OSAGE BEACH / LAKE OZARK JOINT SEWER BOARD MEETING AGENDA JANUARY 15, 2019 @ 4:00 p.m. LAKE OZARK CITY HALL

1. CALL TO ORDER

2. ROLL CALL

Mayor, Lake Ozark, Johnnie Franzeskos
Mayor, Osage Beach, John Olivarri
City Administrator, Osage Beach, Jeana Woods
City Administrator, Lake Ozark, Dave Van Dee
Alderman, Lake Ozark, Gerry Murawski
Alderman, Osage Beach, Greg Massey
Public Works Director, Osage Beach, Nick Edelman
Public Works Director, Lake Ozark, Matt Michalik
Resident Member, Mr. Gary Hamner

3. MINUTES	Page Numbers
Regular Meeting: November 20, 2018	3-4
4. REPORTS	
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Revenue Budget Analysis	31-32
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Alliance Report of Operations	49-82
Approval of Flow Charts November 2018	
December 2018	

5. OLD BUSINESS

- A. Discussion and possible action for approval of contract with Martin Energy for the generator project.
- B. Board Representative update

6. NEW BUSINESS

A. Discussion and possible action regarding approval of the Inventory list

- B. Discussion and possible action regarding the Emergency Response Plan
- 7. ADDITIONAL DISCUSSION ITEMS
- 8. ADJOURNMENT

THE NEXT MEETING WILL BE FEBRUARY 19, 2019 4:00 PM @ LAKE OZARK CITY HALL

LAKE OZARK-OSAGE BEACH JOINT SEWER BOARD

Meeting Minutes - November 20, 2018

CALL TO ORDER:

Mayor Johnnie Franzeskos called the meeting to order at 4:00pm on Tuesday, November 20, 2018 at Lake Ozark City Hall

ROLL CALL:

Mayor, Lake Ozark, Johnnie Franzeskos - Present
Mayor, Osage Beach, John Olivarri- Present
City Administrator Osage Beach, Jeana Woods - Present
City Administrator Lake Ozark, Dave Van Dee – Present
Alderman Osage Beach, Greg Massey - Absent
Alderman Lake Ozark, Gerry Murawski - Present
Public Works Director Osage Beach, Nick Edelman - Present
Public Works Director Lake Ozark, Matt Michalik - Present
Resident Member, Mr. Gary Hamner - Present

MINUTES:

Mayor Olivarri motion to approve the meeting minutes of October 16, 2018. The motion was seconded by City Administrator Van Dee. The motion passed unanimously.

REPORTS:

Resident Member Gary Hamner motion to approve the October Bills List. The motion was seconded by City Administrator Woods. The motion passed unanimously.

The October Revenue Budget, Expenditure Budget Analysis, Income & Expense Summary and Check Registers and Bank Statements were reviewed. Motion was made by Alderman Murawski to acknowledge the review of the documents. Seconded by Mayor Olivarri. The Motion passed unanimously.

Alliance Report of Operations: The average daily incoming flow for October was 1.573 mgd. We had 7.5 inches of precipitation measured at the WWTP in October.

Operationally, the plant's discharge was excellent, with an effluent monthly average BOD of 1.4 mg/l and TSS of 2.1 mg/l respectively for October, which represents a 99.0% or better removal.

The MLSS average for both aeration basins was 3,727 mg/l in October. The total dry weight sludge inventory for October totaled 189,409 pounds. There were 38 tanker loads of biosolids or 140,600 gallons land applied in October. We also received 21 tanker loads or 59,500 gallons of septage for the month of October.

APPROVAL OF FLOW CHART

Motion was made by Public Works Director Edelman to approve the Flow Chart, seconded by Public Works Director Michalik, motion passed unanimously.

OLD BUSINESS:

- A. Report of action regarding the generator project. Public Works Director Michalik stated they had another meeting with Martin Energy and discussed a preliminary contract. Martin made a proposal for 10% down approximately \$14,000- \$15,000 to get the project started. On site work will take about 2 weeks to finish. If the board is ok with the 10% down that they will come back to the board with a contract at next meeting.
- **B.** Report of action regarding the 2019 Budget & Capital Improvement Plan. A motion was made by Alderman Murawski to approve with the amended amounts as discussed and seconded by City Administrator Woods, motion passed unanimously.

NEW BUSINESS:

- A. Report of action on appointing Board Representatives and clarification of authority. City Administrator Van Dee suggested both Public Work Directors Edelman and Michalik oversee operational decisions on expenditures up to \$2500. A motion was made by City Administrator Woods designating Representatives for Administration of the contract and seconded by Mayor Olivarri. A voice vote was taken and all in attendance said yes. Motion passed unanimously
- **B.** Report of action regarding the final approval for the alliance contract. With a lot of discussions there will be some proposed changes to the contract. A motion was made by Public Works Director Edelman to approve with the amendments as discussed and seconded by Public Works Director Michalik, motion passed unanimously
- C. Report of action authorization to pay December bills. A motion was made by City Administrator Van Dee to pay the bills and seconded by Public Works Director Michalik, motion passed unanimously
- **D.** Report of action regarding the bids to repair the Flygt pump. A motion was made by Public Works Director Michalik to go with the lowest bid from JCI industries and seconded by City Administrator Woods, motion passed unanimously

ADJOURNMENT:

With no further business to discuss, a motion to adjourn was made by Alderman Murawski. His motion was seconded by Public Works Director Michalik and was passed unanimously. The meeting adjourned at 5:00 pm.

City Collector, Trisha Kane

JOINT SEWER BOARD BILL LIST JANUARY 15, 2019

OPERATINI OPERATINI EQUIPMEN EQUIPMEN	\$ \$ \$ \$ \$ \$	35,023.64 28,920.25 2,620.00 364.99			
			TOTAL	\$	66,928.88
OPERATING	G FUND E	BILLS PAID PRIOR TO BOARD ME	ETING:		
Account 4185 4000 4170 4020 4150	Check 3699 3700 3701 3702 3702	Paid To: Ameren MO Equipment Replacement Fund Alliance Water Resources, Inc. Alliance Water Resources, Inc. Alliance Water Resources, Inc.	Description: November Service Payment into ER Fund Management Fee maintenance and repair misc. vehicle maintenance	* * * * * * * *	Amount: 3,731.22 3,467.00 26,584.22 825.96 415.24
			TOTAL	\$	35,023.64
OPERATING	3 FUND E	BILLS TO BE PAID:			
Account 4185 4000 4170 4020 4150	Check 3703 3704 3705 3706 3706	Paid To: Ameren MO Equipment Replacement Fund Alliance Water Resources, Inc. Alliance Water Resources, Inc. Alliance Water Resources, Inc.	Description: December Service Payment into ER Fund Management Fee Trash Serv and Sand Blast GMC Serv and Lube	***	3,467.00 24,996.00 217.08 240.17
			TOTAL	\$	28,920.25
EQUIPMENT	repla(CEMENT FUND BILLS PAID PRIOR	TO BOARD MEETING:		
Account Equip/Replace	Check 1027	Paid To: Choat Const. Co. LL(Description: 3 new doors	\$ \$	Amount: 2,620.00 2,620.00
EQUIPMENT	REPLAC	CEMENT FUND BILLS TO BE PAID			
Account Equip/Replace	Check 1028	Paid To: Alliance Water Resources, Inc.	Description: Replace Heaters TOTAL	\$ \$ \$	Amount: 364.99 - 364.99



- AmerenMissouri.com
- ₽ 1.877.426.3736
- PO Box 88068 Chicago, IL 60680-1068 € € Ameren payment processing center

FOCUSED ENERGY. For life

Account Number 4580005832

Customer Name

ALLIANCE WATER RESOURCES INC

Service Address

3 ANDERSON RD, -

LAKE OZARK, MO 65049

Current Detail for Statument 12/07/2018

Total Electric Charges

\$3.652.43

Total Amount Due

\$3,652,43



Stay informed about your energy usage anytime. Go to AmerenMissouri.com and create an account. It's simple and free!

AMOUNT DUE

\$3,652.43

Due Date

Amount After Due Date

01/02/2019

\$3,707.22

Previous Statement Total Payments

\$5,202.53

Payment Received. Thank You.

\$5,202.53

Your electric rate decreased by approximately B%. Your savings are noted as the Federal Tex Rate Reduction.

Electric Usage History Electric Usage Summery (kWh) Electric Usage in Kilewatt Hours (kWh) So far this year, you're using 13.6% MOFE than lest 125000 100000 2017 75000 50000 25000 OCT DEC 80°F 79°F 79°F 71°F 53°F 36°F 40°F 42°F 58°F 74°F 1.052,480 kWh 32°F Average Mentley Temperature (°f) Usaga frem Jan-Dec for 2017 & 2018

Keeping You Informed.

Update your account information so we can contact you when crews are working in your neighborhood. Fill out the slip and mail it in or update your online account. Don't have an online account? Sign up today a. AmerenMissouri.com.



» See next page for service details.

Keep this portion for your records.

Please return this portion with your payment

Page 1 of 4



Check if you have address changes on back.

January 02, 2018 \$3,652.43

Assount Municipa 4580005832

Amount Enclosed \$

>000331 P048224 0003 035134 705

ALLIANCE WATER RESOURCES INC PO BOX 1985 LAKE OZARK, MO 65049-1985

AMEREN MISSOURI PO BOX 88068 CHICAGO IL 60680-1068

LOLDODO 0045800058302 000003L52430 000003L52430



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Base Energy Charge / Hours Used	21,160.00	kWh	@	\$ 0.0484	0000	\$1,046.29
Base Energy Charge ! Hours Used	28,535.00	kWh	@	\$ 0.0389	0000	\$1,110.01
Custemer Charge						\$95.07
Fuel Adjustment Charge	65,600.00	kWh	@	\$ 0.0019		\$128.58
Energy Efficiency Program Charge	65,600.00	kWh	0	\$ 0.0002		\$13.12
Energy Efficiency Investment Charge	65,600.00	kWh	@	\$ 0.00441		\$294.28
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			Total Ele	ectric Chei	gøs	\$3,052.43

Questions? Contact Ameren Missouri at 1.877.426.3736 or visit AmerenMissouri.com.

Page 2 of 4

Address Changes or Corrections

Name :__ Address ___ City, State, Zip. Phone Number_

AmerenMissouri.com/WaysToPay



ONLINE E-CHECK



PHONE 866.288,3729



IN PERSON FIND A PAY STATION AT AMERENMISSOURI.COM/ PAYSTATION







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- □ 1.877.426.3736
- PO Box 88068 Chicago, IL 60680-1068 **

 Ameren payment processing center

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Account Number 5580005920

Customer Name ALLIANCE WATER RESOURCES INC

Service Address

3 ANDERSON RD

LAKE OZARK, MO 65049

Current Detail for Statement 12/07/2018	
Total Electric Charges	\$78.79
The second secon	COLUMN TO THE RESIDENCE OF THE PARTY OF THE

Total Amount Due

\$78.79



Stay informed about your energy usage anytime. Go to Ameren Missouri.com and create an account. It's simple and free!

AMOUNT DUE

\$78.79

Due Date

01/02/2019

Amount After Due Date

\$79.97

Previous Statement Total Payments

\$114.09

Payment Received, Thank You

\$114.08

UDESC 6%. Your savings

Your electric rate decreased by approximately 6%. Your savings are noted as the Federal Tax Rate Reduction.

E Contraction	(dis Us egasu e		Mary State of State o	oers (Ki	Nh)	u s					2.2			Elect	ric Usage Summary (kWh)
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Keeping You Informed.

Update your account information so we can contact you when crews are working in your neighborhood. Fill out the slip and mail it in or update your online account. Don't have an online account? Sign up today at Ameren Missouri.com.



u See next page for service details.

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Page 1 of 4



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Please return this port on with your payment

Ammat due Duc Date

\$75.70 January 02, 2019

Definquent Amount After Due Date

\$79.97 S580035620

Amount Enclosed \$

>000143 6045557 0003 092139 102

ALLIANCE WATER RESOURCES INC PO BOX 1985 LAKE OZARK, MO 65049-1985

AMEREN MISSOURI PO BOX 88068 CHICAGO IL 60680-1068

70633000 00558000059200 000000078790 000000078790



- AmerenMissouri.com
 1.877.426.3736
- PO Box 88066 Chicago, IL 60680-1068 **

 Ameren psyment processing center

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- Staenne	Service Details			्र अप	ensa teom	11/04/2018 - 12/09	DZOJE) (STE lavs)
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Threshold · P	teek Demand						
	DESCRIPTION		USAGE	UNIT		RAYE	CHARGE
	Base Energy Charge		680.00	kWh	@	¢ 0.08360000	\$56.85
	Seasonal Energy Charge		0.00	kWh	0	\$ 0.04820000	\$0.00
	Customer Charge						\$21.43
	Fuel Adjustment Charge		680.00	kWh	@	\$ 0.00186000	\$1.33
	Energy Efficiency Progrem Charge		680.00	kWh	@	\$ 0.00010000	\$0.07
	Energy Efficiency Investment Charge		680.00	kWh	0	\$ 0.00449900	\$3.0 8
	Federal Tax Rate Reduction		680.00	kWh	@	\$-0.00581000	\$-3.95
					Tota	Service Amount	\$78.78
					Total E	lectric Charges	\$78.78
Paymer	its Since Previous Statement					10 P	
	DATE RECEIVED		AMOUNT				
	November 28, 2018		\$114.09				

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Page 2 of 4

Address Changes or Corrections	Amere	enMissouri.co	ni/Way	sToPay	
NameAddress	[F]	E-CHECK DINTIME		PHONE 866.268.3729	IM PERSON FIND A PAY STATION AT AMERENMISSOURI.COM/
City, State, ZipPhone Number	100	ONUNE CREOIT CARD		MAIL STUB & CHECK	PAYSTATION

Alliance Water Resources, Inc.

Professional Water and Wastewater Operations 206 South Keene Street Columbia, Missouri 65201 (573) 874-8080 Fax (573) 443-0833

SOLD TO:

Lake Ozark/Osage Beach Joint Utility Board

c/o Karri Bell

. City of Osage Beach 1000 City Parkway

Osage Beach, MO 65065

INVOICE

Involce No:

8127

Invoice Date:

1-Dec-18

Customer No:

20220

Terms:

30 days

REFERENCE	DESCRIPTION	04445000450 777**********************************	AMOUNT
REFERENCE	Wastewater Plant operating service for month of: Base Fee	Dec-2018	\$26,584.22
		TOTAL DUE	\$26,584.22

Alliance Water Resources, Inc.

Professional Water and Wastewater Operations 206 South Keene Street Columbia, Missouri 65201 (573) 874-8080 Fax (573) 443-0833

SOLD TO:

874-8080 Fax (573) 443-0833 Invoice No:

Invoice Date:

INVOICE

1-Dec-18

Customer No:

20220

8128

Terms:

30 days

Lake Ozark/Osage Beach Joint Utility Board
c/o Karri Bell
City of Osage Beach
1000 City Parkway
Osage Beach, MO 65065

REFERENCE	DESCRIPTION	AMOUNT
	Bledsoe Automotive Service - Invoice # 14599 - 50%	\$145.50
	Bledsoe Automotive Service - Invoice # 14599 - 50% Bledsoe Automotive Service - Invoice # 14597 - 50% Roemer's Heavy Equipment - Invoice # 19471 - 50% Controlled Heating & Cooling Co - Invoice # 28053 - 50% OVIVO - Invoice # 8474988 - 50% Jani-King - Invoice # CLM12180094 - 50% LISA Bluebook - Invoice # 736458 - 50%	\$138.50
!	Roemer's Heavy Equipment - Invoice # 19471 - 50%	\$131.24
	Controlled Heating & Cooling Co - Invoice # 28053 - 50% 👊 🙌	\$127.50
	OVIVO - Invoice # 8474988 - 50% 100 400	\$197.61
	Jani-King - Invoice # CLM12180094 - 50% 🔌	\$97.50
	USA Bluebook - Invoice # 736456 - 50% UPV	\$403.35
		Age and the second seco
communication de la commun		
	TOTAL DUE	\$1,241.20

Statement

Bledsoe Automotive Service 322 S BUSINESS RT 5 CAMDENTON MO. 65020

Date 11/1/2018

То:
ALLIANCE WATER RESOURCES
PO BOX 1985
LAKE OZARK, MO 65049
•



				Amount Due	Amount Enc.
				\$568.00	
Date		Transaction		Amount	Balance
10/18/2018 IN	GL Acct#: 470 GL Acct#: 470 Signature: 10/16/20/20/20/20/20/20/20/20/20/20/20/20/20/	.475% = 0.00 Orig. Amount \$277.00.	00 1220-20	291.00 277.00	291.00 568.00
CURRENT	1-30 DAYS PAST DUE	31-50 DAYS PAST DUE	61-90 DAYS PAST	OVER 90 DAYS PAST DUE	Amount Due
0.00	568.00	0.00		0.00	\$568.00

ROEMER'S HEAVY EQUIPMENT & TRUCK REPAIR 37 48 OTY PARTING AND DESCRIPTION
1 BRATSHAIX GOVERNOR

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P.O. Box 191 Osage Beach, Missouri 65065 (573) 348-3733	NAME MIGNES (12) COSSUS VEPS OF ARDRESS OF 100	18	MOTOR NUMBER	DESCRIPTION OF WORK DLUBE CHANGEON, COLREGE CITUME-UP	Service CALL Removed and replaced governor. Tooked the Good!		LITERS/GALS. OF GAS @ LITERS/QIS. OF OIL @ kg/lbs of Grease @	ne above repair work You and your ental	Wathde for purposes of testing, isospecifion, or definency at my risk. An express mechanics from extrowelegiped on above verhole to secure the emount of repetits floration. It is also understood that you will not be held responsible for loss or demage to cars or anticles telf in cars in case of fire, theft or any other cause beyond your control. SANE OLD PARTS? CYES NO
2.7							377 48	1230.20 731.214	
DK 21 2944 1 X (30Ver 120)				5/21/10 Day 6	of service. Thank you.		e l	Signature: 1009-30" 34.14 1022	Date: 11/5/18 TOTAL ACCESSORIES

CONTROLLED HEATING & COOLING CO. 883 E. HIGHWAY 42 SUITE A. OSAGE BEACH, MO 65065 573-348-1535

OPERATING PRESSURES ROSE TO 70 LOW 230 HIGH,. CHECKED INDOOR COL FOR LEAKS DID NOT HIT ON

Date	Invoice	
11/5/2018	28053	

Bill To Celebrating 35 Years Alliance Water Resources 1983 - 2018 P.O. Box 1985 Lake Ozark, MO 65049 P.O. No. Due on receipt Qty Rate Amount Description 125.00 125.00 Labor/hour 65.00 130.00 Freon R-22/LB. 0.00 0.00 20 x 25 x 4" pleated filter 8-31-18: UNIT FROZE UP: CHECK ON SYSTEM, REPLACE FILTER (20X25X4). TAKE TD 14' CHECK OPERATION PRESSURES, READING 45 LOW SIDE 150 HIGH SIDE. ADDED 2 LBS R22 DID NOT MOVE PRSSURE 50 LOW 158 HIGH TD ROSE FROM 14' TO 16' 74 RETURN 58 SUPPLY. BLOCKED OUTDOOR COIL TO SIMULATE LOAD ON SYSTEM.

ANTHING, COPPER COIL IS RUSTY. -20 127.50 1220-20 127.50 4020 Signature: Thank you for your business.

Total

\$255.00



Remit To:

MAJESTIC FRANCHISING INC DBA JANI-KING COLUMBIA 14821 W. 95TH STREET

LENEXA

KS

66215

Invoice						
Date	Number					
12/01/2018	CLM12180094					
Due Date	Cust #					
12/31/2018	022031					
Invoice Amount \$ 195.00	Amount Remitted					

Sold To:

ALLIANCE WATER

For:

Same as Sold To

3 ANDERSON RD

LAKE OZARK

MO 65049

Make All Checks Payable To: MAJESTIC FRANCHISING INC DBA JANI-KING COLUMBIA RETURN THIS PORTION WITH YOUR PAYMENT

MAJESTIC FRANCHISING INC DBA JANI-KING COLUMBIA **Commercial Cleaning Services**

(573) 442-8455

Sold To:

ALLIANCE WATER 3 ANDERSON RD

LAKE OZARK

MO 65049

For:

Same as Sold To

Invoice No	Date	Gust No	Sismn No	PO Number	Franchisee			Due Date	
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						Amount of Sale		\$ 195.00	
		nd 6	ablema I m	nús		Sales Tax		\$ 0.00	
Marie Allenanteur	Maje		e Ali Checks Payable Hising INC DBA JANI		Total \$ 195.0				

OVIVO

Workfericle Experts In Water Treatment Ovivo USA, LLC 4246 Riverboat Road, Suite 300 Salt-Lake City, UT 84123 Phone: (801)931-3000 Fax: (801)931-3080

REVIEW TO VINCHAGE

Ovivo USA, LLC P.O. Box 673076 Detroit, MI 48267-3076

REMITE TO YEAR WIRE

Comerica Bank
Comerica Bank Center
411 West Lafayette
Detroit, MI 48226
Account #: 1851855104
Routing #: 07200096
SWIFT #: MNBDUS33
Telex: 3772134 MNB INTL DET

INVOICE NO

8474988

Page: 1 of 1

Date: 11/06/2018

В	102912
AD.	2422

I Alliance Water Resources, Inc.

L #3 Anderson Road

L P.O. Box 1985

Lake Ozark MO 65049

T USA

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H Alliance Water Resources, Inc.

I #3 Anderson Road

P.O. Box 1985

Lake Ozark MO 65049

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	YEMVIEW.	
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10 days	USD	

Order		Customer PO		Ship Via		Terms		-Carance
SSW0010285		Vč	rbal Gary	Freight Allowed		Net 30 days		USD
Line	Item/Description		Qty Ordered	Qty Shipped	Qıy Back Ord	UM	Unit Price	Extended Price

1 23276C332X2

INSERTS, COUPLING, N-EUPEX 160, (7) SET

Date Shipped:

10/31/2018

3.00

0.00 SET

131.7400

395.22

Please submit purchase order to:

Your point of contact is:

Mark Williams Product Manager Aeration Process Group

Email: mark.williams@ovivowater.com

Phone: 801-931-3037 Fax: 801-931-3020 GL Acct#:

3.00

Signature:

Date.

7100-20 \$197.61 1220-20\$197.61

lue X

4020

OPICITION

WE HEREBY CERTIFY THAT THESE GOODS WERE PRODUCED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF SECTION 8, 7, 6, 12 OF THE FAIR LABOR STANDARDS ACT AS AMENOED AND REGULATORS AND ORDERS OF THE UNITED STATES DEPARTMENT OF LABOR ISSUED UNDER SECTION 14 THEREOF. MATERIAL RETURN POLICY; WRITTEN AUTHORIZATION IS REQUIRED FOR ALL RETURNED MATERIAL. MATERIAL MUST

BE RETURNED F.O.B. TO OUR PLANT OF ORIGIN

Sales Amount	395.22
Misc Charges	0.00
Freight	0.00
Sales Tax	0.00
	0.00
Prepaid Amount	0.00
Total	395.22

Get the Best Treatment"

Remit To: Gumes, IL 60031-9004



BILL TO: 304523 1487 1 MB 0.424 E0202X I0334 D4236268022 S2 P6801752 0001:0001

ALLIANCE WATER RESOURCES PO BOX 1985 LAKE OZARK MO 65049-1985

INVOICE

INVOIGE NG)	PAGE NO.
736456	1 of 1
edstomer no	DAYE
304523	11/13/18

View online at: http://usabluebook.billtrust.com Web Enrollment Token: RMM ZRV XZK

SHIP TO:

ALLIANCE WATER RESOURCES *****DELIVER BY 4 PM***** 3 ANDERSON RD LAKE OZARK MO 65049

USA

Order			Attention: 0009 G		e remerce r	e de la	and the state of t			
F. CUSTOMER P.O. NO	UNS ESSELVIDATEDAY	Str artistic	Ga. ATERMS	TA	(CODE)	GALES ORDER NO.	WIH	AL FREIGHT	W	SHIP VIA a
MO-0103241	11/12/18	GIF	1%/10 NET :	30	мо	302929	01	PREPAID	-	UPS
	HOLES HE DES	CRIPTION	g ² ²	ORDERED	SHIPPE	BACKORDER	Unit	PRICE	PER	EXTENSION
32891	Hach Ammonia Com Electrode 519270 SDS VISIT WWW	00 '.USABLU	EBOOK.COM		1	0	EA	786.24		786.24
	GL Acct#:		~ /	1.55 18	1220)-20 ^{\$} 403	35	4020		

THANK YOU for your business! 1.6% MONTHLY FINANCE CHARGE ON AMOUNTS 30 DAYS PAST DUE Discounts Apply to Merchandise Only

		THE STREET STREET STREET, THE STREET STREET, S	TO STATE OF THE PROPERTY OF TH	Sebendest Top Control Control Control Control Control	Mante
ENIS ROSEMUNDINS	際いればは記載はほりむけの際	। अञ्चलकार	FAX	in in the little	Television
CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR					
786.24	0.00	0.00	66.06	20.45	
100.27	0.00	0.00	44.21	20.45	850.90
		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			

Should it become necessary to refer your unpaid balance to a collection agency, a collection fee, not to exceed 25% of the balance referred; plus reasonable attorney's fees; and court costs when necessary, will be added to the balance due.

Please Detach and Return Bottom Portion to Insure Proper Credit to Your Account

# Get the Eest Treatment

****IMPORTANT****

Please include this customer # on the face of your remittance check.

INVOICE NO. CUSTOMER NO. DATE		
736456 304523 11/13/18	850.90	

ALLIANCE WATER RESOURCES PO BOX 1985 LAKE OZARK MO 65049-1985

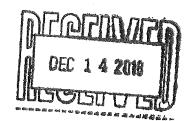
REMITTANCE ADDRESS **USABlueBook** P.O. Box 9004

Gurnee, IL 60031-9004

# INVOICE

Jeffries Construction LLC DBA Choat Construction Company LLC

PO Box 249 Iberia, Mo 65486 Cell (573)280-1275 choatconstruction@gmail.com



BILL TO

Joint Sewer Board PO Box 1985 Lake Ozark, Mo. 65049 INVOICE #
INVOICE DATE

186

12/03/2018

DESCRIPTION

AMOUNT

Labor and Material to replace 3 doors with new fiberglass doors.

2,620.00

TOTAL

\$2,620.00

Thank you

TENNS GROWING THAT

Payment is due within 15 days



- AmerenMissouri.com
- 1.877.426,3736
- PO Box 88068 Chicago, IL 60680-1068 Ameren payment processing center

FOCUSED ENERGY. For life.

Account Number 4580005832

Customer Name ALLIA

**ALLIANCE WATER RESOURCES INC** 

Service Address

3 ANDERSON RD, -LAKE OZARK, MO 65048

Current Detail for Statement 01/10/2019	p. D.
Total Electric Charges	\$3,924.43

#### **Total Amount Due**

\$3,924,43



Stay informed about your energy usage anytime. Go to AmerenMissouri.com and create an account. It's simple and free!

#### AMOUNT DUE

\$3,924.43

#### Due Date

02/01/2019

Amount After Due Date

\$3,983.30

Previous Statement

\$3,652.43 \$3,652.43

Total Payments
Payment Received Thank You.

JAN 1 0 2018

Your electric rate decreased by approximately 8%. Your savings are noted as the Federal Tax Rate Reduction.

#### .. Electric Usage History Electric Usage in Kilowatt Hours (kWh) Electric Usage Summary (kWh) Your electric energy usage this year was about the same as 125000 last year. 100000 75000 50000 68.960 kWh 25000 0 2019 APR MAY AHR NOV DEC JAN MAR JUN. m. SEP OCT JAN 27°F 32°F 40°F 42°F 58°F 74°F 80°F 79°F 78°F 71°F 53°F 36°F 38°F 68,320 kWh Average Mosthly Temperature (*F) Usage for Jan 2018 & 2019

Keeping You Informed.

Update your account information so we can contact you when crews are working in your neighborhood. Fill out the slip and mail it in or update your online account. Don't have an online account? Sign up today at AmerenMissouri.com.



n See next page for service details.

Keep this partien for your records.

Please return this portion with your payment.

Page 1 el 4



Check if you have address changes on back.

Amount Due Due Date

\$3,924.43 February 01, 2019

Dalinguent Amount After Due Date Account Number

\$3,983.30 4590005632

Amount Enclosed \$

>000160 6059982 0002 092139 loz

ALLIANCE WATER RESOURCES INC PO BOX 1985 LAKE OZARK, MO 65049-1885

AMEREN MISSOURI PO BOX 88068 CHICAGO IL 60680-1068

00600000 0045800058302 000003924430 000003924430



- AmerenMissouri.com
- **1.877.426.3736**
- PO Box 88088 Chicago, IL 60680-1068 Ameren payment processing center

FOCUSED ENERGY. For Life.

