

**OSAGE BEACH / LAKE OZARK
JOINT SEWER BOARD MEETING
AGENDA
January 21st, 2025
LAKE OZARK CITY HALL**

1. CALL TO ORDER

2. ROLL CALL ROBIN

Mayor, Michael Harmison
Mayor, Dennis Newberry
City Administrator, Harrison Fry
City Administrator, Devin Lake
Alderman, Kevin Rucker
Alderman, Pat Thompson
Public Works Director, Matt Michalik
Member at Large, Gary Hamner
Public Works Manager, Osage Beach, Zachary Wilber

3. PUBLIC COMMENT

4. MINUTES

Regular Meeting: November 19th, 2024,

3-4

5. REPORTS

Bills List 5-21

December 2024

Revenue Budget Analysis 22

Expenditure Budget Analysis 23

Income & Expense Summary 24

November 2024

Revenue Budget Analysis 25

Expenditure Budget Analysis 26

Income & Expense Summary 27

6. ALLIANCE REPORT OF OPERATIONS

A. Review and discuss ERP & Plant Inventory pg. 100-107

7. APPROVAL OF FLOW CHARTS

8. OLD BUSINESS

- A. Board update.
- B. Capital replacement funding update

9. NEW BUSINESS

- A. Discuss and review waste hauler fee adjustment
- B. Discuss and review year end city reports of connections
- C. Discuss and review future year projections

10. ADDITIONAL DISCUSSION ITEMS

The Alliance Social/get together will be right after this meeting at Wobbly Boots in Osage Beach, in the fireplace room

11. ADJOURNMENT

LAKE OZARK-OSAGE BEACH JOINT SEWER BOARD

Meeting Minutes – November 19th, 2024

CALL TO ORDER:

Mayor Newberry called the meeting to order at 4:00 pm on Tuesday, November 19th, 2024 at Lake Ozark City Hall.

ROLL CALL:

Mayor, Michael Harmison- Absent
 Mayor, Dennis Newberry – Present
 City Administrator, Harrison Fry - Present
 City Administrator, Devin Lake – Present
 Alderman, Kevin Rucker- Present
 Alderman, Pat Thompson- Present
 Public Works Director, Matt Michalik – Absent
 Resident Member, Mr. Gary Hamner – Present
 Public Works Manager, Zachary Wilber – Present

PUBLIC COMMENT: None

MINUTES:

Alderman, Pat Thompson motioned to approve the meeting minutes from October 15th, 2024. The motion was seconded by Alderman, Kevin Rucker and passed unanimously.

REPORTS:

- Bill List
- Revenue Budget Analysis
- Expenditure Budget Analysis
- Income & Expense Summary

A motion was made by Alderman, Pat Thompson to approve the October Bills List, Revenue Budget Analysis and Expenditure Budget Analysis. The motion was seconded by City Administrator, Devin Lake, and passed unanimously.

ALLIANCE REPORT OF OPERATIONS:

Alliance Report of Operations: The average daily incoming flow for October was 0.958 MGD. We had 1.5 inches of precipitation measured at the WWTP .

Operationally, the plant's discharge was excellent, with an effluent monthly average BOD of 1.8 mg/l and TSS of 2.0 mg/l respectively for October which represents a 99.0+% or better removal.

The MLSS average for both aeration basins for October was 3,957 mg/l. The total dry weight sludge inventory for October totaled 206,138 pounds. There were 11 loads of biosolids, or

39,600 gallons land applied for October. We received 72 loads of septage or 148,500 gallons in October.

APPROVAL OF FLOW CHART:

Resident Member, Mr. Gary Hamner, motioned to approve the flow charts. The motion was seconded by Alderman, Kevin Rucker and passed unanimously.

OLD BUSINESS:

- A. Board Representative Update. Business as usual.

NEW BUSINESS:

- A. Reviewed and discussed adding the following items to 2025.
 - a. Headworks building interior painting, \$12,000 to be added to next year's budget. Alderman, Kevin Rucker made a motion to approve, and it was seconded by Public Works Manager, Zachary Wilber and passed unanimously
 - b. Administration building roof repair/replacement, \$3,000 to next year's budget. Alderman, Kevin Rucker made a motion to approve, and it was seconded by Public Works Manager, Zachary Wilber and passed unanimously.
- B. Amendment of the 2024 Budget - 4020 Equip & Bldg. Repair Maintenance to increase \$18,450.00, 4175 Electric to increase \$8,500.00, and E/R Expenses to increase \$14,200. A motion was made by City Administrator, Harrison Fry, to approve. His motion was seconded by Alderman, Kevin Rucker and passed unanimously.
- C. Reviewed – Proposed Budget 2025 not to include the Grit removal from Aeration Basin#2 in the amount of \$112,500. Resident Member, Mr. Gary Hamner made a motion to approve, and it was seconded by Alderman, Pat Thompson. Unanimously approved.
- D. Presentation on Long-Range Capital Needs of Sewer Plant

ADDITIONAL DISCUSSION ITEMS:

ADJOURNMENT:

With no further business to discuss, a motion was made Alderman, Kevin Rucker to adjourn. Resident Member, Mr. Gary Hamner, seconded the motion. The meeting was adjourned at 5:36 pm.

Approved:

Dennis Newberry, Mayor

Robin Craig, Clerk

JOINT SEWER BOARD
BILL LIST
JANUARY 21, 2025

OPERATING FUND BILLS PAID PRIOR TO BOARD MEETING:	\$	72,285.24
OPERATING FUND BILLS TO BE PAID:	\$	43,977.35
EQUIPMENT REPLACEMENT FUND BILLS PAID PRIOR TO BOARD MEETING:	\$	7,637.80
EQUIPMENT REPLACEMENT FUND BILLS TO BE PAID:	\$	-

TOTAL \$ 123,900.39

OPERATING FUND BILLS PAID PRIOR TO BOARD MEETING:

Account	Paid To:	Description:	Amount:
4000	Equipment Replacement Fund	Payment into ER Fund	\$ 8,750.00
4020	Tillman Painting	Power Wash & Paint 5 Bldgs.	\$ 30,275.00
4020	Smart Printing	Ship Charge for Permit Renewal	\$ 123.33
4020	Macgruder Limestone	Rock for Road	\$ 1,871.09
4020	Central Mo Serv. Plumb	Repaired Propane Leak	\$ 950.00
4020	Menards	Supplies for Clarifier #2 restart	\$ 20.31
4020	Menards	Pipe Fitting	\$ 1.99
4020	M/C QuickBooks	Accounting Software	\$ 35.00
4020	Ovivo USA	Drive Control for Clarifier #1	\$ 1,782.44
4020	Pace Analytical	Lab Testing for Permit Renewal	\$ 819.30
4020	Woodley Building Main.	Janitorial - December	\$ 330.00
4140	Lake Media	RFP - Audit	\$ 94.50
4150	JBC Tire LLC	Repair Tire on Sludge Trk	\$ 203.45
4170	Alliance Water Resources Inc	December	\$ 30,321.00
4175	Ameren MO	11673321	\$ 5,121.73
4175	Ameren MO	98041275	\$ 87.29
4176	Allied Services	December	\$ 81.54
4176	AT&T	December	\$ 42.94
4176	Allied Services	January	\$ 81.39
4176	AT&T	January	\$ 42.94

TOTAL \$ 72,285.24

OPERATING FUND BILLS TO BE PAID:

Account	Paid To:	Description:	Amount:
4000	Equipment Replacement Fund	Payment into ER Fund	\$ 8,500.00
4020	Menards	80093 Cleaning product	\$ 11.42
4020	M/C QuickBooks	Accounting Software	\$ 35.00
4020	O'Reilly Auto	Tube Grease	\$ 84.90
4020	University of MO Ex.	Soil Sample	\$ 132.00
4170	Alliance Water Resources Inc	January	\$ 31,079.00
4175	Ameren MO	11673321	\$ 4,065.30
4175	Ameren MO	98041275	\$ 69.73
			\$ -
TOTAL			\$ 43,977.35

EQUIPMENT REPLACEMENT FUND BILLS PAID PRIOR TO BOARD MEETING:

Account	Paid To:	Description:	Amount:
4000	Professional Metal Fab.	Labor & rebuild gear drive Clarifier #2	\$ 7,637.80
TOTAL			\$ 7,637.80

EQUIPMENT REPLACEMENT FUND BILLS TO BE PAID:

Account	Paid To:	Description:	Amount:
TOTAL			\$ -



- Pay by phone: 1.866.268.3729
- Pay by mail: PO Box 88068, Chicago, IL 60680-1068
- Pay online or manage your account: AmerenMissouri.com
- Customer Service: 1.877.426.3738

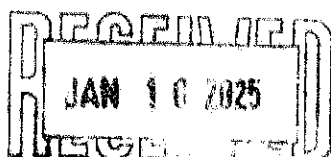
FOCUSED ENERGY. For Life.

Account Number 5580005920
Customer Name ALLIANCE WATER RESOURCES INC
Service Address 3 ANDERSON RD
LAKE OZARK, MO 65049

Current Detail for Statement 01/10/2025

Total Electric Charges \$69.73

Total Amount Due \$69.73



AMOUNT DUE \$69.73

Due Date 02/03/2025

Amount After Due Date \$70.43

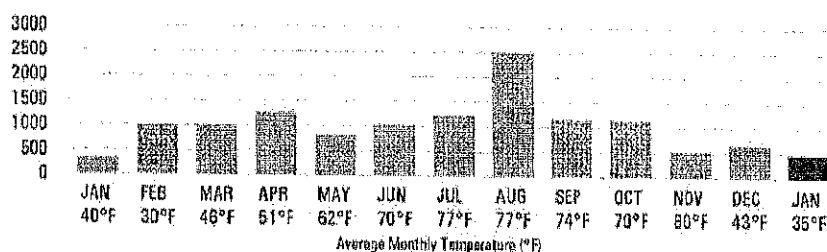
Previous Statement \$87.29

Total Payments \$87.29

Payment Received. Thank You.

Electric Usage History

Electric Usage in Kilowatt Hours (kWh)



Electric Usage Summary (kWh)

So far this year you're using **39.9% more** than the same time period last year.

2024 338 kWh

2025 473 kWh

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.

GL Acc#: 4175

Signature: *[Handwritten Signature]*

Date: 1/10/25

» See next page for service details.

Keep this portion for your records.

Page 1 of 4

Please return this portion with your payment.



☐ Check if you have address changes on back.

>004000 2355130 0006 092139 102

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

Amount Due	Due Date
\$69.73	February 03, 2025
Delinquent Amount After Due Date	Account Number
\$70.43	5580005920
Amount Enclosed \$	

AMEREN MISSOURI
P.O. BOX 88068
CHICAGO, IL 60680-1068

10633000 0055800059200 000000069730 000000069730

13073
04000 2355130 037977 015953 00010002



- Pay by phone: 1.866.268.3729
- Pay by mail: PO Box 88068, Chicago, IL 60680-1068
- Pay online or manage your account: AmerenMissouri.com
- Customer Service: 1.877.426.3736

FOCUSED ENERGY. For Life.

Electric Service Details

Service from 12/05/2024 - 01/08/2025 (34 days)

Electric Meter Read

METER NUMBER	SERVICE FROM - TO	NO. DAYS	USAGE TYPE	READING TYPE	CURRENT READING	PREVIOUS READING	READING DIFFERENCE	MULTIPLIER	USAGE
70843410	12/05 - 01/08	34	Total kWh	Actual	12850.0000	12377.0000	473.0000	1.0000	473.0000
70843410	12/05 - 01/08	34	Peak kW	Actual	30.2770	0.0000	30.2770	1.0000	30.2770

Usage Summary

Total kWh	473.0000	Non-Summer kWh	473.0000
Winter Base kWh	1000.0000	Current Base kWh	473.0000
Winter Cur Base kWh	473.0000	Seasonal kWh	0.0000

Rate 2M Sm Gen Svc - 3 Ph w/Dmd

Threshold - Peak Demand

DESCRIPTION	USAGE	UNIT		RATE	CHARGE
Base Energy Charge	473.00	kWh	@	\$ 0.08940000	\$42.29
Seasonal Energy Charge	0.00	kWh	@	\$ 0.05160000	\$0.00
Customer Charge					\$23.07
Fuel Adjustment Charge	473.00	kWh	@	\$ 0.00229000	\$1.08
Energy Efficiency Investment Charge	473.00	kWh	@	\$ 0.00373900	\$1.77
Renewable Energy Adjustment	473.00	kWh	@	\$ 0.00204000	\$0.96
Rush Island Retirement Cost	473.00	kWh	@	\$ 0.00117647	\$0.56
Total Service Amount					\$69.73
Total Electric Charges					\$69.73

Payments Since Previous Statement

DATE RECEIVED	AMOUNT
December 26, 2024	\$87.29

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
866.268.3729



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



ONLINE
CREDIT CARD



MAIL
STUB & CHECK



- Pay by phone: 1.866.268.3729
- Pay by mail: PO Box 88068, Chicago, IL 60680-1068
- Pay online or manage your account: AmerenMissouri.com
- Customer Service: 1.877.426.3736

AMOUNT DUE \$69.73
Due Date 02/03/2025
Account Number 5580009920
Service Address 3 ANDERSON RD

Account Messages

A late payment charge of 1% will be added for any unpaid balance on all accounts after the due date.

Summer Electric Rates - June through September; Winter Electric Rates - October through May.

Please note: If your billing period for this statement spans both Summer and Winter seasons, you will see prorated charges that reflect the different rates for each season.



Rush Island Retirement Cost

Ameren Missouri is acting as the servicer for this Public Service Commission-approved charge for an assignee, who owns the rights to the securitized utility tariff charges related to the Rush Island Energy Center retirement. Based on projections, customers are expected to save about \$85 million over a 15-year period versus standard rates.

Ameren Missouri's Community Solar program enables your home or small business to support renewable energy in Missouri through an easy monthly subscription. Learn more at AmerenMissouri.com/CommunitySolar.

Auto Pay Makes Paying Bills Easier. To enroll, go to AmerenMissouri.com or call 1.800.552.7583 to request an enrollment form.

START 2025

With Energy Savings

Use the BizSavers[®] program to save money and energy. Upgrade to energy-efficient equipment and get a cash incentive — it's that easy.

