



**ENGINEERING REPORT
FOR
Lake Region Water and Sewer Company
Shawnee Bend/Lake of the Ozarks
Camden County, Missouri
Wastewater System**

**PREPARED BY:
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Camdenton, MO 65020**

Date Prepared: October 2007



ENGINEERING REPORT

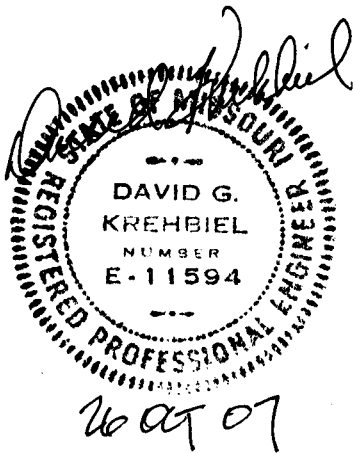
FOR

Lake Region Water and Sewer Company

**Shawnee Bend/Lake of the Ozarks
Camden County, Missouri**

Wastewater System

October 2007



PREPARED FOR:
**Lake Region Water and Sewer
Company**
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Camden County, Missouri

Wastewater System**

BACKGROUND:

Lake Region Water and Sewer Company is certificated by the Missouri Public Service Commission to serve an area in Shawnee Bend at the Lake of the Ozarks in Camden County, Missouri. The certificated area is shown on the attached Exhibit 1.

The wastewater system is operated under Operating Permit No. MO-0123722, with an Expiration Date of December 9, 2009.

PURPOSE:

The purpose of this engineering report is twofold.

First, the previous owner of Lake Region Water and Sewer Company (LRW&S) entered into a Consent Judgment and Order of Injunction with the Missouri Clean Water Commission and the Missouri Department of Natural Resources (MoDNR). As a part of the Consent Order, LRW&S, under the Construction Schedule, Paragraph 5.A., was to "Within one hundred twenty (120) days of the wastewater plant reaching a monthly average of seventy-five percent (75%) of the wastewater treatment plant's design flow capacity in any one month,..." take action in expanding or modifying the system to assure "adequate" capacity.

Second, in the transfer of ownership of LRW&S from the previous owner to the present owner. LRW&S, in the order with the Missouri Public Service Commission (PSC) "agreed to conduct an engineering study of the facility improvements that will likely be needed in the long-term, with that study to include a detailed analysis of the flow to

the Company's sewage treatment plant in the subject service area and the manner in which the plant should be operated,..."

Missouri Department of Natural Resources

The existing wastewater treatment facility has a design flow of 100,000 gallons per day (gpd). Therefore, the threshold figure triggering action on behalf of LRW&S, in accordance with the Consent Order, is 75% of the 100,000 gpd which is a monthly average of 75,000 gpd. Daily inflow monitoring into the WWTF was conducted for the last 4 days of June, all of July and August, and the first 26 days of September.

This period was selected as seasonal flows are anticipated in the Lake of the Ozarks area. Higher flows are anticipated during July and August and on weekends and holidays. The testing period included the entire months of July and August and the July 4th and Labor Day holidays. The data collected is shown in Exhibit 2.

From the data collected, which shows the greatest monthly average in gallons per day to be in July 2007 at 55,422 gpd. It is not anticipated that the flow will reach the 75,000 gpd threshold during the year 2008. Flow monitoring will continue.

There is always the potential that some form of major development will be constructed. The time period for negotiating a service agreement is such that it would allow sufficient time for any upgrades to the WWTF to be planned, designed, submitted to MoDNR for review and constructed prior to the development being placed in service.

At the present time, normal growth is anticipated along the existing lines.

Public Service Commission

Exhibit 2 gives a detailed analysis of the flow into the WWTF. The only long range planning that would be meaningful would be to project the addition of another 100,000 gpd of treatment capacity.

As additions come on line, it is the responsibility of the Developer to have his engineer design the necessary improvements. The LRW&S consultant, Krehbiel Engineering, reviews submitted plans in conjunction with DNR. During construction, LRW&S staff inspects the installation.

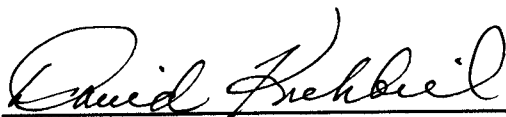
OPERATION:

Operational procedures by the previous owners of LRW&S and the resulting conditions led to the Consent Order with the MoDNR. In the PSC order, the need for the new owners to analyze "the manner in which the plant should be operated" was expressed. These operational procedures appear to have been resolved under the new management.