. Blockrie	Service Details				, St	rvice from	12/05/2018 - 0	(1/08/2019 (3/4 days)
Electric Me	eter Read							
METER N	UMBER SERVICE NO. DAYS	USAGE R Type		IRRENT ADING	PREVIOU PREADIN		DING RENCE WILL	TIPLIER USAGE
11873321 11673321	<b>S</b>	Total kWh Peak kW	Actual !	51106,0000 0.7840		1000 1000	horas :	160,0000 68320,0000 180,0000 125,4400
Usage Sum	mary							
	Total kWh		68320	.0000	Peak k	W		125.4000
	Total Billing Demand		125	.4000	Octobe	r Winter Bas	se kW	153.1000
Winter Base Demand			125	.4000	Base k	Wh Ratio		1.0000
	Base kWh (HUD)		68320	.0000	Seasonal kWh (HUD)		0.0000	
Rate 3M La	arge General Service							
	DESCRIPTION			USAGE	UNIT		AR	TE CHARGE
	Seasonal Energy Charge			0.00	kWh	@	\$ 0.0389000	00.00
	Demand Charge			125.40	kW	@	\$ 2.000000	00 \$250.80
	Base Energy Charge / Hours Used		18,	810.00	kWh	@	\$ 0.0665000	00 \$1,250.87
	Base Energy Charge / Hours Used		•	080.00	kWh	@	\$ 0.049400	,
	Base Energy Charge / Hours Used		24,	430.00	kWh	@	\$ 0.038900	
	Customer Charge							\$95.07
	Fuel Adjustment Charge			320.00	kWh	@		
	Energy Efficiency Program Charge			320.00	kWh	@		
	Energy Efficiency Investment Charge	!		320.00	kWh	@		
	Federal Yax Rate Reduction		68,	320.00	kWh	@		
	AAAMAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA		-0-47-20-20-20-20		·	Tot	al Service Amou	int \$3,924.43
						Total	Electric Charge	es \$3,924.43

Questions? Contact Ameren Missouri at 1.877.426.3736 or visit AmerenMissouri.com.

Page 2 of 4

Address Changes	or Cerrections
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#### AmerenMissouri.com/WaysToPay



ONLINE E-CHECK



PHONE 866.268.3729



IN PERSON FIND A PAY STATION AT AMERENMIS SOURI.COM/ PAYSTATION

ONLINE CREDIT CARD



MAIL STUB & CHECK



- AmerenMissouri.com
- 1.877.426.3736
- PO Box 88068 Chicago, IL 60680-1068 The American payment processing center

#### FOCUSED ENERGY. For Life.

Account Number 5580005920

Customer Name

**ALLIANCE WATER RESOURCES INC** 

Service Address

3 ANDERSON RD

LAKE OZARK, MO 65049

Current Detail for Statement 01/10/2019	AO Laboratoria
Total Electric Charges	\$65.29

#### **Total Amount Due**

\$65.29



Stay informed about your energy usage anytime. Go to AmerenMissouri.com and create an account, It's simple and free!

#### AMOUNT DUE

\$65.29

**Due Date** 

02/01/2019

Amount After Due Bate

\$68.27

Previous Statement Total Payments \$78.79 \$78.79

Payment Received. Thank You,

JAN 1 0 2018

Your electric rate decreased by approximately 6%. Your savings are noted as the Federal Tax Rate Reduction.

#### 13073 00181 6059982 000352 000703 0001/0002 Electric Usage History and the state of t Electric Usage in Kilowatt Hours (kWh) Electric Usage Summary (kWh) So far this year, you're using 72% IESS than last year. 4500 3000 1.860 was 1500 0 2019 JAN FEB MAR APR MAY JUN JIIL. AUG SEP OCT NOV DEC JAN 40°F 42°F 58°F 74°F 80°F 79°F 78°F 71°F 53°F 36°F 38°F 27°F 32°F Average Manthly Temporature (*F) Usage fer Jan 2018 & 2018

Keeping You Informed.

Update your account information so we can contact you when crews are working in your neighborhood. Fill out the slip and mail it in or update your online account. Don't have an online account? Sign up today at AmerenMissouri.com.



» See next page for service details.

Keep this partion for your records.

Please return this portion with your payment.

Page 1 of 4



Check if you have address changes on back.

Amount Die Due Date

\$65,29 Fabiuary 03, 2018

Delinquent Amount After Die Date Account Number

\$66,27 6580005920

Amount Enclosed \$

>000181 6059982 0002 092139 102

ALLIANCE WATER RESOURCES INC PO BOX 1985 LAKE OZARK, MO 65049-1985

AMEREN MISSOURI PO BOX 88068 CHICAGO IL 60680-1068

90633000 0055800059200 000000065290 000000065290



- AmerenMissouri.com
- **1.877.426.3736**
- PO Box 88068 Chicago, IL 60680-1068 ** Ameren payment processing center

FOCUSED ENERGY. For life.

Electric Mo	Service Details	)		Sov	ce from 1	2/05/2018 01/08	(2019 (34 days)
M2 (411) 98041275 98041276	SERVICE AND 115ARE	TYPE:	CURRENT READING 18129.0000	PREVIOUS READING 18077.0000			900 <b>520.0000</b>
Usage Sum	nmary	angun an angun an angun an					
	Total kWh		520.0000	Winter Ba	se kWh		1000.0000
	Current Base kWh		520.0000	Seasonal l	(Wh		0.0000
Rate 2M S	m Gen Svc · 3 Ph w/Dmd						
Threshold · P	eak Demand						
	DESCRIPTION		USAGE	UNIT		RATE	CHARGE
	Base Energy Charge		520.00	kWh	6	\$ 0.08360000	\$43.47
	Seasonal Energy Charge		0.00	kWh	6	\$ 0.04820000	\$0.00
	Customer Charge						\$21.43
	Fuel Adjustment Charge		520.00	kWh	@	\$ 0.00196000	\$1.02
	Energy Efficiency Program Charge		520.00	kWh	@	\$ 0.00010000	\$0.05
	Energy Efficiency Investment Charge		520.00	kWh	@	\$ 0.00449900	\$2.34
	Federal Tax Rate Reduction		520.00	kWh	<u>@</u>	\$-0.00881000	\$-3.02
					Total	Service Amount	\$65.29
	PRODUCTION OF THE PRODUCTION O	CONCORDED ST.			Total E	lectric Charges	\$65.29
Payme	nts Since Provious Statement	7.57		n Sida			
	DATE RECEIVED		TNUOMA				
	December 26, 2018		\$78.79				

Questions? Contact Ameren Missouri at 1.877.426,3735 or visit Ameren Missouri.com

Page 2 of 4

Address Changes or Corrections
Name
Address
City, State, Zip
Phose Number

AmerenMissouri.com/WaysToPay



e-check e-check



PHONE 866.268.3729



IN PERSON
FIND A PAY STATION AT
AMERENMISSOURI.COM/
PAYSTATION

ADDITION OF THE PARTY OF THE PA	
AND STREET, STREET,	
Santanana d	

ONLINE CREDIT CARD



Mail 5Tub & Check

#### Alliance Water Resources, Inc.

Professional Water and Wastewater Operations 206 South Keene Street Columbia, Missouri 65201 (573) 874-8080 Fax (573) 443-0833

SOLD TO

Lake Ozark/Osage Beach Joint Utility Board

c/o Karri Bell

City of Osage Beach 1000 City Parkway

Osage Beach, MO 65065

#### INVOICE

Invoice No:

8169

Invoice Date:

1-Jan-19

Customer No:

20220

Terms:

30 daye

REFERENCE	DESCRIPTION		AMOUNT
	Wastewater Plant operating service for month of: Base Fee	Jan-2019	\$24,996.00
,			
ndaglad dağırlığındı bir quasa eren indireci ili ildə bir quasa qarşadı			
		TOTAL DUE	\$24,996.00

#### Alliance Water Resources, Inc.

Professional Water and Wastewater Operations 206 South Keene Street Columbia, Missouri 65201 (573) 874-8080 Fax (573) 443-0833

Invoice No:

INVOICE

8170

SOLD TO

Lake Ozark/Osage Beach Joint Utility Board

c/o Karri Bell

City of Osage Beach 1000 City Parkway

Osage Beach, MO 65065

Invoice Date:

1-Jan-19

**Customer No:** 

20220

Terms:

30 days

REFERENCE	DESCRIPTION	AMOUNT
	Menards - Invoice # 39158 06 4558 - 50% (replacement heaters)	\$364.96
	Roemer's Heavy Equipment - Invoice # 19520 - 50% (GMC Service & Lube)	\$240 1
	Republic Services - Invoice # 0435-000598815 - 50% (Regular Dumpster & Sandblast Dumpster)	\$217.0
	TOTAL DUE	\$822.24



#### MENARDS - LAKE DZARK 1015 Barred Owl Lane Lake Ozark, MO 65049

KEEP YOUR RECEIPT RETURN POLICY VARIES BY PRODUCT TYPE

Unless noted below allowable returns for items on this receipt will be in the form of an in store credit voucher if the · return is done after 03/20/19

If you have questions regarding the charges on your receipt, please email us at: DZRKfrontend@menards.com



Sale Transaction

50000BTU UNIT HEATER 6350031-399.99 5000W 240V GARAGE HEATER 6354245 329.99 TOTAL 729.98 TAX LAKE DZARK-NO 7.975% 58.22 TOTAL SALE 788.20 MasterCard 1718 788.20 Auth Code: 036102

Chip Inserted a0000000041010 TC - ab7af8881ebcU05b TOTAL NUMBER OF ITEMS =

GUEST COPY

The Cardholder acknowledges receipt of goods/services in the total amount shown hereon and agrees to pay the card issuer according to its current terms.

THIS IS YOUR CREDIT CARD SALES SLIP PLEASE RETAIN FOR YOUR RECORDS.

THANK YOU, YOUR CASHIER, Becky

39158 06 4558 12/20/18 02:32PM 3288

TOTAL ACCESSORIES	(MAY BE CONTINUED ON OTHER SIDE) TOTAL PARTS ACCESSORIES				BUSSO	DART NO AND BESCRIPTION PRICE  1 33538 FUOI Filter  1 Tube growse  2 184 Psylls
Industrials. Trou and your employees may operate above values for purposes of testing, inspection, or delivery at my fack, when express mechanics lier actinowies/glad on above vahide to secure the amount of repairs thereto. It is also understood that you will not be held responsible for less or dermage to care or articles left in care in case of fire, their or any other cause beyond your control.  SAVE CLD PARTS? □ YES □ NO  SIGNATURE	The second secon	GL Acct#: 16702-30 351,77   Signature: 18134   18	DESCRIPTION  THAT DELVICE ON DOIL FILTER  OUR ! I POCHEN WORSON'T	SUS ON	1 1 1	ROEMER'S HEAVY EQUIPMENT & TRUCK REPAIR P.O. Box 191
16 15/ MOLAWARL.	87 00 TOTAL LABOR 330 DO TOTAL PARTS: 412, 94 ACCESSORIES 107 39 SUBLET REPAIRS: 107 39	930-30406-017	heating very well,	LICENSE NUMBER ODOMETER OUT TERMS DUE ON EECT.	ORDER WRITTEN BY PROMISED A.M.	

35 N Frontage Road Osage Beach MO 65065-433131

**Customer Service** (573) 346-3637 RepublicServices.com/Support

Important Information

Thanks for being a loyal customer and for trusting us to handle your recycling and waste needs responsibly while protecting our Blue Planet.

**Account Number** Invoice Number Invoice Date

3-0435-0010208 0435-000598815 December 20, 2018

Previous Balance Payments/Adjustments **Current invoice Charges** 

\$145.23 -\$145.23 \$434.16

Total Amount Due Payment Due Date \$434.16 January 09, 2019

PAYMENTS/ADJUSTMENTS

Description Reference **Amount** Payment - Thank You 12/17 175826 -\$145.23

**CURRENT INVOICE CHARGES** 

Description Quantity Reference **Unit Price** <u>Amount</u> Alliance Water Resources Inc. #3 Anderson Road CSA C0074 Lake Ozark, MO

1 Waste Container 2 Cu Yd, 1 Lift Per 2 Weeks

Waste/Recycling Overage 12/11 Pickup Service 01/01-01/31

1.0000

\$26.00 \$102.77

\$26.00 \$102.77 \$42.27

\$171.04

Fuel/Environmental RecoveryFee

**Location Total** 

GL Acct#:

Signature

FOR REGULAR DUMPSTER +

### Electronics Recycling with BlueGuard™

Convenient recycling solutions that are safe for your business and good for our planet. To learn more, visit RepublicServices.com/Electronics





35 N Frontage Road Osage Beach MO 65055-433131

Please Return This Portion With Payment

Total Enclosed

Return Service Requested

L2RCFSOTDB 000992

JOINT SEWER BOARD C/O ALLIANCE WATER RESOURCES PO BOX 1985 LAKE OZARK MO 65049-1985

**Total Amount Due** \$434.16 Payment Due Date January 09, 2019 Account Number 3-0435-0010208 Invoice Number 0435-000598815

For Billing Address Changes, Check Box and Complete Reverse.

Make Checks Payable To:

**REPUBLIC SERVICES #435** PO BOX 9001099 **LOUISVILLE KY 40290-1099** 

30435001020800000005988150000434160000434162

21011301.1

Account Number Invoice Number Invoice Date

3-0435-0010208 0435-000598815 December 20, 2018

CURRENT INVOICE CH	IARGES
--------------------	--------

Description	Reference	Quantity	Unit Price	Amanual
Alliance Water-20yd *spw* #3 Anderson Re	oad CSA A183834331	and the second s	<u>Sincrine</u>	<u>Amount</u>
Lake Ozark, MO 1 Waste Container 20 Cu Yd, On Call Service				
Container Delivery 12/03	<b>:0</b>	4 6 8 6 6		
Delivery Discount 12/03		1.0000	\$188.27	\$188.27
Rental 12/13-12/31		1.0000	\$46.27 \$80.29	-\$46.27
Fuel/Environmental RecoveryFee			\$00.Z5	\$50.15
Location Total				\$63.07
Administrative Fee			etheters.	\$255.22
Total Fuel/Environmental Recovery Fee		•		\$5.95
CURRENT INVOICE CHARGES				\$107.29
ASSISTANT OUTCO				\$434.16
				, ,



#### Remit To:

MAJESTIC FRANCHISING INC DBA JANI-KING COLUMBIA 14821 W. 95TH STREET

LENEXA

KS 66215

(573) 442-8455

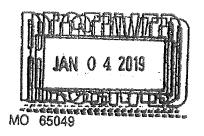
| Invoice | Number | O1/01/2019 | CLM01190095 | Due Date | Cust # | O1/31/2019 | O22031 | O22

Sold To:

JOINT SEWER BOARD

3 ANDERSON RD

LAKE OZARK



For:

**ALLIANCE WATER** 

3 ANDERSON RD

LAKE OZARK

MO 65049

Make All Checks Payable To: MAJESTIC FRANCHISING INC DBA JANI-KING COLUMBIA RETURN THIS PORTION WITH YOUR PAYMENT

### MAJESTIC FRANCHISING INC DBA JANI-KING COLUMBIA

Commercial Cleaning Services

(573) 442-8455

Sold To:

JOINT SEWER BOARD 3 ANDERSON RD

LAKE OZARK

MO 65049

For:

ALLIANCE WATER 3 ANDERSON RD

LAKE OZARK

MO 65049

01/01/2019	00000		PO Number	ŧ.	Franchisee		Due Date
	022031			RJ ENTERPRISES, LLC			01/31/2019
		Description	de constitution de la constituti	Unit Price Exte			nded Price
MONTHLY	CONTRA	CT BILLING AMO	UNT FOR JANU	IARY	195.00	(Contraction services)	195.00
	Make	Ali Checke Payable T	<b>'</b> ©:	n a constant a marque a que constalla a sassa se	Amount of Sale Sales Tax		\$ 195.00 \$ 0.00
		MONTHLY CONTRA	MONTHLY CONTRACT BILLING AMO		MONTHLY CONTRACT BILLING AMOUNT FOR JANUARY  Make All Checks Payable To:	MONTHLY CONTRACT BILLING AMOUNT FOR JANUARY  195.00  Amount of Sale Sales Tax	MONTHLY CONTRACT BILLING AMOUNT FOR JANUARY  195.00  Amount of Sale Sales Tax

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# MONTH-TO-DATE AND YEAR-TO-DATE REVENUE/BUDGET ANALYSIS

#### 12/31/2018

Account		2016	2017	2018	2018	2018	Percent
Number	Account Name	Actual	Actual	Budget	Actual as of 12/31/2018	Dec. Revenue	YTD
3020	Osage Beach	475,802.57	478,614,41	478,500.00	480,784.67	39,501.71	100%
3010	Lake Ozark	74,197.42	71,385.58	71,500.00	69,215.30	6,331.62	97%
3030	Misc.				1,485.00	0.00	
3100	Interest	368.52	781.57	500.00	1,484.82	113.97	297%
3060	Waste Haulers' Fee	33,460.00	30,500.00	34,500.00	25,780.00	2,440.00	75%
	Total Operating Fund	583,828.51	581,281.56	585,000.00	578,749.79	48,387.30	99%
	E/R Fund Income	2,847.67	2,319.07	2,300.00	4,281.74	143.45	186%
	TOTAL INCOME	586,676.18	583,600.63	587,300.00	583,031.53	48,530.75	99%

# MONTH-TO-DATE AND YEAR-TO-DATE REVENUE/BUDGET ANALYSIS

#### 11/30/2018

Account		2016	2017	2018	2018	2018	Percent
Number	Account Name	Actual	Actual	Budget	Actual as of	Nov.	YTD
					11/30/2018	Revenue	
3020	Osage Beach	475,802.57	478,614.41	478,500.00	441,282.96	39,796.08	92%
3010	Lake Ozark	74,197.42	71,385.58	71,500.00	62,883.68	6,037.25	88%
3030	Misc.				1,485.00	0.00	
3100	Interest	368.52	781.57	500.00	1,370.85	152.35	274%
3060	Waste Haulers' Fee	33,460.00	30,500.00	34,500.00	23,340.00	860.00	68%
	Total Operating Fund	583,828.51	581,281.56	585,000.00	530,362.49	46,845.68	91%
	E/R Fund Income	2,847.67	2,319.07	2,300.00	4,138.29	83.63	180%
	TOTAL INCOME	586,676.18	583,600.63	587,300.00	534,500.78	46,929.31	91%

#### MONTH-TO-DATE AND YEAR-TO-DATE EXPENDITURE/BUDGET ANALYSIS 12/31/2018

Account		2016	2017	2018	2018	2018	Percent
Number	Account Name	Acutel	Acutal	Budget	Actua as of	Dec.	YTD
					12/31/2018	Expenses	
4000	Equipment Replace Fund	41,606.04	41,604.17	41,604.00	41,604.17	3,467 00	100%
4020	"Maintenance & Repair	18,735.50	129,789.11	•	9 713.86	825.96	8%
4140	Insurance	16,977.00	17,144.00		18,475.25	0.00	
4150	Vehicle Repair/Maint	951.93	12,047.61		3,887.47	415.24	105%
4160	Haulers Fees to Contractor	8,000.00	8,000.00		8.000.00	0.00	130%
4170	Contract Management	303,638.88	311,229.84	0,000.00	319,010.64	26,584,22	100%
4185	Electric	72,637.17	69,261,90	,	79,533.37	-	100%
4190	Bank Charges	14.85	24.35		24.00	3,731.22	106%
4200	Audit	2,158.50	2,200.00	000	2,300.00	3.00	0%
4220	Professional Service	9,193.09	1,200.00	_,	0.00	0.00	100%
4240	Capital Purchases	0.00	0.00	.,2.00.00	0.00	0.00	0%
	Totals	473,912.96	592,500.98	734,270 84	482,548.76	0.00 35.026.64	0% 66%
	**E/R Expenses	7,980.42	7,554.68	67,500.00	42,782,61	2,620.00	63%
	TOTAL EXPENSES	481,893.38	600,055.66	801,770.84	525.331.37	37,646.64	66%
**Equipment &	Replacement			*Maintenance & Re	·mala		
Pickup 4X4 w/s	snow plow	35,000.00	¥				
Replace Actuat	tor	9,000.00		Auto Dialer Yrly Sof		X	500 00
Replace duckin	ig skimmer arm	5,000.00	¥	Effluent Testing for I			1,500 00
Replace woode		2,000.00			<b>3</b>		8 000.00
Replace LED pa		9,000.00	^	UV Spare Parts Rock for Road			8,000.00
	ers for RAS pump	7,500.00					2,000.00
•		67,500.00		Sandblast & paint C	ianner #3		95,000 00
						#IMT24gg	115,000.00

#### MONTH-TO-DATE AND YEAR-TO-DATE EXPENDITURE/BUDGET ANALYSIS 11/30/2018

### Auto	Account Number	Account Name	2016 Acutal	2017 Acutal	2018 Budget	2018 Actual as of 11/30/2018	2018 Nov. Expenses	Percent YTD
4140   Insurance   16.977 00   17,144 00   17 600 00   18.475 25   0 00   105%	4000	Equipment Replace Fund	41,606.04	41,604.17	41,604 00	38 137 17	3,467 00	92%
4150   Vehicle Repair/Maint   951 93   12,047.61   3 000.00   3,472 23   0 00   116%	4020	*Maintenance & Repair	18,735.50	129,789.11	115,000.00	8.887 90	538 38	8%
4160   Haulers Fees to Contractor	4140	Insurance	16,977 00	17,144.00	17 600 00	18,475 25	0 00	105%
4170   Contract Management   303 638 68   311,229 64   320,566 84   292,426 42   26 584.22   91%	4150	Vehicle Repair/Maint	951.93	12,047.61	3 000.00	3,472 23	0 00	116%
##Equipment & Replacement  TOTAL EXPENSES  ##Equipment & Replacement  Pickup 4X4 w/anow plow  35,000.00  **Equipment & Replacement  Pickup 4X4 w/anow plow  36,000.00  Replace Actuator  Replace ducking skimmer arm  5,000.00  Replace wooden doors  Replace wooden doors  Replace LED parking lot lights  14 85	4160	Haulers Fees to Contractor	8,000 00	8,000.00	8,000.00	8,000.00	0.00	100%
A   190   Bank Charges	4170	Contract Management	303.638.88	311,229.84	320,566.84	292,426.42	26 584.22	91%
A200   Audit	4185	Electric	72.637.17	69,261.90	75,000.00	75,802.15	5.316.62	101%
A220   Professional Service   9 193 09   1,200.00   1,200.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00	4190	Bank Charges	14 85	24.35	0.00	21.00	4.00	0%
4240   Capital Purchases   0.00   0.00   150,000.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.	4200	Audit	2 158 50	2,200.00	2,300.00	2,300.00	0.00	100%
Totals 473,912.96 592,500.98 734,270.84 447,522.12 35,910.22 61%  **E/R Expenses 7,980.42 7,554.68 67,500.00 40,162.61 0.00 60%  TOTAL EXPENSES 481,893.38 600,055.66 801,770.84 487,684.73 35,910.22 61%  **Equipment & Replacement  Pickup 4X4 w/snow plow 35,000.00 X Auto Dialer Yrly Software Fee X 500.00 Replace Actuator 9,000.00 Effluent Testing for Permit Renewal 1,500.00 Replace ducking skimmer arm 5,000.00 X Normal Maintenance 8,000.00 Replace wooden doors 2,000.00 UV Spare Parts 8,000.00 Replace wooden doors 2,000.00 Rock for Road 2,000.00 Replace LED parking lot lights 9,000.00 Sandblast & paint Clarifier #3 95,000.00 Control of the strength	4220	Professional Service	9.193.09	1,200.00	1,200.00	0.00	0.00	0%
**E/R Expenses 7,980.42 7,554 68 67.500.00 40,162.61 0.00 60%  TOTAL EXPENSES 481,893 38 600,055.66 801,770.84 487,684.73 35,910.22 61%  **Equipment & Repiscement Pickup 4X4 w/snow plow 35,000.00 X Auto Dialer Yrly Software Fee X 500.00 Replace Actuator 9,000.00 Effluent Testing for Permit Renewal 1,500.00 Replace ducking skimmer arm 5,000.00 X Normal Maintenance 8,000.00 Replace wooden doors 2,000.00 UV Spare Parts 8,000.00 Replace wooden doors 2,000.00 Rock for Road 2,000.00 Replace impellers for RAS pump 7,500.00 Sandblast & paint Clarifier #3 95,000.00	4240	Capital Purchases	0.00	0.00	150,000.00	0.00	0.00	0%
**Equipment & Replacement Pickup 4X4 w/snow plow Replace Actuator Replace ducking skimmer arm Soundon Replace wooden doors Replace LED parking lot lights Replace impellers for RAS pump  481,893 38 600,055.66 801,770.84 487,684.73 35,910.22 61%  **Maintenance & Repair **Maintenance & Repair **Maintenance & Repair **Auto Dialer Yrly Software Fee		Totals	473,912.96	592,500.98	734,270.84	447,522 12	35,910.22	61%
**Equipment & Repiscement  Pickup 4X4 w/snow plow  35,000.00 X Auto Dialer Yrly Software Fee X 500.00  Replace Actuator  Replace ducking skimmer arm  5,000.00 X Normal Maintenance  8,000.00  Replace wooden doors  2,000.00 UV Spare Parts  8,000.00  Replace LED parking lot lights  9,000.00 Rock for Road  2,000.00  Replace impellers for RAS pump  7,500.00  87,500.00  **Maintenance & Repair*  1,500.00  Wormal Maintenance  8,000.00  Rock for Road  2,000.00  Sandblast & paint Clarifier #3  95,000.00		**E/R Expenses	7,980.42	7,554 68	67,500.00	40,162.61	0.00	50%
Pickup 4X4 w/snow plow         35,000.00         X         Auto Dialer Yrly Software Fee         X         500.00           Replace Actuator         9,000.00         Effluent Testing for Permit Renewal         1,500.00           Replace ducking skimmer arm         5,000.00         X         Normal Maintenance         8,000.00           Replace wooden doors         2,000.00         UV Spare Parts         8,000.00           Replace LED parking lot lights         9,000.00         Rock for Road         2,000.00           Replace impellers for RAS pump         7,500.00         Sandblast & paint Clarifier #3         95,000.00		TOTAL EXPENSES	481,893 38	600,055.66	801,770.84	487,684.73	35,910.22	61%
Replace Actuator         9,000.00         Effluent Testing for Permit Renewal         1,500.00           Replace ducking skimmer arm         5,000.00         X         Normal Maintenance         8,000.00           Replace wooden doors         2,000.00         UV Spare Parts         8,000.00           Replace LED parking lot lights         9,000.00         Rock for Road         2,000.00           Replace impellers for RAS pump         7,500.00         Sandblast & paint Clarifier #3         95,000.00	<u> **Equipment</u>	& Replacement			*Maintenance & R	epair		
Replace ducking skimmer arm         5,000.00 X         Normal Maintenance         8,000.00           Replace wooden doors         2,000.00 UV Spare Parts         8,000.00           Replace LED parking lot lights         9,000.00 Rock for Road         2,000.00           Replace impellers for RAS pump         7,500.00 Sandblast & paint Clarifier #3         95,000.00	Pickup 4X4 w	/snow plow	35,000.00	х	Auto Dialer Ydy So	ftware Fee	X	500.00
Replace wooden doors         2,000.00         UV Spare Parts         8,000.00           Replace LED parking lot lights         9,000.00         Rock for Road         2,000.00           Replace impellers for RAS pump         7,500.00         Sandblast & paint Clarifier #3         95,000.00           67,500.00         -         -	Replace Actua	ator	9,000.00		Effluent Testing for	Permit Renewal		1,500 00
Replace LED parking lot lights 9,000.00 Rock for Road 2,000.00  Replace impellers for RAS pump 7,500.00 Sandblast & paint Clarifier #3 95,000.00	Replace ducki	ing skimmer arm	5,000.00	×	Normal Maintenand	æ		8,000 00
Replace impellers for RAS pump 7,500.00 Sandblast & paint Clarifier #3 95,000.00 -	Replace wood	len doors	2,000.00		UV Spare Parts			8,000 00
67,500.00	Replace LED	parking lot lights	9,000.00					2,000 00
67,500.00	Replace impe	liers for RAS pump	7,500.00		Sandblast & paint (	Clarifier #3		
115,000.00			67,500.00					-
							entz	115,000.00

