluence currently lacks sufficient personnel to provide necessary access to its utility systems for routine or emergency inspections.

Q. How does Confluence operate its utility systems now?

A. It is Staff's understanding that Confluence utilizes contract operators to run all of its treatment, distribution, and collection systems. Confluence does not employ operators of its own, unlike the majority of water and sewer utilities in Missouri. Confluence and its affiliates through Central States Water Resources own over 750 facilities in ten states.[4] This means there is enormous potential for problems across the country if significant oversight is not provided by Confluence employees to ensure that safe and adequate service is provided at all of these systems.

Q. What problems is this causing, from Staff's perspective?

A. In any situation where contractors are utilized to perform critical functions, there must be routine oversight of those contractors. In short, Confluence must ensure that ratepayers are getting their money's worth for the expense of these contracts and that ratepayers' investment in the systems is adequately protected. It is not the responsibility of the contractors to ensure safe and adequate service, it is the responsibility of the regulated utility.

In addition to exercising an apparent lack of oversight, Confluence will not allow Staff access to its utilities via a contract operator, and instead requires a Confluence employee familiar with operations to attend. However, Confluence appears to lack full time employees dedicated to Missouri to fulfill this role. When Staff seeks to conduct routine inspections of the

[4] Josiah Cox Direct, page 3, lines 12-18.

facilities owned by Confluence, or verify installation of new plant investments as part of a prudence review, Confluence has constrained these inspections to a time when a specific Confluence employee is in the state. While scheduling for inspections associated with this rate case were eventually accommodated within a few weeks, this is not an appropriate or sustainable situation.

Q. If Staff has an immediate need to inspect a facility, such as due to a complaint of unsafe service, how will Confluence accommodate such an immediate need with personnel familiar with operating a water or sewer system?

A. Staff does not have confidence that an urgent inspection can be conducted. Since access is controlled at drinking water and sewage treatment facilities, Staff must have a Company representative on site capable of unlocking gates, doors, etc.

Q. If Confluence does not have any employees overseeing Missouri contract operations full time, how do they ensure the contract employees are doing what they are supposed to do?

A. Based on Confluence personnel's statements, and the examples below, Staff does not believe adequate oversight of contract employees is being conducted.

Q. Doesn't Confluence purchase and rehabilitate challenged systems in Missouri?

A. Confluence does purchase systems that are struggling to maintain compliance or in need of significant investment, and it is Staff's position that Confluence has generally done a good job at this effort. However, installing necessary plant repairs or upgrades is not enough to ensure safe and adequate service. As Confluence is moving from a new company establishing its presence in Missouri to a large utility with thousands of customers and growing, Confluence must have dedicated personnel overseeing continued operations as well. When

Confluence purchases a system that needs significant repair or upgrades it must pursue those investments as quickly as feasible, and it must operate those systems in such a way that they perform to the best of their ability until the investments are completed, and beyond.

Q. Do you have recent examples of this lack of oversight that have caused Staff concern?

A. Yes. On December 7, 2022, and December 12, 2022, Staff received complaints about the water service at Auburn Lake Estates.[5] Customers complained of excessive air in the distribution system and provided pictures showing discolored water. Customers also noted incidents of occasional excessive chlorine and a lack of responsiveness by Confluence personnel. Staff's investigation revealed that the number of customers had been steadily increasing due to home construction, but Confluence had not expanded the water system capacity to keep up with growth. The system does not have adequate storage to allow flushing of the water mains to remove sediment associated with naturally occurring iron in the groundwater. While chlorine addition can be more carefully regulated to prevent the spikes of chlorine described by customers, flushing of water lines is essential for removal of sediment, removing biofilm, preventing taste and odor issues, and maintaining capacity within water mains. Staff intends to address the concerns at Auburn Lake Estates in greater detail in its rebuttal testimony.

As of the filing of this testimony, it is Staff's understanding that the issues at Auburn Lake Estates remain unresolved. Customers continue to complain of Confluence being unresponsive.[6] The Company has stated they plan to complete upgrades in the future, but

[5] C202300495 and C202300502, respectively.
[6] Email from customer, May 5, 2023.

appropriate capital planning could have avoided this problem. Confluence must respond promptly to customer inquiries, and ensure ongoing operational and future capital investment needs are met.

Q. Has Staff raised capital planning as an issue in this case?

A. Yes, please see the Direct Testimony of Staff witness David C. Roos.

Q. Do you have additional examples?

A. Yes. On April 11, 2023, Staff inspected systems owned by the Company in the Kansas City area. At the Fox Run sewer treatment plant, Staff observed a bypass of partially treated sewage and a non-functioning recirculating sand filter bed. Staff observed dead vegetation where the sewage escaped the filter bed due to saturated soils, large pools of sewage outside the perimeter fencing in which algae had begun to grow, and a saturated filter bed with surfacing sewage.[7] The condition of the facility appears to indicate the bypass had been occurring for several days to a few weeks. The Clean Water Act, Section 402, prohibits sewage dischargers from bypassing untreated or partially treated sewage.[8] Bypassing is also prohibited under the Company's operating permit.[9] In addition to being a significant nuisance to those nearby and downstream, partially treated sewage exposes the public to pathogens, and can cause significant harm to the environment.

Staff later inquired to the local Department of Natural Resources ("DNR") regional office and confirmed that the bypass had been reported within 24 hours of its discovery, as is required by DNR. In addition to DNR addressing the issue, the Company has conveyed to Staff they would immediately arrange for pumping of sludge and wastewater to alleviate the bypass.

[7] Schedule CBG-d3 through CBG-d7.
[8] 40 CFR 122.41(m)(4)(i).
[9] Standard Condition Part I, Section C.2.c.

Alleviating a dry-weather bypass can be as simple as removing a blockage from a pipe or correcting a power failure. On the other hand, it can include significant repairs to pipes, pumps, or other equipment. The Company should immediately be made aware of any serious failures at their sewage treatment facilities, and should promptly begin evaluating the corrective action and any needed investment. In the interim, emergency pumping and hauling of the sewage to another treatment facility should have been enacted unless it was demonstrated to be infeasible. In no event should the bypassing of sewage been allowed to continue without immediate corrective action.