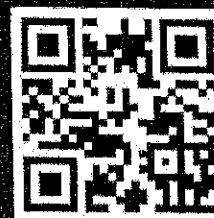
AmerenMissouri.com/BizSavers



Thanks to

RELIABILITY INVESTMENTS

through the Smart Energy Plan, Ameren Missouri has avoided nearly 100,000 customer outages since the start of 2023.



Learn more about how Ameren is making a stronger, smarter and more reliable energy grid at

AmerenMissouri.com/Reliability

04600 2055136 007978 015855 000206002





- Pay by phone: 1.866.268.3729
- Pay by mail: PO Box 88068, Chicago, IL 60680-1068
- Pay online or manage your account: AmerenMissouri.com
- Customer Service: 1.877.426.3736

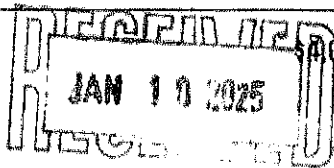
FOCUSED ENERGY. For Life.

Account Number 4580005832
Customer Name ALLIANCE WATER RESOURCES INC
Service Address 3 ANDERSON RD, -
LAKE OZARK, MO 65049

Current Detail for Statement 01/10/2025

Total Electric Charges \$4,065.30

Total Amount Due \$4,065.30



AMOUNT DUE \$4,065.30

Due Date 02/03/2025

Amount After Due Date \$4,105.95

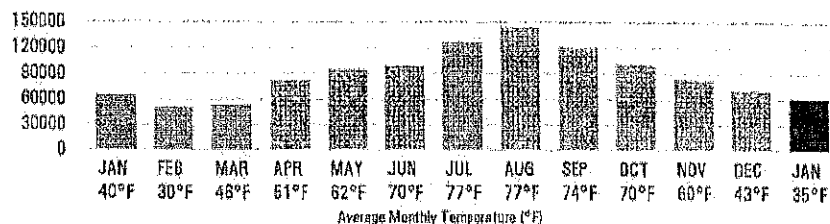
Previous Statement \$5,121.73

Total Payments \$5,121.73

Payment Received. Thank You.

Electric Usage History

Electric Usage in Kilowatt Hours (kWh)



Electric Usage Summary (kWh)

So far this year you're using **4.9% less** than the same time period last year.

2024 65,280 kWh

2025 62,080 kWh

Electric Service Details

Service from 12/05/2024 - 01/08/2025 (34 days)

Electric Meter Read

METER NUMBER	SERVICE FROM - TO	NO. DAYS	USAGE TYPE	READING TYPE	CURRENT READING	PREVIOUS READING	READING DIFFERENCE	MULTIPLIER	USAGE
95783299	12/05 - 01/08	34	Total kWh	Actual	4304.0000	3918.0000	386.0000	160.0000	62080.0000
95783299	12/05 - 01/08	34	On Peak kWh	Actual	1507.0000	1388.0000	119.0000	160.0000	19040.0000

GL Acct#: H175

» See next page for service details.

Keep this portion for your records.

Signature: *Ray Hutchings*

Date: 1/10/25

Please return this portion with your payment.



☐ Check if you have address changes on back.

Amount Due	Due Date
\$4,065.30	February 03, 2025
Delinquent Amount After Due Date	Account Number
\$4,105.95	4580005832

Amount Enclosed \$

>004005 2355130 0006 092135 102

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

AMEREN MISSOURI
P.O. BOX 88068
CHICAGO, IL 60680-1068

40600000 0045800058302 000004065300 000004065300

13073
04005 2355130 007907 015973 00016302



- Pay by phone: 1.866.268.3729
- Pay by mail: PO Box 88068, Chicago, IL 60680-1068
- Pay online or manage your account: AmerenMissouri.com
- Customer Service: 1.877.426.3736

FOCUSED ENERGY. For Life.

Electric Service Details (Continued)

METER NUMBER	SERVICE FROM - TO	NO. DAYS	USAGE TYPE	READING TYPE	CURRENT READING	PREVIOUS READING	READING DIFFERENCE	MULTIPLIER	USAGE
95783289	12/05 - 01/08	34	Off Peak kW	Actual	0.6040	0.0000	0.6040	160.0000	96.6400
95783299	12/05 - 01/08	34	On Peak kW	Actual	0.5800	0.0000	0.5800	160.0000	92.8000

Usage Summary

Total kWh	62080.0000	Non-Summer kWh	62080.0000
Peak kW	96.6000	On-Peak kW	92.8000
Off-Peak kW	96.6000	Sec. Energy Block kW	92.8000
Billing Demand	92.8000	Total Billing Demand	100.0000
October Winter Base kW	213.3000	Winter Base Demand	92.8000
Base kWh Ratio	1.0000	Base kWh (HUD)	62080.0000
Seasonal kWh (HUD)	0.0000		

Rate 3M Large General Service

Secondary Srvc Off-Pk Demand Rider

Secondary Srvc Off-Pk Demand Rider

DESCRIPTION	USAGE	UNIT		RATE	CHARGE
Seasonal Energy Charge	0.00	kWh	@	\$ 0.04080000	\$0.00
Winter Demand Charge	100.00	kW	@	\$ 2.30000000	\$230.00
Base Energy Charge / Hours Used	13,920.00	kWh	@	\$ 0.06980000	\$971.62
Base Energy Charge / Hours Used	18,560.00	kWh	@	\$ 0.05180000	\$963.26
Base Energy Charge / Hours Used	29,600.00	kWh	@	\$ 0.04090000	\$1,210.64
Customer Charge					\$110.55
Fuel Adjustment Charge	62,080.00	kWh	@	\$ 0.00229000	\$142.16
Energy Efficiency Investment Charge	62,080.00	kWh	@	\$ 0.00382400	\$237.39
Renewable Energy Adjustment	62,080.00	kWh	@	\$ 0.00204000	\$126.64
Rush Island Retirement Cost	62,080.00	kWh	@	\$ 0.00117647	\$73.04
Total Service Amount					\$4,065.30
Total Electric Charges					\$4,065.30

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
866.268.3729



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



ONLINE
CREDIT CARD



MAIL
STUB & CHECK



- Pay by phone: 1.866.268.3729
- Pay by mail: PO Box 88068, Chicago, IL 60680-1068
- Pay online or manage your account: AmerenMissouri.com
- Customer Service: 1.877.426.3736

AMOUNT DUE**\$4,065.30****Due Date****02/03/2025****Account Number****4580095832****Service Address****3 ANDERSON RD,****Payments Since Previous Statement**

DATE RECEIVED
December 26, 2024

AMOUNT
\$5,121.73

Account Messages

A late payment charge of 1% will be added for any unpaid balance on all accounts after the due date.

Summer Electric Rates - June through September; Winter Electric Rates - October through May.

Please note: If your billing period for this statement spans both Summer and Winter seasons, you will see prorated charges that reflect the different rates for each season.

**Rush Island Retirement Cost**

Ameren Missouri is acting as the servicer for this Public Service Commission-approved charge for an assignee, who owns the rights to the securitized utility tariff charges related to the Rush Island Energy Center retirement. Based on projections, customers are expected to save about \$85 million over a 15-year period versus standard rates.

Auto Pay Makes Paying Bills Easier. To enroll, go to AmerenMissouri.com or call 1.800.552.7583 to request an enrollment form.

START 2025

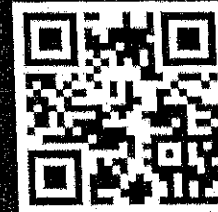
Use the BizSavers® program to save money and energy. Upgrade to energy-efficient equipment and get a cash incentive — it's that easy.



Thanks to

RELIABILITY INVESTMENTS

through the Smart Energy Plan, Ameren Missouri has avoided nearly 100,000 customer outages since the start of 2023.



Learn more about how Ameren is making a stronger, smarter and more reliable energy grid at

AmerenMissouri.com/Reliability.

04705 2055130 007925 015875 0002/0002





- * Pay by phone: 1.866.268.3729
- * Pay by mail: PO Box 88068, Chicago, IL 60680-1068
- * Pay online or manage your account: AmerenMissouri.com
- * Customer Service: 1.877.426.3736

FOCUSED ENERGY. For Life.

Account Number 4580005832
 Customer Name ALLIANCE WATER RESOURCES INC
 Service Address 3 ANDERSON RD,
 LAKE OZARK, MO 65049

AMOUNT DUE \$5,121.73

Due Date 01/02/2025

Amount After Due Date \$5,172.95

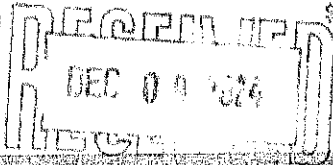
Previous Statement \$5,517.67

Total Payments \$5,517.67

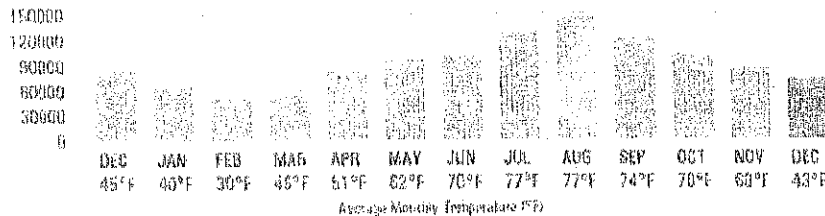
Payment Received: Thank You.

Total Electric Charges \$5,121.73

Total Amount Due \$5,121.73



Electric Usage in Kilowatt Hours (kWh)



Electric Usage Summary (kWh)

So far this year you're using **2.8% MORE** than the same time period last year.

2025	1,064,320 kWh
2024	1,034,240 kWh

10073 61477 2349824 002937 005873 00618001

Some data from 1/01/2024 - 12/01/2024 (11 mos)

Electric Meter Read

METER NUMBER	DATE	TIME	LOCATION	READING	CURRENT READING	PREVIOUS READING	READING DIFFERENCE	MULTIPLIER	USAGE
95783289	11/01 - 12/05	31	Total kWh	Actual	3915.0000	3489.0000	447.0000	160.0000	71520.0000
95783289	11/01 - 12/05	31	On Peak kWh	Actual	1383.0000	1235.0000	153.0000	160.0000	24480.0000

* See next page for service details.

Keep this portion for your records.

GL Acct#: 4175

Signature: *[Signature]* Page 1 of 4

Please return this portion with your payment Date: 12/9/24



☐ Check if you have address changes on back.

Amount Due	Amount Due
\$5,121.73	January 02, 2025
Amount Due After Due Date	Amount Due
\$5,172.95	4580005832

Amount Enclosed \$

>001477 2346824 0007 092139 10Z

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

AMEREN MISSOURI
 P.O. BOX 88068
 CHICAGO, IL 60680-1068

80600000 0045800058302 000005121730 000005121730



* Pay by phone: 1.866.268.3729
 * Pay by mail: PO Box 86296, Chicago, IL 60686-1088
 * Pay online or manage your account: AmerenMissouri.com
 * Customer Service: 1.877.426.3736

FOCUSED ENERGY. For Life.

ACCOUNT NUMBER	DATE	PERIOD	UNIT	UNIT	UNIT	UNIT	UNIT	UNIT	UNIT
95783295	11/04 - 12/05	31	Off Peak kW	Actual	1.0930	0.0000	1.0930	160.0000	174.8800
95783295	11/04 - 12/05	31	On Peak kW	Actual	1.0830	0.0000	1.0830	160.0000	170.0800

Usage Summary

Total kWh	71520.0000	Non-Summer kWh	71520.0000
Peak kW	174.9000	On-Peak kW	170.1000
Off-Peak kW	174.9000	Sec. Energy Block kW	170.1000
Billing Demand	170.1000	Total Billing Demand	170.1000
October Winter Base kW	213.3000	Winter Base Demand	170.1000
Base kWh Ratio	1.0000	Base kWh (HUD)	71520.0000
Seasonal kWh (HUD)	0.0000		

Rate 3M Large General Service

Secondary Srvc Off-Pk Demand Rider

Secondary Srvc Off-Pk Demand Rider

DESCRIPTION	USAGE	UNIT	RATE	CHARGE
Seasonal Energy Charge	0.00	kWh	@ \$ 0.00000000	\$0.00
Winter Demand Charge	170.10	kW	@ \$ 2.30000000	\$391.23
Base Energy Charge / Hours Used	25,515.00	kWh	@ \$ 0.06980000	\$1,780.95
Base Energy Charge / Hours Used	34,020.00	kWh	@ \$ 0.05190000	\$1,765.64
Base Energy Charge / Hours Used	11,985.00	kWh	@ \$ 0.04090000	\$490.19
Customer Charge				\$110.55
Fuel Adjustment Charge	71,520.00	kWh	@ \$ 0.00229000	\$163.78
Energy Efficiency Investment Charge	71,520.00	kWh	@ \$ 0.00382400	\$273.49
Renewable Energy Adjustment	71,520.00	kWh	@ \$ 0.00204000	\$145.90
Total Service Amount				\$5,121.73
Total Electric Charges				\$5,121.73

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

Page 2 of 4

Address Changes or Corrections

AmerenMissouri.com/WaysToPay

Name _____
 Address _____
 City, State, Zip _____
 Phone Number _____



ONLINE
e CHECK



PHONE
866.268.3729



IN PERSON
FIND A PAY STATION AT
AMFRENMISSOURI.COM
PAYSTATION



ONLINE
CREDIT CARD



MAIL
STUB & CHECK



- Pay by phone: 1.866.268.3729
- Pay by mail: PO Box 88068, Chicago, IL 60680-1068
- Pay online or manage your account: AmerenMissouri.com
- Customer Service: 1.877.426.3736

FOCUSED ENERGY. For Life.