## OPERATING FUND INCOME AND EXPENSE SUMMARY 12/31/2018

Beginning Balance	360,737.95
Income - Osage Beach	39,501.71
Income - Lake Ozark	6,331.62
Income - Other	ь
Income - Waste Haulers' Fees	2,440.00
Interest - Checking	113.97
Income - CD Interest	224.01
Transfers From E/R Fund	•
Transfers to E/R Fund	(3,467.00)
Expenses	(31,559.64)
Ending Fund Balance	374,322.62
Central Bank - NOW Acct. CD Central Bank, 12/18 #150784	222,047.28
First Bank of the Lake - Money Mkt.	101,746.74
CD St. Elizabeth, 3/19 #400886	50,528.60
Outstanding Checks:	•
Deposit in Transit:	Gr.
	374,322.62

# EQUIPMENT REPLACEMENT FUND INCOME AND EXPENSE SUMMARY 12/31/2018

Beginning Balance	525,044.71
Interest - Checking	
Income - CD Interest	143.45
Transfers From E/R Fund	3,467.00
Transfers to E/R Fund	es
Income - Miscellaneous	•
Expenses	(2,620.00)
Ending Fund Balance	526,035.16
First Bank of the Lake - Money Mkt.	169,106.93
CD Providence Bank, 7/19 #1268880	203,934.35
CD First Bank of the Lake, 01/18 #101318429	102,465.28
CD St. Elizabeth, 3/19 #485431	50,528.60
Deposit in Transit	6
Outstanding Checks:	40
	526,035.16

### OPERATING FUND INCOME AND EXPENSE SUMMARY 11/30/2018

Beginning Balance	349,802.49
Income - Osage Beach	39,796.08
Income - Lake Ozark	6,037.25
Income - Other	105
Income - Waste Haulers' Fees	860.00
Interest - Checking	152.35
Income - CD Interest	120-
Transfers From E/R Fund	ND-
Transfers to E/R Fund	(3,467.00)
Expenses	(32,443.22)
Ending Fund Balance	360,737.95
Central Bank - NOW Acct.	133,549.35
CD Central Bank, 12/18 #150784	75,000.00
First Bank of the Lake - Money Mkt.	101,660.00
CD St. Elizabeth, 3/19 #400886	50,528.60
Outstanding Checks:	w
Deposit in Transit:	403
	360,737.95

### EQUIPMENT REPLACEMENT FUND INCOME AND EXPENSE SUMMARY 11/30/2018

Beginning Balance	521,494.08
Interest - Checking	83.63
Income - CD Interest	**
Transfers From E/R Fund	3,467.00
Transfers to E/R Fund	ess
Income - Miscellaneous	ecc
Expenses	w
Ending Fund Balance	525,044.71
First Bank of the Lake - Money Mkt.	168,116.48
CD Providence Bank, 7/19 #1268880	203,934.35
CD First Bank of the Lake, 01/18 #101318429	102,465.28
CD St. Elizabeth, 3/19 #485431	50,528.60
Deposit in Transit	æå
Outstanding Checks:	
	525,044.71

# CHECK REGISTER - JOINT SEWER BOARD OPERATION FUND

	reconciled balance 8/31/18				404 646 60
3681		Х	10,399.56		181,049.05
3682		X	3,467.00		170,649.49
3683	Alliance Water Resources, Inc.	X	26,584.22	e.	167,182.49
3684	Alliance Water Resources, Inc.	X	1,500.00		140,598.27
3685	Alliance Water Resources, Inc.	X	1,266.06		139,098.27
3686	Roemer's Heavy Equip & Truck	X	2,007.41		137,832.21
3687	Mission Communications LLC	X	407.40		135,824.80
3688		X	31.50	-	135,417.40
	Two signature verification chg.	X	5.00		135,385.90
	Deposit LO	X	5.00	E 070 FF	135,380.90
	Deposit OB	X	•	5,676.55	141,057.45
	Deposit	X		40,156.78	181,214.23
	Interest	X		4,540.00	185,754.23
	reconciled balance 9/30/18	^		14.28	185,768.51
3689	Ameren MO	Х	5,684.73		185,768.51
3690	Equipment Replacement Fund	X	-		180,083.78
3691	Alliance Water Resources, Inc.	X	3,467.00		176,616.78
3692	Alliance Water Resources, Inc.	X	26,584.22		150,032.56
3693	Alliance Water Resources, Inc.	X	220.00		149,812.56
3694	Lake Sun Leader	X	1,532.75		148,279.81
	Two signature verification chg.	X	238.50		148,041.31
	Deposit LO	X	6.00	£ 000 00	148,035.31
	Deposit OB	x	•	5,808.30	153,843.61
	Deposit	X		40,025.03	193,868.64
	Purple Wave	X		2,380.00	196,248.64
	Interest	X		1,485.00	197,733.64
	reconciled balance 10/31/18	^		15.80	197,749.44
3695	Ameren MO	Х	5,316.62		197,749.44
3696	Equipment Replacement Fund	X	3,467.00		192,432.82
3697	Alliance Water Resources, Inc.	X	26,584.22		188,965.82
3698	Alliance Water Resources, Inc.	X	538.38		162,381.60
	Two signature verification chg.	X	4.00		161,843.22
	Deposit LO	X	4.00	6 027 05	161,839.22
	Deposit OB	X	-	6,037.25	167,876.47
	Deposit	X		39,796.08	207,672.55
	Interest	X		860.00	208,532.55
	reconciled balance 11/30/18	,		16.80	208,549.35
3699	Ameren MO	Х	3,731.22		208,549.35
3700	Equipment Replacement Fund	X	3,467.00		204,818.13
3701	Alliance Water Resources, Inc.	X	26,584.22		201,351.13
3702	Alliance Water Resources, Inc.	X	1,241.20		174,766.91
	Two signature verification chg.	X	3.00		173,525.71
	Deposit LO	X	5.00	6,331.62	173,522.71
	Deposit OB	X	-	39,501.71	179,854.33
	Deposit	X		2,440.00	219,356.04
	CD Interest	- \		2,440.00 224.01	221,796.04
	Interest	Χ		27.23	222,020.05
	reconciled balance 12/31/18	- 4		4.6V	222,047.28
	· <del>-</del>				222,047.28

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P.O. Box 4500, Jefferson City, MO 65102 (573) 348-2761 RETURN SERVICE REQUESTED

LAKE OZARK OSAGE BEACH JOINT SEWER TREATMENT PLANT BOARD 1000 CITY PKWY OSAGE BEACH MO 65065-3058 Period 12/01/2018 - 12/31/2018 Page 1 of 3

Web Address www.centralbank.net

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000007

Totals

# Your Financial Summary on December 31, 2018

Bank Deposits

Bank Deposi	t Acco	unie:	Dank	peposits				lotals
Checking			\$	222,047.28				
Bank Deposi							\$	222,047.28
Total Assets	š.		\$	222,047.28			\$	222,047.28
		Deta	ailed Explanation of A	ccount Bala	nces and O	ther Assets		
Basic Plus	Intere	st Check	ing		PHARMONI, ORIGINA (CONTROL CONTROL CONT			
No. 0000072	297		Beginning Balance Nove	mber 30, 2018			\$	133,549.35
Deposits								
Dec. 03 C Dec. 05 D Dec. 18 D Dec. 18 D Dec. 20 D	D Inter D Red Deposit Deposit Deposit Deposit Deposit	emption 000						224.01 75,000.00 900.00 6,331.62 39,501.71 1,540.00 27.23
				Total			+\$	123,524.57
Checks		D=4=			_			
	k No. 3699 3700	Date Paid Dec. 27 Dec. 19	Amount 3,731.22 3,467.00	Check No. 3701 3702	Date Paid Dec. 21 Dec. 21	Amount 26,584,22 1,241,20		
				Total			-\$	35,023.64
Withdrawals at	nd othe	r charges						
Date T	уре		Transaction Description					
Dec. 03 1	1/2018	TWO SIGNA	TURE VERI		<del>and her likes Describe with this layers to differ to the construction of the construc</del>	TO CHAIR TO THE CHAIR CONTRACT OF THE CONTRACT	A CONTRACTOR OF THE PARTY OF TH	3.00
				Total			~ <i>&amp;</i> ;	3.00



P.O. Box 4500, Jefferson City. NIO 65102 (573) 348-2761 RETURN SERVICE REQUESTED

LAKE OZARK OSAGE BEACH JOINT SEWER TREATMENT PLANT BOARD 1000 CITY PKWY OSAGE BEACH MO 65065-3058 Period Pale 11/01/2018 - 11/30/2018 1 of 3

Web Address www.centralbank.net

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# Your Financial Summary on November 30, 2018

·			Ban	k Deposits			#1	Totals
Bank Depo Checking Certificate	es of De	posit	\$ \$	133,549.35 75,000.00				
Bank Depo Total Asse		İ	\$	208,549.35			\$ \$	208,549.35 208,549.35
igh Banda. Tagan Nasa.		Deta	ailed Explanation of	Account Bala	nces and O	ther Assets		
Basic Plu	s Intere	est Check	ing		angiginas ang kangsang ng nggan k <del>a manalan</del> ak an sakalana sa manalana da saka an an an da saka an an an da saka	kt indika raja o ga raja cita da ga ka da		
No. 00000	7297		Beginning Balance Oct	ober 31, 2018			\$	122,749.44
Deposits Nov. 19 Nov. 19 Nov. 21 Nov. 30	Deposit Deposit Deposit Interest	Earned						6,037,25 39,796.08 860.00 16.80
<b>.</b>				Total			+\$	46,710.13
Checks Ch	eck No 3695 3696	Date Paid Nov. 29 Nov. 23	Amount 5 316.62 3 467.00	Check No. 3697 3698	Date Paid Nov. 27 Nov. 27	Amount 26,584.22 538.38		
				Total			-\$	35,906.22
Withdrawals	and other	er charges						
Date	Туре		Transaction Description					
Nov. 01	10/2018	TWO SIGNA	ATURE VERI	-	JOHN JACON			4.00
				Total			-\$	4.00
			Ending Balance Nover	nber 30, 2018			\$	133,549.35

# JSB - CHECK REGISTERS 2018

# CHECK REGISTER - JOINT SEWER BOARD EQUIPMENT REPLACEMENT FUND

	reconciled balance 8/31/18				269,403.79
	Interest	X		207.43	269,611.22
	Deposit	X		3,467.00	273,078.22
	reconciled balance 9/30/18				273,078.22
	Interest	X		245.69	273,323.91
	Deposit	X		3,467.00	276,790.91
1025	Natural Gas Solutions LLC	X	9,522.52	•	267,268.39
1026	John Henry Foster	X	1,178.09		266,090.30
	reconciled balance 10/31/18		·		266,090.30
	Interest	Х		219.18	266,309.48
	Deposit	X		3,467.00	269,776.48
	reconciled balance 11/30/18			-,	269,776.48
	Interest	X		230.19	270,006.67
	Deposit	X		3,467.00	273,473.67
1027	Choat Const. Co.	X	2,620.00	0, 107.00	270,853.67
	reconciled balance 12/31/18		,		270,853.67

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Print

Page 1 of 1

MONEY MARKET ACCOUNT Printed by: JEANNIE NEUMAN FIRST BANK OF THE LAKE

1/10/2019 11:09:36 AM Reporting Institution: 36

Demand Deposit

### LAKE OZARK-OSAGE BEACH JOINT SEWER TREAT

Date of Phone Number Tax Identification Relationship Birth

**&** LAKE OZARK-OSAGE BEACH JOINT SEWER

Dwner

EIN **_*****

TREAT @ SEWER BD.-TREATMENT PLANT BD. Owner

物物赤布松田物物水土

1000 CITY PKWY

**OSAGE BEACH MO 65065-3058** 

Additional Relationships **BUSINESS MONEY MARKET** TAX Name; LAKE OZARK-OSAGE BEACH

Current & Previous Cycle

JOINT SEWER TREAT

Description	Deblts	Credits	Date	Belence
Balance Forward:			Nov 30, 2018	\$269,776.48
Deposit		\$3,467.00	Dec 18, 2018	\$273,243.48
Check #1027	\$2,620.00	• •	Dec 31, 2018	\$270,623.48
Interest		\$230.19	Dec 31, 2018	\$270,853.67
****Statement Produced****			Dec 31, 2016	\$270,853.67
Balance This Statement:			Jan 09, 2019	\$270,853.67



4558 Osage Beach Pkwy, Suite 100 Osage Beach, MO 65065 (573) 348-2265

536 00010 01 ACCOUNT: DOCUMENTS:

PAGE: 11/30/2018

1

0013D 3150235 10Z ATM 608 127.1.4

LAKE OZARK-OSAGE BEACH JOINT SEWER TREAT **SEWER BD.-TREATMENT PLANT BD.** 1000 CITY PKWY OSAGE BEACH MO 65065-3058 



First Bank of the Lake takes the security of our client's financial accounts very seriously. Due to a global rise in identity theft and and online fraud, we are now offering the ability to add secure access codes and security questions to your account information. If you would like to add this additional layer of security to your accounts with us, please call us at 573-348-2265.

MONEY MARKET ACCOUNT ACCOUNT "USINESS MONEY MARKET) 

> LAST STATEMENT 10/31/18 266,090.30 2 CREDITS 3,686.18 DEBITS .00 THIS STATEMENT 11/30/18 269,776.48

- - - - DEPOSITS - - - - -

REF #.....DATE......AMOUNT REF #.....DATE......AMOUNT REF #.....DATE......AMOUNT 11/21 3,467.00

---- OTHER CREDITS - - -

**DESCRIPTION** DATE **AMOUNT** INTEREST 11/30 219.18

----INTEREST-----

AVERAGE LEDGER BALANCE: 267,245.96 INTEREST EARNED: 219.18 AVERAGE AVAILABLE BALANCE: 266,668,13 DAYS IN PERIOD: 30 INTEREST PAID THIS PERIOD:

219.18 ANNUAL PERCENTAGE YIELD EARNED: 1.00% INTEREST PAID 2018: 2,241.18

CONTINUED * * *





# LAKE OZARK - OSAGE BEACH JOINT SEWER TREATMENT PLANT 2019 BUDGET WORKSHEET REVENUE

Operating Fund	2016 Actual	2017 Actual	2018 Budget	2018 10/31/2018	2018 Nov/Dec	2018 Total	2019 Proposed	2019 Proposed
6666 6 6 1						Est.		THE RESERVE THE PERSON AND THE PERSO
3020 Osage Beach	475,802.57	478,614.41	473,000.00	401,486.88	77,013.12	478,500.00	478,500.00	
3010 Lake Ozark	74,197.42	71,385.58	77,000.00	56,846.43	14,653.57	71,500.00	71,500.00	
3030 Misc.				1,485.00				CALL THE REAL PROPERTY AND ADDRESS OF THE PARTY AND ADDRESS OF THE PART
3100 Interest	368.52	781.57	200.00	1,218.50	200.00	1,418.50	400.00	220000 <del>0000000000000000000000000000000</del>
3060 Waste Haulers'	33,460.00	30,500.00	35,000.00	22,480.00	5,000.00	27,480.00	30,000.00	
Total Operating	583,828.51	5B1,281.56	585,200.00	483,516.81	96,866.69	578,898.50	580,400.00	
Equipment Replace	€.							
Transfers-Opera	41,606.04	41,604.17	41,606.04	34,670.17	10,401.51	45,071.68	41,606.04	
Interest Revenu	2,847.67	2,319.07	1,500.00	3,360.61	400.00	3,760.61	3,000.00	
Total E.R. Reve	44,453.71	43,923.24	43,106.04	38,030.78	10,801.51	48,832.29	44,606.04	

# LAKE OZARK - OSAGE BEACH JOINT SEWER TREATMENT PLANT 2019 BUDGET WORKSHEET EXPENDITURES

		2016	2017	2018	2018	2018	2018	2019	2019
		Actual	Actual	Budget	10/31/2018	Nov/Dec	Total	Proposed	Proposed
				•			Est.		
4000	Equip. Replace Fund	41,606.04	41,604.17	41,604.00	34,670.17	6,934.00	41,604.17	41,604.00	
4020	Equip & Bldg. Repair/Main.	18,735.50	129,789.11	115,000.00	8,349.52	78,000.00	86,349.52	122,000.00	÷
4140	Insurance	16,977.00	17,144.00	17,600.00	18,475.25		18,475.25	19,030.25	
4150	Vehicle Repair/Main.	951.93	12,047.61	3,000.00	3,472.23	1,500.00	4,972.23	8,000.00	***
4160	Haulers Fees to Contractor	8,000.00	8,000.00	8,000.00	8,000.00	•	8,000.00	**	
4170	Contract Management	303,638.88	311,229.84	320,566.84	265,842.20	53,168.44	319,010.64	299,592.00	
4175	Electric	72,637.17	69,261.90	75,000.00	70,485.53	8,613.00	79,098.53	80,000.00	
4176	Utilities Misc.	0.00	0.00	0.00	-		•	5,000.00	
4190	Bank Charges	0.00	24.35	0.00	17.00	6.00	23.00	60.00	
4200	Audit	2,158.50	2,200.00	2,300.00	2,300.00	ès	2,300.00	2,400.00	
4220	Professional Services	9,207.94	1,200.00	1,200.00	-	•	-	*	
4240	Equipment Purch-New	0.00	0.00	150,000.00	٠	-	-	152,000.00	
	Generator				•	-	•	٠	
	Total Operating Fund	473,912.96	592,500.98	734,270.84	411,611.90	148,221.44	559,833.34	729,686.25	
	E/R Expenses per Alliance	7,980.42	7,980.42	67,500.00	40,162.61	2,620.00	42,782.61	96,500.00	*#
	Disinfectin System			-		9	-	to become and an extension of the comment	
	Total E.R. Fund	7,980.42	7,980.42	67,500.00	40,162.61	2,620.00	42,782.61	96,500.00	
		CONTRACTOR OF THE CONTRACTOR O				Description of the Control of the Co	THE STATE OF THE S		
	TOTAL EXPENSES	481,893.38	600,481.40	801,770.84	451,774.51	150,841.44	602,615.95	826,186.25	
	**Equipment & Replaceme	nt			*Maintenance	& Repair			
	Rebuild Ducking Skimmer /	5,000.00	Tier 1		Auto Dialer Yrly			500.00	Tier 1
	Replace BOD & Ammonia r	2,000.00	Tier 1		-	for Permit Ren	ewal	1,500.00	Tier 1
	Replace grit concetrator, vc	15,000.00	Tier 1		Normal Mainte	•		8,000.00	Tier 1
	Replace wooden doors	2,000.00	Tier 1		UV Spare Parts	\$		8,000.00	Tier 1
	Replace impellers for RAS	7,500.00	Tier 1		Road and park			4,000.00	Tier 1
	Replace LED parking lot lig	10,000.00	Tier 1		•	sin repair vives	lab testing	100,000.00	Tier 2
	Replace electric panel & pu	15,000.00	Tier 2			·	_	122,000.00	<b>a</b>
	Replace electric panel in R/	•	Tier 2						
	the formula of the state of the	96,500.00							
	***Vehicle Repair/Maint								
	Vehicle Maintenance	8,000.00	Tier 1						
	www.teffefe.tormin.tom.tom.tom.g.	8,000.00	,						

# **ESTIMATED FUND BALANCES**

# **OPERATING FUND**

BALANCE 1/1/18	277,898.00
TOTAL ESTIMATED REVENUE TOTAL ESTIMATED EXPENSES/TRANSFERS	578,898.50 (559,833.34)
BALANCE 12/31/18	296,963.16
TOTAL ESTIMATED REVENUE TOTAL ESTIMATED EXPENSES/TRANSFERS	580,400.00 (729,686.25)
BALANCE 12/31/19	147,676.91
EQUIPMENT REPLACEMENT FUND	
BALANCE 1/1/18	523,626.00
TOTAL ESTIMATED REVENUE/TRANSFERS TOTAL ESTIMATED EXPENSES	48,832.29 (42,782.61)
BALANCE 12/31/18	529,675.68
TOTAL ESTIMATED REVENUE/TRANSFERS TOTAL ESTIMATED EXPENSES	44,606.04 (96,500.00)
BALANCE 12/31/19	477,781.72

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# OUR MISSION

We partner with communities to deliver the finest water and wastewater services available at a competitive price. We are committed to keeping water safe and clean while serving people and taking care of communities with improved technical operations. careful management and financial oversight, and ensured regulatory compliance.

Alliance Water Resources, Inc.

206 S. Keene St. Columbia, MO 65201

(573)874-8080



### REPORT OF OPERATIONS

LAKE OZARK/OSAGE BEACH
Joint Wastewater Treatment Plant No. 1

Month of November 2018

Submitted by Alliance Water Resources, Inc. for the January 2019

Joint Sewer Board Meeting

# **SUMMARY OF FACILITY OPERATION**

The Lake Ozark/Osage Beach Joint WWTP produced superior effluent quality throughout the month and was in full compliance with effluent limitations established in NPDES Permit No.MO-0103241. No leaks, no spills, and no unauthorized releases to waters of the state. No work related lost time accidents have occurred during the month.

Detailed information relating to plant performance and operations is presented as follows.

# PLANT EFFLUENT QUALITY

	BOD mg/l	TSS mg/l	рН	E.coli Coliform Colonies/100 ml	Ammonia as N mg/L	O&G mg/L	Metals Selenium ug/L
Monthly Average	2.0	2.1	N/A	0	0.02	< 5.0	< 1.0
Peak Day	2.2	2.5	8.0	0	0.04	< 5.0	< 1.0
Percent Removal	99.0	99.0	N/A	N/A	N/A	N/A	N/A

### NPDES EFFLUENT LIMITATIONS

	BOD mg/l	TSS mg/l	рН	E.coli Coliform Colonies/100 ml	Ammonia as N mg/L	O&G mg/L	Metals Selenium ug/ L
Monthly Average Weekly Average	30 45	30 45	6-9	126 630	2.2	10	4.0
Daily Max					11.5	15	8.1

# PLANT HYDRAULIC AND ORGANIC LOADING

The average daily influent flow for the month was 1.277 MGD or 43% of Permitted flow with Lake Ozark contributing 13% of the total flow and Osage Beach contributing 87%. Daily influent flow BOD and TSS data is presented in Table A. Daily flow for the month and rainfall are shown in Figure 2. A three-year flow history for each of the two cities is presented in Table B.

Organic loading for the month was 63454 pounds of BOD.

# **BIOSOLIDS APPLICATION AND INVENTORY**

Plant personnel land applied 11 tanker loads of bio-solids during the month equivalent to a total of 40,700 gallons and 12,899 pounds dry weight solids.

500,455 pounds of dry weight solids have been land applied year to date.

Bio-solids inventory in the storage tanks at the end of the month was 225,000 gallons with a level of 2.5 feet in Tank 1 and 2.5 feet in Tank 2.

### **WASTEHAULERS**

The plant received 8 loads of septage during the month totaling 21,500 gallons.

### **WWTP OPERATIONS**

- Decanting digesters and wasting weekly.
- Normal operations.

# WWTP MAINTENANCE AND REPAIR

- Performed routine maintenance throughout the month as per Antero Maintenance Data Management schedule. (New version of Operator 10 Software)
- We received the flex coupler inserts for aerator #6 on the 6th of November and got them installed and had it back online the same day. We also received the correct oil fitting for aerator #1 on the 19th and installed it and was back online the 20th.
- The paint contractor started the clarifier #3 sandblast and paint project on the 20th of November.

### **SAFETY**

 We conducted our monthly routine Safety Meeting on Chlorine Safety on the 13th of November.

# REGULATORY AGENCY, INSPECTION AND REPORTS

• We filled out the EDMR on MDNR's website on the 12th of December.

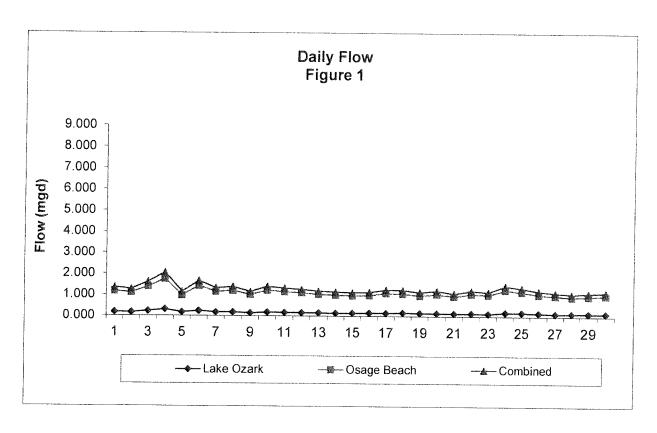
# MISCELLANEOUS AND RECOMMENDATIONS

 Alliance would like to remind all Joint Sewer Board members and guest that we are having our annual new year get together at Wobbly Boots BBQ in Osage Beach right after the Joint Sewer Board meeting this month.