Q. But isn't Confluence operating under compliance agreements with DNR for the Fox Run sewer treatment plant?

A. Yes, but the compliance agreement, called an Administrative Order on Consent ("AOC"), does not authorize bypassing. The AOC requires[10] Confluence to make good faith efforts to operate the Fox Run system in compliance with its operating permit[11] and the Missouri Clean Water Law.[12] Following Confluence's purchase of Fox Run, bypassing occurred causing the system to be non-functional. The AOC establishes that DNR will not take further enforcement action for previous effluent limit exceedances, or similar exceedances in the future, so long as Confluence complies with a schedule to upgrade the facilities. The AOC is attached as Schedule CBG-d8.

Q. Does the Fox Run example indicate a lack of oversight by Confluence, or a lack of communication by Confluence's contract operator?

[10] Page 8, paragraph 30, Order No. 2021-WPCB-1667.
[11] MO-0120006.
[12] Chapter 644 RSMo.

A. It appears to indicate both. But Confluence is the owner of the system and is therefore responsible for providing safe and adequate service.

Q. You previously stated this was a problem before the initiation of this general rate case. Has Staff urged Confluence to rectify the situation?

A. Yes. As Confluence has grown in Missouri, Staff has had several conversations with the Company about expanding their personnel to coincide with the growth of the Company. Confluence has created several additional positions,[13] but has continued to rely on contractors for operating the treatment systems. While Staff has had concerns, the scope of the problem was not fully revealed until Staff was attempting to arrange customary inspections as part of the prudency review and rate case investigation.

Q. Has Confluence indicated that they have recently designated a manager for Missouri?

A. Yes. On April 19, 2023 Confluence updated their answer to DR No. 0177 to indicate that Brad Thibault is the Regional Manager for Missouri. In response to DR No. 0081, Confluence provided a description of the duties of a Regional Manager, which includes, but is not limited to, the following:

- Responsible for overall management of all aspects of the water and wastewater contract at respective regional location.
- Directly responsible for overseeing the various O&M Partners operating and maintaining the water and wastewater systems as well as oversight of all sub-contractors, consultants and vendors.

[13] Response to DR No. 0037.

- Develops and implements policies and procedures, and activity reporting systems to ensure efficient and effective service levels as well as compliance with all contractual requirements.

This is not consistent with the Company's response to DR Nos. 0212 through 0228, which indicate that Senior Vice President Todd Thomas is responsible for overseeing operators and system repairs, while Director of Engineering Jacob Freeman is responsible for overseeing capital improvement projects.

Q. If the Regional Manager is responsible for overseeing contract operator performance, why is this not sufficient to allay Staff's concerns?

A. There are several issues. This Regional Manager position is not dedicated to Missouri, but also oversees Tennessee operations as well, and Staff is uncertain how many other states this position may also support.[14] Confluence has not stated whether there are employees under the Regional Manager position that oversee contract operations. Confluence has provided contradicting answers to the question of who is in charge of this activity. Finally, the two examples above show that simply hoping that contract operators will perform without oversight is not working.

Based on the information available to Staff, it appears that Confluence has generally done a good job upgrading and replacing the failing water and sewer treatment systems it has purchased. Staff has become concerned however that improper operations now and in the future may cause additional problems. It is Staff's position that while Confluence's failures to

[14] Staff conversation with Confluence employee Jake Freeman, May 2, 2023.

properly operate their systems do not appear to be widespread, changes are necessary to ensure safe and adequate service continues to be provided.

Q. Do any other water or sewer utilities that operate in Missouri do so without personnel dedicated specifically for Missouri operations?

A. No, not to my knowledge. Other large companies generally employ a mix of contract operators and company employees as operators, while owners of very small companies operate small systems themselves.

Q. Your solution is for Confluence to create or designate some positions for Missouri Operations. Please describe how you envision such positions would function.

A. The persons who fill these positions, which would be funded by Missouri ratepayers after Confluence's rate case following this one, would not be allowed to split their time amongst Confluence operations in other states and must be based within Missouri. While these positions could conceivably conduct several tasks, the primary duties of these positions must include:

- Oversight of contract operators, including frequent communications, scheduled and unscheduled spot checks at facilities, audits of contractor performance, and ensuring that Confluence personnel are aware of any problems at facilities or customer concerns.
- The ability to rapidly respond to needs for facility inspections, treatment plant upsets,[15] significant damage due to weather, etc.

[15] This arises when the biological treatment process is not working correctly due to an unhealthy habitat, whether due to poor operations, the dumping of toxic materials, or other factors that affect the biological treatment process.

- The ability to respond and schedule routine inspections with Staff within two days, and the ability to allow access to conduct said inspections within two weeks in the majority of circumstances.
- Maintain a familiarity with each system. Understand and track the plan for complying with schedules of compliance ordered by the DNR, significant maintenance and planned upgrades, and other facts about individual systems necessary to understand challenges and how the Company plans to overcome them.

Q. Are you stating Staff will recommend approval of funding for however many positions Confluence dedicates to Missouri in rates?

A. No. Staff will examine costs as part of a future rate case. However, it would be typical for utility company positions to be funded by Missouri customer rates if they are dedicated to Missouri operations and do not devote a percentage of their time to tasks in other states, other affiliates, or other corporate activities. Staff reserves the right to review appropriate salary levels, and the number of positions necessary to carry out the tasks mentioned above.

Q. Is Staff suggesting that decision-making authority must be vested in these positions?

A. No. Staff finds that personnel dedicated solely to Missouri operations for the purposes of oversight, responsiveness, and communication are necessary. Authority for approval or decision making beyond these routine operational concerns should reside at whatever level Confluence finds appropriate while still maintaining enough agility to ensure provision of safe and adequate service.