Account Number 5580005920
 Customer Name ALLIANCE WATER RESOURCES INC
 Service Address 3 ANDERSON RD
 LAKE OZARK, MO 65049

AMOUNT DUE \$87.29

Due Date 01/02/2025

Total Electric Charges \$87.29

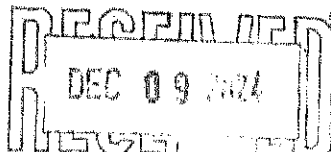
Amount After Due Date \$88.16

Total Amount Due \$87.29

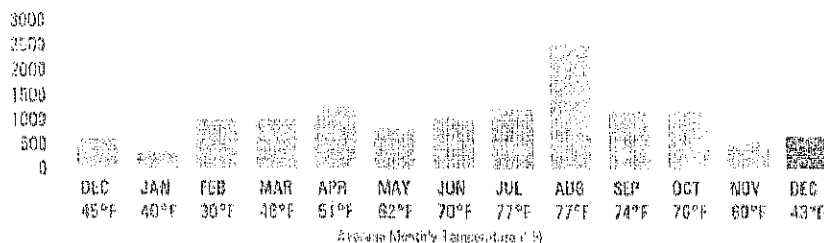
Previous Statement \$75.89

Total Payments \$75.89

Payment Received, Thank You.

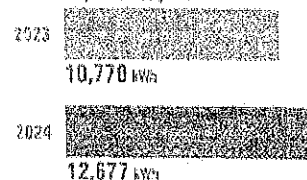


Electric Usage in Kilowatt Hours (kWh)



Electric Usage Summary (kWh)

So far this year you're using **17.7% more** than the same time period last year.



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 portion for your records.

GL Acct# 4175

Signature: *Sony Hattaway*

Date: 12/9/24

Please return this portion with your payment.



☐ Check if you have address changes on back.

Amount Due	Due Date
\$87.29	January 02, 2025

Outstanding Amount After Due Date	Account Number
\$88.16	5580005920

Amount Enclosed \$

>001457 2346824 0007 092139 102

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

AMEREN MISSOURI
 P.O. BOX 88068
 CHICAGO, IL 60680-1068

70633000 0055800059200 000000087290 000000087290

13373 01467 2346824 0007 092139 102



- Pay by phone: 1.866.268.3729
- Pay by mail: PO Box 80068, Chicago, IL 60680-0068
- Pay online or manage your account: AmerenMissouri.com
- Customer Service: 1.877.426.3736

FOCUSED ENERGY. For Life.

Electric Meter Read

DATE	TIME	UNIT	READING	PREVIOUS READING	DIFFERENCE	MULTIPLIER	US \$
76043410	11/04 12:05	31	Total kWh	12577.0000	17716.0000	659.0000	659.0000
76043410	11/04 12:05	31	Peak kW	29.7230	0.0000	29.7230	29.7230

Usage Summary

Total kWh	659.0000	Non-Summer kWh	659.0000
Winter Base kWh	1000.0000	Current Base kWh	659.0000
Winter Cap kWh	659.0000	Seasonal kWh	0.0000

Rate 2M Sm Gen Svc - 3 Ph w/Dmd

Threshold - Peak Demand

DESCRIPTION	USAGE	UNIT	RATE	CHARGE
Base Energy Charge	659.00	kWh	@ \$ 0.08940000	\$58.91
Seasonal Energy Charge	0.00	kWh	@ \$ 0.05160000	\$0.00
Customer Charge				\$23.07
Fuel Adjustment Charge	659.00	kWh	@ \$ 0.00229000	\$1.51
Energy Efficiency Investment Charge	659.00	kWh	@ \$ 0.00373000	\$2.46
Renewable Energy Adjustment	659.00	kWh	@ \$ 0.00204000	\$1.34
Total Service Amount				\$87.29
Total Electric Charges				\$87.29

PART RECEIVED	AMOUNT
November 27, 2024	\$75.99

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
866.268.3729



IN PERSON
FIND A PAY STATION AT
AMERENMISSOURI.COM
PAYSTATION



ONLINE
CREDIT CARD



MAIL
STUB & CHECK



Worldwide 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
www.ovivowater.com

REMIT TO VIA CHECK

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

REMIT TO VIA WIRE

Comerica Bank
Comerica Bank Center
411 West Lafayette
Detroit, MI 48226
Account: 1851855104
Routing: 072000096
SWIFT: MNBGUS33
Telex: 3772134 MNB INTL DET

Invoice No

8488685

Page: 1 of 2

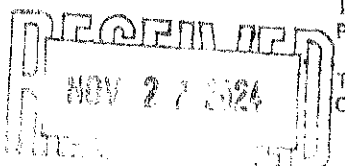
Date: 11/26/2024

Customer Account Number: 18908

Ship To: 1

B Joint Sewer Board of Lake Ozark
I P.O. Box 1985
L Attn: Accounts Payable
L Lake Ozark MO 65049
USA
T
O

S Gary Hutchcraft
H Lake Ozark Wastewater Treatment plant
I 3 Anderson Road
P Lake Ozark MO 65049
USA



MATERIAL MUST BE RETURNED F.O.B. TO OUR PLANT

Order		Customer PO		Ship Via		Terms		Currency	
SSW0015248		110724Gary		Freight Allowed		Net 30 days		USD US Dollars	
Line	Item/Description	Qty Ordered	Qty Shipped	Back Order	UM	Unit Price	Extended Price		
1	L115759-1	1.000	1.000	0.000	EA	1,764.410	1,764.41		

Date Shipped: 11/15/2024

2	48806A PIN,ACTUATING,2.69",STL/SB	1.000	1.000	0.000	EA	18.030	18.03
---	--------------------------------------	-------	-------	-------	----	--------	-------

Date Shipped: 11/15/2024

REPLACEMENT DRIVE CONTROL FOR CLARIFIER #1

GL Acct#: 4020

Signature: Gary Hutchcraft

Date: 11/27/24

Please submit purchase order to:

Your point of contact is:

Vanessa Vann

Aftermarket Parts Specialist

Email: vanessa.vann@ovivowater.com

C: 385-449-8764

Fax: 801-931-3080

WE HEREBY CERTIFY THAT THESE GOODS WERE PRODUCED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF SECTION 6, 7, & 12 OF THE FAIR LABOR STANDARDS ACT AS AMENDED AND REGULATIONS 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	1,782.44
Misc Charges	0.00
Freight	0.00
Surcharge	0.00
Sales Tax	0.00
Total	1,782.44

Ovivo USA, LLC



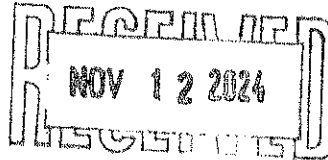
Professional Metal Fabricators
7511 Liberty Road
Jefferson City, MO 65101
Phone: (573) 634-1069

Invoice

Invoice Number
24-0504
Invoice Date
11/12/2024

Bill To: Joint Sewer Board
#3 Anderson Rd
P.O. Box 1985
Lake Ozark, MO 65049

Ship To:



Re: AW Clarifier #2 Gearbox

Lake Ozark, MO

Job No	Customer Job No	Customer PO	Payment Terms	Due Date
24-0504			Net 30 Days	12/12/2024
Date	Quantity	Description	Rate/Unit	Price
11/12/2024	75.00	LABOR	84.31	6,323.04
11/12/2024	1.00	MATERIAL	797.47	797.47
11/12/2024	1.00	EQUIPMENT RENTAL	517.29	517.29

TROUBLE SHOT ON WEEKEND
PULLED GEAR DRIVE, TOOK BACK TO THEIR SHOP
TORE DOWN, INSTALLED NEW PARTS, BROUGHT
BACK + INSTALLED NEWLY REBUILT GEAR DRIVE
ON CLARIFIER #2

GL Acct#: E/R

Signature: [Signature]

Date: 11/12/24

Subtotal \$ 7,637.80
Sales Tax (if applicable) \$ 0.00

Total Due \$ 7,637.80

Thank you for your business!



Office: 573-369-3456

Fax: 573-369-3356

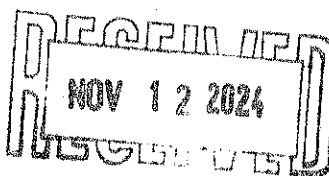
Email: lori@tillmanpaint.com

Date: 11/12/2024

Invoice: 2024-4497

Bill To: Joint Sewer Board of the Lake Ozark-Osage
 Beach Sewage Tx Plant
 #3 Anderson Rd
 Lake Ozark, MO 65049

Please Make Checks Payable to:
 TILLMAN PAINTING & WALL COVERING
 P.O. Box 14
 Tuscumbia, MO 65082



Job Name	Job Location	Start Date	Completion Date	Completion %	Contract Value	Terms
Full 2024	Lake Ozark	10/21/24	11/08/24	100%	30275.00	Net 30
Item	Description	Unit of Measure	Qty	Unit Price	Total	
1.	Power wash and paint the exterior of the (5) buildings, 1 wooden storage shed, as well as the exterior doors and frames, steel posts and beams, and vent pipe	%	100	302.75	30,275.00	
BUILDING PAINT PROJECT GL Acct#: 4020 Signature: Larry Hutchins Date: 11/12/24						
					Total Due	\$30,275.00

P.O. Box 14

Tuscumbia, MO

65082-0014



Magruder Limestone

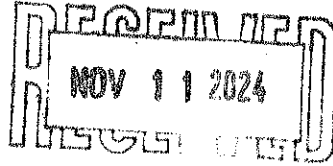
255 Watson Road
Troy, MO 63379
636-528-4180

Invoice 152531
Date 10/31/2024
Page 2 of 2

19

Account # JOIN001

JOINT SEWER BOARD
P. O. BOX 1985
LAKE OZARK, MO 65049



Order 1133
PLANT ROAD LAKE OZARK

Ticket	Date	P.O.	Product	Qty	Material		Freight		Fuel Surcharge Amount	Fee Amount	Tax Amount	Total
					Rate	Amount	Rate	Amount				
214009230	10/28/2024		1" MINUS	5.56	6.75	37.53	0.00	0.00	0.00	0.00	0.00	37.53
214009231	10/28/2024		1" MINUS	5.09	6.75	34.36	0.00	0.00	0.00	0.00	0.00	34.36
214009235	10/28/2024		1" MINUS	6.79	6.75	45.83	0.00	0.00	0.00	0.00	0.00	45.83
214009238	10/28/2024		1" MINUS	6.00	6.75	40.50	0.00	0.00	0.00	0.00	0.00	40.50
214009240	10/28/2024		1" MINUS	6.86	6.75	46.31	0.00	0.00	0.00	0.00	0.00	46.31
214009243	10/28/2024		1" MINUS	5.92	6.75	39.96	0.00	0.00	0.00	0.00	0.00	39.96
214009245	10/28/2024		1" MINUS	5.94	6.75	40.10	0.00	0.00	0.00	0.00	0.00	40.10
214009247	10/28/2024		1" MINUS	5.30	6.75	35.78	0.00	0.00	0.00	0.00	0.00	35.78
214009248	10/28/2024		1" MINUS	6.06	6.75	40.91	0.00	0.00	0.00	0.00	0.00	40.91
214009249	10/28/2024		1" MINUS	6.03	6.75	40.70	0.00	0.00	0.00	0.00	0.00	40.70
214009250	10/28/2024		1" MINUS	5.20	6.75	35.10	0.00	0.00	0.00	0.00	0.00	35.10
214009252	10/28/2024		1" MINUS	5.59	6.75	37.73	0.00	0.00	0.00	0.00	0.00	37.73
214009253	10/28/2024		1" MINUS	6.33	6.75	42.73	0.00	0.00	0.00	0.00	0.00	42.73
Subtotal				277.19 Ton		1,871.09		0.00	0.00	0.00	0.00	1,871.09
Invoice Total				277.19 Ton		1,871.09		0.00	0.00	0.00	0.00	1,871.09

Rock For Road

GL Acct#: 4020

Total Invoice: 1,871.09

Signature: *[Signature]*

Date: 11/11/24

NOTICE TO OWNER

FAILURE OF THIS CONTRACTOR TO PAY THOSE PERSONS SUPPLYING MATERIAL OR SERVICES TO COMPLETE THIS CONTRACT CAN RESULT IN THE FILING OF A MECHANIC'S LIEN ON THE PROPERTY WHICH IS THE SUBJECT OF THIS CONTRACT PURSUANT TO CHAPTER 429, RSMO. TO AVOID THIS RESULT YOU MAY ASK THIS CONTRACTOR FOR "LIEN WAIVERS" FROM ALL PERSONS SUPPLYING MATERIAL OR SERVICES FOR THE WORK DESCRIBED IN THIS CONTRACT. FAILURE TO SECURE LIEN WAIVERS MAY RESULT IN YOUR PAYING FOR LABOR AND MATERIAL TWICE.

INVOICE



Invoice No. INV105429

Alliance Water Resources

**Lake Ozark/ Osage Beach Joint
Utility Board
City of Osage Beach
1000 City Parkway
Osage Beach, MO 65065**

206 South Keene Street
Columbia, MO 65201
USA

Document Date	Due Date	Payment Terms
January 1, 2025	January 31, 2025	Due in 30 Days

Description	Amount
Wastewater Plant operating service for January 2025	31,079.00
Total \$	31,079.00

Home Page
<https://alliancewater.com/>

Phone No.
573-874-8080

Email
Info@alliancewater.com



October 15, 2024

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

Dear Board of Directors:

As per the terms and conditions of the Alliance O&M Agreement dated February 1, 2024, the base fee is adjusted on January 1st each year to reflect the change in the Consumer Price Index and the other terms of the agreement.

The Agreement specifies the use of the Department of Labor CPI- All Urban Consumer Midwest. The most recent CPI data used to calculate the Alliance Fee beginning January 1, 2024 was the twelve (12) month period November 2022 through November 2023.

Accordingly, the base fee beginning January 1, 2025 will use the 12-month period from October 1, 2023 through September 30, 2024. The appropriate indices and resulting contract adjustment is calculated as follows:

CPI Increase for the period =2.5%

Per the Agreement, the base fee will be adjusted upward beginning January 1, 2025 by the CPI percentage of 2.5%. The calculation of the 2025 Base Contract Fee is as follows:

Current 2023 Monthly Fee = \$30,321.00

Adjusted 2024 Monthly Fee = $\$30,321.00 \times 1.025 = \$31,079.00$

The invoice for January 2025 will reflect the new base fee of \$31,079.00

On behalf of Gary Hutchcraft and Alliance Water Resources, thank you for allowing us to serve your communities.