# TABLE A LAKE OZARK/OSAGE BEACH WWTP

# MONTH OF November 2018

DATE			F	LOW			В	OD 5 M	G/L	TSS MG/L			
	RAIN FALL IN.	LO mgd	OB mgd	COMB mgd	% LO	% ОВ	LO mg/l	OB mg/l	COMB mg/l	LO mg/l	OB mg/l	COMB mg/l	
1-Nov	0.5	0.182	1.172	1.354	13.4	86.6							
2-Nov	0.1	0.168	1.104	1.272	13.2	86.8	178	170	160	134	130	174	
3-Nov	0.3	0.226	1.387	1.613	14.0	86.0						******	
4-Nov	0.9	0.310	1.748	2.058	15.1	84.9							
5-Nov	0	0.175	0.982	1.157	15.1	84.9				77777		· · · · · · · · · · · · · · · · · · ·	
6-Nov	0.4	0.235	1.426	1.661	14.1	85.9						**************************************	
7-Nov	0	0.179	1.143	1.322	13.5	86.5						· · · · · · · · · · · · · · · · · · ·	
8-Nov	0	0.184	1.197	1.381	13.3	86.7							
9-Nov	0.5	0.138	1.016	1.154	12.0	88.0	183	163	230	122	110	214	
10-Nov	0	0.183	1.212	1.395	13.1	86.9							
11-Nov	0	0.170	1.151	1.321	12.9	87.1						*******	
12-Nov	0	0.160	1.107	1.267	12.6	87.4							
13-Nov	0.25	0.154	1.029	1.183	13.0	87.0							
14-Nov	0	0.142	1.004	1.146	12.4	87.6							
15-Nov	0.0	0.151	0.971	1.122	13.5	86.5							
16-Nov	0	0.153	0.991	1.144	13.4	86.6	183	210	180	140	218	160	
17-Nov	0	0.157	1.099	1.256	12.5	87.5							
18-Nov	0	0.174	1.072	1.246	14.0	86.0	***************************************	****					
19-Nov	0	0.158	0.983	1.141	13.8	86.2						***	
20-Nov	0	0.151	1.055	1.206	12.5	87.5							
21-Nov	0	0.140	0.946	1.086	12.9	87.1	203	203	230	160	158	324	
22-Nov	0	0.150	1.068	1.218	12.3	87.7							
23-Nov	0	0.132	1.022	1.154	11.4	88.6							
24-Nov	0.6	0.193	1.256	1.449	13.3	86.7							
25-Nov	0	0.185	1.164	1.349	13.7	86.3							
26-Nov	0	0.165	1.038	1.203	13.7	86.3				<del>-</del>	<del>-</del>		
27-Nov	0	0.136	0.989	1.125	12.1	87.9							
28-Nov	0	0.147	0.928	1.075	13.7	86.3							
29-Nov	0	0.149	0.961	1.110	13.4	86.6	205	265	193	238	192	174	
30-Nov	0	0.142	1.000	1.142	12.4	87.6							
SUM	3.6	5.089	33.221	38.310									
AVG		0.170	1.107	1.277	13	87	190	202	199	159	162	209	
NOTE: BO	LD PRINT	INDICATE	S WEEKEN	D DAYS									



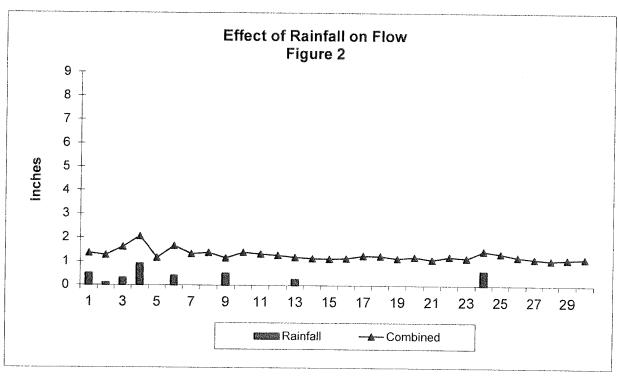
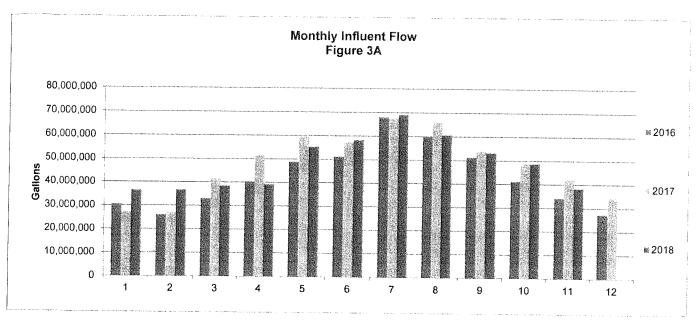
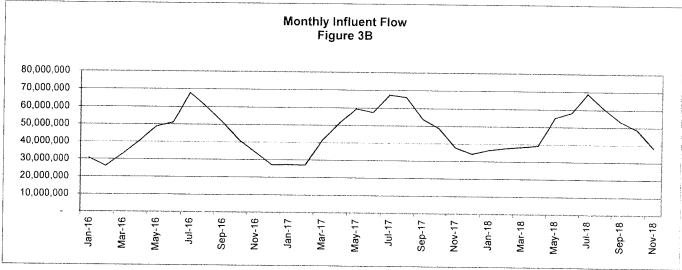
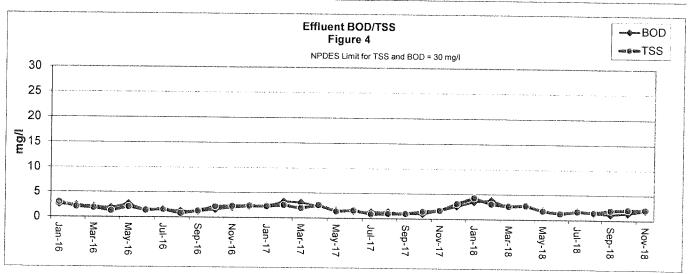


TABLE B JOINT SEWER BOARD Monthly Flows

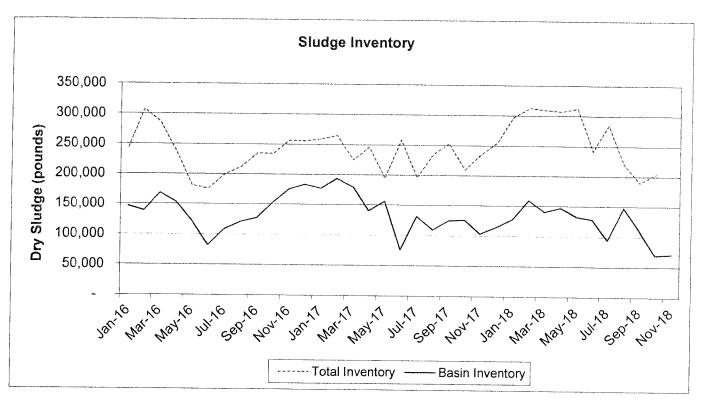
<u>2016</u>	RAINFALL	OSAGE BEACH		LAKE OZARK		TOTAL	%
January	0.8	26,604,000	87%	4,001,000	13%	30,605,000	100%
February	0.8	22,444,000	86%	3,661,000	14%	26,105,000	100%
March	3.1	28,785,000	87%	4,251,000	13%	33,036,000	100%
April	5.3	35,053,000	87%	5,231,000	13%	40,284,000	100%
May	7.0	42,126,000	86%	6,704,000	14%	48,830,000	100%
June	1.2	44,599,000	87%	6,545,000	13%	51,144,000	100%
July	8.7	59,190,000	87%	8,793,000	13%	67,983,000	100%
August	7.7	51,798,000	86%	8,171,000	14%	59,969,000	100%
September	6.0	44,634,000	87%	6,655,000	13%	51,289,000	100%
October	0.5	36,156,000	88%	5,029,000	12%	41,185,000	100%
November	1.2	29,750,000	87%	4,357,000	13%	34,107,000	100%
December	0.8	23,139,000	86%	3,914,000	14%	27,053,000	100%
	45.4	467,718,000	87%	71,221,000	13%	538,939,000	100%
<u>2017</u>	RAINFALL	OSAGE BEACH		LAKE OZARK		TOTAL	%
January	2.5	23,440,000	86%	3,909,000	14%	27,349,000	100%
February	0.7	23,345,000	86%	3,812,000	14%	27,157,000	100%
March	3.8	36,554,000	88%	4,844,000	12%	41,398,000	100%
April	9.8	44,665,000	87%	6,723,000	13%	51,388,000	100%
May	8.1	51,527,000	87%	7,979,000	13%	59,506,000	100%
June	2.9	50,926,000	88%	6,618,000	12%	57,544,000	100%
July	5.2	59,347,000	88%	8,092,000	12%	67,439,000	100%
August	12.4	57,736,000	87%	8,409,000	13%	66,145,000	100%
September	1.5	47,096,000	87%	6,866,000	13%	53,962,000	100%
October	7.4	42,489,000	87%	6,332,000	13%	48,821,000	100%
November	0.5	37,947,000	90%	4,244,000	10%	42,191,000	100%
December	0.9	30,459,000	89%	3,808,000	11%	34,267,000	100%
	55.6	505,531,000	88%	71,636,000	12%	577,167,000	100%
<u>2018</u>	RAINFALL	OSAGE BEACH		LAKE OZARK		TOTAL	%
January	2.8	32,190,000	88%	4,345,000	12%	36,535,000	100%
February	5.4	31,846,000	87%	4,861,000	13%	36,707,000	100%
March	3.2	33,424,000	87%	5,010,000	13%	38,434,000	100%
April	1.9	34,339,000	88%	4,896,000	12%	39,235,000	100%
May	5.4	47,620,000	86%	7,610,000	14%	55,230,000	100%
June	3.2	51,063,000	88%	7,125,000	12%	58,188,000	100%
July	2.7	60,484,000	88%	8,550,000	12%	69,034,000	100%
August	6.9	52,916,000	87%	7,679,000	13%	60,595,000	100%
September	3.4	46,228,000	87%	7,013,000	13%	53,241,000	100%
October	7.5	42,037,000	86%	6,738,000	14%	48,775,000	100%
November	3.6	33,221,000	87%	5,089,000	13%	38,310,000	100%
December		,		, , -		, ., <del></del>	•
	46.0	465,368,000	87%	68,916,000	13%	534,284,000	100%
	10.0	.00,000,000		00,710,000	10/0	557,207,000	100/0

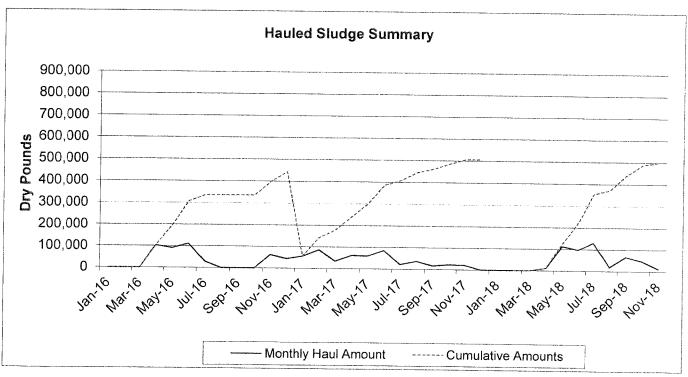






Accepted Sentage	Loads Gallons	1		44 110,000		•	30 75,000			35 75,500	11 20,000	26 54,500	15 37,500	5 12,500	41 102,500	8 20,000	45 116,000	33 82,500	43 107,500	41 103,500	48 122,000	7 17 500	7 17,500	5 12,500	16 40,000	6 15,000	8 20,000	10 24,500		-		4.		
Total Dry	% Solids Studge Inventory	257,551	244,260	307,571	286,515	238,766	181,494	199.462	211,825	235,045	234,497	256,348	255,986	258,991	265,019	224,939	246,426	194,610	258,426	196,173	234,892	253,182	234,792	255,090	297,113	312,769	309,655	307,321	312,100	242,026	284,531	220,132	189,409	203,809
W SS		1	0				0.00321	_		2 0.00267	2 0.00377		3 0.00508	1 0.00409		7 0.00463	3 0.00295			_	0.00359			3 0.00422		-	_	3 0.00576	0.00584	1 0.00478	3 0.00443	0.00363	3 0.00397	_
ALSS invento	# Dry	111,184	105,211	139,249	132,600	116,343	99,133	78.240	84,223	81,922	59,202	72,955	78,853	65,271	85,420	84,367	90,198	118,153	126,886	86,469	109,884	106 250	119,950	127,488	137,610	172,406	162,542	174,683	183,511	147,174	136,753	109,794	119,633	132,500
Blanket and MLSS inventory	Gallons	3,617,762	3,635,524	3,714,476	3,732,238	3,750,000	3,709,347	3.678.952	3,678,952	3,678,952	1,882,904	1,861,190	1,861,190	1,913,499	1,896,714	2,184,858	3,666,119	3,762,833	3,657,238	3,670,071	3,670,071	3,666,119	3,687,833	3,626,643	3,750,000	3,639,476	3,639,476	3,639,476	3,767,762	3,691,785	3,705,595	3,626,643	3,617,762	3,635,524
ventory	SS AB #1 MLSS AB #2	3,610	3,730	4,320	3,180	3,6/0	3,840	2.220	2,690	3,600	3,770	4,700	5,080	4,090	5,400	4,630	2,480	3,000	3,650	2,740	3,300	4.060	4,120	4,040	3,920	5,780	5,040	5,547	5,490	4,990	4,170	3,340	3,640	4,640
MLSS Inventory	MLSS AB #1	3,760	3,210	4,670	5,540	3,770	2,5/0	2.880	2,800	1,740	•	•	1	1	į	•	3,420	4,530	4,670	2,910	3,880	2,890	3,680	4,390	4,880	5,580	5,670	5,963	6,190	4,570	4,680	3,920	4,290	4,100
	Clarf #3 N	0.0	0.0	1.0	0. 6			0.0	1.0	1.0	1.5	1.0	1.0	2.0	1.0	7.5	0.5	1.5	0.5	0.	0.6	0.5	1.0	0.0	1.0	0.5	0.5	0.5	1.0	1.5	1.0	0.0	0.0	0.0
Bianket Depths	Clarf #2	0.5	1.0	2.0	2.5	0.6		0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	10.0		2.5	1.0	0.5	0.5	5 75	1.5	1.0	4.0			0.5	3.0	0.5	1.0	1.0	0.5	1.0
Biank	Clarf #1 (	0.5	1.0	2.0	2.5	0. 4	. r	0	1.0	1.0	1.0	1.0	1.0	1.5	3.0	8.0	1.0	3.0	1.0	0.6	0.5	O	1.0	0.5	2.0	0.5	0.5	0.5	4.0	1.0	2.5	0.5	0.5	1.0
	# Dry	146,367	139,049	168,322	153,914	122,423	108 577	121,222	127,602	153,122	175,295	183,393	177,132	193,720	179,599	140,573	156,228	76,457	131,540	109,704	125,008 126,158	103,583	114,842	127,602	159,503	140,362	147,114	132,638	128,589	94,853	147,778	110,338	92,776	71,309
	Basin Gallons	450,000	427,500	517,500	472,500	382,300	382 500	427,500	450,000	540,000	540,000	540,000	540,000	562,500	630,000	495,000	495,000	247,500	450,000	427,500	427,500	360,000	405,000	450,000	562,500	495,000	495,000	405,000	427,500	337,500	337,500	315,000	202,500	225,000
s		0.0	0.0	0.0	0.0	5 6	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 9	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Basin Depths	Tank #1 Tank #2 AB #1	5.0	č5														_			0 (	-	,												
Ba			m	5.5	5.0				5.0	5.5	5.5	4.5	6.0	7.0	6.5	4.5	4.0	3.0	_	2.5	0.5	3,5	3.0		5.0	5.5	6.0	4 3	5.5	4.5	2.5	2.5	1.5	2.5
	Tank #	5.0			5.5	o c	5 K	0 3	5.0 5.0	6.5 5.5	6.5 5.5					6.5 4.5			. 55 . 55 . 15	4 1	0.0	3 -	.0 3.	4	Ś	5	9	4	0 5.	0.	2	S,	-	2.5 2.5
		- 2.0		6.0		000	0.4	6.0	5.0 5.	5 5.	6.5 5.	7.5	6.0	5.5	7.5	6.5	7.0	2.5	6.5	5.0	D C	5.5	.0 3.	5. 4.	Ś	5.5	5.0 6.	4.5	4.0 5.	3.0 4.	5.0 2.	4.5 2.	3.0 1.	2
Indge			- 6.0	- 6.0	ry C	200 643 600	335 051	335,951 6.0 3.	5.0 5.	6.5 5.	6.5 5.	443,645 7.5	56,748 6.0	143,397 5.5	178,205 7.5	240,199 6.5	299,755 7.0	385,479 2.5	407,110 4.5 5.5	5.0	461,451 6.0 3 484,502 8.0 4	5.5	505,794 6.0 3.	5.5	- 7.5 5.	- 5,5 5,	12,096 5.0 6.	124,789 4.5 4.	222,547 4.0 5.	353,570 3.0 4.	373,011 5.0 2.	439,109 4.5 2.	487,556 3.0 1.3	2.5 2.
Hauled Studge	# Dry % Solids Annual Cumulative # Dry Tank #		3.9% - 6.0	3.9% - 6.0	3.9% 103,652 5.5	200 643 600	3.4% 335.05.1	3.4% 335,951 6.0 3.	335,951 5.0 5.	335,951 6.5 5.	3.9% 398,408 6.5 5.	4.1% 443,645 7.5	3.9% 56,748 6.0	4.1% 143,397 5.5	178,205 7.5	3.4% 240,199 6.5	3.8% 299,755 7.0	385,479 2.5	3.5% 407,110 4,5 5,5	3.1% 444,140 5.0 4	3.5% 461,451 6.U 3 3.7% 484.502 8.U 4	505,794 4.5 3	3.4% 505,794 6.0 3.	5.5	- 7.5 5.	3.4% - 5.5 5.	3.6% 12,096 5.0 6.	3.9% 124,789 4.5 4.	3.6% 222,547 4.0 5.	3.4% 353,570 3.0 4.	5.3% 373,011 5.0 2.	4.2% 439,109 4.5 2.	4.1% 487,556 3.0 1.3	500,455 2.5 2.3
Hauled Studge	% Solids Annual Cumulative # Dry		3.9% - 6.0	0 3.9% - 6.0	3.9% 103,652 5.5	98, 165 5.5% 194,657 5.5 5.	20 0.0 3.7% 3.35.05.04.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0 3.4% 335,951 6.0 3.	335,951 5.0 5.	0 3.4% 335,951 6.5 5.	62,457 3.9% 398,408 6.5 5.	45,237 4.1% 443,645 7.5	56,748 3.9% 56,748 6.0	86,649 4.1% 143,397 5.5	34,808 3.4% 178,205 7.5	61,994 3.4% 240,199 6.5	59,556 3.8% 299,755 7.0	85,724 3.7% 385,479 2.5	21,631 3.5% 407,110 4.5 5.5	37,030 3.1% 444,140 5.0 4	77,371 3.5% 461,451 6.0 3	3.4% 505,794 4.5 3	3.4% 505,794 6.0 3.	5.5	- 7.5 5.	0 3.4% - 5.5 5.	12,096 3.6% 12,096 5.0 6.	112,693 3.9% 124,789 4.5 4.	97,758 3.6% 222,547 4.0 5.	131,023 3.4% 353,570 3.0 4.	19,441 5.3% 373,011 5.0 2.	66,098 4.2% 439,109 4.5 2.	48,447 4.1% 487,556 3.0 1.3	3.8% 500,455 2.5 2.3
Hauled Sludge	# Dry % Solids Annual Cumulative # Dry		3.9% - 6.0	3.9% - 6.0	) 103,652 3.9% 103,652 5.5 04,105 2.0% 104,037 5.5	266,300 444,706 3.7% 306,637 6.0 0	103,300 111,700 3.7% 3.05,045 0.0 0.	335,951 6.0 3.	335,951 5.0 5.	0 3.4% 335,951 6.5 5.	192,400 62,457 3.9% 398,408 6.5 5.	133,200 45,237 4.1% 443,645 7.5	173,000 56,748 3.9% 56,748 6.0	251,600 86,649 4.1% 143,397 5.5	34,808 3.4% 178,205 7.5	218,300 61,994 3.4% 240,199 6.5	188,700 59,556 3.8% 299,755 7.0	277,500 85,724 3.7% 385,479 2.5	74,000 21,631 3.5% 407,110 4.5 5.5	144,300 37,030 3.1% 444,140 5.0 4	29,200 17,311 3.5% 461,451 6.0 3	21,292 3.4% 505,794 4.5 3	3.4% 505,794 6.0 3.	5.5	- 7.5 5.	- 0 3.4% - 5.5 5.	12,096 3.6% 12,096 5.0 6.	344,100 112,693 3.9% 124,789 4.5 4.	325,000 97,758 3.6% 222,547 4.0 5.	466,200 131,023 3.4% 353,570 3.0 4.	44,400 19,441 5.3% 373,011 5.0 2.	66,098 4.2% 439,109 4.5 2.	140,600 48,447 4.1% 487,556 3.0 1.3	40,700 12,899 3.8% 500,455 2.5 2.3





Sep-18 Sep-18 81-luc 81-Inc 81-yeM Mar-18 Mar-18 Jan-18 81-nsl TT-VON Zt-dəS 21-das Kilowatts Used LL-Inc 11-Inc May-17 71-yeM Mar-17 Mar-17 71-nel 71-nel 91-VON at-voN Sep-16 91-Inc 91-111 May-16 May-16 Mar-16 Mar-16 91-nel 140,000 120,000 100,000 20,000 80,000 60,000 40,000 12000 10000 8000 9009 56,290 61,740 69,020 93,310 90,640 110,650 101,260 94,280 81,500 68,360 93,494 106,070 104,700 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,220 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 98,010 Electric Cost Kilowatts Used 3223 3613 4195 5235 8446 9618 11166 8627 8627 3903 3324 4737 3324 2204 4737 3909 3666 5246 4874 3738 3600 10116 11336 11336 11336 10417 5685 5685 Jan-16
Feb-16
Mar-16
Apr-16
Jun-16
Jun-16
Oct-17
Jun-17
Jun-18
Apr-18
May-13
Jun-18
Apr-18
May-18
Nov-18
Nov-18

Electric Cost



# MISSOURI DEPARTMENT OF NATURAL RESOURCES DIVISION OF ENVIRONMENTAL QUALITY

Discharge Monitoring Report For Municipal Wastewater Treatment Plants

			F FACILIT				OPPOPER STATE AND A STATE OF THE PROPERTY OF T		TION ADDRE		Y	**************************************		Y/REGION
MON	TH/YEAR			IT NUMBE		OUTFAL	L NUMBE		o Antacison		EATMENT	FACILITY	<del></del>	IJSVIKO
No	ov-18	NEL LIEN		-0103241		#	001	0:	xidation Dite	h/UV/Slu	dge Holding	g-sludge		
		NFLUEN	<del>'</del>	T		1	T	EFF	FLUENT Ammonia	<u> </u>	E. coli		% R	emoval
DATE	pH UNITS	BOD mg/L	TSS mg/L	TEMP °C	FLOW MGD	pH UNITS	BOD mg/L	TSS mg/L	as N mg/i	DO mg/L	COLFRM #/100 ML	TEMP °C	BOD mg/L	TSS mg/L
1	7.3			18.7	1.527	7.9			0.04	6.8		17.2		
2	7.3	160	174	17.8	1.441	7.9	1.5	2.1		6.9		15.9	99.1	98.8
3	7.3			18.0	1.956	7.8				6.7		15.5		
4	7.3			17.9	2.392	7.6				5.9		15.7		
5	7.5			16.5	1.336	7.8				5.6		15.4	<u> </u>	
6	7.5			18.9	1.993	7.9				6.2		16.1		
7	7.6			15.1	1.516	8.0				7.0		14.3		
8	7.3			15.4	1.677	7.5			0.01	6.3		14.0		
9	7.2	230	214	16.5	1.438	7.7	1.9	2.2		7.0		13.7	99.2	99.0
10	7.4			13.4	1.596	7.8				6.4		10.4	<b> </b>	<del> </del>
11	7.2			15.4	1.638	7.8				6.8		11.1		
12	7.5			12.6	1.537	7.8				6.5		10.6	<b> </b>	
13	7.4			15.3	1.582	7.9				7.6		11.5		
14	7.4			13.4	1.891	7.7		<b> </b>		7.0		10.1		
15	7.3			14.9	1.050	7.7	<del> </del>		0.02	6.8		10.9		
16	7.3	180	160	15.2	1.429	7.7	2.1	1.9		7.6		11.3	98.8	98.8
17	7.4			14.1	1.562	7.6		ļ · · · · · · · · · · · · · · · · · · ·	1	6.9		11.1		
18	7.5			13.7	1.517	7.8				6.0		11.3		
19	7.4			13.3	1.456	7.6	<u> </u>	<u> </u>		6.6		11.5		
20	7.3	<u> </u>	1	14.4	1.427	7.7		<del> </del>	0.01	6.6		11.7		
21	7.3	230	324	15.0	1.477	7.7	1.9	1.6		9.7		11.3	99.2	99.5
22	7.2		1	14.8	1.484	7.9				9.2		11.4		00.0
23	7.3			14.9	1.363	7.7				6.8		11.8		
24	7.3			14.8	1.799	7.6			<del> </del>	6.6		12.7		
25	7.3			14.8	1.607	7.7				6.1		12.4		
26	7.2			13.8	1.485	7.7				7.8		10.9		
27	7.4		<u> </u>	12.6	1.480	7.7				7.0		10.0		
28	7.4			12.6	1.356	7.7			0.02	7.2		9.4		l
29	7.3	193	174	13.7	1.458	7.6	2.2	2.5	1	7.0		10.1	98.9	98.6
30	7.3			14.2	1.430	7.6				7.0		11.5	55.5	33.0
Γotal					46.900					X and a second				
٩vg	3-62	199	209	15	1.563		1.9	2.1	0.02	6.9	0.0	12.4	99.0	98.9
√lin	7.2	160	160	13	1.050	7.5	1.5	1.6	0.01	5.6	0.0	9.4	98.8	98.6
Max	7.6	230	324	19	2.392	8.0	2.2	2.5	0.04	9.7	0.0	17.2	99.2	99.5

	MON	THLY MONIT	ORING		T	C	UARTERLY	MONITORIN	G	
	T	***************************************	SM1	SM2		SM1		SM1		
DATE	Oil & Grease mg/L	<b>Selenium</b> μg/L	Hardness mg/L	<b>Hardness</b> mg/L	Phosphorus mg/L	Phosphorus mg/L	T. Nitrogen mg/L	T. Nitrogen mg/L	TR. Cadmium ug/L	TR. Copper μg/L
1										
2										
3										
4										
5										
6										
7	< 5.0	< 1.0	211	275						
8										
9										
10										
11										
12										
13										
14										
15										
16										
17				·						
18										
19										
20										
21										
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23										
24										
25										
26										
27										
28										
29										
30										
31									**************************************	
Total	< 5.0	< 1.0	211	275					A STATE OF THE STA	
Avg	< 5.0	< 1.0	211	275						
Min	< 5.0	< 1.0	211	275						
Мах	< 5.0	< 1.0	211	275						

# OPERATIONAL CONTROLS/LABORATORY TEST REQUIRED FOR "ACTIVATED SLUDGE" PROCESSES

	SLUDGE	#1 A		sin, O-Dit		#2 A	eration Ba	sin, O-Dit	ch, Etc.	*Weath	er Con	ditions
A CONTRACTOR OF THE CONTRACTOR	DISP.		MIXED				MIXED			Outside		
	LBS. DRY	* DO	** MLSS	*Settle		* DO	** MLSS	*Settle	<del>,</del>	* Ambient	*RAIN	Time
DATE	WEIGHT			*30 min	Temp			*30 min	Temp	Temp		
		mg/l	mg/l	ml	°C	mg/l	mg/l	ml	°C	٥F	inches	SNE CONTRACTOR STATE OF THE CO
1		3.0	4,020	620	16.8	2.7	3,990	640	17.0	48	0.5	7:30
2	***	4.0	3,840	610	15.9	2.7	3,960	680	16.0	43	0.1	7:30
3		3.3	4,110	650	15.4	2.1	3,580	550	15.6	49	0.3	7:30
4		1.9	4,280	720	15.7	1.7	3,300	450	16.0	52	0.9	7:30
5		2.3	4,070	660	15.0	1.5	3,430	540	15.3	46	0	7:30
6		2.9	4,250	710	15.9	2.6	3,770	600	16.0	46	0.4	7:30
7	5,863	4.4	3,880	600	14.7	3.8	4,300	730	14.9	41	0	7:30
8	7,036	3.0	4,360	700	14.1	3.0	3,870	650	14.5	41	0	7:30
9		3.6	4,070	760	13.3	3.8	4,040	700	13.5	36	0.5	7:30
10		3.5	4,180	750	11.5	3.7	3,730	680	11.9	23	0	7:30
11		4.7	4,030	680	12.1	4.5	4,200	750	12.5	35	0	7:30
12		4.1	4,300	760	11.0	2.6	3,940	700	11.7	38	0	7:30
13		4.7	4,160	790	11.5	5.2	4,170	780	11.7	22	0.25	7:30
14		4.8	4,140	730	9.7	4.3	4,240	790	9.9	19	0	7:30
15		4.8	4,650	700	10.6	4.1	3,680	820	10.9	31	0	7:30
16		5.8	3,640	790	11.1	3.5	4,350	790	11.5	32	0	7:30
17		5.7	3,820	690	10.9	3.6	4,310	790	11.4	35	0	7:30
18		5.0	3,890	660	11.3	3.0	4,500	760	11.8	37	0	7:30
19		4.3	2,860	550	11.2	2.1	4,630	820	11.4	37	0	7:30
20		4.7	3,850	660	11.3	2.4	4,160	710	11.5	33	0	7:30
21		6.7	4,590	790	11.3	5.4	4,350	680	11.8	32	0	7:30
22		6.4	4,710	820	11.3	6.0	4,370	680	11.8	31	0	7:30
23		3.4	4,680	810	12.0	4.7	3,920	760	12.4	47	0	7:30
24		1.8	4,740	820	12.6	3.2	4,020	640	13.3	39	0.6	7:30
25	Statistics of the state of the	2.4	4,570	780	12.6	3.1	4,240	750	13.1	42	0	7:30
26		3.1	4,410	810	11.4	3.0	4,280	790	10.8	26	0	7:30
27		4.0	3,800	780	9.2	3.0	4,630	830	9.9	28	0	7:30
28		5.5	5,010	850	8.8	4.2	3,990	700	9.5	29	0	7:30
29		3.7	4,540	810	10.4	4.2	3,850	770	10.8	33	0	7:30
30		4.7	4,100	760	11.6	4	4,640	810	11.8	42	0	7:30
COMMENTS												de la companya de la

COMMENTS:

TESTS PERFORMED BY (PRINT)	, \$IGNATURE	PHONE #	DATE
John Hornback	Italia Horabassa	(573)365-0455	12/12/2018
COMMITMORNIA	THE THE PARTY OF T	10.07000	
REPORT APPROVED BY (PRINT)	/ // SIGNATURE	PHONE #	DATE
	1. 1 2		
Gary Hutchcraft	Mary Hulekuras N	(573)365-0455	12/12/2018
Gary Hutcheratt		(010)000 0 100	

*Required Daily (Monday - Friday)

**Required 1/week

# State of Missouri Department of Natural Resources NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS

NAME ADDRESS Lake of the Ozarks Regional WWTP 1 #3 Anderson Road LAKE OZARK MO 65049

MO0103241 001 A PERMIT NUMBER DISCHARGE NUMBER MONITORING PERIOD FROM 2018 11 01 TO 2018 11 30

Dep. of Natural Resources (REGIONAL OFFICE) Southwest Regional Office 2040 W. Woodland Springfield. MO 65807-5912 4178914300 4178914399 (fax)