Q. To summarize, what is Staff recommending the Commission order?

A. After starting as a small company in Missouri, Confluence has grown to serve thousands of customers in Missouri via approximately 70 water and wastewater facilities.[16] They continue to rapidly grow in Missouri through acquisitions.[17] It is Staff's position that recent efforts to work with the Company through this rate case, efforts to conduct routine regulatory activities before this rate case, and the number of operational problems at Auburn Lake Estates demonstrate that change is necessary. Staff recommends that the Commission order Confluence to establish not less than two positions dedicated to oversight of operations of facilities in Missouri, as described above. The necessary number of positions should be determined by Confluence, and will be reviewed for appropriateness at the next rate case.

Q. Does this conclude your testimony?

A. Yes.

[16] Based on Staff's review of systems purchased by Confluence
[17] Josiah Cox Direct, page 3, lines 17-18; SA-2023-0215; WA-2023-0284.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Confluence Rivers Utility Operating Company, Inc.'s Request for Authority to Implement a General Rate Increase for Water Service and Sewer Service Provided in Missouri Service Areas	)))))	Case No. WR-2023-0006

AFFIDAVIT OF CURT B. GATELEY

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW CURT B. GATELEY and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Direct Testimony of Curt B. Gateley*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

CURT B. GATELEY

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 24th day of May 2023.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070

Notary Public

Curt B. Gateley

Credentials

I am the Regulatory Compliance Manager of the Water, Sewer, & Steam Department, in the Industry Analysis Division of the Missouri Public Service Commission. I have been employed by the State of Missouri for 22 years, and have been with the Commission eight years. My duties as Manager involve all aspects of the Commission's regulation of the water, sewer, and steam industries including customer complaints, reviewing testimony, setting policy, and working with the utilities to promote best practices in their provision of safe and adequate service at just and reasonable rates.

Educational Background and Work Experience

I have a Bachelor of Science degree in Fisheries and Wildlife from the University of Missouri-Columbia. Prior to joining the Public Service Commission I was employed by the Missouri Department of Natural Resources from 2000-2014, as an Environmental Specialist and a Unit Chief. During my time with the agency I worked in compliance and enforcement, industrial and domestic wastewater permitting, industrial stormwater permitting, and eventually oversaw a staff of eight Permit Writers. I have served as expert witness before the Administrative Hearing Commission, as well as expert witness in State and Federal enforcement cases.

Previous Testimony Before the Public Service Commission

Case No.	Company	Type of Filing	Issue
SR-2014-0153	Peaceful Valley	Live Testimony only	Compliance with Dept. of Natural Resources Regulations
WR-2015-0301	Missouri American Water Company	Direct and Rebuttal Testimony	Class Cost of Service Report
SR-2016-0202	Raccoon Creek Utility Operating Company	Direct and Rebuttal Testimony	Rate Design and Tariff Review
WO-2017-0236	Ridge Creek Utility Company, LLC	Live Testimony only	Petition for Interim Receiver
WR-2017-0110	Terre Du Lac Utilities Corporation	Direct Testimony	Rate Design and Tariff Review
WR-2017-0259	Indian Hills Utility Operating Company	Direct, Rebuttal and Surrebuttal Testimony	Rate Design
WR-2017-0285	Missouri American Water Company	Direct, Rebuttal and Surrebuttal Testimony	Class Cost of Service, Rate Design
WR-2018-0285	Liberty Utilities	Direct Testimony	Contract Services, Miscellaneous Service Charges, Tariff Revisions
WR-2020-0344	Missouri American Water Company	Direct Testimony	Class Cost of Service Report

WA-2020-0397	Liberty Utilities	Direct and Rebuttal Testimony	Staff Recommendation, Rate Base
WA-2021-0376	Missouri American Water Company	Rebuttal Testimony	Staff Recommendation