Sincerely,

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

12/31/2024

Account Number	Account Name	2022 Actual	2023 Actual	2024 Budget	2024 Actual as of 12/31/2024	2024 December Revenue	Percent YTD
3020	Osage Beach	460,708.70	491,201.99	512,148.00	508,731.86	42,807.24	99%
3010	Lake Ozark	91,794.26	87,143.84	97,552.00	96,126.49	8,001.10	99%
3030	Misc.	1,094.92	234.08	0.00	0.00	0.00	0%
3100	Interest	2,462.35	5,522.07	5,000.00	12,796.10	19.64	256%
3060	Waste Haulers' Fee	49,490.00	63,160.00	57,000.00	66,425.00	5,600.00	117%
Total Operating Fund		605,550.23	647,261.98	671,700.00	684,079.45	56,427.98	102%
E/R Fund Income		3,588.63	15,192.01	12,000.00	19,513.33	87.38	163%
TOTAL INCOME		609,138.86	662,453.99	683,700.00	703,592.78	56,515.36	103%

**MONTH-TO-DATE AND YEAR-TO-DATE
EXPENDITURE/BUDGET ANALYSIS
12/31/2024**

Account Number	Account Name	2022 Actual	2023 Actual	2024 Amend.Budget	2024 Actual as of 12/31/2024	2024 December Expenses	Percent YTD
4000	Equipment Replace Fund	56,008.00	60,000.00	100,000.00	100,000.00	8,750.00	100%
4020	*Maintenance & Repair	60,030.11	64,665.12	126,000.00	117,259.46	3,918.73	93%
4140	Insurance	22,088.00	22,791.00	26,210.00	27,213.00	0.00	104%
4150	Vehicle Repair/Main	5,999.58	3,255.47	9,000.00	5,678.97	203.46	63%
4170	Contract Management	331,080.00	353,592.00	374,808.00	363,852.00	30,321.00	97%
4175	Electric	79,890.16	88,547.80	95,500.00	94,528.00	5,209.02	99%
4176	Utilities Misc.	3,694.18	4,579.70	4,700.00	2,609.07	124.48	56%
4190	Bank Charges	12.00	3.00	0.00	0.00	0.00	0%
4200	Audit	2,700.00	2,800.00	2,900.00	2,994.50	0.00	103%
4240	Capital Purchases	0.00	0.00	0.00	0.00	0.00	0%
	Totals	678,450.37	620,234.09	739,118.00	714,136.00	48,526.68	97%
	**E/R Expenses	202,161.70	113,313.66	209,200.00	209,195.99	7,637.80	100%
	TOTAL EXPENSES	880,612.07	733,547.75	948,318.00	923,331.99	56,164.48	97%

4020 DETAIL: Equip & Bldg. Repair/Main.

	2024	2023
Regular Maintenance	20,000	
UV Bulbs, Quartz Sleeves, Misc	11,000	
Painting Exterior Buildings	30,000	
Paint Clarifier #2		43,550
Rock for road	3,000	
	64,000.00	

DETAIL: Equipment & Replacement

Replace RAS Pumps & Check Vt	195,000	188,500
	195,000.00	X

OPERATING FUND INCOME AND EXPENSE SUMMARY
12/31/2024

Beginning Balance	333,321.74
Income - Osage Beach	42,807.24
Income - Lake Ozark	8,001.10
Income - Other	-
Income - Waste Haulers' Fees	5,600.00
Interest - Checking	19.64
Income - CD Interest	-
Transfers From E/R Fund	-
Transfers To E/R Fund	(8,750.00)
Expenses	(39,890.60)
Ending Fund Balance	341,109.12
Central Bank - NOW Acct.	101,072.89
	-
CD First Bank of the Lake, 2/20/25 #8432	116,692.80
CD First Bank of the Lake, 1/22/25 #8433	123,673.43
	-
Outstanding Checks: 1415	(330.00)
	341,109.12

EQUIPMENT REPLACEMENT FUND INCOME AND EXPENSE SUMMARY
12/31/2024

Beginning Balance	390,298.91
Interest - Checking	-
Income - CD Interest	87.38
Transfers From Operating Fund	8,750.00
Income - Miscellaneous	-
Expenses	-
Ending Fund Balance	399,136.29
First Bank of the Lake - Money Mkt.	88,598.29
CD First Bank of the Lake, 4/30/25 #8430	120,538.00
CD First Bank of the Lake, 8/07/25 #8434	190,000.00
	-
	-
Outstanding Checks:	-
	399,136.29

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

Account Number	Account Name	11/30/2024					Percent YTD
		2022 Actual	2023 Actual	2024 Budget	2024 Actual as of 11/30/2024	2024 November Revenue	
3020	Osage Beach	460,708.70	491,201.99	512,148.00	465,924.62	42,806.73	91%
3010	Lake Ozark	91,794.26	87,143.84	97,552.00	88,125.39	8,001.61	90%
3030	Misc.	1,094.92	234.08	0.00	0.00	0.00	0%
3100	Interest	2,462.35	5,522.07	5,000.00	12,771.21	1,576.40	255%
3060	Waste Haulers' Fee	49,490.00	63,160.00	57,000.00	60,825.00	2,925.00	107%
Total Operating Fund		605,650.23	647,261.98	671,700.00	627,646.22	55,309.74	93%
E/R Fund Income		3,588.63	15,192.01	12,000.00	19,425.95	2,484.24	162%
TOTAL INCOME		609,138.86	662,453.99	683,700.00	647,072.17	57,793.98	95%

MONTH-TO-DATE AND YEAR-TO-DATE
EXPENDITURE/BUDGET ANALYSIS
11/30/2024

Account Number	Account Name	2022 Actual	2023 Actual	2024 Amend. Budget	2024 Actual as of 11/30/2024	2024 November Expenses	Percent YTD
4000	Equipment Replace Fund	55,008.00	60,000.00	100,000.00	91,250.00	8,750.00	91%
4020	*Maintenance & Repair	60,030.11	84,865.12	126,000.00	113,340.73	33,454.42	90%
4140	Insurance	22,088.00	22,791.00	26,210.00	27,213.00	0.00	104%
4150	Vehicle Repair/Main	5,999.58	3,255.47	9,000.00	5,475.52	251.51	61%
4170	Contract Management	331,080.00	353,592.00	374,808.00	333,531.00	30,321.00	89%
4175	Electric	79,890.16	88,547.80	95,500.00	89,319.98	5,593.66	94%
4176	Utilities Misc.	3,694.18	4,579.70	4,700.00	2,484.59	124.75	53%
4190	Bank Charges	12.00	3.00	0.00	0.00	0.00	0%
4200	Audit	2,700.00	2,600.00	2,900.00	2,994.50	94.50	103%
4240	Capital Purchases	0.00	0.00	0.00	0.00	0.00	0%
	Totals	678,450.37	620,234.09	739,118.00	665,609.32	76,589.84	90%
	**E/R Expenses	202,161.70	113,313.66	209,200.00	209,195.99	7,637.80	100%
	TOTAL EXPENSES	880,612.07	733,547.75	948,318.00	874,805.31	86,227.64	92%

4020 DETAIL: Equip & Bldg. Repair/Main.

	2024
Regular Maintenance	20,000
UV Bulbs, Quartz Sleeves, Misc	11,000
Painting Exterior Buildings	30,000
Paint Clarifier #2	
Rock for road	3,000
	64,000.00

DETAIL: Equipment & Replacement

2023	
Replace RAS Pumps & Check Va	195,000
	188,500
	195,000.00 X

OPERATING FUND INCOME AND EXPENSE SUMMARY
11/30/2024

Beginning Balance	356,487.92
Income - Osage Beach	42,806.73
Income - Lake Ozark	8,001.61
Income - Other	-
Income - Waste Haulers' Fees	2,925.00
Interest - Checking	23.74
Income - CD Interest	1,552.66
Transfers From E/R Fund	-
Transfers To E/R Fund	(8,750.00)
Expenses	(69,725.92)
Ending Fund Balance	333,321.74
Central Bank - NOW Acct.	95,824.53
	-
CD First Bank of the Lake, 2/20/25 #8432	116,692.80
CD First Bank of the Lake, 1/22/25 #8433	123,673.43
	-
Outstanding Checks:	(2,869.02)
	333,321.74

EQUIPMENT REPLACEMENT FUND INCOME AND EXPENSE SUMMARY
11/30/2024

Beginning Balance	386,702.47
Interest - Checking	84.93
Income - CD Interest	2,399.31
Transfers From Operating Fund	8,750.00
Income - Miscellaneous	-
Expenses	(7,637.80)
Ending Fund Balance	390,298.91
First Bank of the Lake - Money Mkt.	79,760.91
CD First Bank of the Lake, 4/30/25 #8430	120,538.00
CD First Bank of the Lake, 8/07/25 #8434	190,000.00
	-
	-
Outstanding Checks:	-
	390,298.91

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. Kaene
St.
Columbia, MO
65201**

(573)874-8080

WATER RESOURCES® Alliance

Professional Water and Wastewater Operations

REPORT OF OPERATIONS

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

Month of November 2024

Submitted by Alliance Water Resources, Inc. for the

January 2025

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, but did have an employee miss the first 10 days of the month due to recovering from surgery from an old work-related injury.

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

PLANT EFFLUENT QUALITY

	BOD mg/l	TSS mg/l	pH	E.coli Coliform Colonies/100 ml	Ammonia as N mg/L	O&G mg/L
Monthly/Quarterly Avg	2.1	3.2	N/A	0.0	0.10	< 2.0
Peak Day	2.3	4.6	8.0	0.0	0.30	< 2.0
Percent Removal	98.7	98.7	N/A	N/A	N/A	N/A

NPDES EFFLUENT LIMITATIONS

	BOD mg/l	TSS mg/l	pH	E.coli Coliform Colonies/100 ml	Ammonia as N mg/L	O&G mg/L
Monthly/Quarterly Avg	30	30	6-9	126	2.5	10
Weekly Average	45	45		630		
Daily Max				N/A	12.1	15

PLANT HYDRAULIC AND ORGANIC LOADING

The average daily influent flow for the month was 0.991 MGD or 33% 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 41179 pounds of BOD.

BIOSOLIDS APPLICATION AND INVENTORY

Plant personnel land applied 36 tanker loads of bio-solids during the month equivalent to a total of 129,600 gallons and 40,233 pounds dry weight solids.

475,611 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 2.0 feet in Tank 1 and 3.0 feet in Tank 2.

WASTEHAULERS

The plant received 29 loads of septage during the month totaling 65,000 gallons.

WWTP OPERATIONS

- Decanting digesters and wasting weekly.
- Normal operations.
- We took the UV system offline on the 1st of November.
- We took Clarifier #3 offline on the 27th of November.

WWTP MAINTENANCE AND REPAIR

- Performed routine maintenance throughout the month as per Maxpanda Maintenance Data Management software schedule.
- Tillman Painting finished the Building Paint Project on the 6th of November.
- We noticed a propane smell on the backside of the UV building, and we found that the line going into the building from the tank was leaking right at ground level. We shut it off at the tank and called Central MO All Service Plumbing to see if they could come down and look at it. They sent their certified propane tech down on the 6th of November and came back and repaired it on the 7th.

SAFETY

- We started a new monthly Safety Meeting process to where the employee is assigned a safety meeting topic through our AWR UKG Learning site which is due by the 15th of each month. This month's topics were Hazard Communication and Hazards of Speeding.

REGULATORY AGENCY, INSPECTION AND REPORT

- We filled out the new EDMR on the EPA MoGEM website on the 4th of December.
- We took a 24-hour composite sample for the permit required expanded effluent testing for the permit renewal on the 11th of November and shipped it on the 12th.

MISCELLANEOUS AND RECOMMENDATIONS

- We would like to Thank the City of Osage Beach sending a crew out to help with the installation of the new controller for Clarifier #1.

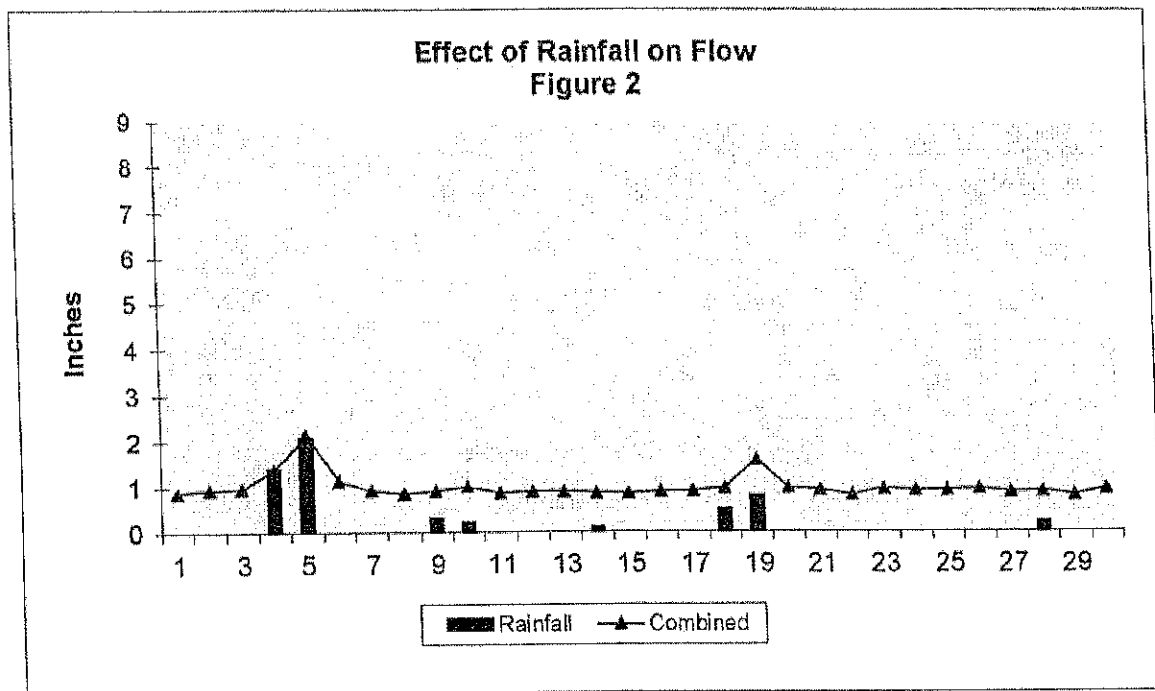
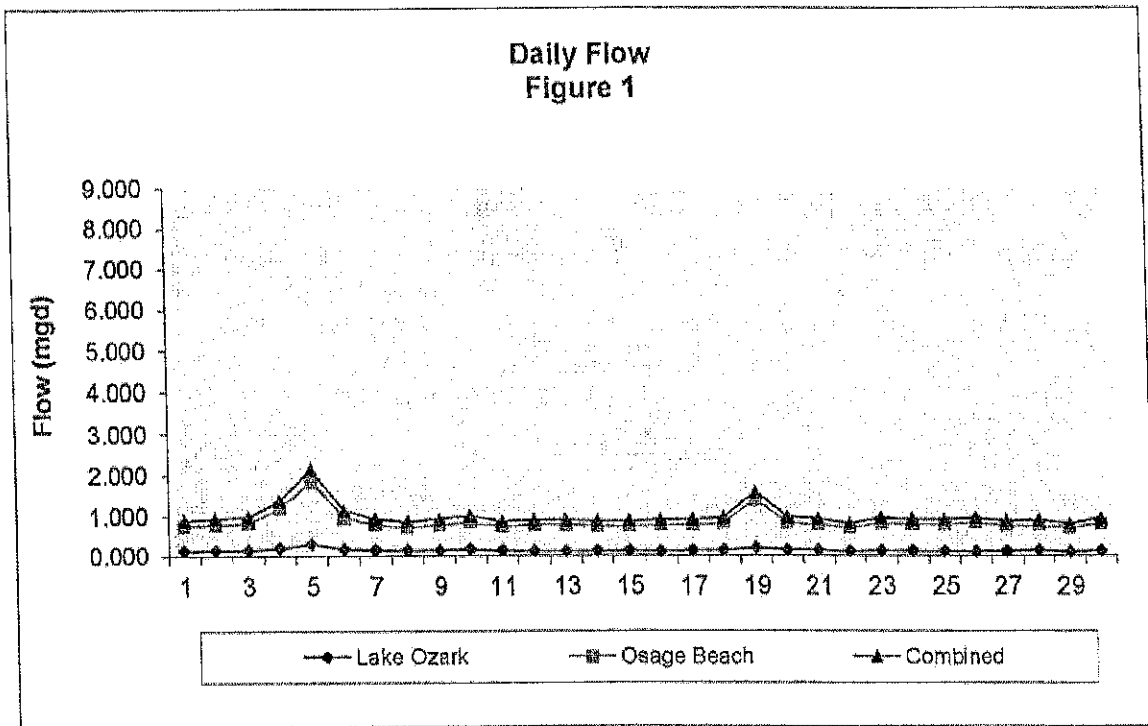