The WWTF is being operated by Josh Duncan, who holds a Class A Certificate. The General Manager of LRW&S, John Summers, holds a Class D Certificate.

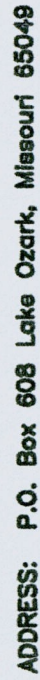
Ronnie Testerman, with Krehbiel Engineering, has made a visual observation of the operation on 4 or 5 occasions this past summer. No deficiencies were noted during those visual observations.

Respectfully submitted:

A handwritten signature in cursive script, reading "David Krehbiel", is written over a horizontal line.

David Krehbiel, E-11594

FOR SEWER SERVICE



LAKE REGION WATER SEWER
SHAWNEE BEND
CAMDEN COUNTY, MO

WASTEWATER (Permit No. MO 0123722)							DAILY FLOW			
Date	Metered Hours			Rainfall (Inches)	Flow			Total Flow (Gal.)		
	Pump #1	Pump #2	Total Hours		Pump #1 (Gal.)	Pump #2 (Gal.)	Total (Gal.)			
07/01/07	17.69	21.10	38.79	-	42,456	50,640	93,096			
07/02/07	20.05	18.00	38.05	0.40	48,120	43,200	91,320			
07/03/07	13.45	14.40	27.85	-	32,280	34,560	66,840			
07/04/07	14.08	15.40	29.48	-	33,792	36,960	70,752			
07/05/07	22.64	18.90	41.54	-	54,336	45,360	99,696			
07/06/07	11.52	17.90	29.42	Trace	27,648	42,960	70,608			
07/07/07	14.36	17.20	31.56	-	34,464	41,280	75,744			
07/08/07	16.99	14.90	31.89	-	40,776	35,760	76,536			
07/09/07	19.55	13.20	32.75	-	46,920	31,680	78,600			
07/10/07	13.00	6.80	19.80	-	31,200	16,320	47,520			
07/11/07	13.10	4.40	17.50	-	29,082	9,768	38,850			
07/12/07	10.94	4.40	15.34	-	24,287	9,768	34,055			
07/13/07	9.08	3.90	12.98	-	20,158	8,658	28,816			
07/14/07	14.29	4.90	19.19	-	31,724	10,878	42,602			
07/15/07	18.05	19.50	37.55	-	40,071	43,290	83,361			
07/16/07	14.09	1.00	15.09	-	31,280	2,220	33,500			
07/17/07	17.15	5.40	22.55	-	38,073	11,988	50,061			
07/18/07	4.26	7.00	11.26	-	9,457	15,540	24,997			
07/19/07	9.40	4.10	13.50	-	20,868	9,102	29,970			
07/20/07	12.14	8.00	20.14	0.25	26,951	17,760	44,711			
07/21/07	11.43	6.20	17.63	-	25,375	13,764	39,139			
07/22/07	15.41	12.30	27.71	-	34,210	27,306	61,516			
07/23/07	13.19	12.30	25.49	-	29,282	27,306	56,588			
07/24/07	13.19	10.60	23.79	-	29,282	23,532	52,814			
07/25/07	8.42	4.60	13.02	-	18,692	10,212	28,904			
07/26/07	8.64	5.00	13.64	-	18,181	11,100	30,281			
07/27/07	9.97	11.40	21.37	-	22,133	25,308	47,441			
07/28/07	10.08	11.40	21.48	-	22,378	25,308	47,686			
07/29/07	10.08	15.20	25.28	-	22,378	33,744	56,122			
07/30/07	19.06	11.20	30.26	-	42,313	24,864	67,177			
07/31/07	12.68	9.30	21.98	-	28,150	20,646	48,796			
TOTALS	417.98	329.90	747.88	0.65	957,315	760,782	1,718,097			