	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23
Indian Hills													
Customer Usage	1,623,664	1,034,451	885,577	764,231	929,740	1,474,003	1,953,455	849,122	917,642	1,084,497	966,318	691,996	836,800
Master Usage	1,878,940	2,350,790	1,385,935	1,670,275	1,695,320	2,452,135	1,888,465	3,150,360	2,083,660	1,658,670	2,594,480	1,751,820	1,929,900
Gallon Loss	255,276	1,316,339	500,358	906,044	765,580	978,132	(64,990)	2,301,238	1,166,018	574,173	1,628,162	1,059,824	1,093,100
% Loss	13.59%	56.00%	36.10%	54.25%	45.16%	39.89%	-3.44%	73.05%	55.96%	34.62%	62.75%	60.50%	56.64%
Port Perry													
Customer Usage	301,770	326,560	312,940	394,910	486,603	734,550	814,009	544,661	699,700	589,264	473,330	259,517	411,244
Master Usage	784,000	738,000	663,000	406,286	809,716	1,041,835	1,391,669	859,502	984,001	966,000	1,180,000	964,250	853,750
Gallon Loss	662,300	590,320	516,620	233,246	597,466	676,475	937,869	612,541	615,631	616,406	940,350	869,884	649,550
% Loss	84.48%	79.99%	77.92%	57.41%	73.79%	64.93%	67.39%	71.27%	62.56%	63.81%	79.69%	90.21%	76.08%
Terre Du Lac													
Customer Usage	4,825,295	5,405,521	3,937,290	4,338,996	4,866,688	11,284,076	14,339,115	13,332,769	9,597,199	11,937,963	8,894,164	3,957,427	4,737,727
Master Usage	5,790,918	5,797,925	5,906,925	5,312,748	4,263,646	4,457,650	5,195,391	5,244,643	3,804,228	4,110,290	4,962,895	2,412,214	527,538
Gallon Loss	965,623	392,404	1,969,635	973,752	(603,042)	(6,826,426)	(9,143,724)	(8,088,126)	(5,792,971)	(7,827,673)	(3,931,269)	(1,545,213)	(4,210,189)
% Loss	16.67%	6.77%	33.34%	18.33%	-14.14%	-153.14%	-176.00%	-154.22%	-152.28%	-190.44%	-79.21%	-64.06%	-798.08%
Cedar Glen													
Customer Usage	145,800	86,800	109,000	110,200	134,100	253,500	301,700	328,160	170,960	162,250	130,900	14,116	97,700
Master Usage	335,860	309,580	317,550	407,110	458,020	599,260	542,980	893,090	613,380	568,120	263,380	234,150	344,060
Gallon Loss	190,060	222,780	208,550	296,910	323,920	345,760	241,280	564,930	442,420	405,870	132,480	220,034	246,360
% Loss	56.59%	71.96%	65.67%	72.93%	70.72%	57.70%	44.44%	63.26%	72.13%	71.44%	50.30%	93.97%	71.60%
Chelsea Rose													
Customer Usage	112,609	82,838	82,084	81,842	96,501	137,171	125,514	42,440	41,852	49,877	48,751	79,905	91,016
Master Usage	212,763	246,304	261,051	301,345	268,265	340,475	361,814	432,548	262,216	364,313	212,236	188,496	220,845
Gallon Loss	100,154	163,466	178,967	219,503	171,764	203,304	236,300	390,108	220,364	314,436	163,485	108,591	129,829
% Loss	47.07%	66.37%	68.56%	72.84%	64.03%	59.71%	65.31%	90.19%	84.04%	86.31%	77.03%	57.61%	58.79%
Cimmaron Bay													
Customer Usage	28,110	9,610	17,210	21,210	28,550	47,650	52,570	71,090	46,740	30,550	13,720	12,376	17,567
Master Usage	168,300	160,900	169,100	218,700	201,900	328,500	255,500	461,400	336,400	351,700	272,300	317,400	372,600
Gallon Loss	140,190	151,290	151,890	197,490	173,350	280,850	202,930	390,310	289,660	321,150	258,580	305,024	355,033
% Loss	83.30%	94.03%	89.82%	90.30%	85.86%	85.49%	79.42%	84.59%	86.11%	91.31%	94.96%	96.10%	95.29%
Eaglewoods													
Customer Usage	123,154	68,930	82,959	99,246	113,998	148,221	136,552	147,044	104,979	136,060	81,076	85,938	104,756
Master Usage	108,700	95,700	81,700	113,600	105,600	123,500	111,400	160,600	27,900	248,300	98,900	104,700	122,000
Gallon Loss	(14,454)	26,770	(1,259)	14,354	(8,398)	(24,721)	(25,152)	13,556	(77,079)	112,240	17,824	18,762	17,244
% Loss	-13.30%	27.97%	-1.54%	12.64%	-7.95%	-20.02%	-22.58%	8.44%	-276.27%	45.20%	18.02%	17.92%	14.13%

Euguene													
Customer Usage	256,448	190,897	161,961	144,797	167,505	178,067	163,630	149,517	157,155	163,729	134,302	32,504	9,266
Master Usage	459,664	574,050	634,370	857,590	713,670	727,630	437,860	223,750	225,190	254,230	276,300	505,200	668,750
Gallon Loss	203,216	383,153	472,409	712,793	546,165	549,563	274,230	74,233	68,035	90,501	141,998	472,696	659,484
% Loss	44.21%	66.75%	74.47%	83.12%	76.53%	75.53%	62.63%	33.18%	30.21%	35.60%	51.39%	93.57%	98.61%
Evergreen Lakes													
Customer Usage	221,213	146,429	335,428	235,315	256,487	309,843	297,374	321,926	218,725	250,470	298,313	221,932	214,714
Master Usage	605,010	684,323	527,953	666,324	534,819	577,766	813,928	558,288	784,155	531,409	520,115	643,557	838,744
Gallon Loss	383,797	537,894	192,525	431,009	278,332	267,923	516,554	236,362	565,430	280,939	221,802	421,625	624,030
% Loss	63.44%	78.60%	36.47%	64.68%	52.04%	46.37%	63.46%	42.34%	72.11%	52.87%	42.64%	65.51%	74.40%
Gladlo													
Customer Usage	286,553	199,954	226,283	5,017,120	276,905	283,219	323,016	281,174	233,731	286,195	334,589	323,283	189,702
Master Usage	286,680	261,210	363,410	267,810	270,230	253,930	289,470	320,820	274,780	265,360	285,910	263,340	278,720
Gallon Loss	127	61,256	137,127	(4,749,310)	(6,675)	(29,289)	(33,546)	39,646	41,049	(20,835)	(48,679)	(59,943)	89,018
% Loss	0.04%	23.45%	37.73%	-1773.39%	-2.47%	-11.53%	-11.59%	12.36%	14.94%	-7.85%	-17.03%	-22.76%	31.94%
Hillcrest													
Customer Usage	912,339	750,936	753,869	2,700	808,997	995,592	858,253	854,900	806,237	749,798	862,912	735,611	857,818
Master Usage	1,014,500	942,000	1,029,000	990,000	1,121,000	1,065,000	1,127,000	1,062,000	1,035,000	1,052,000	1,020,000	1,114,800	1,174,200
Gallon Loss	102,161	191,064	275,131	987,300	312,003	69,408	268,747	207,100	228,763	302,202	157,088	379,189	316,382
% Loss	10.07%	20.28%	26.74%	99.73%	27.83%	6.52%	23.85%	19.50%	22.10%	28.73%	15.40%	34.01%	26.94%
Roy-L													
Customer Usage	60,830	47,170	54,380	41,360	56,070	62,760	63,700	32,287	49,790	73,497	55,644	35,320	55,330
Master Usage	78,604	67,896	63,531	63,979	63,385	60,736	73,484	69,447	60,080	73,344	80,600	80,755	86,514
Gallon Loss	17,774	20,726	9,151	22,619	7,315	(2,024)	9,784	37,160	10,290	(153)	24,956	45,435	31,184
% Loss	22.61%	30.53%	14.40%	35.35%	11.54%	-3.33%	13.31%	53.51%	17.13%	-0.21%	30.96%	56.26%	36.05%