TABLE B
JOINT SEWER BOARD
Monthly Flows

2022	RAINFALL	OSAGE BEACH		LAKE OZARK		TOTAL	%
January	1.7	23,599,000	83%	4,824,000	17%	28,423,000	100%
February	3.8	21,853,000	83%	4,610,000	17%	26,463,000	100%
March	5.2	28,266,000	83%	5,657,000	17%	33,923,000	100%
April	6.3	28,580,000	82%	6,088,000	18%	34,668,000	100%
May	9.1	41,076,000	83%	8,597,000	17%	49,673,000	100%
June	3.3	39,125,000	84%	7,563,000	16%	46,688,000	100%
July	2.6	45,728,000	84%	8,591,000	16%	54,319,000	100%
August	6.8	42,549,000	83%	8,716,000	17%	51,265,000	100%
September	2.4	34,238,000	84%	6,499,000	16%	40,737,000	100%
October	5.2	31,814,000	86%	5,317,000	14%	37,131,000	100%
November	4.5	26,905,000	85%	4,739,000	15%	31,644,000	100%
December	1.9	24,749,000	85%	4,376,000	15%	29,125,000	100%

52.7	388,482,000	84%	75,577,000	16%	464,059,000	100%
------	-------------	-----	------------	-----	-------------	------

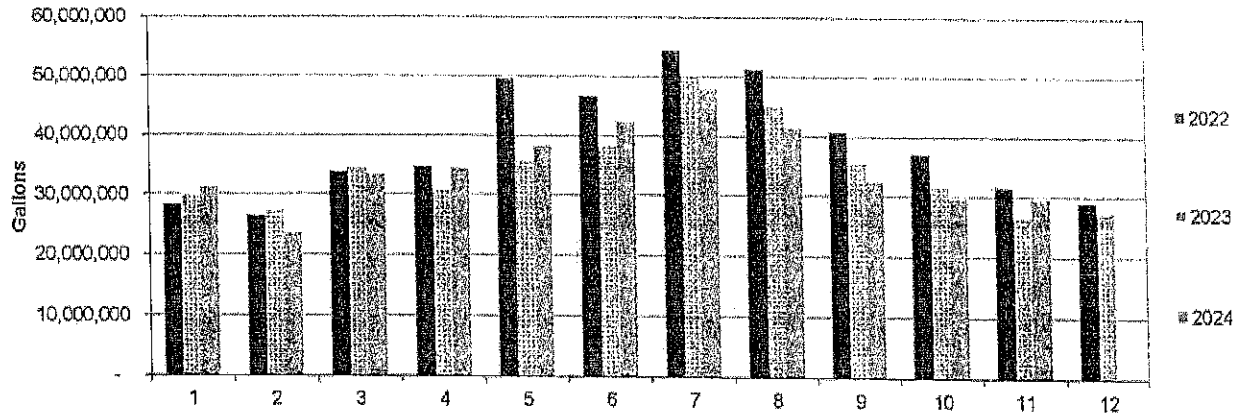
2023	RAINFALL	OSAGE BEACH		LAKE OZARK		TOTAL	%
January	2.8	25,972,000	87%	3,812,000	13%	29,784,000	100%
February	3.9	23,448,000	86%	3,820,000	14%	27,268,000	100%
March	6.2	29,920,000	87%	4,559,000	13%	34,479,000	100%
April	1.3	26,903,000	87%	4,085,000	13%	30,988,000	100%
May	2.1	29,783,000	83%	5,950,000	17%	35,733,000	100%
June	0.9	32,155,000	84%	6,040,000	16%	38,195,000	100%
July	7.1	42,263,000	85%	7,678,000	15%	49,941,000	100%
August	8.3	37,375,000	83%	7,664,000	17%	45,039,000	100%
September	2.5	29,574,000	83%	5,917,000	17%	35,491,000	100%
October	3.2	26,468,000	84%	5,067,000	16%	31,535,000	100%
November	1.0	22,375,000	84%	4,282,000	16%	26,657,000	100%
December	3.4	23,026,000	84%	4,445,000	16%	27,471,000	100%

42.7	349,262,000	85%	63,319,000	15%	412,581,000	100%
------	-------------	-----	------------	-----	-------------	------

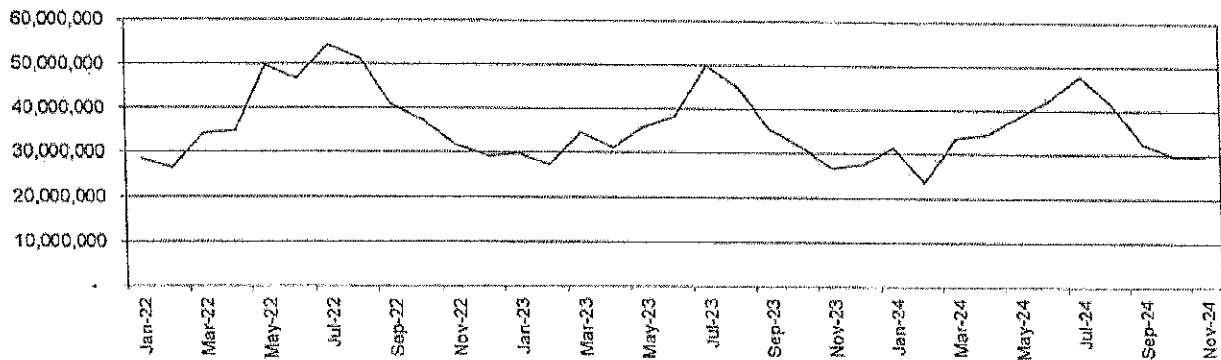
2024	RAINFALL	OSAGE BEACH		LAKE OZARK		TOTAL	%
January	4.8	26,487,000	85%	4,806,000	15%	31,293,000	100%
February	1.1	20,148,000	85%	3,491,000	15%	23,639,000	100%
March	5.1	27,206,000	81%	6,214,000	19%	33,420,000	100%
April	7.3	28,925,000	84%	5,502,000	16%	34,427,000	100%
May	7.4	31,860,000	83%	6,377,000	17%	38,237,000	100%
June	4.8	36,193,000	86%	6,117,000	14%	42,310,000	100%
July	4.5	40,465,000	84%	7,467,000	16%	47,932,000	100%
August	6.4	34,988,000	85%	6,415,000	15%	41,403,000	100%
September	1.1	27,348,000	84%	5,112,000	16%	32,460,000	100%
October	1.5	25,231,000	85%	4,473,000	15%	29,704,000	100%
November	5.6	25,536,000	86%	4,208,000	14%	29,744,000	100%
December							

49.6	324,387,000	84%	60,182,000	16%	384,569,000	100%
------	-------------	-----	------------	-----	-------------	------

Monthly Influent Flow
Figure 3A

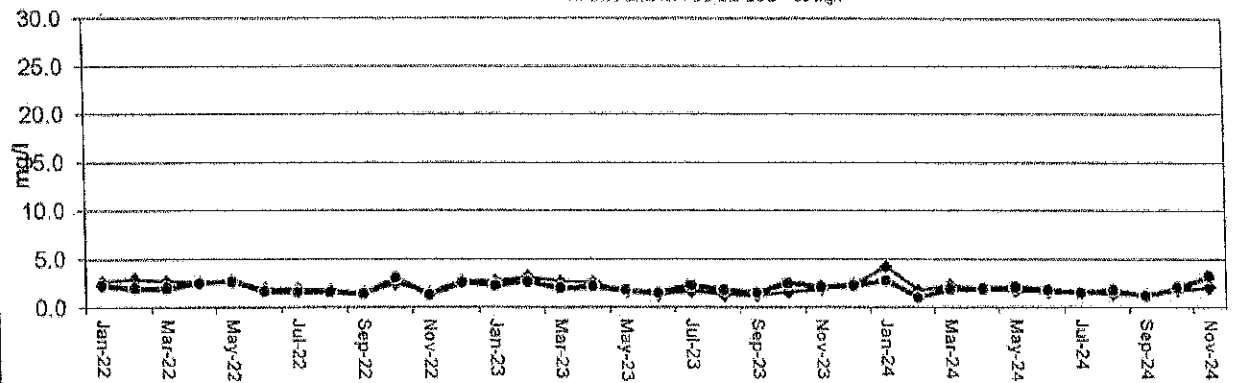


Monthly Influent Flow
Figure 3B



Effluent BOD/TSS
Figure 4

NPDES Limit for TSS and BOD = 30 mg/l

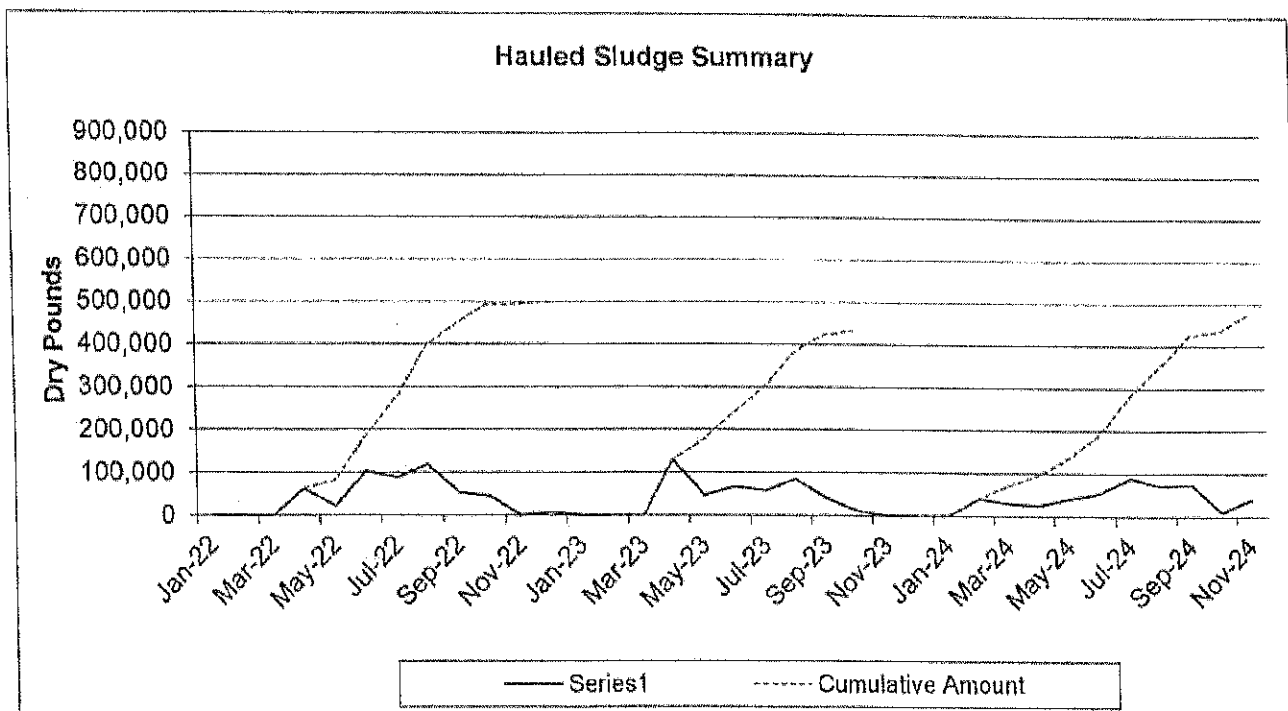
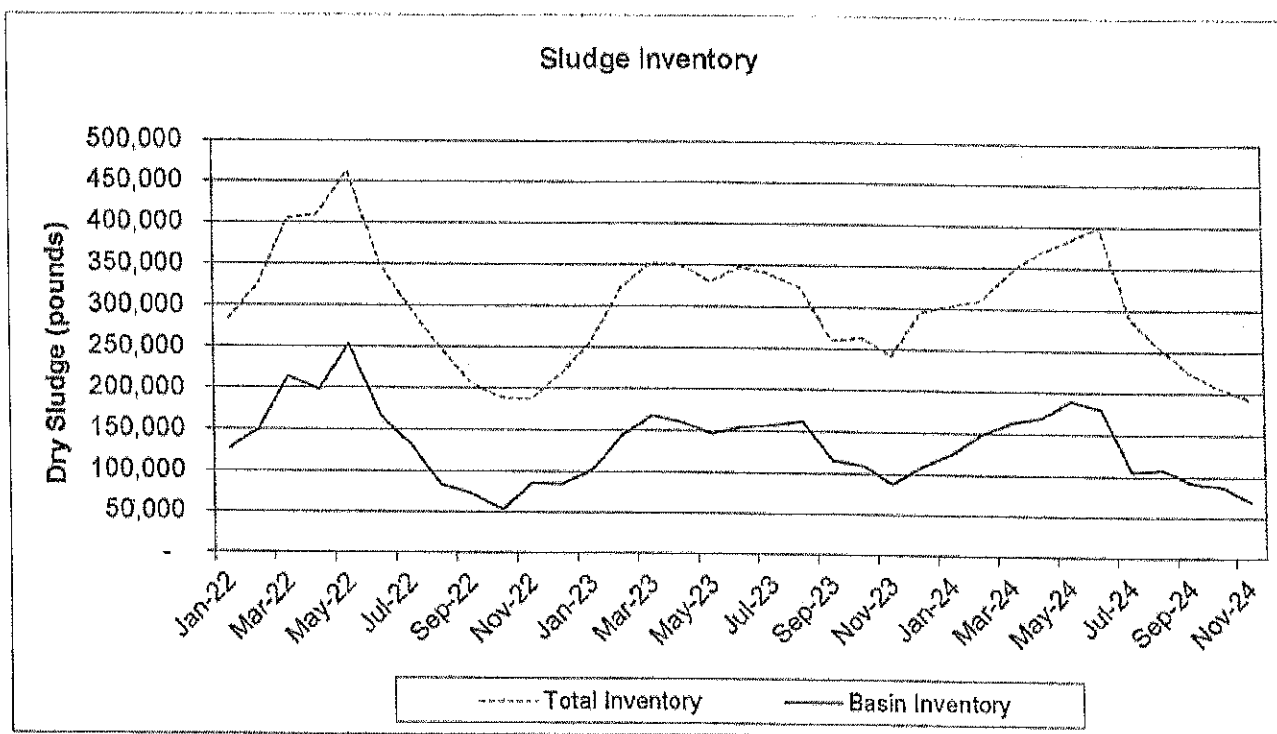