NOTE. READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

Parameter		M.	ASS	Unit	(	CONCENTRA	TION	Unit	FREQUENCY OF ANALYSIS	SAMPLE TYPE	LAB CODE
BOD, 5-day, 20 deg. C (00310)	REPORTD	****	****		*****	2.2	1.9		Weekly	24 Hour Composite	
Stage Type: End of Pipe	REQRMNT	****	****		****	Weckly Average: 45	Monthly Average: 30	mg/L	Weekly	24 Hour Composite	
BOD, 5-day, percent removal	REPORTD	****	****		****	****	98.8		Monthly	Calculated	<b></b>
(81010) Stage Type: End of Pipe	REQRMNT	****	****		****	****	Monthly Average Minimum: 85	%	Monthly	Calculated	
Flow, in conduit or thru treatment plant (50050)	REPORTO	2.392	1,563	NA1/4	****	****	****		Daily	Total Measured	
Stage Type: End of Pipe	REQRMNT	Daily Maximum: Monitoring Required	Monthly Average Monitoring Required	Mgal/d	*****	*****	*****		Daily	Total Measured	
Nitrogen, ammonia total (as N)	REPORTD	****	****		0.04	****	0.02		Weekly	Grab	
(00610) Stage Type: End of Pipe	REQRMNT	****	****		Daily Maximum : 11.5	****	Monthly Average: 2.2	mg/L	Weekly	Grab	
Oil and grease (soxhlet extr.) tot.	REPORTD	****	****		<5.0	****	<5.0		Monthly	Grab	<b></b>
(00550) Stage Type: End of Pipe	REQRMNT	****	****		Daily Maximum: 15	****	Monthly Average:	mg/L	Monthly	Grab	
pH (00400)	REPORTD	****	****		7.5	****	8.0		Weekly	Grab	
Stage Type: End of Pipe	REQRMNT	****	****		Minimum: 6.5	****	Maximum: 9.0	SU	Weekly	Grab	1
Selenium (Se), total recoverable	REPORTD	****	****		<1.0	****	<1.0		Monthly	Grab	<b> </b>
(00981) Stage Type: End of Pipe	REQRMNT	****	****		Daily Maximum: 9.1	*****	Monthly Average:	ug/L	Monthly	Grab	

GENERAL PERMIT REQUIREMENTS OUTFALL-SPECIFIC COMMENTS: PARAMETER-SPECIFIC COMMENTS:

Testify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gailter and evaluate the information authorities authorities and the present of persons who plantage the system, or those persons directly responsible for gathering the information, the information submitted 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, the information of fine.

and imprisonment for knowing violations.			
	OPERATOR IN RES	PONSIBLE CHARGE	
Gary Hu	itchcraft		7305
TYPED OR PR	RINTED NAME		CERTIFICATE NUMBER
PRINCIPAL EXECUTIVE OFFI	CER OR AUTHORIZED AGENT	TELEPHONE	573-365-0455
Gary F Hutchcraft	Gary F Hutchcraft		2018-12-12 11:37:03
TYPED OR PRINTED NAME	SIGNATURE		Date

Page 1

State of Missouri Department of Natural Resources
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS

ADDRESS

Lake of the Ozarks Regional WWTP 1

#3 Anderson Road LAKE OZARK . MO 65049

MO0103241 001 A PERMIT NUMBER DISCHARGE NUMBER MONITORING PERIOD YEAR MO DAY YEAR MO DAY 2018 11 01 TO 2018 11 30

Dep. of Natural Resources (REGIONAL OFFICE) Southwest Regional Office 2040 W. Woodland Springfield, MO 65807-5912 4178914300 4178914399 (fax)

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

Parameter		MA	ASS	Unit		CONCE	TRATION	Unit	FREQUENCY OF ANALYSIS	SAMPLE TYPE	LAB CODE
	REPORTD	****	****		****	****	98.6		Monthly	Calculated	
(81011) Stage Type: End of Pipe Total Suspended Solids (TSS)	REQRMNT	****	****		****	****	Monthly Average Minimum: 85	%	Monthly	Calculated	
Total Suspended Solids (TSS) (00530)	REPORTD	****	****		****	2.3	2,1	ma //	Weekly	24 Hour Composite	
Stage Type: End of Pipe	REQRMNT	****	*****		****	Weekly Average:	Monthly Average: 30	mg/L	Weekly	24 Hour Composite	

GENERAL PERMIT REQUIREMENTS OR COMMENTS. OUTFALL SPECIFIC COMMENTS:: PARAMETER-SPECIFIC COMMENTS:

nnt and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons white exponsible for gathering the information, the information submitted is, to the best of my knowledge and helief, true, accurate, and complete, I am aware that there are significant penelties for submitting false information, including the possibility of fine

and imprisonment for knowing violations.				
	OPERATOR IN	RESPONSIBLE CHARGE		
Gary H	utchcraft		7305	
TYPED OR PI	RINTED NAME		CERTIFICATE NUMBER	
PRINCIPAL EXECUTIVE OFFI	CER OR AUTHORIZED AGENT	TELEPHONE	573-365-0455	
Gary F Hutcheraft	Gary F Hutchcraft		2018-12-12 11:37:03	
TYPED OR PRINTED NAME	SIGNATURE		Date	
				Page 2

PERMITTEE NAME/ADDRESS

State of Missouri Department of Natural Resources
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Dep. of Natural Resources (REGIONAL OFFICE) Southwest Regional Office 2040 W. Woodland Springfield, MO 65807-5912

4178914300 4178914399 (fax)

NAME: ADDRESS:

Lake of the Ozarks Regional WWTP I #3 Anderson Road LAKE OZARK . MO 65049

MO0103241 SM2 A PERMIT NUMBER DISCHARGE NUMBER MONITORING PERIOD YEAR MO DAY YEAR MO DAY

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

Parameter		M,	ASS	Unit	CONC	CENTR	ATION	Unit	FREQUENCY OF ANALYSIS	SAMPLE TYPE	LAB CODE
Hardness, total (as CaCO3) (00900	REPORTO	***	****	<b>†</b>	275	****	275		Monthly	Grab	CODE
Stage Type: Instream Monitoring	REQRMNT	****	****		Daily Maximum : Monitoring Required	*****	Monthly Average : Monitoring Required	mg/L	Monthly	Grab	

GENERAL PERMIT REQUIREMENTS OR COMMENTS.

OUTFALL-SPECIFIC COMMENTS:

PARAMETERS SPECIFIC COMMENTS:

FOR AN ATTERS SPECIFIC COMMENTS:

FOR OPERATOR IN RESPONSIBLE CHARGE

Gary Hutchcraft
TYPED OR PRINTED NAME
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
Gary F Hutchcraft
SIGNATURE 7305 CERTIFICATE NUMBER 573-365-0455 2018-12-12 11:37:03 TELEPHONE Gary F Hutchcraft
TYPED OR PRINTED NAME Date

Page 3

2018

FOR NOVEMBER month

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Use following abbreviations R-rain, S-snow, O-overcast, C-clear, PC-partly cloudy

12.12.2018

Date

# OUR MISSION

We partner with communities to deliver the finest water and wastewater services available at a competitive price. We are committed to keeping water safe and clean while serving people and taking care of communities with improved technical operations, careful management and financial oversight, and ensured regulatory compliance.

Alliance Water Resources, Inc.

206 S. Keene St. Columbia, MO 65201

(573)874-8080



#### REPORT OF OPERATIONS

LAKE OZARK/OSAGE BEACH
Joint Wastewater Treatment Plant No. 1

Month of December 2018

Submitted by Alliance Water Resources, Inc. for the

January 2019

Joint Sewer Board Meeting

### **SUMMARY OF FACILITY OPERATION**

The Lake Ozark/Osage Beach Joint WWTP produced superior effluent quality throughout the month and was in full compliance with effluent limitations established in NPDES Permit No.MO-0103241. No leaks, no spills, and no unauthorized releases to waters of the state. No work related lost time accidents have occurred during the month.

Detailed information relating to plant performance and operations is presented as follows.

### PLANT EFFLUENT QUALITY

	BOD mg/l	TSS mg/l	рН	E.coli Coliform Colonies/100 ml	Ammonia as N mg/L	O&G mg/L	Metals Selenium ug/L
Monthly Average	2.3	2.4	N/A	0	0.49	< 5.0	1.1
Peak Day Percent Removal	2.5 98.9	2.9 98.9	7.9 N/A	0 N/A	1.90 N/A	< 5.0 N/A	1.1 N/A

### NPDES EFFLUENT LIMITATIONS

	BOD mg/l	TSS mg/l	рΗ	E.coli Coliform Colonies/100 ml	Ammonia as N mg/L	O&G mg/L	Metals Selenium ug/ L
Monthly Average	30 45	30 45	6-9	) 126 630	2.2	10	4.0
Weekly Average Daily Max	#J	<del>'1</del> J		030	11.5	15	8.1

#### PLANT HYDRAULIC AND ORGANIC LOADING

The average daily influent flow for the month was 1.212 MGD or 40% of Permitted flow with Lake Ozark contributing 14% of the total flow and Osage Beach contributing 86%. Daily influent flow BOD and TSS data is presented in Table A. Daily flow for the month and rainfall are shown in Figure 2. A three-year flow history for each of the two cities is presented in Table B.

Organic loading for the month was 64164 pounds of BOD.

### **BIOSOLIDS APPLICATION AND INVENTORY**

Plant personnel land applied 14 tanker loads of bio-solids during the month equivalent to a total of 51,800 gallons and 14,688 pounds dry weight solids.

515,143 pounds of dry weight solids have been land applied year to date.

Bio-solids inventory in the storage tanks at the end of the month was 382,500 gallons with a level of 6.5 feet in Tank 1 and 2.0 feet in Tank 2.

# **WASTEHAULERS**

The plant received 22 loads of septage during the month totaling 55,000 gallons.

### **WWTP OPERATIONS**

- Decanting digesters and wasting weekly.
- Normal operations.
- We pulled all UV banks, cleaned them and are stored in the UV room ready for the next disinfection season.

# WWTP MAINTENANCE AND REPAIR

- Performed routine maintenance throughout the month as per Antero Maintenance Data Management schedule. (New version of Operator 10 Software)
- The contractor that was awarded the door replacement contract back in September finally received the doors and got them installed on December 10th.
- We came in on the 11th of December and found the pista grit system wasn't working. We troubleshot it and found a faulty breaker. We found a one locally and had it back in service the next day.
- When servicing the heaters in the non-pot and RAS valve rooms we noticed that they were not
  working properly so we called in a service tech and they said that they needed replaced. We
  communicated this to Nick & Matt and they recommended to purchase new ones and install
  them in-house. We purchased replacement units and will install them ASAP.
- The decant pump repair that was approved at Novembers Joint Sewer Board meeting needed some additional parts and machine work which was around two thirds of what a new pump would cost. I contacted Nick & Matt and informed them of the findings and they told me to go ahead and bids for a replacement pump. We received 4 quotes/bids and JCI was awarded the bid and was ordered on the 20th of December with a 4 to 6-week lead time.
- The RAS flow meter has been malfunctioning during really cold snaps. We have contacted the manufacturer and they think it might be repairable but won't know for sure until we pull it and send it to them and are planning on doing so ASAP.
- The heater on the sludge truck quit working so we took it to Roemer's and had it fixed. While he had it, we went ahead and had him service the truck also.

#### SAFETY

We conducted our monthly routine Safety Meeting on Hazardous Communication on the 13th of December.

# REGULATORY AGENCY, INSPECTION AND REPORTS

We filled out the EDMR on MDNR's website on the 7th of January.

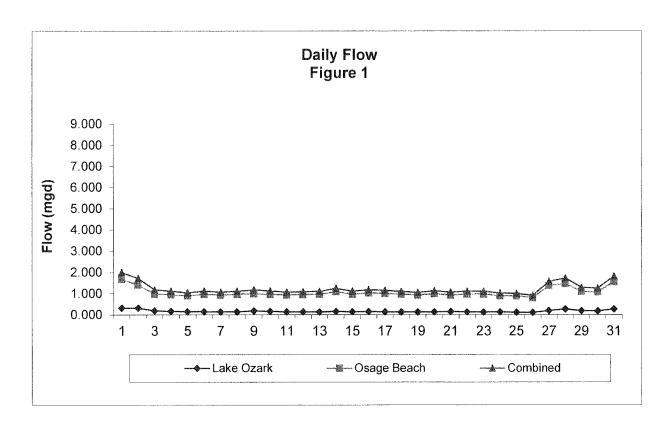
### MISCELLANEOUS AND RECOMMENDATIONS

- We would like to Thank the City of Lake Ozark for sending their service truck and crew to assist us in the removal of the sandblast sand out of clarifier #3. Many Thanks!
- The paint contractor that's doing the clarifier paint project requested a 90-day extension of completion on the 27th of December. We forwarded it on to Nick and Matt and the request was granted. (see attachment)
- The updated annual ERP and plant inventory are attached, please review and let us know of any needed changes.
- Alliance would like to remind all Joint Sewer Board members and guest that we are having our annual new year get together at Wobbly Boots BBQ in Osage Beach right after the Joint Sewer Board meeting this month.

# TABLE A LAKE OZARK/OSAGE BEACH WWTP

MONTH OF December 2018

DATE		FLOW						BOD 5 MG/L			TSS MG/L		
	RAIN FALL IN.	LO mgd	OB mgd	COMB mgd	% LO	% OB	LO mg/l	OB mg/l	COMB mg/l	LO mg/l	OB mg/l	COMB mg/l	
1-Dec	1.75	0.313	1.681	1.994	15.7	84.3							
2-Dec	0	0.314	1.399	1.713	18.3	81.7							
3-Dec	0	0.195	0.981	1.176	16.6	83.4							
4-Dec	0	0.160	0.951	1.111	14.4	85.6							
5-Dec	0.1	0.150	0.890	1.040	14.4	85.6							
6-Dec	0	0.145	0.969	1.114	13.0	87.0							
7-Dec	0	0.140	0.932	1.072	13.1	86.9	188	218	188	154	136	158	
8-Dec	0	0.143	0.965	1.108	12.9	87.1							
9-Dec	0	0.182	0.992	1.174	15.5	84.5							
10-Dec	0	0.166	0.957	1.123	14.8	85.2							
11-Dec	0	0.134	0.930	1.064	12.6	87.4							
12-Dec	0	0.132	0.951	1.083	12.2	87.8							
13-Dec	0	0.133	0.968	1.101	12.1	87.9							
14-Dec	0.5	0.157	1.082	1.239	12.7	87.3	180	223	248	118	180	288	
15-Dec	0.0	0.141	0.965	1.106	12.7	87.3							
16-Dec	0	0.148	1.023	1.171	12.6	87.4							
17-Dec	0	0.136	1.002	1.138	12.0	88.0							
18-Dec	0	0.128	0.965	1.093	11.7	88.3		****					
19-Dec	0	0.125	0.918	1.043	12.0	88.0						····	
20-Dec	0.25	0.131	0.987	1.118	11.7	88.3							
21-Dec	0	0.147	0.916	1.063	13.8	86.2	190	168	200	166	128	194	
22-Dec	0	0.136	0.966	1.102	12.3	87.7							
23-Dec	0	0.128	0.969	1.097	11.7	88.3							
24-Dec	0	0.131	0.886	1.017	12.9	87.1							
25-Dec	0	0.112	0.876	0.988	11.3	88.7		· · · · · · · · · · · · · · · · · · ·					
26-Dec	0	0.106	0.802	0.908	11.7	88.3							
27-Dec	1.3	0.195	1.367	1.562	12.5	87.5	- V						
28-Dec	0	0.265	1.457	1.722	15.4	84.6	198	223	183	166	208	216	
29-Dec	0	0.185	1.093	1.278	14.5	85.5							
30-Dec	0	0.179	1.070	1.249	14.3	85.7			· · · · · · · · · · · · · · · · · · ·		İ		
31-Dec	2.4	0.266	1.542	1.808	14.7	85.3							
SUM	6.3	5.123	32.452	37.575									
AVG		0.165	1.047	1.212	14	86	189	208	205	151	163	214	
	LD PRINT	INDICATE							200	, , , ,		2 1 1	



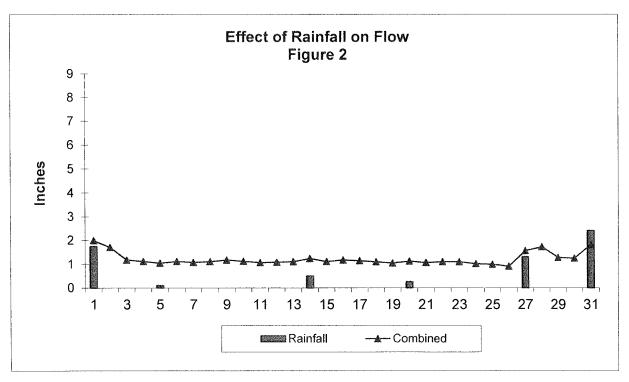
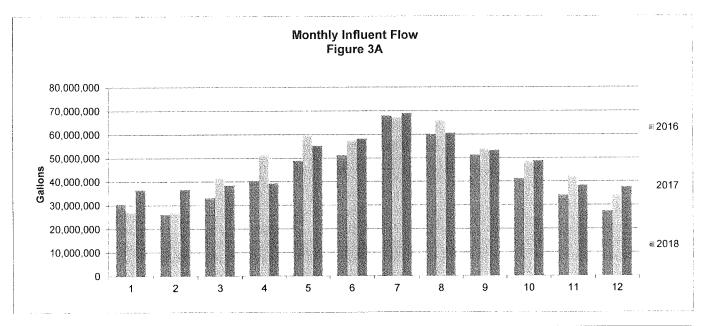
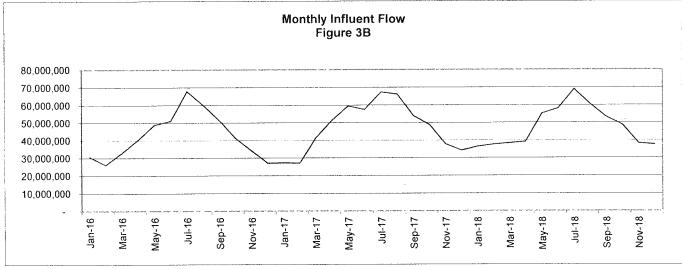
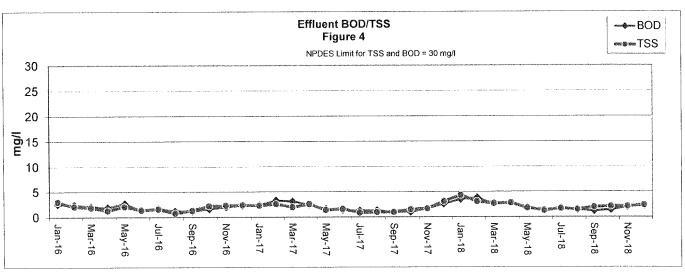


TABLE B
JOINT SEWER BOARD
Monthly Flows

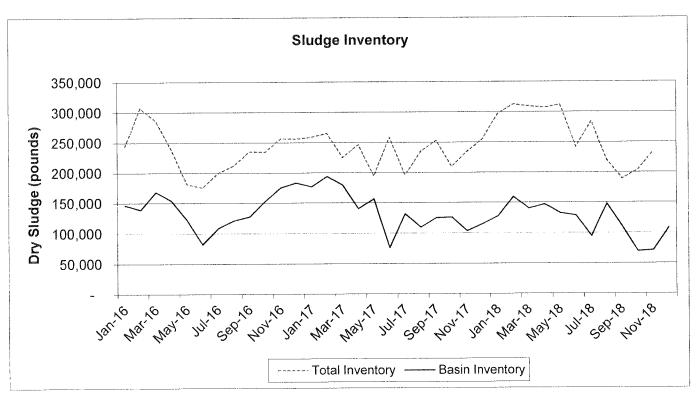
<u>2016</u>	RAINFALL	OSAGE BEACH	r	LAVE OZADIZ		mor et	•
January	0.8	26,604,000		LAKE OZARK		TOTAL	
February	0.8	22,444,000		4,001,000		30,605,000	100%
March	3.1	28,785,000		3,661,000 4,251,000		26,105,000	100%
April	5.3	35,053,000				33,036,000	100%
May	7.0	42,126,000		5,231,000		40,284,000	100%
June	1.2	44,599,000		6,704,000		48,830,000	100%
July	8.7	59,190,000		6,545,000		51,144,000	100%
August	7.7	51,798,000		8,793,000	13%	67,983,000	100%
September	6.0	44,634,000		8,171,000	14%	59,969,000	100%
October	0.5	36,156,000		6,655,000	13%	51,289,000	100%
November	1.2	29,750,000	87%	5,029,000	12%	41,185,000	100%
December	0.8	23,139,000	86%	4,357,000	13%	34,107,000	100%
December	0.8	23,139,000	80%	3,914,000	14%	27,053,000	100%
	45.4	467,718,000	87%	71,221,000	13%	538,939,000	100%
2017	RAINFALL	OSAGE BEACH	r	LAVEOZADI			
January	2.5	OSAGE BEACH 23,440,000	<u>1</u> 86%	LAKE OZARK		TOTAL	%
February	0.7	23,345,000	86%	3,909,000	14%	27,349,000	100%
March	3.8	36,554,000	88%	3,812,000	14%	27,157,000	100%
April	9.8	44,665,000	87%	4,844,000	12%	41,398,000	100%
May	8.1	51,527,000	87%	6,723,000	13%	51,388,000	100%
June	2.9	50,926,000	88%	7,979,000	13%	59,506,000	100%
July	5.2	59,347,000	88%	6,618,000	12%	57,544,000	100%
August	12.4	57,736,000	87%	8,092,000	12%	67,439,000	100%
September	1.5	47,096,000	87%	8,409,000	13%	66,145,000	100%
October	7.4	42,489,000	87%	6,866,000	13%	53,962,000	100%
November	0.5	37,947,000	90%	6,332,000 4,244,000	13% 10%	48,821,000	100%
December	0.9	30,459,000	89%	3,808,000		42,191,000	100%
	0.7	30,439,000	07/0	3,000,000	11%	34,267,000	100%
	55.6	505,531,000	88%	71,636,000	12%	577,167,000	100%
2018	RAINFALL	OSAGE BEACH		LAKE OZARK		TOTAL	%
January	2.8	32,190,000	88%	4,345,000	12%	36,535,000	100%
February	5.4	31,846,000	87%	4,861,000	13%	36,707,000	100%
March	3.2	33,424,000	87%		13%	38,434,000	100%
April	1.9	34,339,000	88%	4,896,000	12%	39,235,000	100%
May	5.4	47,620,000	86%	7,610,000	14%	55,230,000	100%
June	3.2	51,063,000	88%	7,125,000	12%	58,188,000	100%
July	2.7	60,484,000	88%	8,550,000	12%	69,034,000	100%
August	6.9	52,916,000	87%	7,679,000	13%	60,595,000	100%
September	3.4	46,228,000	87%	7,013,000	13%	53,241,000	100%
October	7.5	42,037,000	86%	6,738,000	14%	48,775,000	100%
November	3.6	33,221,000	87%	5,089,000	13%	38,310,000	100%
December	6.3	32,452,000	86%	5,123,000	14%	37,575,000	100%
-	52.3	497,820,000	87%	74,039,000	13%	571,859,000	100%
=		,,		,000,000		571,055,000	100/0

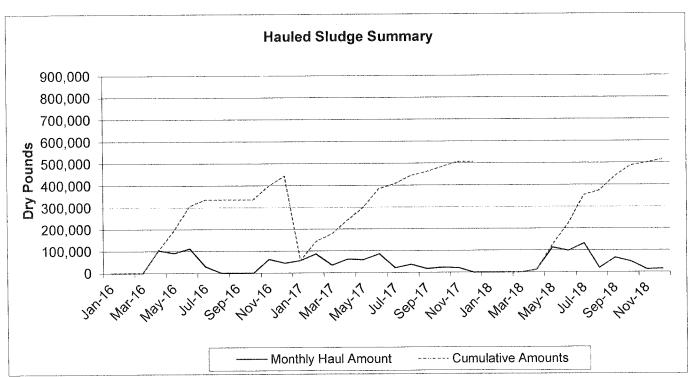






	Accepted Septage				•	_				•		42 94,500	35 75,500	11 20,000	26 54,500	15 37,500	5 12,500	41 102 500	8 20,000	45 116,000	23 60 60	33 92,300	44 402 500	40 400 000	48 122,000	0.52,500	006,71 /	006,75	16 40,000		000,00	10 20,000	78 24,500	000,68 85	42 107,000	30 75,000	45 113,500	21 59,500	8 21,500	22 55,000
	Total Dry	% Solids Studge Inventory	257 551	244.280	307,574	70,700	200,000	438,755	101.484	175,618	199,462	211,825	235,045	234,497	256,348	255,986	258,991	265,019	224 939	246,426	194 610	258 426	106 173	234 902	253 182	200,102	234 782	257,752	297,113	312,769	300,555	307.321	312,100	242,000	244,020	284,531	220,132	189,409	203,809	234,494
	nventory MLSS	# Dry % Solids S	111,184 0.00369							57,041 0.00219				_	72,955 0.0047		_	85,420 0.0054	_		118.153 0.00377							_		-	_	_							_	26,035 0.00377
	Blanket and MLSS inventory	_	3,617,762	3.635.524	3 714 476	3 732 238	3 750 000	3 709 547	2 679 050	3,070,932	3,078,952	3,678,952	3,678,952	1,882,904	1,861,190		_		2,184,858	3,666,119	3,762,833	_		,	_								•					. ,		4,008,526 1
		LSS AB #2	3,610	3,730	4.320	3.180	3.670	3.840	2,630	2,230	2,220	2,690	3,600	3,770	4,700	5,080	4,090	5,400	4,630	2,480	3,000	3,650	2.740	3,300	3,780	4 060	4,120	4,040	3,920	5,780	5.040	5,547	5.490	4 990	4 170	o c	3,540	3,640	4,040	3,420
	MLSS Inventory	Clarf #3 MLSS AB #1 MLSS AB #2	3,760	3,210	4,670	5.540	3 770	2.570	1 740	04.7	000,0	2,800	1,740	,	,	,	,	t	1	3,420	4,530	4,670	2,910	3,880	4,520	2 890	3,680	4,390	4,880	5,580	5,670	5,963	6,190	4 570	4 680	000	3,920	087, 4	4,100	4,120
		Clarf #3 ML	0.0	0.0	1.0	1,0	10	5		5 5	, 5 ¢	<u> </u>	- • - •	 (	⊃. <b>.</b>	0.6	2.0	0.	7.5	0.5	1,5	0.5	1.0	1.0	1.0	0.5	1.0	0.0	1.0	0.5	0.5	0.5	1.0	1.5	0		) c	2 0	2 0	o.o
	위	Clarf #2 (	0.5	1.0	2.0	2.5	5.0	10	C	2 -	2	2 6	2 6	2 6	0.0	0.0	0.0	0.0	10.0	1.5	2.5	1.0	0.5	1.0	1.0	1.5	1.5	1.0	4.0	0.5	0.5	0.5	3.0	0.5	1.0	0		) <del>-</del>	5 5	0.21
	Blank	Clart #1	0.5	1.0	2.0	2.5	1.0	1,5	1.0	5 5	) C	5 6	5 6	5 6	2 6	) i	ب س	3.0	8.0	1.0	3.0	1.0	1.0	0.5	0.5	1.0	1.0	0.5	2.0	0.5	0.5	0.5	4.0	1.0	2.5	4	0.0	) C	5 5	) - -
		λο # #	146,367	139,049	168,322	153,914	122,423	82,339	108,577	121.222	127 602	153 122	175 205	103,230	177 130	102 202	193,720	660'67	140,573	156,228	76,457	131,540	109,704	125,008	126,158	103,583	114,842	127,602	159,503	140,362	147,114	132,638	128,589	94,853	147,778	110 338	69.776	71,309	108 450	500,400
	-	Sasin Gallons	450,000	427,500	517,500	472,500	382,500	270,000	382,500	427,500	450 000	540,000	540,000	540,000	540,000	240,000	302,300	000,000	495,000	495,000	247,500	450,000	427,500	427,500	405,000	360,000	405,000	450,000	562,500	495,000	495,000	405,000	427,500	337,500	337,500	315.000	202,500	225,000	382 500	200, 200
	3	-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	9 6	9 0	9 6	9 0	5 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	j
	Basin Depths	BIK #2	0.0	3,5	5.5		3.0	0.0	4.0	3.5	5.0	5.5	140	9 4	9 0	2.0	- u	5 4	υ, 4 υ, σ	0.4 O.0	ر ا	5,5	4.5	3,5	1.0	3.5	3.0	4.5	9.0	5.5	0.9	4.5	5.5	4,5	2.5	2.5	1.5	2.5	00	ì
ſ	2 T	# ¥ E	0.0	6.0	6.0	5.5	5.5	9.0	4.5	6.0	5.0	6.5	8.5	7.5	0.6	ט ני	, v	 	0.0	O. C	2.0	5.5	2.0		8.0	4.5	0.9	5.5	7.5	5.5	9.0	4.5	4.0	3.0	5.0	4.5	3.0	2.5	6	ì
	% Solids Approx Completing # Day	out idiality # Oly	,	f	•	103,652	194,837	306,543	335,951	335,951	335,951	335,951	398 408	443 645	56 748	143.397	178 205	240.180	200 766	288,733	900,478	407,110	444,140	461,451	484,502	505,794	505,794		•	. 6	12,096	124,789	222,547	353,570	373,011	439,109	487,556	500,455	515.143	
in doo	studge % Solids Appli	20%	2 2	8.6.0	3.9%	3.9%	3.8%	3.7%	3.4%	3.4%	3.4%	3.4%	3.9%	4.1%	3.9%	4 1%	3.4%	3.4%	200	3.79%	2 2	8.0.0	3.1%	3.5%	3.7%	3.4%	3.4%	3.4%	3.4%	3.4%	5.0%	3.9%	3.6%	3.4%	5.3%	4.2%	4.1%	3.8%	3.4%	
Louis Studen	namen #	c	0 0	0 (	0 1	103,652	91,185	111,706	29,408	0	0	0	62,457	45,237	56,748	86,649	34.808	61 994	50,10	85,230	1,000	77,531	37,030	115,71	23,051	282,12	0 (	<b>)</b>	<b>-</b>	12 000	12,090	112,693	867.78	131,023	19,441	960'99	48,447	12,899	14,688	
	Gallons	210000			, 0	318,200	284,900	366,300	103,600	*	•		192,400	133,200	173,000	251,600	122,100	218 300	188 700	277.500	000,17	74,000	000,44	29,200	74,000	74,000	1	1		200	40,700	344,100	325,000	466,200	44,400	188,700	140,600	40,700	51,800	
	oads	C	, ,	> 0	> 5	8 1	= :	o ;	28	0	0	0	25	36	47	98	33	26	5.5	75	2 6	2 6	) t	5 6	2 8	₹ 6	<b>&gt;</b> 0	> <	<b>&gt;</b> c	,	- 8	2 6	8 5	9 9	77	51	38	7-	4	
ـــا		.lan-16	10h	ren-10	ol-lew	01-10-1	May-15	Jun-16	30-10	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	Mav-17	Jun-17	1111-17	71-in0	Cop 47	Oet 42	Ve: 17	/ I-AON	Dec-17	201110	Mar-18	01-10A	May 19		7.3		Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	