Case No. WR-2023-0006
Schedule CBG-d3

Case No. WR-2023-0006
Schedule CBG-d4

Case No. WR-2023-0006
Schedule CBG-d5

Case No. WR-2023-0006
Schedule CBG-d6

Case No. WR-2023-0006
Schedule CBG-d7

BEFORE THE MISSOURI DEPARTMENT OF NATURAL RESOURCES

In the Matter of:	)	
	)	
Elm Hills Utility Operating Company, Inc.	)	**Order No. 2021-WPCB-1667**
	)	
Proceeding under the Missouri Clean Water Law	)	

ABATEMENT ORDER ON CONSENT

The issuing of this Abatement Order on Consent (AOC) No. 2021-WPCB-1667, by the Missouri Department of Natural Resources (Department), is a formal administrative action by the State of Missouri and is being issued because the Department acknowledges that Elm Hills Utility Operating Company, Inc. (Respondent) is and will be in violation of the Missouri Clean Water Law (MCWL) due to the Respondent's acquisition of the wastewater treatment facilities (WWTFs) known as or currently serving Berkshire Glenn, Country Hills Estates, Countryside Meadows, Fox Run, Park Estates, Private Gardens, and Wilmar Estates. This AOC is issued under the authorities of Sections 644.056 and 644.079, Revised Statutes of Missouri (RSMo). Failure to comply with this AOC is, by itself, a violation of Section 644.076.1, RSMo, which may activate penalties and other forms of relief. Litigation may occur without further notice if there is not compliance with the requirements of this AOC. This AOC does not constitute a waiver or a modification of any requirements for the MCWL, or its implementing regulations, all of which remain in full force and effect. Compliance with the terms of this AOC shall not relieve the Respondent of liability for, or preclude the Department from, initiating an administrative or judicial enforcement action to recover civil or administrative penalties for any future violations of the MCWL, or to seek injunctive relief, pursuant to Chapter 644, RSMo.

FINDINGS OF FACT

1. The Respondent, originally formed on March 22, 2016, is a domestic, for-profit business registered and in good standing with the Missouri Secretary of State, which purchased the seven WWTFs on or about June 30, 2020.

2. The Elm Hills - Berkshire Glenn WWTF consists of a septic tank effluent pump (STEP) system with recirculating sand filter. The WWTF has a design population equivalent of 185, a design flow of 18,500 gallons per day (gpd), and is located in Clay County, Missouri. Effluent from the WWTF discharges to a tributary to Holmes Creek, subject to the conditions and requirements of Missouri State Operating Permit No. MO-0128511 (Berkshire Glenn Permit), which was effective December 1, 2018, and expires September 30, 2023.

3. On July 17, 2019, prior to the Respondent acquiring the facility, Department staff inspected the Elm Hills – Berkshire Glenn WWTF and found the facility in non-compliance due to a failure to meet final permitted effluent limitations for E. coli.

4. Discharge Monitoring Reports (DMRs) submitted by the previous owner of the Elm Hills – Berkshire Glenn WWTF indicate that effluent produced by the WWTF violated the permitted effluent limitations. Additionally, Department records indicated that the previous owner failed to submit a DMR for the monitoring period ending December 2018. See Exhibit A of this AOC for a list of effluent violations.

5. The Elm Hills – Country Hills Estates WWTF consists of septic tanks with recirculating sand filter. The WWTF has a design population equivalent of 111, a design flow of 11,000 gpd with an adjusted design flow of 6,999 gpd, and is located in Clinton County, Missouri. Effluent from the WWTF discharges to a tributary to Brushy Creek, subject to the

conditions and requirements of Missouri State Operating Permit No. MO-0132144 (Country Hills Estates Permit), which was effective September 1, 2018 and expires September 30, 2021.

6. On August 30, 2019, prior to the Respondent acquiring the facility, Department staff inspected the Elm Hills – Country Hills Estates WWTF and found the facility in non-compliance due to failure to submit DMRs.

7. The Elm Hills - Countryside Meadows WWTF consists of a STEP system with anaerobic digester and recirculating sand filter. The WWTF has a design population equivalent of 74, a design flow of 5,520 gpd, and is located in Ray County, Missouri. Effluent from the WWTF discharges to a tributary to East Fork Rollins Creek, subject to the conditions and requirements of Missouri State Operating Permit No. MO-0119822 (Countryside Meadows Permit), which was effective February 1, 2019 and expires December 31, 2023.

8. On April 3, 2013, prior to the Respondent acquiring the facility, Department staff inspected the Countryside Meadows WWTF and found the facility in non-compliance for failure to submit DMRs, failure to clearly mark the outfall, failure to place warning signs on all fences and gates, failure to maintain the fence so that plants and vegetation would not cause damage, and failure to have enough gravel carefully placed over distribution lines.

9. DMRs submitted by the previous owner of the Elm Hills – Countryside Meadows WWTF indicate that effluent produced by the WWTF violated the permitted effluent limitations. Additionally, Department records indicated that the previous owner failed to submit a DMR for the monitoring period ending December 2018. See Exhibit B of this AOC for a list of effluent limitations.

10. The Elm Hills - Fox Run WWTF consists of a STEP system with recirculating sand filter and chlorination. The WWTF has a design population equivalent of 152, a design flow

of 11,400 gpd, and is located in Clay County, Missouri. Effluent from the WWTF discharges to a tributary to Rock Creek, subject to the conditions and requirements of Missouri State Operating Permit No. MO-0120006 (Fox Run Permit), which was effective June 1, 2019 and expires March 31, 2024.

11. On July 7, 2015, prior to the Respondent acquiring the facility, Department staff inspected the Elm Hills – Fox Run WWTF and found the facility in non-compliance for failure to comply with effluent limits contained in Part A of the Fox Run Permit and failure to upgrade facilities to comply with final effluent limitations for Fecal Coliform bacteria as required by Part D of the Fox Run Permit.