WATER (Permit No. MO 3031201)					DAILY FLOW	
Flow Pump #1 (Gal.)	Flow Pump #2 (Gal.)	Total Flow (Gal.)				
128,000	-	128,000				
318,000	111,600	429,600				
151,000	111,700	262,700				
124,000	300,000	424,000				
-	300,000	300,000				
184,000	37,700	221,700				
141,000	305,200	446,200				
-	305,200	305,200				
-	305,200	305,200				
142,000	-	142,000				
225,000	-	225,000				
299,000	-	299,000				
124,000	-	124,000				
140,000	325,800	465,800				
212,000	32,100	244,100				
345,000	32,200	377,200				
69,000	6,500	75,500				
186,000	264,400	450,400				
186,000	-	186,000				
199,000	-	199,000				
304,000	-	304,000				
289,000	-	289,000				
290,000	-	290,000				
203,000	-	203,000				
290,000	-	290,000				
254,000	-	254,000				
261,000	-	261,000				
342,000	-	342,000				
364,000	-	364,000				
267,000	-	267,000				
156,000	-	156,000				
6,193,000	2,437,600	8,630,600				

WASTEWATER (Permit No. MO 0123722)							
Metered Hours				DAILY FLOW			
Date	Pump #1	Pump #2	Total Hours	Rainfall (Inches)	Flow Pump #1 (Gal.)	Flow Pump #2 (Gal.)	Total Flow (Gal.)
08/01/07	10.41	10.80	21.21		24,984	25,920	50,904
08/02/07	12.79	0.90	13.69		30,696	2,160	32,856
08/03/07	12.84	11.80	24.64		30,816	28,320	59,136
08/04/07	8.29	14.00	22.29		19,896	33,600	53,496
08/05/07	11.37	16.50	27.87		27,288	39,600	66,888
08/06/07	12.93	12.60	25.53		31,032	30,240	61,272
08/07/07	13.34	7.60	20.94		32,016	18,240	50,256
08/08/07	9.68	14.00	23.68		23,232	33,600	56,832
08/09/07	5.15	13.00	18.15		12,360	31,200	43,560
08/10/07	10.03	6.90	16.93		24,072	16,560	40,632
08/11/07	17.52	9.50	27.02		42,048	22,800	64,848
08/12/07	11.45	14.50	25.95		27,480	34,800	62,280
08/13/07	16.10	10.60	26.70		38,640	25,440	64,080
08/14/07	8.32	12.50	20.82		19,968	30,000	49,968
08/15/07	12.06	0.00	12.06		28,944	0	28,944
08/16/07	0.03	11.70	11.73		72	28,080	28,152
08/17/07	11.52	5.10	16.62		27,648	12,240	39,888
08/18/07	14.15	8.60	22.75		33,960	20,640	54,600
08/19/07	15.60	12.10	27.70		37,440	29,040	66,480
08/20/07	13.31	19.50	32.81		31,944	46,800	78,744
08/21/07	3.79	16.20	19.99		9,096	38,880	47,976
08/22/07	16.92	6.50	23.42		40,608	15,600	56,208
08/23/07	9.01	1.60	10.61		21,624	3,840	25,464
08/24/07	13.65	0.00	13.65		32,760	0	32,760
08/25/07	2.94	8.90	11.84		7,056	21,360	28,416
08/26/07	5.88	5.20	11.08		14,112	12,480	26,592
08/27/07	8.52	5.70	14.22		20,448	13,680	34,128
08/28/07	4.24	11.30	15.54		10,176	27,120	37,296
08/29/07	6.15	6.30	12.45		14,760	15,120	29,880
08/30/07	5.09	2.90	7.99		12,216	6,960	19,176
08/31/07	4.50	5.00	9.50		10,800	12,000	22,800
TOTALS	307.58	281.80	589.38	0	738,192	676,320	1,414,512

WATER (Permit No. MO 3031201)				
DAILY FLOW				
Flow Pump #1 (Gal.)	Flow Pump #2 (Gal.)	Total Flow (Gal.)		
400,000	-	400,000		
151,000	-	151,000		
218,000	-	218,000		
397,000	57,900	454,900		
330,000	58,000	388,000		
316,000	57,900	373,900		
308,000	58,000	366,000		
126,000	58,000	184,000		
-	247,600	247,600		
234,000	400	234,400		
374,000	400	374,400		
341,000	400	341,400		
274,000	400	274,400		
330,000	400	330,400		
228,000	242,300	470,300		
-	335,100	335,100		
213,000	-	213,000		
329,000	-	329,000		
280,000	-	280,000		
370,000	-	370,000		
216,000	-	216,000		
298,000	-	298,000		
223,000	-	223,000		
320,000	-	320,000		
328,000	-	328,000		
326,000	-	326,000		
295,000	-	295,000		
317,000	-	317,000		
353,000	-	353,000		
282,000	-	282,000		
117,000	100	117,100		
8,294,000	1,116,900	9,410,900		

AUGUST 2007