Electric Cost Kilowatts Used

Electric Cost

Jan-18 TI-VON Zr-dəs Kilowafts Used 2r-qə2 Tr-Inc Tr-yBM Tr-yeM Tr-15M Tr-16M Tr-net 71-uer 81-YON ar-voM 91-qa2 Sep-16 91-100 91-Inc May-16 May-16 Mar-16 Mar-16 วิย-นธุก 80,000 40,000 160,000 140,000 120,000 100,000 60,000 20,000 10000 2000 8000 56,290 69,740 93,310 90,640 100,670 101,260 94,280 81,500 68,360 93,494 106,070 93,494 106,070 93,494 106,070 93,494 106,070 93,494 106,070 98,220 98,220 98,010 86,930 98,010 98,010 98,010 98,650 115,750 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 100,520 10 Jan-16
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81-INC

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Sep-18

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May-18

81-18M



## MISSOURI DEPARTMENT OF NATURAL RESOURCES DIVISION OF ENVIRONMENTAL QUALITY

Discharge Monitoring Report For Municipal Wastewater Treatment Plants

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Dec-		FLUENT	1410-0	103241		1			UENT	01/0100	***************************************	orange i	% Rer	Contract and Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract Contract
DATE	pH UNITS	BOD mg/L	TSS mg/L	TEMP °C	FLOW MGD	pH UNITS	BOD mg/L	TSS mg/L	Ammonia as N mg/l	DO mg/L	E. coli COLFRM #/100 ML	TEMP °C	BOD mg/L	TSS mg/L
1	7.4			13.1	2.367	7.5				5.0		11.8		
2	7.3			12.5	2.025	7.5				5.2		12.0	·	
3	7.4			12.7	1.474	7.8				6.3		11.2		
4	7.5			12.7	1.469	7.8		***************************************		6.3		10.4		
5	7.3			13.1	1.299	7.8			0.01	6.8		10.2		
6	7.5			13.3	1.459	7.9				7.4		10.5		
7	7.4	188	158	12.7	1.454	7.9	2.5	1.9		7.8		9.7	98.7	98.8
8	7.4			11.9	1.502	7.7				7.6		8.8		
9	7.2			12.8	1.545	7.6				9.4		9.4		
10	7.2			12.2	1.473	7.7				7.2		8.4		
11	7.2			12.3	1.384	7.6				7.6		8.1		
12	7.3			11.6	1.337	7.6				6.8		9.1		
13	7.3			12.9	1.375	7.7			0.02	7.5		10.4		
14	7.2	248	288	13.1	1.564	7.7	1.9	2.2		5.6		10.9	99.2	99.2
15	6.8			12.8	1.397	7.6				8.2		9.9		
16	7.3			10.9	1.496	7.7				8.0		9.3		
17	7.4			11.4	1.427	7.8				7.1		9.7		
18	7.4			11.5	1.401	7.6				6.8		9.6		
19	7.3			12.9	1.315	7.7				7.4		10.0		
20	7.2			12.8	1.409	7.6		***************************************	0.02	6.6		11.2		
21	7.2	200	194	12.6	1.374	7.6	2.1	2.5		5.3		10.1	99.0	98.7
22	7.3			12.5	1.345	7.8				8.8		9.5		
23	7.3			12.8	1.402	7.8				6.9		9.8		
24	7.3			11.4	1.300	7.8				7.8		8.9		
25	7.3			13.2	1.262	7.8				8.0		9.8		
26	7.4			12.7	1.098	7.7				6.5		10.2		
27	7.3			13.3	1.927	7.7			1.9	5.0		11.6		
28	7.3	183	216	12.8	2.006	7.9	2.5	2.9		6.1		10.7	98.6	98.7
29	7.3			10.4	1.672	7.7				6.7		9.4		
30	7.5			10.8	1.623	7.8				7.4		9.1		
31	7.4			10.5	2.233	7.7				6.7		9.4		
Total	-				47.414									
Avg		205	214	12	1.529		2.3	2.4	0.49	7.0	0.0	10.0	98.9	98.9
Min	6.8	183	158	10	1.098	7.5	1.9	1.9	0.01	5.0	0.0	8.1	98.6	98.7
Max	7.5	248	288	13	2.367	7.9	2.5	2.9	1.90	9.4	0.0	12.0	99.2	99.2

	MON	THLY MONI	TORING			(	QUARTERLY	MONITORIN	IG.	
DATE	Oil & Grease mg/L	Selenium µg/L	SM1 Hardness mg/L	SM2 Hardness mg/L	Phosphorus mg/L	SM1	T. Nitrogen	SM1 T. Nitrogen	TR. Cadmium	TR. Copp
1					1116/2	IIIg/L	mg/L	mg/L	ug/L	μg/L
2				<u> </u>						
3										
4	< 5.0	1.1	217	256						
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## OPERATIONAL CONTROLS/LABORATORY TEST REQUIRED FOR "ACTIVATED SLUDGE" PROCESSES

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	LBS. DRY	* DO	** MLSS	*Settlea		* DO	** MLSS	*Settlea	***************************************	* Ambient	*RAIN	Time
DATE	WEIGHT			*30 min	Temp			*30 min	Temp	Temp		
		mg/l	mg/l	ml	°C	mg/l	mg/l	ml	°C	°F	inches	7.20
1		2.0	3,890	660	11.7	1.6	3,610	520	11.9	48	1.75	7:30
2		2.8	4,570	760	11.7	1.8	4,220	710	12.0	41	0	7:30
3		3.0	4,470	780	10.6	3.4	4,250	740	11.0	36	0	7:30
4		3.4	4,340	750	10.2	3.4	4,500	790	10.5	32	0	7:30
5	6,326	5.2	4,510	750	9.7	3.3	3,940	680	10.0	32	0.1	7:30
6		4.8	4,270	800	11.0	5.0	3,840	660	11.0	37	0	7:30
7		4.3	4,120	770	9.8	4.8	3,650	750	10.3	29	0	7:30
8		6.0	3,630	770	9.2	5.7	4,110	780	9.5	28	0	7:30
9		6.9	4,840	850	9.0	7.0	3,830	730	9.7	20	0	7:30
10		5.7	4,810	820	8.0	5.8	3,790	730	8.5	21	0	7:30
11	3,580	4.4	4,870	780	7.8	4.9	4,090	700	8.4	26	0	7:30
12	4,783	<b></b>	4,580	780	9.2	4.6	4,160	700	9.4	40	0	7:30
13		4.2	3,910	720	10.4	4.0	4,530	780	10.7	49	0	7:30
14	<u> </u>	3.0	4,240	750	10.9	2.1	4,190	690	11.3	42	0.5	7:30
15		5.1	5,030	800	9.8	5.0	3,990	650	10.0	37	0	7:30
16		4.2	4,530	760	9.1	5.2	4,390	730	9.5	30	0	7:30
17		3.4	4,340	730	9.5	2.8	4,670	750	10.0	30	0	7:30
18		4.7	4,160	720	9.7	3.0	4,730	780	10.0	29	0	7:30
19		4.2	3,820	740	9.9	2.7	4,180	700	10.4	36	0	7:30
20		2.6	4,660	750	11.0	2.1	3,870	660	11.4	45	0.25	7:30
21		1.9	4,580	780	10.3	2.6	4,030	670	10.8	35	0	7:30
22		4.4	4,590	740	9.8	4.6	3,690	620	10.3	31	0	7:30
23		4.1	4,470	690	10.5	3.9	4,200	680	10.7	37	0	7:30
24		5.0			9.0	4.8	4,200	710	9.5	26	0	7:30
25		5.2			10.3	5.2	4,360	700	10.5	41	0	7:30
26		4.3			10.4	4.2	4,370	730	10.7	40	0	7:30
27		2.3			12.2	2.5	3,380	560	12.2	52	1.3	7:30
28		2.7			11.6	2.3	3,720	510	11.8	32	0	7:30
29		3.3		<u> </u>	9.1	4.5	3,790	590	9.3	28	0	7:30
30		3.4			8.6	4.2	4,040	650	8.6	25	0	7:30
31		4.3			9.5	3.3		550	9.8	40	2.4	7:30
COMMEN	ITS:					A STATE OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PAR					AND THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPER	SOMETHING THE PROPERTY OF

COMMENTS:

TESTS PERFORMED BY (PRINT)	PHONE #	DATE
William Henson	(573)365-0455	1/7/2019
REPORT APPROVED BY (PRINT)	PHONE #	DATE
Gary Hutchcraft Lauf Hulchwold	(573)365-0455	1/7/2019

*Required Daily (Monday / Friday)

**Required 1/week

# State of Missouri Department of Natural Resources NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (IDMR)

PERMITTEE NAME/ADDRESS

NAME: ADDRESS: Lake of the Ozarks Regional WWTP 1

#3 Anderson Road LAKE OZARK MO 65049

MO0103241 001 A PERMIT NUMBER DISCHARGE NUMBER MONITORING PERIOD 
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 TO
 2018
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FROM

Dep. of Natural Resources (REGIONAL OFFICE) Southwest Regional Office 2040 W. Woodland Springfield. MO 65807-5912 4178914300 4178914399 (fax)

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

Parameter		M/	ASS	Unit		CONCENTRA	TION	Unit	FREQUENCY OF ANALYSIS	SAMPLE TYPE	LAB
BOD, 5-day, 20 deg, C (00310)	REPORTD	****	****		****	2.5	2.3		Weekly	24 Hour	COD
Stage Type: End of Pipe	REQRMNT	****	*****	1	****	Weekly Average: 45	Monthly Average :	mg/L	Weekly	Composite 24 Hour	
BOD, 5-day, percent removal (81010.)	REPORTD	****	****		****	*****	98.6	<del> </del>	Monthly	Composite	
Stage Type: End of Pipe	REQRMNT	****	****		****	****	Monthly Average Minimum: 85	%	Monthly	Calculated Calculated	
Flow, in conduit or thru treatment plant (50050)	REPORTD	2.367	1.529		****	****	****		Daity	Total	<b></b>
Stage Type: End of Pipe	REQRMNT	Daily Maximum : Monitoring Required	Monthly Average: Monitoring Required	Mgal/d	*****	****	*****		Daily	Measured Total Measured	
Nitrogen, ammonia total (as N) 00610)	REPORTD	****	****		1.9	****	0.49		Weekly	Grab	
Stage Type: End of Pipe	REQRMNT	****	*****		Daily Maximum : 11.5	*****	Monthly Average : 2.2	mg/L	Weekly	Grab	
Oil and grease (soxhlet extr.) tot. 00550)	REPORTD	****	****		<5.0	****	<5.0		Monthly	Grab	
Stage Type: End of Pipe	REQRMNT	*****	****		Daily Maximum: 15	****	Monthly Average :	mg/L	Monthly	Grab	
oH (00400 )	REPORTD	****	****		7.5	****	7.9		Weekly	Grab	<del></del>
Stage Type: End of Pipe	REQRMNT	*****	****		Minimum: 6.5	****	Maximum: 9.0	SU	Weekly		
Selenium (Se), total recoverable 00981)	REPORTD	****	****		1.1	*****	1.1		Monthly	Grab Grab	
tage Type: End of Pipe	REQRMNT	*****	****		Daily Maximum: 9.1	****	Monthly Average :	ug/L	Monthly	Grab	

PARAMETER-SPECIFIC COMMENTS.

Terrify under possily of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the systems, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, thus, accurate, and complete. I am aware that there are significant possibles for submitting false information, including the possibility of line.

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	OPERATOR IN R	ESPONSIBLE CHARGE	
Gary H	itchcraft		7305
	UNTED NAME		CERTIFICATE NUMBER
	CER OR AUTHORIZED AGENT	TELEPHONE	573-365-0455
Gary F Hutchcraft	Gary F Hutchcraft		2019-01-07 14:34:19
TYPED OR PRINTED NAME	SIGNATURE		Date
			Date

Page 1

State of Missouri Department of Natural Resources
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS

NAME: ADDRESS:

Lake of the Ozarks Regional WWTP 1 #3 Anderson Road LAKE OZARK . MO 65049

MO0103241 A 100 PERMIT NUMBER DISCHARGE NUMBER MONITORING PERIOD 
 YEAR
 MO
 DAY
 YEAR
 MO

 2018
 12
 01
 TO
 2018
 12
 YEAR MO DAY

Dep. of Natural Resources (REGIONAL OFFICE) Southwest Regional Office 2040 W. Woodland Springfield. MO 65807-5912 4178914300 4178914399 (fax)

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM

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Parameter Suspended Solids, percent removal	31000000		ASS	Unit		CONCE	NTRATION	Unit	FREQUENCY OF ANALYSIS	SAMPLE TYPE	LAB CODE
(81011)	REPORTD	****	****		****	****	98.7		Monthly	Calculated	CODE
Stage Type: End of Pipe	REQRMNT	****	****		****	*****	Monthly Average Minimum: 85	%	Monthly	Calculated	
(00530)	REPORTD	****	****		****	2.9	2.4		Weekly	24 Hour Composite	
Stage Type: End of Pipe	REQRMNT	****	*****		****	Weekly Average : 45	Monthly Average: 30	mg/L	Weekly	24 Hour Composite	

GENERAL PERMIT REQUIREMENTS OUTFALL-SPECIFIC COMMENTS:
PARAMETER-SPECIFIC COMMENTS.

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel groupely gather and evaluate the information submitted. Based on my taquity of the person or persons when manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant genulates for submitting false information, including the possibility of fine

	OPERATOR IN RES	PONSIBLE CHARGE	
Gary Hu	tchcraft	I STORES CHARGE	7305
TYPED OR PR	INTED NAME		CERTIFICATE NUMBER
	CER OR AUTHORIZED AGENT	TELEPHONE	573-365-0455
Gary F Hutchcraft	Gary F Hutchcraft		2019-01-07 14:34:19
TYPED OR PRINTED NAME	SIGNATURE		Date
			VAC

PERMITTEE NAME/ADDRESS

State of Missouri Department of Natural Resources
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Dep. of Natural Resources (REGIONAL OFFICE) Southwest Regional Office 2040 W. Woodland Springfield, MO 65807-5912

4178914300 4178914399 (fax)

NAME: ADDRESS:

Lake of the Ozarks Regional WWTP 1

#3 Anderson Road LAKE OZARK . MO 65049

MO0103241 SM2 A
PERMIT NUMBER DISCHARGE NUMBER MONITORING PERIOD YEAR MO DAY 2018 12 01 YEAR MO DAY

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

Parameter		M	ASS	Unit	CONC	ENTR	ATION	Unit	FREQUENCY OF ANALYSIS	SAMPLE TYPE	LAB CODE
Hardness, total (as CaCO3) (00900)	REPORTD	****	****		256	****	256		Monthly	Grab	
Stage Type: Instream Monitoring	REQRMNT		****		Daily Maximum : Monitoring Required	****	Monthly Average: Monitoring Required	mg/L	Monthly	Grab	

OFNIRAL PERMIT REQUIRED.

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and unpresonation for knowing violations.			
	OPERATOR IN R	ESPONSIBLE CHARGE	
Gary Hu	itchcraft		7305
TYPED OR PE	RINTED NAME		CERTIFICATE NUMBER
PRINCIPAL EXECUTIVE OFFI	CER OR AUTHORIZED AGENT	TELEPHONE	573-365-0455
Gary F Hutchcraft	Gary F Hutcheraft		2019-01-07 14:34:19
TYPED OR PRINTED NAME	SIGNATURE		Date

Page 3

2018

FOR DECEMBER

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Use following abbreviations R-rain. S-snow, O-everasti, C-clear, PC-partiv eloudy

### **CHANGE ORDER NO.1**

December 27, 2018

Landco Enterprises, LLC P.O. Box 275 High Ridge, MO 63049

Reference:

Lake Ozark / Osage Beach Joint Sewer Board

Sandblast & Paint Clarifier #3 Project

Dear Mr. Tamborski:

You are hereby granted a time extension of 90 calendar days for the Sandblast & Paint Clarifier #3 Project. The revised Contract Completion Date is hereby moved from December 31, 2018 to March 31, 2019.

Your Contract Amount is hereby revised as indicated:

Original Contract Amount

\$68,700.00

Change Order No.1

NO CHANGE

\$0.00

Revised Contract Amount

\$68,700,00

Sincerely,

Mayor Franzeskos

Chairman

Landco Enterprises, LLC hereby accepts the terms and conditions of Change Order No.1.

Landco Enterprises, LLC

Date

#### TOOLS

	TOOLS	
Item No.	Quantity & Item	* $& X = New 2018$
1	1 - Craftsman 3 drawer tool box	
2	1 - Craftsman 5 drawer tool box	
3	I - Assortment SAE Allen wrenches	
4	1 - Assortment Metric Allen wrenches	
5	l - 3/8 SAE T Allen wrench	
6	1 - Set 3/8 Allen wrench sockets 1/8 - 1/2	
7	1 - Set SAE & Metric nutdrivers in tool bag	
8	7 - SAE nutdrivers 3/16 - 1/2	
9	7 - Metric nutdrivers 5mm - 11mm	
10	5 - Torx screwdriver assorted sizes	
11	l - Assortment of straight & Philips screwdrivers	
12	1 - 1/2"staight screwdriver socket	
13	1 - 1/4"deep socket set 4mm -14mm	
14	1 - 1/4" deep socket set 3/16 - 1/2	
15	1 - 1/4" shallow socket set 4mm - 13mm	
16	1 - 1/4" shallow socket set 5/32 -1/2 w/ 2 & 3" extensions	
17	1 - 1/4"Ratchet	
18	1 - 40 piece 1/4 & 3/8 socket set, in RAS basement	
19	1 - 3/8" X 1/4" socket adapter	
20	1 - 3/8" deep & shallow socket set 3/8 - 3/4	
21	1 - 3/8"deep socket set 9mm - 19mm	
22	1 - 3/8" Craftsman socket set 3/8 - 13/16	
23	2 - 3/8" 1 1/2" extensions & 1 - 6" ext.	
24	1 - 3/8" Ratchet	
25	4 - 3/8" 6 point sockets 1/4 - 7/16	
26	2 - 3/8" spark plug sockets 5/8 & 13/16	
27	2 - 1/2" Ratchets & 1 set 1/2" extensions 2, 3 & 6"	
28	1 - 1/2" deep socket set 3/8 - 13/16	
29	1 - 1/2" socket shallow socket set 9mm - 21mm	
30	1 - 1/2" socket shallow socket set 7/16 - 1 1/4	
	6 - KD brand 3/4" sockets, 1 3/8, 1 7/16, 1 1/2, 1 5/8, 1 13/16 & 2 3/4"	
32	1 - 3/4" Breaker bar & 16" extension, True craft	
33	1 - 10 piece ignition wrench set 4mm - 13mm	
	1 - 10 piece ignition wrench set 5/32 - 7/16	
	2 - Boxed end wrench's 1/2-9/16 & 5/8-11/16	
	3 - 3/8, 4 - 7/16, 2 - 11/16, 2 - 3/4, 2 - 13/16, 2 - 7/8 combination wrenches	
	4 - 15/16, 4 - 1", 3 - 1 1/16, 5 - 1 1/4 & 4 - 1 1/18 comb. wrenches	
	3 - open end wrenches 7/16-17/32, 5/8-11/16, & 3/4-7/8	
	1 - Set pm comb. Wrench's 1/4 thru 7/8 in pouch	
	3 - snap ring pliers	
	2 - pair channel lock pliers, 1 blue handle & 1 black	
	2 - pair electrical channel lock pliers, 6 & 10"	
43	1 - set of left handed drill bits	

#### TOOLS

r. 31	TOOLS	+ 0 W = NI 2010
	Quantity & Item	* & $X = New 2018$
44	6 - electrical screwdrivers, 3 straight & 3 philips head	
45	2 - wire stripers	
46	1 - pair lineman pliers	
47	1 - pair needle nose pliers	
48	1 - pair side cutters, 6"	
49	3 - 10" Vise grip pliers, 2 curved jaw & 1 straight	
50	2 - 6" Vise grip pliers, 1 curved & 1 needle jaw	
51	1 - yellow handle tin snips	
52	1 - 12" crescent wrench, Craftsman	
53	3 - pipe wrenches, 18", 24", & 36"	
54	1 - 10" Stanley level	
55	1 - 24" Craftsman level	
56	2 - 25' Task Force tape measures	
57	2 - 6" pocket metal rules	
58	1 - points file	
59	1 - file assortment	
60	1 - rasp file	
61	2 - Concrete trowel	
62	1 - feeler gauge	
63	1 - tool bag	
64	1 - ice pick	
65	1 - punch & chisel set	
66	1 - 2" C clamp & 2 - 4" C clamps	
67	2 - putty knives	
68	1 - parts brush	
69	1 - ball peen hammer	
70	1 - 4lb shop hammer	
71	1 - claw hammer	
72	1 - 10 lb sledge hammer	
73	1 - rubber mallet	
74	1 - hacksaw	
75	3 - wire brushes	
76	1 - tire gauge	
77	I - 6" square	
78	2 - rag pullers	
79	1 - crow bar	
80	1 - garden rake	
81	1 - round point shovel	
82	1 - flat shovel	
83	1 - 10lb straight bar	
84	1 - pick	
85	1 - anti freeze tester	
86	1 - flat bar	

#### TOOLS

Item No	Quantity & Item	* & X = New 2018
87	1 - Craftsman 28 pc. tap & die set	11011 2010
88	1 - Black & Decker drill & driver set	
89	1 - 7" carbide masonry drill bit set 3/16 - 3/4	
90	3 - masonry bits, 1/4, 5/16 & 3/8	
91	1 - Black & Decker metal drill bit set, 1/16 to 1/2 & HS bits assorted sizes	
92	2 - gear pullers, 1 large & 1 small	
93	1 - Black & Decker 3/8 variable speed drill	
94	1 - mini copper tubing cutter	
95	1 - PVC cutter	
97	1 - 1/2" Electric Impact Wrench	
98	1 - Sandblaster w/ 24ft of hose & 2 bags of blasting material	
99	1 - Hitachi hammer drill*	X
	SLUDGE TRUCK TOOLS	Λ
100	1 - grease gun	
101	1 - 20 piece Stanley SAE Comb. end wrenches 1/4 - 7/8	
102	1 - Set Comb. End wrenches 8mm - 18mm	
103	1 - Rubber maid tool bag	
104	4 - Stanley flathead screwdrivers	
105	2 - Stanley phillips screwdrivers	
106	AC Delco T20x4" star screwdriver	
107	AC Delco 2x1 1/2" phillips screwdriver	
108	AC Delco 1/4"x1 1/2" slotted screwdriver	
109	13 oz. Wood handle claw hammer	
110	RayOVac industrial flashlight	
111	25' task force tape measure	
112	7 WR vise grip	
113	10 WR vise grip	
114	Stanley lineman pliers 84-113	
115	Stanley wire cutters 84-060	
116	Stanley crescent wrench 85-763	
117	1 - Set of wheel chocks	
118	1 - log chain	
119	1 - air hose	
120	I - assortment Buse fuses & 1157 bulbs	
	MISCELLANEOUS EQUIPMENT	
121	1 - Ryobi 18 volt Drill, Circular Saw, Recip saw, Flashlight, Vacuum Combo	Kit w/2 batteries
122	1 - Millermatic Wire feed welder w/helmet & gloves	outtories
123	1 - 10-3 50ft & 1 - 10-3 100ft Extension cord	
124	4 - metal lockers in men's restroom	
125	2 - metal lockers in women's restroom	
	1 - plastic mop bucket w/wringer	
127	l - Gorilla ladder MPX-22*	X

#### MISCELLANEOUS EQUIPMENT

Item No.	Quantity & Item	* & $X = New 2018$
128	1 - 4' step ladder, fiberglass	
129	1 - 6' step ladder, fiberglass	
130	10' stepladder, wood	
131	24' 300 lb rated extension ladder, aluminum	
132	24' 300 lb. rated extension ladder, fiberglass	
133	2 - set of plastic saw horses	
134	1 - 6"x 10' suction hoses	
135	2 - 6" x 25' suction hose	
136	1 - 4" x 60' suction hose	
137	1 - 4" x 15' discharge hose @ septic unloading station	
138	2 - Schumacher battery chargers, 1 model SE-82-6 & 1 model XC103-CA	
139	1 - 100' extension cord	
140	1 - 50' extension cord	
141	1 - 1 gallon plastic gas cans	
142	2 - 5 gallon steel safety gas cans	
143	1 - misc. log chains, headwork's tool room	
144	5 - 50'x1 1/2" fire hoses with 2 nozzles*	
145	5 - Garden hoses	
146	1 - mechanic creeper	
147	2 - Craftsman gas leaf blowers, older one not running	
148	1 - Craftsman 4 cycle weed eater	
149	1 - Stihl weed eater	
150	1 - Kawasaki weed eater	
151	1 - cherry picker (engine hoist)	
152	1 - 9 gallon portable air tank	
153	1 - Campbell Hausfield 26 gallon air compressor	
154	l - CH air drill	
155	1 - CH air ratchet	
156	1 - CH air grinder	
157	1 - CH air impact wrench	
158	1 - CH air chisel w/4 chisels	
159	1 - air tire inflator	
160	1 - Pro-Arc oxy-acc torch kit & tanks	
161	1 - Pro-Force 33 paint sprayer	
162	1 - 15 gal 12 volt portable sprayer	
163	1 - 60gal Ingersoll Rand in UV building	
164	1 - 3 ea. grease gun	
165	1 - Cowhbian 5" multi bench vise	
166	3 - shop vac's	
167	2 - drum dollies	
168	1 - Commercial Elec. Amp meter, HDSA 500	
169	1 - Commercial Elec. Multi meter, HDM 4100	
170	2 - insulated fuse pullers, 1 large & 1 small	