12. DMRs submitted by the previous owner of the Elm Hills – Fox Run WWTF indicate that effluent produced by the WWTF violated the permitted effluent limitations. Additionally, Department records indicated that the previous owner failed to submit DMRs for the monitoring periods ending December 2018 and March 2019. See Exhibit C of this AOC for a list of effluent limitations.

13. The Elm Hills – Park Estates WWTF consists of a STEP system with recirculating sand filter. The WWTF has a design population equivalent of 196, a design flow of 20,000 gpd, and is located in Clay County, Missouri. Effluent from the WWTF discharges to a tributary to Clear Creek, subject to the conditions and requirements of Missouri State Operating Permit No. MO-0126004 (Park Estates Permit), which was effective June 1, 2019 and expires March 31, 2024.

14. On July 8, 2019, prior to the Respondent acquiring the facility, Department staff inspected the Elm Hills – Park Estates WWTF and found the facility in non-compliance due to a failure to meet final permitted effluent limitations for pH and E. coli.

15. DMRs submitted by the previous owner of the Elm Hills – Park Estates WWTF indicate that effluent produced by the WWTF violated the permitted effluent limitations. Additionally, Department records indicated that the previous owner failed to submit DMRs for the monitoring periods ending December 2018 and March 2019. See Exhibit D of this AOC for a list of effluent limitations.

16. The Elm Hills – Private Gardens WWTF consists of a STEP system with recirculating sand filter. The WWTF has a design population equivalent of 240, a design flow of 18,037 gpd, and is located in Clay County, Missouri. Effluent from the WWTF discharges to a tributary to Fishing River, subject to the conditions and requirements of Missouri State Operating Permit No. MO-0129691 (Private Gardens Permit), which was effective May 1, 2019 and expires March 31, 2024.

17. On January 25, 2018, prior to the Respondent acquiring the facility, Department staff inspected the Elm Hills – Private Gardens WWTF and found the facility in non-compliance due to failure to comply with final permitted effluent limitations, failure to upgrade the facility with disinfection technology, and discharge of water contaminants to waters of the State which reduced the quality of such waters below applicable water quality standards.

18. DMRs submitted by the previous owner of the Elm Hills – Private Gardens WWTF indicate that effluent produced by the WWTF violated the permitted effluent limitations. Additionally, Department records indicated that the previous owner failed to submit a DMR for the monitoring period ending December 2018. See Exhibit E of this AOC for a list of effluent limitations.

19. The Elm Hills – Wilmar Estates WWTF consists of a STEP system with recirculating sand filter. The WWTF has a design population equivalent of 296, a design flow of

29,600 gpd, and is located in Clay County, Missouri. Effluent from the WWTF discharges to a tributary to Rock Creek, subject to the conditions and requirements of Missouri State Operating Permit No. MO-0124931 (Wilmar Estates Permit), which was effective June 1, 2019 and expires March 31, 2024.

20. On April 12, 2018, prior to the Respondent acquiring the facility, Department staff inspected the Elm Hills – Wilmar Estates WWTF and found the facility in non-compliance due to failure to comply with final permitted effluent limitations for Ammonia as Nitrogen and Biochemical Oxygen Demand, and discharge of water contaminants into waters of the State which reduced the quality of such waters below water quality standards.

21. DMRs submitted by the previous owner of the Elm Hills – Wilmar Estates WWTF indicate that effluent produced by the WWTF violated the permitted effluent limitations. Additionally, Department records indicated that the previous owner failed to submit DMRs for the monitoring periods ending December 2018 and March 2019. See Exhibit F of this AOC for a list of effluent limitations.

22. Holmes Creek, Brushy Creek, East Fork Rollins Creek, Rock Creek, Clear Creek, Fishing River, and their tributaries are waters of the State as the term is defined by Section 644.016(27), RSMo.

23. Domestic wastewater is a water contaminant as the term is defined by Section 644.016(24), RSMo.

24. Sections 644.051.1(3) and 644.076.1, RSMo, make it unlawful to violate permitted effluent limitations as contained in Part "A" of the Permits, or any other condition listed in the permit.

STATEMENT OF VIOLATIONS

25. The Department and the Respondent acknowledge that the Respondent has acquired seven WWTFs with histories of MCWL violations that require improvements in order to meet final permitted effluent limitations. The Department and the Respondent acknowledge that after the Respondent's acquisition of these WWTFs, the WWTFs accrued and will continue to accrue violations of the MCWL of the same kind as the violations listed below, or violations that are a consequence of the existing conditions of the WWTFs until the Respondent completes upgrades to the WWTFs as set forth in the compliance schedule and plan described in Paragraphs 30 through 43 below. Anticipated violations of the MCWL and its implementing regulations are as follows:

26. Failing to comply with final permitted effluent limitations for the Berkshire Glenn Permit, Country Hills Estates Permit, Countryside Meadows Permit, Fox Run Permit, Park Estates Permit, Private Gardens Permit, and Wilmar Estates Permit, in violation of Sections 644.051.1(3) and 644.076.1, RSMo; and

AGREEMENT

27. The Department and the Respondent desire to amicably resolve all disputes or claims that could arise against the Respondent after acquiring the WWTFs for any and all past violations of the MCWL, including but not limited to penalties proposed in or arising from violations of the MCWL and its implementing regulations, as well as past acknowledged and future anticipated violations that may occur during the time period from the Respondent's acquisition of the WWTFs set forth above until the AOC expires.

28. The provisions of this AOC shall apply to and be binding upon the parties executing this AOC, their successors, assigns, agents, subsidiaries, affiliates, and lessees,

including the officers, agents, servants, corporations, and any persons acting under, through, or for the parties. Any changes in ownership or corporate status, including but not limited to any transfer of assets or real or personal property, shall not affect the responsibilities of the Respondent under this AOC.