	Hauled Sludge				
	Loads	Gallons	# Dry	% Solids	Annual Cumulative # Dry
Jan-22	0	-	0	4.5%	
Feb-22	0	-	0	4.0%	
Mar-22	0	-	0	4.4%	
Apr-22	47	169,200	82,120	4.4%	82,120
May-22	16	57,800	21,017	4.4%	83,137
Jun-22	84	302,400	102,052	4.0%	185,189
Jul-22	80	288,000	88,981	3.7%	274,150
Aug-22	108	388,800	120,426	3.7%	394,576
Sep-22	51	183,600	54,073	3.5%	448,649
Oct-22	42	151,200	44,405	3.5%	493,054
Nov-22	0	-	0	3.5%	493,054
Dec-22	8	28,800	7,746	3.2%	500,800
Jan-23	0	-	0	3.2%	
Feb-23	0	-	0	3.2%	
Mar-23	0	-	0	3.2%	
Apr-23	116	417,000	139,223	3.7%	126,223
May-23	48	172,800	46,747	3.2%	175,970
Jun-23	56	208,800	65,362	3.8%	241,332
Jul-23	51	163,600	58,307	3.8%	299,639
Aug-23	74	266,400	83,587	3.8%	383,226
Sep-23	34	122,400	39,271	3.8%	422,497
Oct-23	9.5	34,200	11,124	3.9%	435,621
Nov-23	0	-	0	3.9%	
Dec-23	0	-	0	3.9%	
Jan-24	0	-	0	3.9%	
Feb-24	36	129,600	40,863	3.8%	40,863
Mar-24	25	90,000	29,724	4.0%	70,587
Apr-24	23	82,800	24,930	3.6%	95,537
May-24	36	129,600	40,472	3.7%	136,009
Jun-24	50	180,000	53,413	3.6%	189,422
Jul-24	81	291,600	80,582	3.7%	269,004
Aug-24	70	252,000	71,427	3.4%	339,431
Sep-24	69	246,400	72,638	3.5%	424,269
Oct-24	11	39,600	11,109	3.4%	435,378
Nov-24	36	129,600	40,233	3.7%	475,611

Basin Depths					# Dry
Tank #1	Tank #2	AB #1	Basin Gallons		
4.5	3.0	0.0	337 500	126,864	
7.0	3.0	0.0	450 000	180,120	
6.0	7.0	0.0	585 000	214,672	
7.0	5.0	0.0	540 000	196,255	
8.5	7.0	0.0	597 500	254,503	
7.0	4.0	0.0	495 000	167,049	
7.0	2.5	0.0	427 500	132,051	
2.0	4.0	0.0	270 000	83,829	
3.5	2.0	0.0	247 500	72,893	
1.0	3.0	0.0	180 000	52,863	
4.0	2.5	0.0	292 500	85,361	
5.0	3.0	0.0	315 000	84,722	
5.0	3.5	0.0	382 500	102,082	
6.5	5.5	0.0	540 000	144,115	
7.0	7.0	0.0	630 000	168,134	
7.5	4.0	0.0	517 500	160,367	
6.0	6.0	0.0	540 000	146,084	
6.0	5.0	0.0	495 000	154,953	
6.0	5.0	0.0	495 000	157,200	
7.0	4.5	0.0	517 500	162,373	
7.5	6.5	0.0	580 000	115,503	
7.5	6.0	0.0	337 500	109,778	
3.0	3.0	0.0	270 000	87,620	
4.5	3.0	0.0	337 500	109,775	
5.5	3.0	0.0	382 500	124,412	
7.0	3.5	0.0	472 500	148,980	
7.0	4.0	0.0	495 000	163,482	
5.5	7.0	0.0	562 500	169,497	
7.0	6.5	0.0	607 500	189,713	
7.0	6.5	0.0	607 500	180,289	
3.0	4.5	0.0	337 500	104,840	
4.0	4.5	0.0	382 500	108,418	
4.0	3.0	0.0	315 000	92,367	
3.5	3.5	0.0	315 000	86,367	
2.0	3.0	0.0	225 000	69,849	

Blanket Depths			MLSS Inventory		Blanket and MLSS Inventory		# Dry	% Solids	Total Dry
Clar #1	Clar #2	Clar #3	MLSS AB #1	MLSS AB #2	Gallons	Gallons			
1.0	3.5	0.0	5,060	5,180	3,679,929	157,136	0.0051		263,600
4.0	1.5	0.0	6,260	5,030	3,697,891	174,393	0.0057		324,513
9.0	10.0	0.0	5,870	5,760	3,937,478	190,464	0.0058		405,135
10.0	10.0	1.0	7,100	5,600	3,995,668	211,765	0.0064		410,021
2.0	10.0	1.0	6,290	8,630	3,856,572	207,778	0.0065		462,281
4.5	0.5	1.5	5,760	8,010	3,753,932	184,247	0.0059		351,297
8.0	3.0	1.5	4,740	5,860	3,860,524	166,296	0.0052		298,346
1.5	1.0	0.5	5,400	5,420	3,666,110	166,789	0.0055		250,418
1.0	1.0	0.5	4,650	4,180	3,657,238	134,359	0.0044		207,251
0.5	0.5	0.5	4,590	4,390	3,639,476	136,286	0.0045		189,149
1.0	1.0	0.0	4,330	2,340	3,635,524	101,573	0.0034		136,954
1.5	1.5	0.0	4,510	4,270	3,653,286	133,756	0.0044		218,478
1.0	1.0	0.0	4,880	5,380	3,635,524	155,543	0.0051		257,625
2.0	2.0	0.0	6,060	5,570	3,671,046	177,862	0.0058		321,997
1.0	2.0	1.0	5,310	6,640	3,696,714	184,213	0.0060		352,347
1.0	1.0	1.0	6,200	6,170	3,678,952	189,771	0.0062		360,138
0.5	9.0	0.5	5,120	6,530	3,790,453	184,142	0.0058		330,226
1.5	4.0	0.5	6,020	6,440	3,719,405	193,254	0.0062		348,207
2.0	3.5	0.5	6,030	5,710	3,719,405	182,086	0.0059		339,287
1.0	1.0	0.5	5,600	4,910	3,657,238	160,285	0.0053		322,656
1.0	1.0	0.5	4,760	4,750	3,657,238	145,339	0.0046		260,842
0.5	0.5	0.5	4,530	3,660	3,639,476	154,650	0.0051		264,426
2.0	2.0	0.5	4,550	5,540	3,692,762	155,374	0.0050		243,184
1.0	3.0	0.0	5,730	6,450	3,671,046	186,455	0.0061		296,230
1.0	5.0	0.0	5,470	6,100	3,708,572	178,831	0.0058		303,243
0.5	1.0	0.0	5,120	5,530	3,676,643	181,061	0.0053		310,041
4.0	5.0	0.0	5,960	6,540	3,759,858	180,304	0.0058		343,786
1.5	0.5	0.5	5,770	7,270	3,657,238	198,889	0.0065		368,366
2.5	2.5	0.5	6,800	5,623	3,772,691	192,581	0.0061		362,274
6.0	8.0	1.5	6,890	7,100	3,625,000	219,954	0.0069		400,223
3.0	8.0	1.5	6,890	6,260	3,657,238	184,838	0.0061		269,679
1.0	1.0	0.5	5,880	4,760	3,726,286	145,675	0.0047		254,001
1.0	5.0	0.5	4,610	4,260	3,639,476	131,685	0.0043		224,252
0.5	0.5	0.5	4,410	4,150	3,639,476	117,771	0.0039		208,138
0.5	0.5	0.0	3,840	4,340	3,617,762	123,404	0.0041		193,253

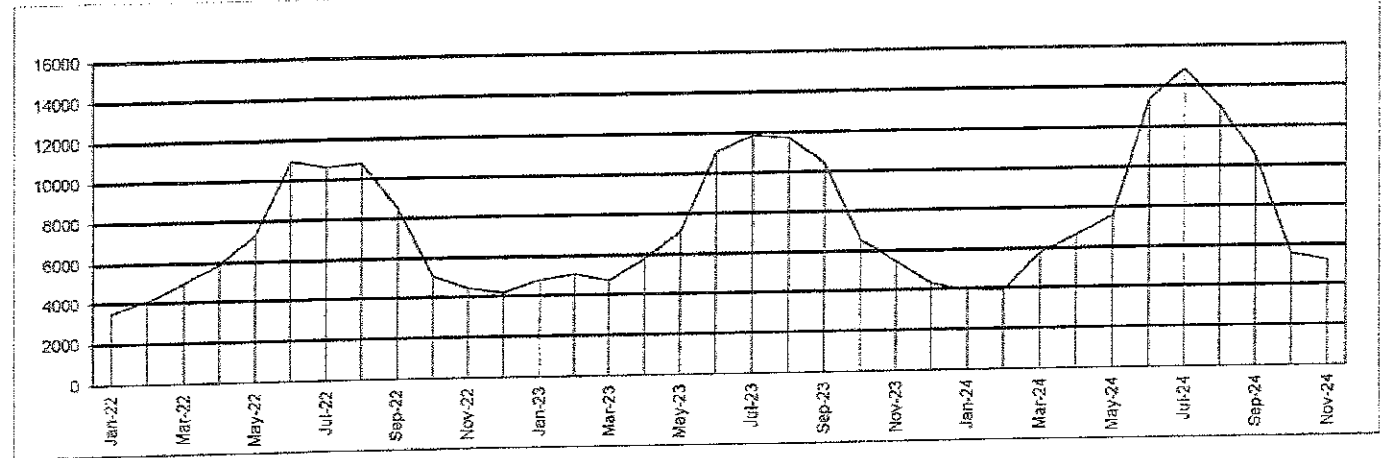
Accepted	Septage Gallons
13	27,000
32	68,000
23	48,000
52	124,500
37	85,000
42	93,500
33	68,500
168	300,000
76	168,000
33	71,000
38	89,500
33	71,500
35	74,500
38	87,500
50	115,500
82	171,500
49	102,500
59	131,500
61	120,500
27	66,500
84	164,000
40	85,500
30	66,000
20	77,000
23	49,000
21	40,000
21	51,500
56	122,000
48	119,000
78	175,000
46	93,500
81	168,500
83	181,000
72	148,500
29	65,000



