# BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION NASHVILLE, TENNESSEE

PETITION OF CARTWRIGHT CREEK,	)	
LLC REQUESTING APPROVAL OF	)	<b>DOCKET NO. 19-00049</b>
PROPOSED CAPITAL IMPROVEMENTS	)	

# DIRECT TESTIMONY of BRUCE MEYER

ON BEHALF OF CARTWRIGHT CREEK, LLC

1	Q1.	PLEASE STATE TOUR NAME, DUSINESS ADDRESS AND
2		OCCUPATION FOR THE RECORD.
3	<i>A1</i> .	My name is Bruce Meyer and my business address is 6545 Cox Road, College
4		Grove, TN 37046.
5	<i>Q2.</i>	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
6	<i>A2</i> .	I am employed by Sheaffer Wastewater Solutions, LLC as Operations Manager.
7	<i>Q3.</i>	HOW LONG HAVE YOU BEEN EMPLOYED BY SHEAFFER
8		WASTEWATER SOLUTIONS?
9	<i>A3</i> .	I have been employed by Sheaffer Wastewater Solutions ("Sheaffer") for
10		approximately nineteen years.
11	Q4.	WHAT ARE YOUR RESPONSIBILITIES AS THE OPERATIONS
12		MANAGER FOR CARTWRIGHT CREEK, LLC.?
13	<i>A4</i> .	I am responsible for the day-to-day operation, engineering and permitting for
14		Cartwright Creek, LLC ("Cartwright Creek").
15	Q5.	WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS
16		PROCEEDING?
17	A5.	The purpose of this testimony is to support Cartwright Creek's request asking the
18		Commission to issue an order authorizing the utility to spend up to \$550,000 from
19		the utility's tap fee escrow account and the capital improvements surcharge
20		account to rehabilitate the Grassland's collection system.
21	Q6.	PLEASE DESCRIBE THE BACKGROUND AND THE REASON FOR
22		THIS REQUEST.

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A6. In previous submittals to TPUC and discussions with agency staff, Cartwright 2 Creek provided information on the problem with groundwater and rainwater entering its aging underground collection system serving the Grasslands 3 wastewater treatment facility. Moderate rainfall events increase the flow to the 4 5 wastewater treatment system to above its design flow of 250,000 gallons per day. 6 During more intense or longer rain events, the influent flow to the plant can be more than three times the design flow rate. The record rainfalls of recent winters 7 8 have been especially problematic.

#### *07*. WHAT PROBLEMS DOES THIS CAUSE CARTRIGHT CREEK?

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A7. The groundwater and rainwater infiltration into the collection system cause three types of problems. First, infiltration decreases the treatment efficiency of the Grasslands wastewater treatment system resulting in exceedances of the facility's discharge permit. Second, it can cause overflows of sewage from manholes. And third, it results in extra wear and premature failures of pumps and treatment equipment.

## WHAT HAS CARTRWIGHT CREEK DONE TO IDENTIFY THE SOURCES *Q8*. OF INFILTRATION?

*A8.* Cartwright Creek has retained multiple consultants to perform detailed investigations of the collection system and identify the sources. This has included GPS mapping the entire system, manhole inspection, flow measurement, and video inspection. In 2017, the collected data from these investigations was reviewed by Mr. George Kurz, who is regarded as an expert in infiltration due to his extensive work reviewing infiltration in Tennessee utilities. Mr. Kurz

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1		concluded that one quadrant of the Cartwright Creek collection system resulted in
2		most of the infiltration. In 2018, Cartwright Creek retained the engineers at Inflo
3		Design Group (IDG) to identify repair methods and costs. IDG agreed with Mr.
4		Kurz that making the repairs in the high flow quadrant would cause a substantial
5		reduction in infiltration. IDG concluded that the cost of repairs in the quadrant
6		with the most infiltration would be approximately \$500,000. The IDG report is
7		on file in Docket 19-00034, and the Commission has taken administrative notice
8		of the record of that case in this docket.
9	Q9.	WHAT HAS BEEN TDEC'S RESPONSE TO THE PROBLEMS CAUSED
10		BY INFILTRATION.
11	A9.	TDEC has been aware of the infiltration issues at Grasslands for some time and
12		has had several discussions with staff. On January 15, 2019 Cartwright Creek
13		representatives met with TDEC representatives in a Show Cause meeting due to
14		multiple permit exceedances, a majority caused by the infiltration. On January
15		15, 2019, TDEC issued a "Notice of Violation" due to Total Nitrogen
16		exceedances and requested a corrective action plan.
17	Q10.	HAS TDEC REVIEWED THE ENGINEERING REVIEWS AND THE IDG
18		REPORT YOU PREVIOUSLY MENTIONED?
19	A10.	Yes, the reports were submitted to TDEC and reviewed by TDEC's Chief
20		Engineer, George Garden. Mr. Garden agrees with the conclusions. Please refer
21		to his March 12, 2019 letter which is on file in Docket 19-00034.
22	Q11.	HOW WILL RAISING THE TAP FEE ADDRESS THE PROBLEMS

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DESCRIBED?

1 A11. It will allow Cartwright Creek to more quickly have the necessary funding to
2 make the repairs to the collection system and achieve a substantial reduction in
3 infiltration. The reduction in infiltration will not only reduce the number of flow
4 related overflows, but will also reduce the number of permit exceedances of
5 organics, solids, and Nitrogen. Collected tap fees will continue to be placed in an
6 escrow account and used with the approval of TPUC.

### 7 Q12. DOES THIS COMPLETE YOUR TESTIMONY?

8 *A12*. Yes, it does.

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