29. The Department and the Respondent agree that by entering into this AOC, the Respondent is not admitting liability. The AOC shall not be deemed an admission of liability for any purpose whatsoever.

30. Immediately upon execution of this AOC, the Respondent agrees to make all efforts in good faith to operate the WWTFs in compliance with applicable permits and the MCWL and its implementing regulations.

31. Within six months of the effective date of the AOC, the Respondent is ordered and agrees to complete operational monitoring and assessment at each of the WWTFs.

32. Within 60 days of completing operational monitoring and assessment for each WWTF, if repairs or construction are required to achieve and maintain compliance with the respective Permits and MCWL, the Respondent is ordered and agrees to consult with the Department's Engineering Section regarding submission of all applicable Engineering Reports, Facility Plans, permit applications, and permit fees as set forth in 10 CSR 20-6 Permits and 10 CSR 20-8 Minimum Design Standards. If a Facility Plan or an Engineering Report contains a construction improvements schedule, the Respondent is ordered and agrees to implement the construction improvements schedule, which is incorporated herein as an enforceable condition of this AOC.

33. Within 12 months of completion of the operational monitoring and assessment of the WWTFs, the Respondent is ordered and agrees to complete construction of facility

improvements for any facility that cannot achieve compliance through operational improvement alone. Such construction shall be according to Department-approved plans and specifications to allow effluent produced by the WWTF to comply with final permitted effluent limitations.

34. Within 60 days of completing construction of the upgrades specified in the construction improvements schedule for each WWTF, the Respondent is ordered and agrees to submit to the Department a Statement of Work Completed Form, signed, sealed, and dated by a professional engineer registered in the State of Missouri certifying that the project is complete and operable in accordance with Department-approved plans and specifications.

35. This AOC shall terminate 90 days after upgrades to the WWTFs are completed, or two years from the date the AOC was executed, whichever date occurs first.

36. Except for stipulated penalties for violations of this AOC pursuant to Paragraph 40, the Department agrees not to bring, or cause to be brought, any administrative action against the Respondent for penalties arising out of the above-referenced violations of the MCWL and its implementing regulations, provided that the Respondent complies in good faith with the Department-approved compliance schedule and plan.

37. Upon completion of the compliance schedule and plan, the Respondent is ordered and agrees to obtain all necessary permits and approvals.

SUBMISSIONS

38. All other documentation submitted to the Department for compliance with this AOC shall be submitted within the timeframes specified to:

Emmanuel Babalola
Department of Natural Resources
Water Protection Program
Compliance and Enforcement Section
P.O. Box 176
Jefferson City, MO 65102-0176

OTHER PROVISIONS

39. Immediately upon becoming aware that a deadline or milestone as set forth in this AOC will not be completed by the required deadline, the Respondent shall notify the Department by telephone or electronic mail: i) identifying the deadline that will not be completed; ii) identifying the reason for failing to meet the deadline; and iii) proposing an extension to the deadline. Within five days of notifying the Department, the Respondent shall submit to the Department, for review and approval, a written request containing the same basic provisions of i, ii, and iii listed above. The Department may grant an extension if it deems appropriate. Failure to submit a written notice to the Department may constitute a waiver of the Respondent's right to request an extension and may be grounds for the Department to deny the Respondent an extension.

40. Should the Respondent fail to meet the terms of this AOC, including the deadlines set out in Paragraphs 16 through 24, the Respondent shall be subject to pay stipulated penalties in the following amount:

Days of Violation	Amount of Penalty
1 to 30 days	$100 per day
31 to 90 days	$250 per day
91 days and above	$500 per day

Stipulated penalties will be paid in the form of a check made payable to "[Appropriate] County Treasurer, as custodian of the [Appropriate] County School Fund." Any such stipulated penalty shall be paid within ten days of demand by the Department and shall be delivered to:

Accounting Program
Department of Natural Resources
P.O. Box 477
Jefferson City, MO 65102-0477

41. Compliance with this AOC resolves only the specific past acknowledged and anticipated violations described herein, and this AOC shall not be construed as a waiver or modification for any other requirements of the MCWL, its implementing regulations, the Missouri Drinking Water Law, or any other source of law. Nor does this AOC resolve any future violations of this AOC or any law or regulation after this AOC expires. Consistent with 10 CSR 20-3.010(5), this AOC shall not be construed as satisfying any claim by the state or federal government for natural resource damages.

42. Nothing in this AOC forgives the Respondent from future non-compliance with the laws of the State of Missouri, nor requires the Department or State of Missouri to forego pursuing by any legal means for any non-compliance with the laws of the State of Missouri. The terms stated herein constitute the entire and exclusive agreement of the parties. There are no other obligations of the parties, be they expressed or implied, oral or written, except those expressly set forth herein. The terms of this AOC supersede all previous memoranda of understanding, notes, conversations, and agreements, express or implied. This AOC may not be modified orally.

43. By signing this AOC, all signatories assert that they have read and understood the terms of this AOC, and that they have the authority to sign this AOC on behalf of their respective party.

44. The effective date of the AOC shall be the date the Department signs the AOC. The Department shall send a fully executed copy of this AOC to the Respondent for their records.

NOTICE OF APPEAL RIGHTS

45. By signing this AOC, the Respondent consents to its terms and waives any right to appeal or otherwise challenge the terms and conditions of this AOC, pursuant to Sections 621.250, 640.010, 640.013, 644.056.3, 644.079.2, Chapter 536 RSMo, 644.145, RSMo, 10 CSR 20-1.020, 10 CSR 20-3.010, 10 CSR 20-6.020(5), the Missouri Constitution, or any other source of law.

SIGNATORY AUTHORITY

Agreed to and Ordered on this 22 day of OCTOBER, 2021

Josiah Cox, President
Elm Hills Utility Operating Company, Inc.