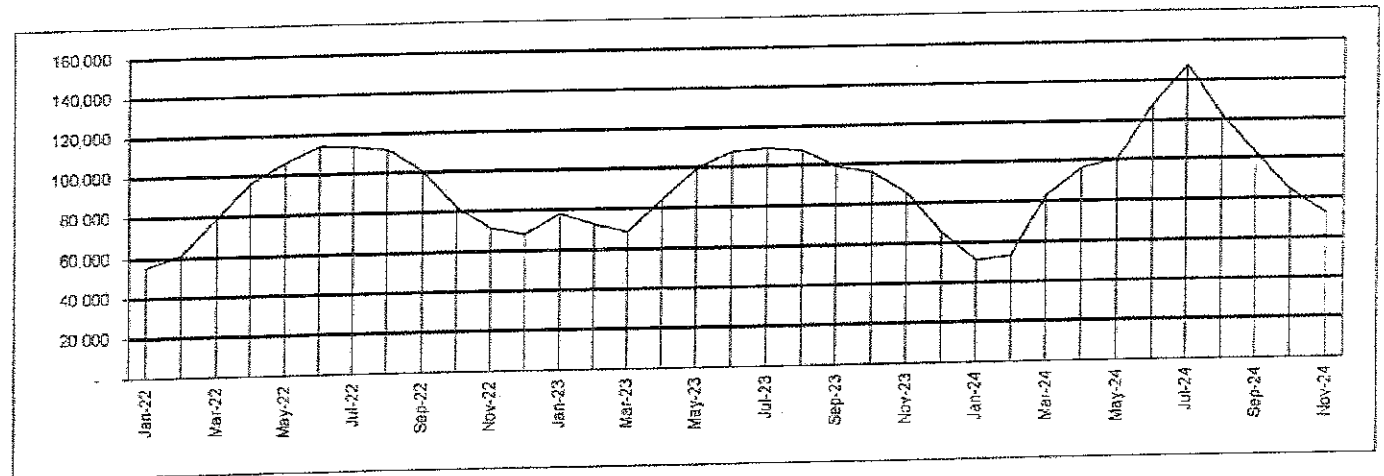
Electric Cost Kilowatts Used

Jan-22	3547	55,070
Feb-22	4063	61,330
Mar-22	4979	79,050
Apr-22	5907	96,160
May-22	7292	106,100
Jun-22	10958	113,870
Jul-22	10648	113,590
Aug-22	10800	111,690
Sep-22	8498	100,470
Oct-22	5071	82,030
Nov-22	4451	71,240
Dec-22	4224	68,000
Jan-23	4809	77,980
Feb-23	5074	72,420
Mar-23	4730	68,320
Apr-23	5801	84,440
May-23	7128	99,300
Jun-23	11076	107,520
Jul-23	11845	109,070
Aug-23	11697	107,330
Sep-23	10438	99,140
Oct-23	6553	96,000
Nov-23	5474	85,570
Dec-23	4293	65,618
Jan-24	3972	51,236
Feb-24	3925	53,460
Mar-24	5786	82,859
Apr-24	6619	96,496
May-24	7563	100,390
Jun-24	13362	127,782
Jul-24	14832	147,621
Aug-24	12915	122,157
Sep-24	10456	102,916
Oct-24	5594	84,223
Nov-24	5209	72,179

Electric Cost



Kilowatts Used



Lake Ozark/Osage Beach WWTP
Phosphorus Removal

	Inf. mg/L	Eff. mg/L		Inf. mg/L	Eff. mg/L		Inf. mg/L	Eff. mg/L
Jan-22	4.8	1.9	Jan-23	4.9	2.7	Jan-24	5.3	3.3
Feb-22	4.6	1.7	Feb-23	5.9	3.0	Feb-24	5.3	2.8
Mar-22	4.9	2.9	Mar-23	5.1	2.9	Mar-24	4.5	3.5
Apr-22	4.7	2.9	Apr-23	6.0	3.2	Apr-24	5.5	2.1
May-22	4.4	2.8	May-23	5.6	1.9	May-24	5.2	3.6
Jun-22	4.4	3.7	Jun-23	6.2	2.8	Jun-24	4.5	1.4
Jul-22	6.2	2.8	Jul-23	7.2	0.6	Jul-24	4.0	0.8
Aug-22	3.5	1.0	Aug-23	4.7	0.6	Aug-24	4.5	5.0
Sep-22	5.3	4.5	Sep-23	5.0	4.6	Sep-24	5.1	5.7
Oct-22	6.1	6.8	Oct-23	7.0	6.6	Oct-24	5.9	4.7
Nov-22	4.8	3.6	Nov-23	7.6	5.4	Nov-24	3.3	3.4
Dec-22	4.8	2.8	Dec-23	5.9	3.6	Dec-24		
Avg.	4.9	3.1	Avg.	5.9	3.2	Avg.	4.8	3.3



MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
 Discharge Monitoring Report For Municipal Wastewater Treatment Plants

NAME OF FACILITY							LOCATION ADDRESS & CITY							COUNTY/REGION			
Lake of the Ozarks Regional WWTP #1							#5 Anderson Road							Miller/SWRO			
MONTH/YEAR		PERMIT NUMBER					OUTFALL NUMBER		TYPE TREATMENT FACILITY								
Nov-24		MO-0103241					#001		Oxidation Ditch/UV/Sludge Holding-sludge is land applied								
INFLUENT							EFFLUENT							% Removal			
DATE	pH UNITS	BOD mg/L	TSS mg/L	Ammonia as N 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	6.9				15.3	1.135	7.6				9.8		17.1				
2	6.8				16.7	1.160	7.6				9.9		16.1				
3	6.8				19.6	1.201	7.6				9.6		18.6				
4	7.0				19.3	1.607	7.7				9.5		18.8				
5	7.0				19.0	2.463	7.7				9.2		19.0				
6	7.9			27.9	18.1	1.414	7.7			0.3	9.6		18.0				
7	7.0				16.4	1.159	7.7				9.9		17.0				
8	7.0	158	280		16.8	1.178	7.7	2.3	2.6		9.9		15.6	98.5	99.1		
9	6.8				17.3	1.124	7.7				9.9		15.4				
10	6.8				17.8	1.278	7.6				9.9		15.6				
11	6.7				17.2	1.102	7.9				10.0		15.9				
12	7.0				16.3	1.121	7.8				10.4		15.3				
13	6.9			26.3	17.5	1.170	7.9			0.02	10.0		16.0				
14	6.9				17.2	1.123	7.9				10.1		15.5				
15	7.0	173	228		14.6	1.118	7.8	2.0	2.4		10.2		13.8	98.8	98.0		
16	7.0				16.4	1.140	7.6				10.3		14.4				
17	6.9				16.6	1.102	7.6				10.2		15.1				
18	7.0				18.6	1.119	7.9				9.7		17.1				
19	7.0				17.1	1.872	7.6				9.6		16.4				
20	6.8			24.6	16.7	1.223	7.6			0.05	10.0		15.6				
21	7.1				15.3	1.157	8.0				10.6		13.5				
22	7.1	168	322		15.1	1.089	8.0	1.9	3.3		10.7		12.9	98.9	99.0		
23	6.9				15.3	1.154	7.6				10.9		12.1				
24	7.0				16.4	1.159	7.7				10.7		13.3				
25	6.8			30.2	17.2	1.113	8.0			0.04	10.5		14.5				
26	6.9				14.2	1.145	7.6				11.1		12.0				
27	7.0	165	146		15.7	1.098	7.6	2.2	4.6		10.7		13.1	98.7	98.8		
28	6.8				13.5	1.204	7.6				11.1		11.5				
29	6.8				12.0	1.005	7.5				11.5		10.7				
30	6.9				13.8	1.146	7.1				11.4		11.0				
Total						37.077											
Avg		166	244	27.3	16.4	1.236		2.1	3.2	0.10	10.2	0.0	15.0	98.7	98.5		
Min	6.7	158	146	24.8	12.0	1.005	7.1	1.9	2.4	0.02	9.2	0.0	10.7	98.5	98.8		
Max	7.9	173	322	30.2	19.6	2.463	8.0	2.3	4.6	0.30	11.5	0.0	19.0	98.9	99.1		

MONTHLY EFF MONITORING				QUARTERLY EFF MONITORING				MONTHLY INF MONITORING		
DATE	Phosphorus mg/L	TKN mg/L	Nitrite+Nitrate mg/L	Oil & Grease mg/L	TR. Cadmium mg/L	Selenium mg/L	Hardness mg/L	Phosphorus mg/L	TKN mg/L	Nitrite+Nitrate mg/L
1										
2										
3										
4										
5										
6	3.38	< 0.130	18.8					3.28	30.9	< 0.030
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
Total	3.38	< 0.130	18.8					3.28	30.9	< 0.030
Avg	3.38	< 0.130	18.8					3.28	30.9	< 0.030
Min	3.38	< 0.130	18.8					3.28	30.9	< 0.030
Max	3.38	< 0.130	18.8					3.28	30.9	< 0.030

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

OPERATIONAL CONTROLS/LABORATORY TEST REQUIRED FOR "ACTIVATED SLUDGE" PROCESSES												
DATE Nov-24	SLUDGE DISP. LBS. DRY WEIGHT	#1 Aeration Basin, O-Ditch, Etc.				#2 Aeration Basin, O-Ditch, Etc.				#Weather Conditions		
		MIXED LIQUOR				MIXED LIQUOR				Outside		
		* DO	** MLSS	*Settleability		* DO	** MLSS	*Settleability		* Ambient	*RAIN	Time
		mg/l	mg/l	*30 min ml	Temp ° C	mg/l	mg/l	*30 min ml	Temp ° C	Temp ° F	inches	
		3.2	3,820	320	16.4	3.1	4,100	390	17.1	41	0	7:30
		3.7	3,900	320	15.9	3.4	4,200	360	16.7	49	0	7:30
		2.6	3,910	320	18.6	2.3	4,200	360	18.7	65	0	7:30
		3.8	4,140	340	19.0	3.2	4,200	340	19.2	63	1.4	7:30
		1.3	4,070	330	19.0	1.3	4,060	450	19.1	62	2.1	7:30
		2.1	4,250	360	17.8	2.7	4,430	410	18.3	48	0	7:30
		1.5	4,160	400	16.8	2.3	4,110	370	17.1	47	0	7:30
		2.3	4,950	410	16.1	3.3	4,130	360	16.5	48	0	7:30
		2.7	4,790	350	16.0	4.2	3,980	320	16.3	55	0.3	7:30
		4.0	3,840	320	16.2	4.4	4,270	330	16.6	51	0.2	7:30
	5,554	2.7	4,050	330	15.9	3.5	4,210	330	16.4	45	0	7:30
	3,603	2.8	3,990	330	15.2	4.3	4,090	330	15.7	42	0	7:30
		3.3	4,080	320	15.7	3.6	4,270	330	15.8	50	0	7:30
		3.1	4,390	330	15.7	3.4	3,610	300	16.0	53	0.1	7:30
		3.1	4,430	340	13.8	3.8	4,040	310	14.5	38	0	7:30
		3.7	4,110	310	14.9	4.8	3,820	300	15.1	42	0	7:30
		3.2	4,160	300	15.4	4.7	3,920	280	15.5	52	0	7:30
		3.5	4,280	280	17.7	4.5	4,180	270	17.3	63	0.5	7:30
		1.6	3,930	280	16.7	2.3	3,970	280	16.9	53	0.8	7:30
	8,827	1.5	3,760	280	15.6	3.5	3,810	240	15.7	48	0	7:30
	6,665	2.3	4,050	280	13.4	4.8	3,710	240	13.9	41	0	7:30
	5,485	3.5	4,180	280	13.1	5.5	3,680	240	13.1	39	0	7:30
		4.1	3,720	260	12.2	5.4	3,640	250	12.5	35	0	7:30
		3.6	2,150	250	13.5	4.3	3,840	250	13.5	48	0	7:30
		3.1	4,100	240	14.7	3.2	4,250	260	14.8	54	0	7:30
	5,945	4.6	3,960	240	12.0	4.6	4,280	260	13.0	32	0	7:30
	3,153	3.2	4,230	250	13.2	3.3	3,860	250	13.2	46	0	7:30
		3.6	4,080	250	12.2	4.7	4,080	250	12.5	37	0.2	7:30
		4.1	3,910	250	10.8	4.1	4,270	260	11.6	30	0	7:30
		5.0	3,840	250	11.9	5.3	4,340	270	11.6	39	0	7:30
COMMENTS:												

COMMENTS:

TESTS PERFORMED BY (PRINT)	SIGNATURE	PHONE #	DATE
John Hornback	<i>John Hornback</i>	(573)365-0455	12/4/2024
REPORT APPROVED BY (PRINT)	SIGNATURE	PHONE #	DATE
Gary Hutchcraft	<i>Gary Hutchcraft</i>	(573)365-0455	12/4/2024

*Required Daily (Monday - Friday)

**Required 1/week

Lake of the Ozarks Regional
WWTP #1
23 Anderson Road
LAKE OZARK, MO, Miller

State of Missouri
Department of Natural Resources
National Pollutant Discharge Elimination System (NPDES)
Discharge Monitoring Report (DMR)

Central Field Operations
P O Box 176
Jefferson City, MO, 65102

Permit Number	Outfall Number
MO0003241	001A1
Monitoring Period	
11/1/24	11/30/24
NOD:	43-004

Parameters	Reporting Requirements			Unit	Reporting Requirements			Unit
Flow, in conduit or thru treatment plant	*****	*****	*****	mgd	2.463	1.236		Mgal/d
Mon. Location: End of Pipe	*****	*****	*****		Daily Max. Monitoring Required	Monthly Avg. Monitoring Required		
Sample Type: Total Measured								
Frequency: Daily								
BOD, 5-day, 20 deg. C	*****	2.3	2.1	mg/l	*****	*****	*****	
Mon. Location: End of Pipe	*****	Weekly Avg.:45	Monthly Avg.:30		*****	*****		
Sample Type: 24 Hour Composite								
Frequency: Weekly								
Total Suspended Solids (TSS)	*****	4.6	3.2	mg/L	*****	*****	*****	
Mon. Location: End of Pipe	*****	Weekly Avg.:45	Monthly Avg.:30		*****	*****		
Sample Type: 24 Hour Composite								
Frequency: Weekly								
Phosphorus, total (as P)	3.38	*****	3.38	mg/l	*****	*****	*****	
Mon. Location: End of Pipe	Daily Max. Monitoring Required	*****	Monthly Avg. Monitoring Required		*****	*****		
Sample Type: 24 Hour Composite								
Frequency: Monthly								
Nitrogen, Kjeldahl, total (as N)	<0.130	*****	<0.130	mg/L	*****	*****	*****	
Mon. Location: End of Pipe	Daily Max. Monitoring Required	*****	Monthly Avg. Monitoring Required		*****	*****		
Sample Type: 24 Hour Composite								
Frequency: Monthly								
Nitrite plus nitrate total (as N)	18.8	*****	18.8	mg/l	*****	*****	*****	
Mon. Location: End of Pipe	Daily Max. Monitoring Required	*****	Monthly Avg. Monitoring Required		*****	*****		
Sample Type: 24 Hour Composite								
Frequency: Monthly								
Nitrogen, ammonia total (as N)	0.30	*****	0.10	mg/l	*****	*****	*****	
Mon. Location: End of Pipe	Daily Max. Monitoring Required	*****	Monthly Avg. Monitoring Required		*****	*****		
Sample Type: 24 Hour Composite								
Frequency: Weekly								