#### MISCELLANEOUS EQUIPMENT

	MISCELLANEOUS EQUIFMENT	
Item No.	Quantity & Item	* & X = New 2018
171	1 - GB circuit tester	
172	1 - 3/8 hammer drill	
173	1 - Skil 14.4 drill kit, w/ battery & charger	
174	1 - Black & Decker bench grinder	
175	1 - Black & Decker hand grinder, 4 1/2"	
176	1 - 115V 3/8 VSR Drill/ Driver	
177	l - propane torch, elec. Start	
178	1 - strap 1 ton come along	
179	2 - chain come alongs, 1 ton & 3 ton	
180	1 - cable come along, 1 ton	
181	1 - 2 ton floor jack	
182	1 - 12 ton high lift jack	
183	2 - yellow air hoses	
184	1 - 100gal. Portable Diesel fuel tank	
185	1 - Fluke T5-1000 Volt/Amp meter	
186	1 - wheel barrow	
187	1 - garden cart	
188	1 - Garden power 65ft. 5/8" Auto-Retractable Garden Hose reel*	X
189	1 - portable hand work light	
190	1 - portable work light stand w/ dual mounted lights	
191	4 - Strong Arm electric winches - 3 for clarifier scum baskets & 1 for pullis	ng lift station pumps
192	1 - AMT 3" trash pump w/wheel kit	<i>y</i> p.
193	1 - 3" 50ft & 1 - 30ft suction/discharge hose w/couplings	
194	1 - North Star 3000 PSI Steam and Hot Water Pressure Washer	
195	1 - Warn 120 volt Winch/Hoist for pulling UV channel basket	
196	1 - Chapin Homepro backpack sprayer	
	OFFICE INVENTORY	
196	1 - wooden desk	
197	1 - metal desk	
198	4 - Office chairs	
199	3 - file cabinets, 1 - 4 drawer & 2 - 2 drawer	
200	1 - 3 shelf bookshelf	
201	1 - PC, w, speaker in monitor, keyboard, and surge arrestDELL	
202	1 - MFC-7360N Brother copier / printer	1
203	1 - conference table	
204	27 - folding steel chairs	
	3 - Phones (cradle style)	
	1 - Fellowes paper shredder	
	1 - Bissell vacuum cleaner	
208	1 - Emerson TV / VCR Combo (for training)	
	1 - Emerson microwave	
210	1 - Magic chef refrigerator	

211	1 - Culligan water cooler  CONSUMABLE MATERIALS	* & X = New 2018
212	2 - 500 Gallon propane tanks, w/ 650 gallons as of 1/7/19	
212	2 300 Garrott propule taking, w 030 garrotto as of 177717	
	VEHICLE'S	
213	1 - 2018 Ford F-250 w/Knaplied snow blade vin#1FTBF2B66JEC64283*	X
214	1 - 1994 Volvo White GMC Sludge Truck vin# 4V2JCBE75R833094	
215	1 - 1985 GMC 4 Wheel Drive Field Truck vin# 1GDL7D1YDV529996	
216	1 - Kabota ZG123S 48" Zero-Turn Mower	
	LABORATORY EQUIPMENT	
Item No.	Quantity & Item	
217	1 - OHAUS adventurer analytical balance	
218	1 - Orion & 1 no name brand bench top electrode arms	
219	1 - USA Bluebook electric stirrer	
220	3 - Isco Auto samplers, 1 - NI-CAD batteries, 1 small & 1 larger charger	
221	1 - Isco Auto sampler pump	
222	1 - Hach Sension 2 ammonia/ph meter and probes	
223	1 - Hach HQ10 DO meter & probe, not in use, obsolete	
224	1 - Hach HQ411D pH/mv meter & probe with stand	
225	1 - Allied stirrer and hot plate	
226	1 - Vector spotlight, for discharging Isco batteries	
227	2 - VWR ASTM certified / calibrated thermometers	
228	2 - Nalgene desiccators	
229	1 - muffle furnace-Therolyne	
230	1 - vacuum pump-Fisher	
231	1 - sterilizer-Electric Steno Clave	
232	1 - centrifuge-IEC centrifuge, not in use	
233	1 - Incubator-Fisher ISO temp	
234	1 - drying oven-Fisher ISO temp oven	
235	1 - portable D.O. meter-YSI 550-A	
236	1 - BOD meter & probeYSI 5905, not in use, obsolete	
237	1 - BOD Incubator- Fisher low temp model 307	
238	1 - microscope-Micromaster	
239	1 - water still-Corning Mega-Pure System MP1, not in use	
240	1 - Cartridge for still- Corning high cap (used), not in use	
241	1 - Lab refrigerator-Marvel Division	
242	2 - timers-West Bend	
243	1 - Hanna portable pH meter	
244	2 - Hach HQ40D meters, one with LBOD probe & 1 w/ Rugged LDO prob	oe .
245	1 - Hach Distillation Glassware set for Ammonia	
246	1 - Thermo Hot plate for distillation	
247	2 - Igloo Ice Maker for Samplers *	

### SAFETY EQUIPMENT

Item No	Quantity & Item	* & $X = New 2018$
248	15 - Safety Glasses / Goggles	
249	2 - Face Shield	
250	2 - UV Face shields	
251	4 - Rubber Gloves	
252	25 - Disposable Gloves	
253	6 - Dust Mask/Respirators	
254	2 - Ear Protection muffs & 14 pair disposable ear plugs	
255	1 - Eye Wash Stations	
256	2 - Back Supports	
257	1 - Gas Detector / Monitor, portable	
258	1 - Lock Out/Tagout Station	
259	2 - Full Body Harness	
260	2 - Lanyards	
261	1 - Tripod and Winch	
262	3 - First Aid Kits	
263	6 - Fire Extinguishers, Plant	
264	1 - Fire Extinguishers, Office	
265	3 - Fire Extinguishers, Vehicles	
266	SPARE EQUIPMENT & PARTS	
267	1 - 10hp Rebuilt Flyght lift station pump	
268	2 - electrical contact relay for pista grit	
269	1 - 3 phase monitors for lift stations	
270	3 - Allen Bradley PLC I/O Boards for UV control panel	
271	73 - UV bulbs	
272	49 - UV quartz sleeve	
273	3 - UV ballast	
274	2 - UV air cylinder rebuild kit & 2 outer bands	
275	3 - New UV air cylinder	
276	1 - UV air cylinder hose, approx. 20 ft.	
277	16 - Wiper Rings	
278	1 - UV bulb cord w/1 bulb sockets	
279	1 - blower for digesters	
280	4 - UV sensor brushes	
281	1 - Vac pump rebuild kit for Field Gymmy sludge truck	
282	1 - Carboy for BOD water	
283	1 - electric cylinder valve for back of sludge truck	
284	1 - Fluorescent bulb ballast & 28 T-8 bulbs	
285	1 - quantity of assorted 3/4, & 1" PVC pipe fittings	
	1 - quantity of assorted nuts & bolts	
	2 - Transtector ACP-100 surge suppressor	
	1 - Transtector PDS 1 tube surge protector	
	1 - Alternating relay for lift stations	
290	1 - Rebuild kit for the compressor pump in the Pista Grit panel	

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#### The Lake of the Ozark Regional Wastewater Treatment Plant #1

## Emergency Response Plan, Emergency Operations Plan, Emergency Action Plan, and Fire Protection Plan

#### January 2019

#### Purpose

The purpose of the Emergency Response Plan (ERP) is to provide for an organized response to an emergency situation at the Lake of the Ozarks Regional Wastewater Treatment Plant #1 (WWTP). The primary emphasis in the ERP is to minimize risk to public health, and to minimize damage to private and public property. The secondary emphasis in the ERP is to provide the best possible wastewater treatment in the event of an emergency situation.

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## Preliminary Damage Assessment Checklist

Call key plant personnel, starting with Contact Order on page 3 of this ERP. Determine need for additional personnel.
Notify fire department if appropriate.
Identify person in charge at the site.
Make preliminary site evaluation, determine extent of physical and operating damage (Check piping, pumps, basins, structures, look for seepage, leaks, cracks, landslides, broken pipes and drains).
Check for downed power lines and propane gas odors and notify Ameren UE if necessary.
If damage appears intentional, notify police (site may be a crime scene).
Take steps to keep public safe, use barricades, etc. Remove obstacles that will prevent emergency vehicle access.
Person in charge should contact key City and Board members to inform of situation and discuss further anticipated notifications.
If environmental damage is likely, notify MDNR.
If public health is at risk, notify local health department.
Develop mitigation and recovery plan.

### Section I

### A. Personnel Inventory, Contact Order & Training

#### 1: Personnel Inventory

Name	Title	Office Phone	Home Phone	Mobile Phone
Gary Hutchcraft	Local Manager II	573-365-0455		573-216-8398
John Hornback	Supervisor	573-365-0455	573-369-2761	573-480-4065
David Henson	Utiltiy Worker II	573-365-0455		573-723-0715
Gary Johnson	Division Manager	573-874-8080	573-234-7946	314-581-6024
Mark Mahler	Director of Compliance	573-874-8080		573-825-8169
Tim Geraghty	& Safety AWR President	636-561-3737	Ext. 101	314-575-4738

#### 2: Contact Order

Contact Order	Corporate Office Contact	Division Contact	Outside Support Contact
1 2 3 4 5 6 7 8	Gary Johnson Tim Geraghty	Gary Hutchcraft John Hornback David Henson	Lonnie Madole Kevin Klein Josh Thompson
Client Contact:	Nick Edleman Matt Michalik		

#### 3: Annual Staff Training Goals

- * CPR First Aid
- Confined Space Entry
- Vehicle Safety Defensive Driving
- * Hazard Communication
- Work Area Protection Traffic Around Job Sites
- * Lockout Tagout
- Back Safety/Lifting Methods
- Respiratory Protection
- * Emergency Action and Fire Prevention
  - 4: Emergency Response Plan shall be reviewed and updated on an annual basis

#### B. Facility Emergency Equipment Inventory

#### 1. Communications

#### a. Cell Phones

The following Cell numbers have been assigned to staff:

Gary Hutchcraft	573-216-8398
John Hornback	573-216-3878 (duty phone)
David Henson	573-216-3878 (duty phone)

#### b. Telephones

B C.Op C. 100	
WWTP Plant Voice	573-365-0455
WWTP Plant Dialer	573-365-0455
WWTP Duty Cell	573-216-3878

#### 2. Safety Equipment

- a. Full body harness (2) (Admin. Bldg.)
- b. Lanyard & spreader bar (Admin. Bldg.)
- c. Tripod and hoist (Admin. Bldg.)
- d. 4-gas Drager X-am 2000 gas detector (Admin. Bldg.-office)

#### 3. Other Equipment

- a. Ford 6" trash pump, City owned (Lake Ozark)
- b. 60' of 6" suction hose, City owned (Lake Ozark). 60' of 4" suction hose w/ 4 to 6" adapter.
- c. AMT 3" trash pump, w/ 30' and 50' hoses w/ quick couplers.
- d. Dodge Dakota, 2WD pickup truck w/ tire chains.
- e. Volvo White GMC Sludge pump truck w/ 3700 gallon tank.
- f. GMC 4 Wheel drive Field pump truck with 1600 gallon tank w/ 20' of 6" suction hose.
- g. Wire feed Welder (1)
- h. Oxygen and Acetylene torch set w/ 50' hose.

#### C. Command Post Designation

- The command post for the WWTP shall be in the Administration building-office at the WWTP. If conditions make this impossible, then the command post shall be located at a designated site provided for by the Joint Sewer Board.
- All communications shall be coordinated through the City.

#### D. Communications Policy

1-Report all emergency situations (if possible), to Gary Hutchcraft

If Gary cannot be contacted, then call the people on the following list until someone is notified of the emergency situation.

	- ,	Work	Mobile	Home
•	David Henson	573-365-0455	573-723-0715	
•	John Hornback	573-365-0455	573-480-4065	573-369-2761
•	Lonnie Madole	573-378-5737	573-789-5242	
6	Kevin Klein	573-378-5737	573-378-8510	
	Josh Thompson	573-364-8790	573-308-6229	573-762-9941
8	Gary Johnson	573-874-8080x275	314-581-6024	573-234-7946
•	Tim Geraghty	636-561-3737x101	314-575-4738	

What qualifies as an emergency situation?

Generally speaking, an emergency situation can be anything that has the potential to cause danger to human health, and or damage to property. We can easily extend the meaning of an emergency situation to be anything that has the potential to cause damage to the environment. The practical application thus being: an emergency situation is any situation that has the potential to cause a violation of the NPDES permit.

The NPDES permit is a combination of both numeric and narrative standards that are developed to protect the designated uses of the stream that the Lake of the Ozarks Regional WWTP #1 discharges into. The permit also contains standards that cover wastewater discharges from the collection system.

The following outline lists some (not all) of the situations that qualify as an emergency situation that should trigger notification.

#### Surcharge

Wet Weather

Dry Weather

Loss of treatment

Power Fail

Equipment damage

Toxic Shock

**Short Circuit** 

Sabotage

- 2 In an emergency situation the following information shall be communicated:
  - What has been damaged.
  - If no damage, why is there an emergency,
  - Is there a threat to public health,
  - Is there damage to public and/or private property.
  - Has treatment been affected,
  - Are NPDES permit violations occurring,
  - Will NPDES permit violations result from the emergency,
  - Are there any safety issues due to the emergency,
  - Are help and/or equipment needed to eliminate the emergency?

3-The MODNR will have to be contacted when Section B, 2A-B, (noncompliance notification standards, published in the 'Standard Conditions for NPDES Permits'), have been reached. A

copy of these standards is included in the text of this plan on page 24. Follow the directions listed in the 'notification standards'.

MODNR Southwest Regional Office

Phone: 1-417-891-4300 or Environmental Emergency Response 1-573-634-2436

2040 W. Woodland Springfield, MO 65807

Always notify the Joint Sewer Board and Corporate before MODNR notification. When notifying the MODNR always record the name of who you are talking to, and the time and date of the notification. Give the following information: what the violation is per notification standards, and what our actions are to eliminate the violation. Be factual; do not assume anything. Finally, find out if the DNR requires written notification concerning the violation.

In the 2 drawer file cabinet by the copier, the file that is marked "DNR Bypass forms" there are two report forms that need to be filled out in any bypass situation, and/or any operations - treatment emergency that reaches notification standards. One report form (Wastewater Bypass Report Form) is for the MODNR, and the other report form (Deviation Notification Form) is for AWR corporate. These forms are also included in Appendix 8 of this manual.

#### E. Emergency Action Plan

- Procedures for reporting a fire or other emergency situations.
  - 1. Call 911 and report the situation
  - 2. If the land line phones don't work, try cells and direct connects
  - 3. Determine if a response is safe and or necessary
  - 4. Determine whether or not evacuation is necessary
- Procedures for emergency evacuation including type of evacuation and exit route assignments.
  - 1. If an emergency evacuation is necessary follow the exit routes posted in the buildings.
  - 2. All evacuees shall meet at the main entrance gate, and determine what action needs to be taken, and if support can be given to emergency response personnel.
- Procedures to be followed by employees who remain to operate critical plant operations before they evacuate.
  - If employees need to stay behind to operate critical plant operations, they shall establish communications with an employee who has already evacuated. Communications shall be on a routine basis with information conveyed relating to the safety of the remaining employee, current operation conditions, safety related conditions, etc.
  - The employee who stayed behind shall evacuate if life threatening conditions present themselves, or if there is evidence that a condition may become life threatening.
- Procedures to account for all employees after evacuation.
  - 1. As specified above, all employees who evacuate shall meet just outside the entrance gate. An accounting of all employees shall be determined.

#### Assignments

- 1. The on call operator shall be designated as the employee who stays behind.
- 2. The local manager shall ensure that communications are being carried out with the employee who stayed behind
- 3. The local manager is responsible for making an accounting of all employees.

#### F. Fire Protection Plan

- Assure that hazardous accumulations of combustible waste material are controlled.
  - 1. Place used rags in the metal used rag container.
  - 2. Keep trash picked up and trash cans empty on a regular basis.
  - 3. Complete and turn in the required hot work permit for all welding or grinding activities.
  - 4. Keep a 30 minute fire watch after any welding operation has ended.
  - 5. Keep combustible liquids in the storage cabinets. Keep the cabinet doors closed.
- Identify high risk areas and develop plans to minimize potential fire hazards.
  - 1. The highest risk area for fires is in the shop. Plans to minimize the risk of a fire include: use of storage cabinets for gasoline, paints, etc. Use of metal trash cans with lids for the storage of used shop rags. And the control of trash accumulation on the floor and in the trash cans

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			sponsible for Uot Work authorization.  A TTT	ENTION
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Yes	No	N/A		Precautions
			Is all cutting and welding equ	ipment in good repair/ condition?
	.i	-	Has pre-task Tool Box Talk I	ocen administered?
Yes	No	N/A	,	Within 25 Feet of Work
		-	Floor/ ground clear of combu	stibles if possible?
	<b>.</b>	· · · · · · · · · · · · · · · · · · ·	Combustible floors wet down	
***************************************	· · · · · · · · · · · · · · · · · · ·		No combustible material or f	
			Combustibles and flammable	liquids covered or shielded?
Yes	No	N/A	Wo	rk on Enclosed Equipment
			Equipment cleaned of all con	hustibles?
	<u></u>		Containers/ drums purged of	flammable vapors/ materials?
Yes	No	N/A		Fire Watch
X			To be provided during and 3t	minutes after work completion?
X	ļ	-	Supplied with fire extinguished	er and or small charged fire hose?
X			Trained in the use of equipme	ent and emergency procedures?
Yes	No	N/A		Final Check-Up
mana and anyong a siling a day	-	<u> </u>	Completed 30 minutes after v	vork completion?
Supervis				Date ⁻
	(100	se stance	by individual responsible for Final Check	in the rise completion.)

### G. Emergency Identification and Analysis

Emergency	Analysis
Severe storms, high wind, lightning, floods.	<ul> <li>Damage can range from low to medium depending on severity of storm.</li> <li>Electrical supply, electrical pathways, exposed equipment and equipment located in underground vaults (when flooding is a concern), are most susceptible to damage.</li> </ul>
Severe cold, ice storms, blizzards.	<ul> <li>Damage can range from low to medium depending on severity of conditions.</li> <li>Temperatures below -15° F are cause for emergency response with outside equipment and with buildings that require additional heat to protect equipment with exposed moving parts. In these conditions always make sure the lift stations lids are closed.</li> <li>Ice storms and blizzards can cause damage to the electrical supply and also hinder access to the Wastewater Treatment Plant.</li> </ul>
Earthquakes.	<ul> <li>Damage can range from low to high.</li> <li>A major earthquake has the potential to cause extensive damage to all phases of wastewater collection and wastewater treatment since a lot of equipment is located underground.</li> <li>Damage can also occur in weak links of a collection system or weak areas of concrete basins, which may not be apparent by visual observation.</li> </ul>
Sabotage, civil unrest, riots, terrorist attacks.	<ul> <li>Damage can range from low to high on electrical supply, and any equipment that is exposed and can be easily damaged (i.e. bar screen, electrical control panels, lift stations, lab-office building equipment, etc.).</li> <li>Measures to prevent damage from terrorist attacks are detailed in the following section on facilities security.</li> </ul>
Air borne chemicals, water borne chemicals, toxic chemical spills, weapons of mass destruction.	<ul> <li>Damage to bacteria mass in the treatment process, and can also affect health of treatment personnel.</li> <li>Caution should always be taken when confronting a chemical - biological emergency.</li> <li>If weapons of mass destruction are suspected to have caused the emergency, then treat the affected area as a crime scene and call local authorities.</li> </ul>

#### H. Facilities Security:

The following topics should be analyzed and developed to increase security to its highest Level at the WWTP:

- 1. Detection (the ability to detect a security threat),
- 2. Access (deter access to the WWTP),
- 3. Delay (provide a layered barrier system to delay access to the WWTP)
- 4. Respond (develop an organized response to a breach in security)

#### I. Priority Equipment and Processes.

The following list is a list of equipment and/or processes in the order of relative importance to the wastewater treatment process. The list shall be used as a guide when determining what equipment and/or processes need to be placed into service first, second, and so on, when there is a widespread emergency. The list is organized into two categories: WWTP mechanical (piping and valves), and equipment (which includes structures).

Mechanical	Treatment Equipment
Raw sewage force mains to WWTP.	<ol> <li>Oxidation Ditches (at least one aerator per unit that WW is entering)</li> </ol>
2. Gravity thru Oxidation Ditches.	2. Final Clarifiers (1,2 & 3).
3. Gravity mains from oxidation ditches to final clarifiers splitter boxes.	3. Adjustable weir gate valves at basins
4. Gravity to Clarifiers.	4. Adjustable weir gate valves at splitter box for Clarifiers
5. Sluice gates in Oxidation Ditches and UV channels for draining purposes	5. Lift Station between aeration basins
6. RAS force main back to Ditches	6. RAS electric pinch valves in middle room of headwork's bldg.
7. RAS waste from clarifiers	7. Waste valves
8. Sludge waste force mains to sludge storage cells.	8. Waste valve pit and waste manhole on top of hill and at bottom by Digesters

- J. Emergency Response Guidelines.
  - 1. General Guidelines.
  - Analysis and Planning. If time permits conduct an initial meeting with staff
    to assess an expected emergency situation. Outline potential damage to
    specific equipment, processes, or structures. Plan a strategy to prevent
    potential damage and/or minimize its effects on public health, property, and
    wastewater treatment.
  - **Inspect.** After the onset of an emergency, inspect WWTP for damage. Follow all applicable safety regulations and lock out and secure any unsafe areas.
  - Communicate. Document damaged units, and unsafe areas. If damage creates immediate threats to public health, properties, and/or wastewater treatment, contact Joint Sewer Board, AWR, and State; to advise of situation. Consult communications policy on page 4.
  - React. Execute activities to eliminate threats to public health, property, and/or wastewater treatment. Refer to 'Damage and Response' section of this plan to help direct the activities. Collect necessary samples, as NPDES permit requires. Develop best treatment plan in the event of an emergency that disables one or several process units. Contact City's for emergency purchasing authority. Contact vendors for needed supplies.
  - Communicate. Update the Joint Sewer Board, AWR, and State as needed. Log important observations and actions.
  - Repair. Make necessary repairs to bring damaged units back up to full operations.
  - Review. Review emergency response with staff and make adjustments in the ERP if necessary.

In a widespread emergency, AWR staff will be required to assist the Joint Sewer Board. In this situation, one staff member (two staff if there are safety concerns), will be responsible for implementing the initial steps of the above guidelines.

#### Section II

#### Damage and Response

Damage to the WWTP can result in threats to public health and/or damage to private or public property. Damage can also result in an interruption of wastewater treatment in various degrees. The WWTP are constructed of several process units that are linked together to convey and treat the wastewater. This section looks at the possible effects of damage to these process units, and what type of responses can be made to limit the threat to public health, property damage, and the continuation of wastewater treatment.

#### Process Unit:

#### **Main Power Supply**

#### Key Components:

3 phase power lines from sub, pole and pad mounted transformers feeding MCC1 which feeds MCC2.

#### **Effects of Damage**

Power lines-

- In severe cases one or all of the power lines can be severed which will result in power loss to the WWTP.
- If power lines are severed upstream from the pole or pad mounted transformers then power loss will affect MCC1 & MCC2
- Power loss of more than 8 hours has the potential to cause the ditches to go septic and the sludge in the clarifiers to surface and bulk and/or cause a violation of permit limits.

#### Transformers-

 Loss of one or more of the pole or pad mounted transformers will cause power loss to MCC1.

#### Response

Power lines-

- Call Ameren UE and find out how soon they can make it out. Once you have a response
  then call the Local Manager and inform, then let him make the decision on what to do
  next.
- At the least the employee on emergency Duty must stay until Ameren UE restores power or a relief operator shows up to relieve him and once power is restored bring one piece of equipment back on line at a time.

#### Transformers-,

• Checks to see if fuses have blown or flipped down on the pole mounted transformer by the main power control room at the Headwork's Bldg. and inform Ameren UE of it. If that is what it is then, it will be an easy fix for them. Never try to attempt to flip fuses back up on your own, Let Ameren UE do it.

#### Process Unit:

#### **Head Works**

#### Key Components:

MCC1 and MCC2 control power and control equipment (unit specific), mechanical bar screens, grit chamber, grit solids pump, RAS pumps, non-pot and potable pumps.

#### **Effects of Damage**

In general-

• In any case, if damage is severe enough to disrupt either the mechanical bar screen, and/or the grit chamber/grit solids pump; both units can be bypassed. This condition is acceptable for a few days.

#### Response

In general-

- If units must be bypassed, do so immediately by placing a stop gate in its appropriate positions; this job requires two people.
- Install the manual bar screen as needed.
- Do not allow flow into the grit chamber if the paddle drives, grit solids pump, are not working, for more than couple of days.
- If damage results in the loss of the heater then emergency heating needs to be set up in sub-freezing weather.
- Pump out the grit chamber if it will be out of service during sub-freezing weather and are experiencing icing conditions.
- If necessary, also pull the Auto bar screen up and install manual bar screen; this will
  require getting in influent channel and hooking come-along to eyelets on bottom of bar
  screen and lifting it up out of the way so you can install the manual screen. This job
  requires at least 2 people.
- When bringing units back into service the mechanical bar screen shall receive top priority over the grit chamber, grit solids pump.

#### Process Unit:

#### **Secondary Treatment**

#### Key Components:

MCC1 and MCC2, aerator control box, control power and control equipment, oxidation ditch 1, and oxidation ditch 2.

#### Effects of Damage

In general-

- MCC1 power center is utilized to operate the aeration equipment.
- The most critical aeration equipment are the motors and gear boxes that drive the Carrousels. At least one should be in operation at all times.
- Loss of the oxidation ditches will result in at least a 60% reduction in treatment.
- Loss of air to the bacteria in the oxidation ditches for more than: 4 hours in the summer, and 24 hours in the winter, will create anoxic conditions and could possibly kill the bacterial population.

#### Response

In general-

- The oxidation ditches can, (one at a time), be isolated from the WW treatment process.
- If all aeration equipment is down make arrangements to get a minimum of one carrousel per ditch in operation ASAP.
- Note: If there has been a toxic spill in the collection system, one of the oxidation ditches
  can be made ready to accept the toxic waste, and then taken out of the process to further
  treat the toxic waste.
- If bacterial population is killed, plan to get seed from Camdenton or other surrounding communities

#### Process Unit:

#### Clarification

#### Key Components:

Clarifier splitter box

MCC1 feeds MCC2.

Final clarifiers 1, 2, 3

Control power and control equipment.

Clarifier drive units, skimming mechanism, scraper mechanism, sludge withdrawal, RAS pumps, RAS force main, WAS force main, and clarifier gravity drain

#### **Effects of Damage**

#### In general-

- Severe cold is the most likely threat to damage the clarifiers.
- Earthquakes could cause considerable damage to underground piping.
- There is one inlet line and one drain line on clarifiers #1 and #2, with no drain on #3, so it is appropriate to state that any damage to underground piping could result in total disruption to the function of the clarifiers.
- Damage to sludge withdrawal equipment will disrupt the return of sludge to the oxidation ditches and thus stockpile the sludge in the affected clarifiers.

#### Response

#### In general-

- In severe cold, the skimming mechanisms should be modified to minimize potential damage to the skimmer arm/rake mechanism.
- A means of maintaining surface water disturbance (i.e. water sprays) is necessary to keep the surface from forming thick ice.
- Constant attention shall be given to the clarifiers during extreme cold conditions.
- Emergency pumping may be required to remove sludge from the clarifiers. This can be accomplished with the sludge pump truck on a routine interval. Clarifiers 1, and 2, should be placed back into service first.
- Note: Clarifier 3 cannot be drained dry by means gravity drain mains; it has to be pumped dry by RAS pumps.

#### Process Unit:

#### RAS Pump Building (basement)

#### Key Components:

MCC1 feeds MCC2, control power and control equipment, discharge piping, and check valves, discharge valves, force main, pumps/motors.

#### **Effects of Damage**

#### Main power-

 Will disable pumps and may lead to the stockpiling of sludge in the clarifiers. If left unchecked sludge can be discharged into the receiving stream.

#### Control power, control equipment-

 Will disable pumps in the automatic mode. Pumps can be operated manually (unless control transformer is damaged).

#### Piping and valves-

Damage will inhibit operation of pumps.

#### Pumps and motors-

- Can disable one or all pumps.
- There are five pumps in the RAS pump building, which should greatly minimize the chance of losing total pumping capacity.

#### Response

#### Main power-

- If there is a power loss feeding the pump building then check to see if you have lost a leg of your 3 phase power in MCC2?
- If there is an interruption of main power within the control panel then isolate the problem (motor starter contacts, thermal overloads, fuses, etc.) and correct.
- Be aware that high amps indicate a motor overload (shorted windings, bad bearings, pump obstructions, etc.), and should be corrected before placing any motor back into service.

#### Control power, control equipment-

- If pumps operate on hand but not on auto then there is a problem with either the control power and/or the control equipment.
- Check control voltages.

#### Piping and valves-

- If there is damage to suction piping and/or check valves, then the damage shall be repaired, (ASAP if all pumps are affected; emergency pumping may have to be provided in this situation).
- If damage to piping and valves occurs downstream from the check valve, the damage should be repaired as required to allow RAS to be conveyed under pressure.

#### Pumps and motors-

• If all pumps are disabled then isolate the problem with each pump and plan corrective action based on which pump can be repaired the fastest. Make repairs to that pump then proceed to the next, etc.