Agreed to and Ordered on this 28th day of October, 2021

DEPARTMENT OF NATURAL RESOURCES
Chris Wieberg, Director
Water Protection Program

c: Karen Rouse, Director, Kansas City Regional Office
Operating Permits Section
General Counsel's Office
Accounting Program

Exhibit A. Permitted Effluent Limitation Violations – Elm Hills – Berkshire Glenn WWTF

Reporting Date	Effluent Parameter	Daily				Weekly				Monthly			
		Effluent Limit	Reported Value	Exceeds limit by (times)	SNC	Effluent Limit	Reported Value	Exceeds limit by (times)	SNC	Effluent limit	Reported value	Exceeds limit by (times)	SNC
6/30/2018	*E. coli* (#/100mL)	1030	2420	2.3	Y					206	2420	11.7	Y
9/30/2018	*E. coli* (#/100mL)	1030	2420	2.3	Y					206	2420	11.7	Y
3/31/2018	Ammonia as N (mg/L)	8.4	12.2	1.5	Y					2.8	43.7	15.6	Y
6/30/2018	Ammonia as N (mg/L)	4.1	12	2.9	N					1.4	51.4	36.7	Y
9/30/2018	Ammonia as N (mg/L)	4.1	3.4	0.8	N					1.4	30.9	22.1	Y
3/31/2018	pH	9	9.25	1.0	N					9	9.25	1.0	N

Exhibit B. Permitted Effluent Limitation Violations – Elm Hills – Countryside Meadows

Reporting Date	Effluent Parameter	Daily				Weekly				Monthly			
		Effluent Limit	Reported Value	Exceeds limit by (times)	SNC	Effluent Limit	Reported Value	Exceeds limit by (times)	SNC	Effluent limit	Reported value	Exceeds limit by (times)	SNC
6/30/2018	Ammonia as N (mg/L)	3.6	52.8	14.7	N					1.4	52.8	37.7	Y
9/30/2018	Ammonia as N (mg/L)	3.6	1.77	0.5	N					1.4	1.77	1.3	N
3/31/2018	pH	6.5 (Min)	5.98							6.5 (Min)	5.98		
9/30/2018	pH	9.0 (Max)	9.41							9.0 (Max)	9.41		

Exhibit C. Permitted Effluent Limitation Violations – Elm Hills – Fox Run

Reporting Date	Effluent Parameter	Daily				Weekly				Monthly			
		Effluent Limit	Reported Value	Exceeds limit by (times)	SNC	Effluent Limit	Reported Value	Exceeds limit by (times)	SNC	Effluent limit	Reported value	Exceeds limit by (times)	SNC
6/30/2018	E. coli (#/100mL)	1030	2420	2.3	Y					206	2420	11.7	Y
9/30/2018	E. coli (#/100mL)	1030	2420	2.3	Y					206	2420	11.7	Y
3/31/2018	pH	6.5 (Min)	6.44							6.5 (Min)	6.44		
9/30/2018	pH	9.0 (Max)	9.53							9.0 (Max)	9.53		

Exhibit D. Permitted Effluent Limitation Violations – Elm Hills – Park Estates

Reporting Date	Effluent Parameter	Daily				Weekly				Monthly			
		Effluent Limit	Reported Value	Exceeds limit by (times)	SNC	Effluent Limit	Reported Value	Exceeds limit by (times)	SNC	Effluent limit	Reported value	Exceeds limit by (times)	SNC
6/30/2018	E. coli (#/100mL)	1030	2420	2.3	Y					206	2420	11.7	Y
9/30/2018	E. coli (#/100mL)	1030	2420	2.3	Y					206	2420	11.7	Y
9/30/2018	Ammonia as N (mg/L)	2.1	1.68	0.8	N					1.5	1.68	1.1	N
3/31/2018	pH	6.5 (Min)	6.09							6.5 (Min)	6.09		
3/31/2018	pH	6.5 (Min)	6.15							6.5 (Min)	6.15		
9/30/2018	pH	9.0 (Max)	9.11							9.0 (Max)	9.11		

Exhibit E. Permitted Effluent Limitation Violations – Elm Hills – Private Gardens

Reporting Date	Effluent Parameter	Daily				Weekly				Monthly			
		Effluent Limit	Reported Value	Exceeds limit by (times)	SNC	Effluent Limit	Reported Value	Exceeds limit by (times)	SNC	Effluent limit	Reported value	Exceeds limit by (times)	SNC
6/30/2018	E. coli (#/100mL)	1030	2420	2.3	Y					206	2420	11.7	Y
9/30/2018	E. coli (#/100mL)	1030	2420	2.3	Y					206	2420	11.7	Y
3/31/2018	Ammonia as N (mg/L)	9.7	45.3	4.7	Y					2.8	45.3	16.2	Y
6/30/2018	Ammonia as N (mg/L)	3.8	62.5	16.4	Y					1.4	62.5	44.6	Y
9/30/2018	Ammonia as N (mg/L)	3.8	54.3	14.3	Y					1.4	54.3	38.8	Y
3/31/2018	pH	9.0 (Max)	9.05							9.0 (Max)	9.05		
9/30/2018	pH	6.5 (Min)	6.45							6.5 (Min)	6.45		

Exhibit F. Permitted Effluent Limitation Violations – Elm Hills – Wilmar Estates

Reporting Date	Effluent Parameter	Daily				Weekly				Monthly			
		Effluent Limit	Reported Value	Exceeds limit by (times)	SNC	Effluent Limit	Reported Value	Exceeds limit by (times)	SNC	Effluent limit	Reported value	Exceeds limit by (times)	SNC
6/30/2018	BOD (mg/L)					45	34	0.8	N	30	34	1.1	N
3/31/2018	Ammonia as N (mg/L)	7.5	43.6	5.8	Y					2.9	43.6	15.0	Y
6/30/2018	Ammonia as N (mg/L)	3.6	35.5	9.9	Y					1.4	35.5	25.4	Y
9/30/2018	Ammonia as N (mg/L)	3.6	46.6	12.9	Y					1.4	46.6	33.3	Y
3/31/2018	pH	9.0 (Max)	9.06							9.0 (Max)	9.06		