#### Process Unit:

#### Sludge Digestion and Sludge Storage

#### Key Components:

Motor control center at digesters, positive displacement blowers air suction and discharge piping, air distribution piping and diffusers, sludge loading station, force main(s), valves.

#### Effects of Damage

#### In general-

- Damage will most likely have a minimal effect except in a situation where the sludge basins are discharging sludge.
- Loss of aeration will turn the sludge basins into facultative storage.
- Long-term loss of air may damage the diffusers.

#### Response

#### In general-

- If the sludge basins are discharging sludge then action should be taken immediately to contain the sludge and prevent it from reaching the receiving stream.
- If flood conditions exist, let water recede and then evaluate the situation. If sludge spill takes place fill out MODNR SSO/Bypass and AWR Deviation Notification forms, found in (Appendix 7). Make needed repairs and get back on line ASAP.
- Loss of air should be addressed as time permits.

#### Section III

#### Contingency Plans

#### **Contingency Plan for Total Loss of Electrical Power**

Goal: Develop strategies and to assign specific duties to plant staff: to provide for continuance of pumping at critical points of Plant; and to provide for at least primary treatment at the wastewater plant.

#### Response:

- 1. Contact generator supplier or vendor. Find out how soon they can get a portable generator to our location. Get into service one aerator in each ditch and at the minimum 2 clarifiers depending on flow conditions.
- 2. Get into service the head works building equipment.
- 3. In below freezing weather check to make sure heaters in all buildings are operating properly.
- 4. Check to make sure that lift stations are operating properly.
- 5. Check status of wastewater plant.
- 6. Check all lift stations, secure by taking one of the two pumps off line, and providing emergency pumping if needed.
- 7. Conduct a meeting to evaluate the situation and make necessary decisions as the need arises.

#### Contingency Plan for High Flows

Goal: Minimize solids wash out and provide for best treatment of all influent flow.

Note: During a high flow event both oxidation ditches will be needed to prevent solids wash out.

Response: Response depends on whether one ditch is in service or if both ditches are in service. Great care must be used when, at the onset of high flows, that sludge blanket depths are monitored. If sludge blankets are rising then several options present themselves, first, more clarifiers can be placed into service, if any is out, second, #1 and #4 carrousel aerators can be shut off reduce mixing in the ditch (es), third, #3 and #6 can be taken out of service to further reduce mixing in the ditch (es), fourth, all aerators can be taken out of service (for short periods of time, i.e. up to 8 hours) to eliminate mixing in the ditch (es). Or a combination of the above measures can be used. The overall goal is to save the mixed liquor suspended solids (mlss) in the ditch from being discharged in the receiving stream. Past high flow events have demonstrated that proper management of flow through the plant can achieve good treatment (within NPDES permit standards). It is also important to note that effluent sampling should be done during high flow events to assure that NPDES permit standards are being met, and that proper documentation in the plant daily bench sheet must be maintained on all process changes to manage high flows. Whenever all the carrousel aerators are shut off to prevent solids wash out the event must be reported as a bypass at the WWTP. Always leave 1 aerator in each ditch going if at all possible, even if it means moving the oxidation ditch inlet gates to aerators #3 and #6 and running only those aerators. This will give the mixed liquor suspended solids (mlss) time to settle in the ditch before entering the clarifiers.

#### **Bulking Sludge**

#### Response:

If a clarifier is bulking sludge and flows are normal for dry weather, first raise splitter box gate to the clarifier or clarifiers that are bulking, then go over to the RAS pinch valve and open them up all the way and if that doesn't calm things down then go down in the RAS basement and clean pumps.

If the pumps are not clogged but is flowing clear water then there is probably a short circuit in the clarifier caused by structural damage of the rake mechanism. Shut flow off to the clarifier and drain it and check for damage. Put other clarifiers (if one is down) on line as appropriate.

If the pump is not clogged and the discharge is dirty, then check the other clarifier to see if it is bulking as well. There could be a toxic shock. First try shutting the aerators off closest to the outlet weir gates and if that doesn't work try moving the basin inlet gates to, (#3 and #6) and running only those aerators, will minimize solid loss, and may be an appropriate response.

#### **Contingency Plan for Toxic Chemical Release**

Toxic chemical release to the wastewater treatment plant will most likely take place in one of two forms, regardless of the toxic agent.

The first likely scenario would be the discovery, containment and cleanup of a fuel leak. This would involve participation of Lake Ozark Fire Department, Lake Ozark Emergency Response personnel and a HAZMAT unit. In order to accept this type of waste a few conditions must be met: first, the BTEX test result (if available) should be less than 2.13 mg/l; and second, the plant is operating under dry weather flow conditions. If both conditions are met then the waste can be placed into one of the basins that has been determined to be used for that purpose. The waste can then be diluted and intermittently fed into the treatment process to minimize shock on the biological community in the treatment process. Bench testing of the waste can also be performed to demonstrate if there will be problems to the bacterial community.

The second most likely scenario would be notification of a toxic release into the sewer system. This has never happened (at least the notification part) but if this condition should arise then the most likely first response would be to divert all flow to the designated basin. The second step would be to ascertain what type of toxic chemical it is (ask for MSDS information) and how much of the toxic chemical is in the system. The third step would be notification of City or Cities, Corporate and MODNR. With data available try to estimate when the chemical will arrive at the treatment plant and how long it will take to flush the chemical from the sewer system. This information will determine the length of time all flow will need to be diverted before it is safe to resume normal flow. Again, the availability of taking one basin off line will allow temporary containment (provided dry weather flows) and the ability to further treat the chemical and either release the chemical into the treatment process or allow for its removal and disposal at another location.

#### Contingency Plan for SSO's

SSO's can occur in both wet and dry weather.

Wet weather SSO's are usually caused by inflow and infiltration (I&I) of storm water into the wastewater collection system. A high rate of I&I can cause hydraulic overloading in the collection pipes and thus create an overflow in a manhole or a lift station.

Dry weather SSO's can occur due to collection pipe blockages, long term power fails, and /or lift station pump malfunction.

Whenever an SSO is observed use the Missouri Department of Natural Resources Wastewater Bypass Report Form (Appendix 7), along with the Deviation Notification Form (Appendix 7) to record the SSO event. Copies of these reports must be kept on file along with daily and monthly reports file. Wet weather bypasses at the WWTP are reported on the monthly monitoring report, and filed accordingly.

When bypasses occur at the treatment plant (flow discharged from the WWTP without proper treatment, and/or all aerators are shut off), then document the bypass in the plant daily bench sheet and start the effluent composite sampler. Bypasses from WWTP shall be noted on the monthly DMR, Daily bench sheet and Plant log book; until further notice.

#### Contingency Plan for Sludge Spills

Whenever sludge spills occur, documentation and cleanup services must begin immediately.

#### Documentation -

- Describe in the log book the location, cause and amount of the sludge spill.
- If the spill is greater than 25 gallons then treat the spill as a bypass and fill out the necessary documents (Appendix 7) and report the incident to the control authorities.

#### Clean Up -

- Treat spill area with lime
- Remove spilled material and dispose at the WWTP.
- If spill occurs on a public road way then use appropriate traffic control and warning signals as necessary

# **Local Radio Stations**

Call Letters	Frequency	Location	Phone#	Fax#
KRMS	AM 1150	Osage Beach, Mo	573-302-7000	I UAIT
KRMS	FM 93.5	u u u	573-348-2779	
KLOZ	FM 92.7	11 11 11	573-302-1993	100
KTKS	FM 95	Versailles, MO	573-378-5669	573-378-6640

# **Local Television Stations**

Call Letters	Channel	Location	Phone#	Fax#
KMOS	PBS 7	Warrensburg, MO	573-543-4155	I UAII
KRCG	CBS 13	Jefferson City, MO	573-896-5144	
	7714			
A				

**Local Newspapers** 

Name of Paper	Address	Contact Person	Phone#	Fax#
Lake News Focus	5107 Hwy. 54 Osg Bch		573-348-6050	
Lake Sun Leader	450 N. Hwy. 5 Camdenton	Justin	573-346-2132	
Eldon Advertiser	415 S, Maple St., Eldon		573-392-5658	7.70
Leader-Statesman	104 W. Jasper, Versailles		573-378-5441	100
Westside Star	400 N. Main St., Grvs Mls		573-374-3100	

**Systems Personnel** 

Name	Position	Work Phone#	Mobile Phone#	Home Phone#
Gary Hutchcraft	Local Manager II	573-365-0455	573-216-8398	
John Hornback	Supervisor	573-365-0455	573-480-4065	573-369-2761
David Henson	Utility Worker II	573-365-0455	573-723-0715	0.0 000 2701
Gary Johnson	Division Manager	573-874-8080	314-581-6024	573-234-7946
Mark Mahler	Director of Compliance & Safe	573-874-8080 x226	573-825-8169	0,0 204-1040
Tim Geraghty	AWR President	636-561-3737 x101	314-575-4738	

**City Personnel** 

Name	Position	Work Phone#	Mobile Phone#
Jeana Woods	City Admin. Osage Beach	573-302-2000 ext. 290	573-280-1174
Nick Edelman	Dir. P/W Osage Beach	573-302-2020	573-216-9856
Dave VanDee	City Admin. Lake Ozark	573-365-5378	573-280-6992
Matt Michalik	Dir. P/W Lake Ozark	573-365-5378	573-216-6063
L.O. Police Dept.		573-365-5371	
O.B. Police Dept.		573-302-2010	

**City Engineer** 

Name	Company	Work Phone#	Mobile Phone#	Fax#
Nick Edelman	City of Osage Beach	573-302-2020	573-216-9856	573-302-2043

# **Sewer Board**

Name	Position/Department	Work Phone#
John Olivarri	Mayor / Osage Beach	573-302-2000
Gregory Massey	Board Member / Osage Beach	573-302-2000
Gary Hamner	Board Member / Osage Beach	573-302-2000
Jonnie Franzeskos	Mayor / Lake Ozark	573-365-5378
Gerry Murawski	Board Member / Lake Ozark	573-365-5378

**Local and County Authorities** 

Name	Position	Phone#	Fax#
Lake Ozark Fire Dept.		573-365-3380 or 911	573-365-3758
Osage Beach Fire Dept.		573-348-1221 or 911	
Miller Co. Sheriff Dept.		573-369-2341 or 911	
L.O. Police Dept.		573-365-5371 or 911	
O.B. Police Dept.		573-302-2010 or 911	
Miller County Health Dept.		573-369-2359	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon
Camden County Health Dept.		573-346-5479	

# **Local Ambulance Service**

Name	Phone#	Emergency #
Osage Beach	573-302-2010	911
Miller County	573-369-2444	911

System Maps/Drawings

Name	Position	Work Phone#	Mobile Phone#	Home Phone#
Gary Hutchcraft	Local Manager	573-365-0455	573-216-8398	
Nick Edelman	Dir. P/W Osage Beach	573-302-2020	573-216-9856	
Matt Michalik	Dir. P/W Lake Ozark	573-365-5378	573-216-6063	

Local Utilities/Services/Suppliers

Service	Contact	Company	Phone#	Mobile Phone
Phone	Bruce	AT&T	800-286-8313	573-286-0954
Electric	Brent	Ameren UE	800-552-7583	573-694-5914
Propane		Ferrell Gas	573-392-5400	573-280-7184
UV System	Walt Williams	ITT Wedeco	704-409-9818	
UV System	Shawn	Vandevanter Engineering	636-343-8880	314-724-1269
Laboratory	Colleen	Pace Labs	913-563-1406	
Electrician	Steve Durban	Aesthetix Electric	573-348-1429	573-219-0043
Electrician	Leroy	Midwest Electric	573-348-2727	
Truck Repair	Larry	Roemer Equipment Repair	573-348-3733	
Truck Repair	Monte	Rapid Mobile Repair Ser.	573-346-3217	
Heat A/C	Herb	Controlled Heating & Air	573-348-5455	
Heat A/C & KVAR		Comfort Heating &	573-348-9999	
		Cooling		
Auto Mechanic		Precision Auto	573-348-2233	
Auto Mechanic		Beyer Auto Repair	573-365-1111	
Instrumentation	Mike Ross	Vandevanter Engineering	636-225-8133	314-422-2872
Instrumentation	Scott Keith	ECCO Electric	573-348-1798	573-524-3399
Electric Motors	Jim	Bowling Electric	573-346-4355	
Pumps / Motors	B.J. Hedrick	Evans Enterprises	417-886-8886	417-844-3607
Pumps / Motors	Ben	JCI / MEMC	573-636-7061	573-694-9555
Clarifiers	Field Service	Eimco	801-526-2000	
Pumps / Motors,	Bruce	S & S Electric	573-581-7667	
Aerator Gear Boxes				
Backhoe / Dirt	Steve Butler	Drain Masters, LLC		573-216-1169
Work				
Building Repair	Todd	Ellerman Const.	573-348-3553	573-746-1012
Building Repair	John	Missouri Builders	573-636-7733	
Chemical Supplier	Larry Startin	Brenntag	417-887-3663	417-593-0108
Digester Aerators	Patrick	EDI	573-474-9456	
Truck Tires	Delbert	Purcell Tire	573-348-4010	573-836-0038
Truck Tires	Kevin	McKnight Tire	573-635-0101	573-338-3350
Truck Tires		Bruns Service Center	573-392-4816	
Piping Supplies	Justin	HD Waterworks Supply	573-348-1273	
Welding Service	Gary Koerber	GL Welding		573-680-3957

# **Waste Haulers**

Source	Address	Phone#
Amos Septic	Linn Creek, MO	573-346-5992
Camden County	Lake Ozark, MO	573-374-5850
Bullock Septic	Laurie, MO	573-374-6688
A & A Septic	Camdenton, MO	573-346-5123

# **Emergency Rental Equipment**

Company	Equipment	Location	Contact Person	Phone#
Midway Rental	All Types	Eldon, MO	Jim or Tom Dial	573-392-1611
Lake Lifestyle Rentals	All Types	Osage Beach, MO		573-348-3250
A-B Rental	All Types	Camdenton, MO		573-346-7700

# **MODNR Contacts**

Names	Office	Phone #	Fax #
Troy Potteiger	Osage Beach	573-348-4103	573-348-2568
E.C. West	Springfield	417-891-4300	417-891-4399
Sieu T. Dang	Springfield	417-891-4300	417-891-4399
Emergency Response	After Hours Call	573-634-2436	

#### Chemical List / Facility Map

#### Chemicals:

#### Lab Office Building

- Hydrochloric acid
- Sulfuric acid
- Sodium Hydroxide
- Denatured Alcohol
- Weed Killer

### Maintenance Room/Shop (located in old Chlorine Tank room) or UV building

- Chevron Gear Lube
- Transmission fluid
- Motor oil, various grades
- Anti-Freeze
- WD-40
- Dry Film Silicone
- Chain Lubricant

#### Sludge Digester Blower Building

Hydrated bag Lime, 50lb bags

#### Headwork's Bldg. Storage Room

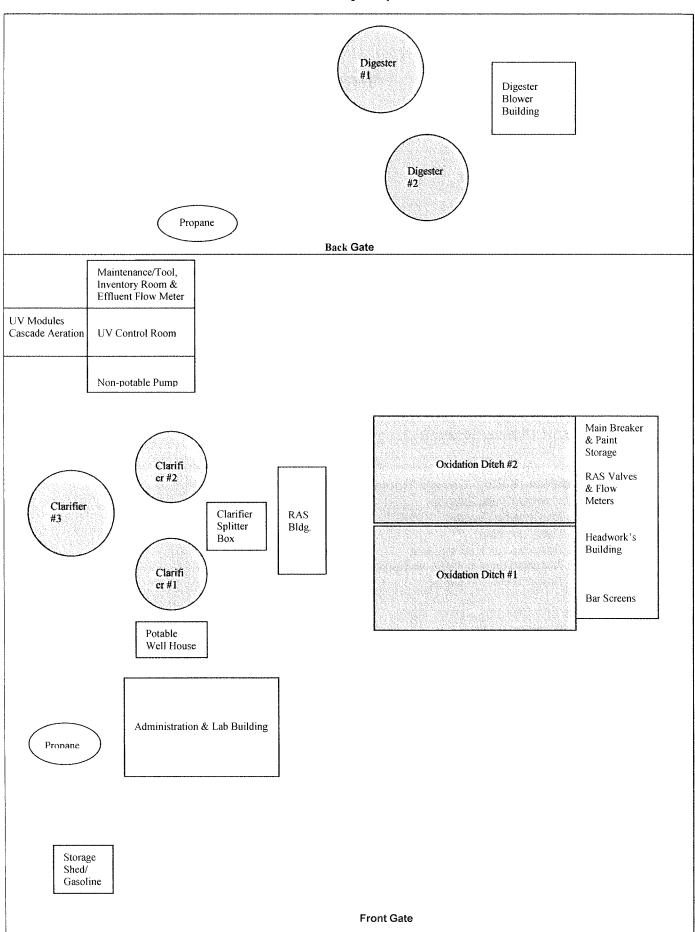
- Chevron Tube Grease
- Mystic tube Grease
- Hydraulic fluid
- Assorted cans spray paint
- Assorted cans building and grounds paint
- Paint thinner / solvents

#### Storage Shed by Admin. Bldg.

- Gasoline
- Weed eater oil

There are two 500-gallon liquid propane tanks located on the property; one is north of UV building and one west of Admin. Bldg. There is a 100-gallon portable diesel tank located normally stored at the sludge digester building over the hill.

### **Facility Map**



#### Standard Conditions for NPDES Permits

Part 1 – General Conditions, Section B – Management Requirements, Part 2. Noncompliance Notification.

A. If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Department with the following information, in writing within five (5) days of becoming aware of such condition: A description of the discharge and cause of noncompliance, and the

period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the non-complying discharge.

B. Twenty-four hour reporting. The permittee shall report any noncompliance, which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

#### Appendix 4

Instructions for Daily Readings & Maintenance / Daily Rounds

#### Sludge Decant Lift Station (at digesters)

Turn both pumps to off position. Turn pump 1 to hand, walk over and observe operation of pump, pump vibration, pump noise, and visually check and watch water level to see if water level is dropping. Turn pump 1 back to auto. Repeat above procedure for pump 2.

### Decant / Dewater Lift Station (at aeration basins)

Check operation of pumps by turning both pumps to off position. Turn pump 1 to hand, walk over and observe operation of pump by looking at the discharge going into aeration basin. Listen for pump vibration, pump noise. Record pump hours daily in Admin. Bldg.

#### RAS Pump Building

One way to check operation of pumps by going over to the headwork's building and look at the RAS flumes and use the RAS pinch valves to adjust flow according to which ditch is the heaviest or lightest. If you can't adjust with valve then your next step is to clean the pumps. Clean RAS pumps as needed or before each waste. Record pump hours daily in Admin. Bldg. office on the Honeywell data recorder.

#### Final Clarifiers

Check operation of clarifiers for rotation, motor vibration, noise, and heat. Check quality of effluent discharging over the weirs. Record sludge depth, wash scum collection troughs if necessary. Exercise #1 & #2 scum troughs down if they look like they haven't been working on auto. Go to control panel on clarifier and turn scum trough switch to manual, after exercising turn back to auto. Weekly checks on the clarifiers include checking oil levels in all gear reduction units, and checking condensation drains.

#### Oxidation Ditch 1 and 2

Check operation of rotors, aerators, and discharge weir. Run down rotors on Monday, Wednesday, and Friday. Weekly checks consist of, checking the oil levels in the gear reduction units and checking the oil breathers on them also.

#### Head Works Building

Check operation of grit paddle, start grit solids pump, and observe for proper operation. To check automatic bar screen, turn bar screen switch to hand and observe for proper operation, and wash bar screen debris as needed. Check and see if the high flow floats in bar screen channels for grease or debris buildup and clean a necessary. Check operation of influent sampler/refrigerator, and record temperature. Weekly checks includes checking the grit chamber and bar screen gearboxes for proper oil levels, checking both the Vac. & Compressor pumps for proper operation and checking the suction globe on the grit solids pump for any excess buildup in the globe and/or air lines. The suction globe needs to be cleaned on a monthly basis. Check what day PM is performed.

#### Blower Building

Check oil levels and position of valves before turning on blowers then check operation of blowers. Weekly PM consist of checking of oil levels and deflection of belts.

#### Outfall / UV Structure & Building

Go into UV control room and touch the screen on the front of the panel to check and see if all UV bulbs in the bank or banks that are on line at the time are working. If all are working and if there is no failures, then go out to outfall structure and visually inspect channels for any excess algae or debris buildup. Remove all banks on a monthly basis to clean and inspect bulbs, wipers, brushes and listen for any air leaks or any other types of odd noises. Also clean any algae buildup on the weir system at the end of the UV system.

#### Appendix 5

#### Permit Required Confined Spaces

The following list of confined spaces requires a permit to enter.

- Lake Ozark Influent Wet Well (right before flow meter)
- Osage Beach Influent Wet Well (right before flow meter)
- All Manholes
- Both Lift Station Wet Wells
- Both UV channel drain / valve pits

The safety protocol outlined in the company safety rules specifies that a confined space hazard assessment and rescue plan and a confined space entry permit both be completed and submitted to the safety coordinator whenever a permitted confined space is entered. The entry permit is included on the following pages for review; copies of the confined space hazard assessment form and the entry permit can be obtained from the safety coordinator.

	RESOURCES'	ermit at Job Sit	e CC	ONFINED S	PACE ENTI	RY PERMIT
Date:	Star	t Time:	Time	Valid to:	(End	of Shift)
Customer Nam	Space to be Entered: Exact Location:					
GENERAL PR	EPARATIONS	CHECKLIST:	(Check All Ite	ms That Apply	<b>/</b> )	
REQUIRED			VERIF	TED COMPLET	E INITIAL	_
Permanent Lines/Hoses Isolated Temporary Lines/Hoses Removed Space Cleaned & Purged GFCI for All Electrical Equipment Energy Sources Locked/Tagged/Tried Air Mover/Ventilation Provided Other Applicable Permits (Hot Work, etc.) Attendant Has Radio or Phone Safety Lighting Rescue Equipment Set Up at Site Safety Harness with Retrieval Line Respiratory Protection Additional PPE Required Continuous Air Monitor Confined Space Sign Visible Rescue Team On-Site Special Requirements (List in Comments)  Comments: Entrant-Attendant Communication (check applicable) Verbat Visual Signal Radio						
ATMOSPHERIC	C TESTING RI	ECORD		erbal		
Initials	Time	Acceptable Levels →	Oxygen 19.5-23.5%	Combustible Gases <10% LEL	Carbon Monoxide <25 ppm	Hydrogen Sulfide <10 ppm
3331311650000000000000000000000000000000					Western Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of th	
ENTRY AUTHORIZAT		ntry Supervisor Si	gnature	Customer H (If Applicab	ealth & Safety Rep le)	- resentative

Rescue Team Status	: Rescue Team Notifie	ed 🔲 Team Ne	eeded at Space			
PERMIT CANCELLATION (Check Only One)						
Work Complete, All E	intrants/Tools Out, Ready For Re-A	ctivation Work N	<u>OT</u> Complete, Entrar	nts Out		
Entry Supervisor	Date	71000000000000000000000000000000000000	Time			
Rescue & Emergenc	y Services:					
Plant Emergency #: Nearest Phone: Other Means of Summ	noning Help:					
AUTHORIZED ENTRA	ANTS:					
Name (Print)	Signature	Y/N? witness air test (optional)	Entry Time	Exit Time		
AUTHORIZED ATTEN	IDANT:	1				
Name	Signature	Department	Tin	1 <b>6</b> % (		
ENTRY SUPERVISOR:						
Name	Signature	Department	Tin	1 <b>e</b>		
	Return Expire	d Permit to Office				

Lockout-Tag out Instructions are found in site specific locations of each building inside the Facility.

There are hanging file holders with 3 ring binders in them found in each building with site specific instructions and pictures, for each piece of equipment that is located within that approximate location.

The main LOTO procedures manual is found in the Administration building as you walk in the main door. This manual has everything in the plant, that LOTO is required.

The Headwork's building LOTO binder is found in the Main Breaker room to the left of the door.

The UV building LOTO binder is found in the UV control room to the right.

The blower building LOTO binder is found to the left of the walk-in door beside electric panel.

After a piece of equipment has been determined in need of Lockout-Tag out devices you must fill out the Lockout / Tag out Permit before doing anything else. It must be approved by Supervisor or Plant Manager before doing any work. All required steps must be checked then verified complete, then the work can be started and completed.

All copies of LOTO permits must be kept and recorded on the annual log in the main LOTO manual in the Administration Building.



### LOCKOUT/ TAGOUT PERMIT

Date:	Start Time:	Time Valid to:	(End of Shift)
Equipment to be Iso Purpose of Isolation: LOTO procedure use	d:	Exact Location:	
GENERAL PREPAR	ATIONS CHECKLIST: (Chec	k All Items That Apply)	
REQUIRED		VERIFIED COMPLETE	E INITIAL
Temporary Lines Energy Sources Notification of Aff Other Applicable Additional PPE F Lockout/ Tagout Special Requirer			
ISOLATION AUTHO	RIZATION:Supervisor Signatu	re Custom (If Appli	er Health & Safety Representative cable)
AUTHORIZED EMPL		<b>1</b> 9.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00 (10.00	
	ame (Print)	Sig	gnature
	Return Expired Perm	nit to Safety Coordinato	r

# ReCAP DEVIATION NOTIFICATION FORM

Date of Incident:			Time:		Division	1:
Location of devia	tion:	1-4-4				
Type of deviation	: W. 7	reatment ck on checkbox	Distributio	n W.W. T cked' under Defa	reatment ult Value.	Collections
Description of de	viation:		Bypass	ressure Los	s	e Analysis
SAMI	PLE TYPE 8	LIMIT			SAMPLE RES	ULT
How did we beco	me awa	re of the iss	sue:			
Possible reason(s	s) for or	event(s) le	ading to de	eviation:		
Immediate correc	tive acti	ons taken:				
Further action pla	nned to	eliminate d	or reduce f	uture incide	ents:	
Other information	or atta	chments:				
Completed by:			Title:			Reported:
Who was notified	?					
Name Comments		Title		Date	Time	

Completed form is to be <u>filled out electronically and e-mailed</u> with any other documentation through the Deviation Notification ReCAP mailbox no later than the next business day of the incident.

### REPORT OF SANITARY SEWER OVERFLOW (SSO) OR WASTEWATER TREATMENT PLANT BYPASS

FACILITY INFORMATION					
PERMITTEE(MUNICIPALITY/DISTRICT & PLANT):			PERMIT NUMBER:		
	,				
COUNTY:	PHONE N	UMBER:			
SSO OR BYPASS DETAILS					
a. Street Address/Landmark/Cross Str			Maria C. Microp 23 (1994) - Security St. 1994 (1994) 1994 (1994) - Security St. 1994 (1994) 1994 (1994) 1994 (1994)		
b. Complaint Name & Telephone #:	· · · · · · · · · · · · · · · · · · ·				
c. Start Date & Time	**************************************	End Date & T	īme:		
d. Total Time:	Volume (Gallons):				
e. Categories of SSO		1			
Vandalism	☐Power Outage		∏Broken Sewer		
☐Inflow & Infiltration	☐Plugged Sewer		☐Equipment Failure		
Rain Inches	Manhole location #		☐Widespread Flooding		
Other					
f. Categories of STP Bypass					
☐Head Works	☐Aeration/Biological Trea	tment	□Digester		
☐Primary Basins	☐ Clarifiers		☐Solids Handling/Drying Beds		
Other					
g. Strength of SSO/Bypass:  Raw (D	•	,			
☐ Partiall	y Treated Bypass or Wet v	/eather SSO)	Was sampling performed? ☐yes ☐no		
Type of Samples Taken: BOD	☐TSS ☐Fecal ☐Am	monia 🔲 DO	Other		
		<del></del>			
a. Name of Receiving Stream:		L	ength Affected:		
b. Discharge Course					
Runs on ground and absorbs into					
Ditch. Name of surface water it d					
Storm sewer. Name of surface w	ater it drains to:		TOTAL CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTR		
<ul><li>☐ Surface water direct discharge: _</li><li>☐ Other, describe:</li></ul>			***************************************		
U Other, describe.					
CORRECTIVE ACTIONS/CLEAN UP					
a. Flushing Removing	Chemical Application	□ Other:			
b. Describe detailed actions taken to co		Other:	. f. II.		
b. Describe detailed actions taken to co	offect & dean up the 550/	bypass and any	y tollow up actions:		
CLEAN UP PREFORMED BY:					
REPORT PREPARED/SUBMITTED B	Υ				
NAME (PRINTED):		TITLE:			
SIGNATURE:	5	DATE:			

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