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

State of Missouri
Department of Natural Resources
National Pollutant Discharge Elimination System (NPDES)
Discharge Monitoring Report (DMR)

Central Field Operations
P O Box 176
Jefferson City, MO, 65102

pH	7.4	8.0	8.0	8.0	8.0	8.0
Mon. Location : End of Pipe	Minimum:6.0	Maximum:9.0				
Sample Type: Grab						
Frequency: Weekly						
BOD, 5-day, percent removal	98.5	98.5	98.5	98.5	98.5	98.5
Mon. Location : End of Pipe		Monthly Avg. Min. 85				
Sample Type: Calculated						
Frequency: Monthly						
Suspended Solids, percent removal	96.8	96.8	96.8	96.8	96.8	96.8
Mon. Location : End of Pipe		Monthly Avg. Min. 85				
Sample Type: Calculated						
Frequency: Monthly						
Comments:						

State of Missouri
Department of Natural Resources
National Pollutant Discharge Elimination System (NPDES)
Discharge Monitoring Report (DMR)

Central Field Operations
P O Box 178
Jefferson City, MO, 65102

Person Number	Outfall Number
AK0603241	INFTM
Monitoring Period	
11/24	11/30/24
Notes:	*****

Parameters	Reporting Requirements			Unit	Reporting Requirements		Unit
BOD, 5-day, 20 deg. C	*****	*****	166	mg/l	*****	*****	*****
Mon. Location: Influent	*****	*****	Monthly Avg.: Monitoring Required		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Monthly							
Total Suspended Solids (TSS)	*****	*****	244	mg/l	*****	*****	*****
Mon. Location: Influent	*****	*****	Monthly Avg.: Monitoring Required		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Monthly							
Nitrogen, ammonia total (as N)	30.2	*****	27.3	mg/L	*****	*****	*****
Mon. Location: Influent	Daily Max.: Monitoring Required	*****	Monthly Avg.: Monitoring Required		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Monthly							
Phosphorus, total (as P)	3.28	*****	3.28	mg/l	*****	*****	*****
Mon. Location: Influent	Daily Max.: Monitoring Required	*****	Monthly Avg.: Monitoring Required		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Monthly							
Nitrogen, Kjeldahl, total (as N)	30.9	*****	30.9	mg/l	*****	*****	*****
Mon. Location: Influent	Daily Max.: Monitoring Required	*****	Monthly Avg.: Monitoring Required		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Monthly							
Nitrite plus nitrate total (as N)	<0.030	*****	<0.030	mg/l	*****	*****	*****
Mon. Location: Influent	Daily Max.: Monitoring Required	*****	Monthly Avg.: Monitoring Required		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Monthly							
Comments:							

Lake of the Ozarks Regional
WWTP 1
#3 Anderson Road
LAKE OZARK, MO, Miller

State of Missouri
Department of Natural Resources
National Pollutant Discharge Elimination System (NPDES)
Discharge Monitoring Report (DMR)

Central Field Operations
P O Box 176
Jefferson City, MO, 65102

I 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 properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who 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 penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature
Gary Hutchcraft

Submission Date
December 4, 2024

User Phone Number
(573)365-4455

2025 Nov 12 10:11 AM

[illegible]

2019年12月15日

2000 年 12 月 12 日

1522 中華書局

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 2024

Submitted by Alliance Water Resources, Inc. for the

January 2025

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	pH	E.coli Colonies/100 ml	Coliform	Ammonia as N mg/L	O&G mg/L
Monthly/Quarterly Avg	2.6	3.6	N/A	0.0		0.07	< 2.0
Peak Day	3.3	5.3	7.9	0.0		0.15	< 2.0
Percent Removal	98.8	98.2	N/A	N/A		N/A	N/A

NPDES EFFLUENT LIMITATIONS

	BOD mg/l	TSS mg/l	pH	E.coli Colonies/100 ml	Coliform	Ammonia as N mg/L	O&G mg/L
Monthly/Quarterly Avg	30	30	6-9	126		3.1	10
Weekly Average	45	45		630			
Daily Max				N/A		12.1	15

PLANT HYDRAULIC AND ORGANIC LOADING

The average daily influent flow for the month was 0.862 MGD or 29% 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 48875 pounds of BOD.

BIOSOLIDS APPLICATION AND INVENTORY

Plant personnel land applied 17 tanker loads of bio-solids during the month equivalent to a total of 61,200 gallons and 17,624 pounds dry weight solids.

493,235 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 247,500 gallons with a level of 3.0 feet in Tank 1 and 2.5 feet in Tank 2.

WASTEHAULERS

The plant received 50 loads of septage during the month totaling 112,000 gallons.

WWTP OPERATIONS

- Decanting digesters and wasting weekly.
- Normal operations.
- We pulled and cleaned the UV modules on the 4th of December, then put them in the UV control room for winter season storage.

WWTP MAINTENANCE AND REPAIR

- Performed routine maintenance throughout the month as per Maxpanda Maintenance Data Management software schedule.
- We had a flat on the sludge truck on the 10th of December and JCB Tire came and fixed it that day.
- We started noticing that Clarifier #2 gear box was leaking gear oil on the 26th of December, so we called PMF, and they came down on the 3rd of January to check it out. They think they may have just overfilled it, so they drained some of the oil to see if that was it.

SAFETY

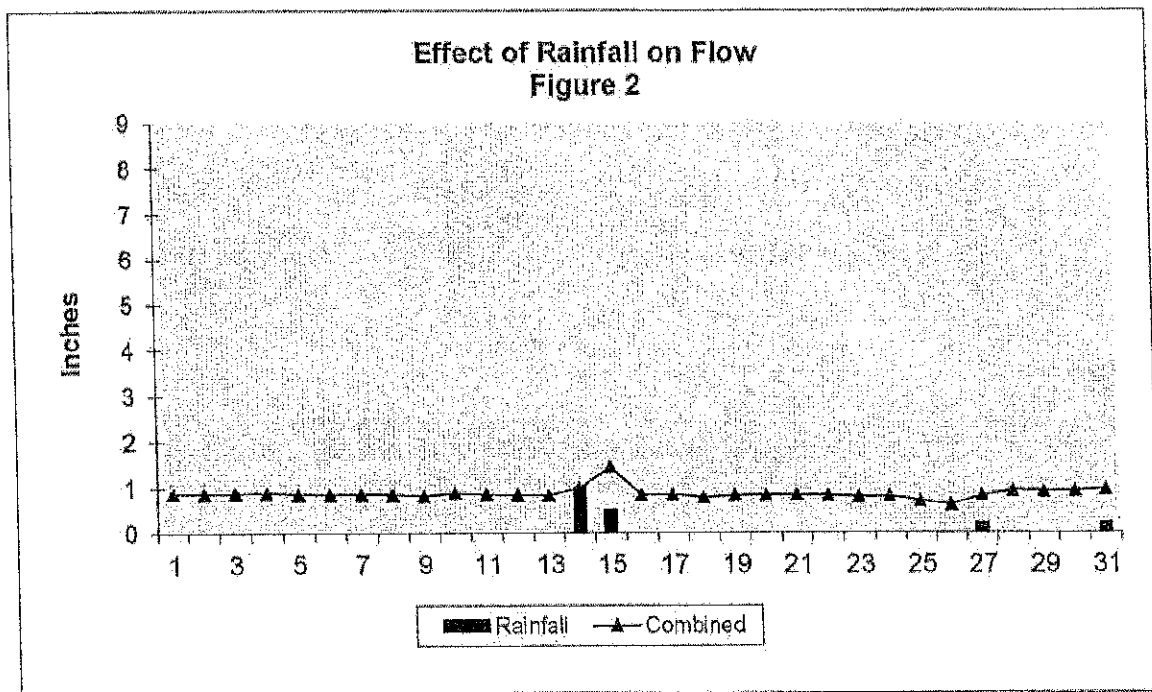
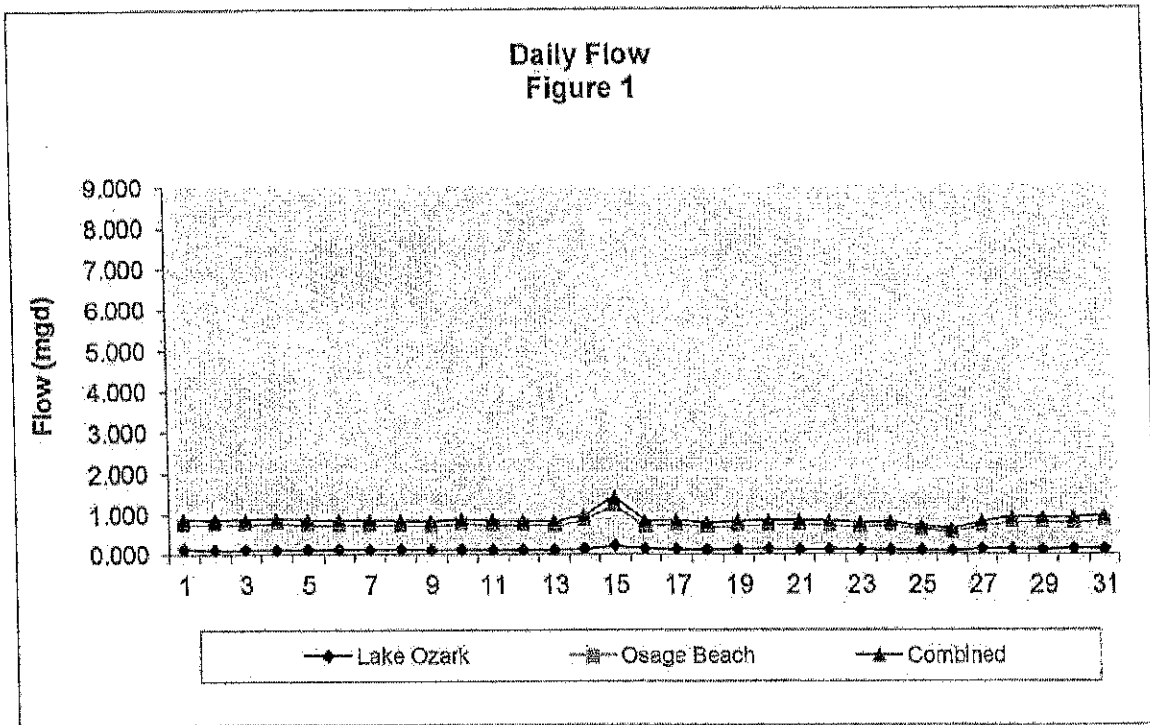
- We started a new monthly Safety Meeting process to where the employee is assigned a safety meeting topic through our AWR UKG Learning site which is due by the 15th of each month. This month's topics were Handling Sodium Hypochlorite, Housekeeping Awareness, Ladder Safety: Safe Use, Lawn Mower and Lawn Care Safety & Fire Safety: Fire Prevention

REGULATORY AGENCY, INSPECTION AND REPORT

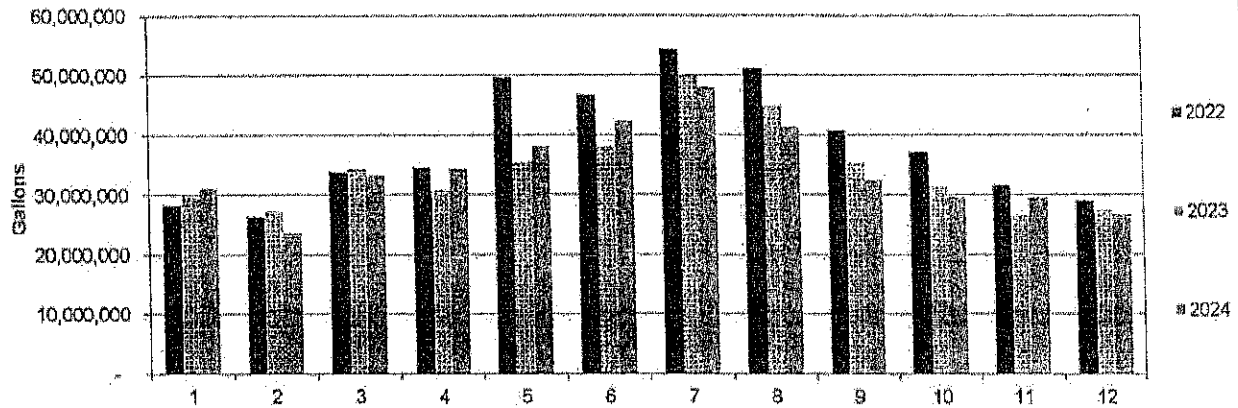
- We filled out the new EDMR on the EPA MoGEM website on the 7th of January.

MISCELLANEOUS AND RECOMMENDATIONS

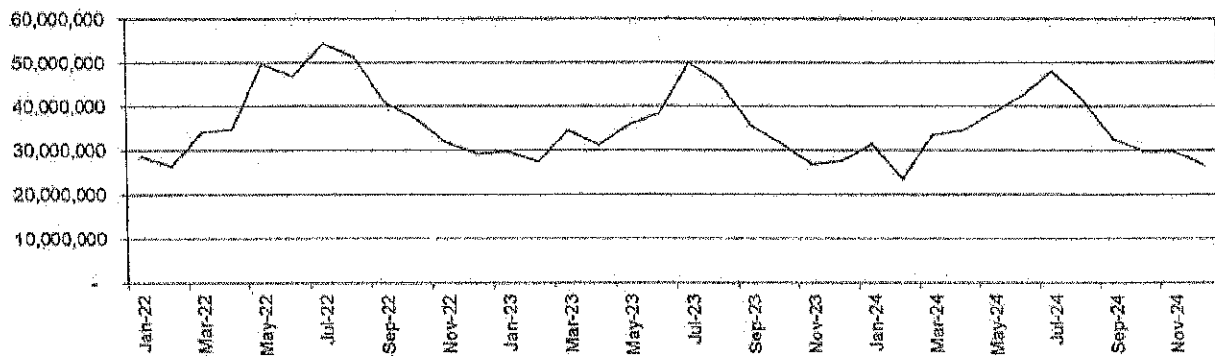
- We have attached a copy of the updated 2025 Plant Inventory and 2025 ERP, (Emergency Response Plan) for review.



Monthly Influent Flow
Figure 3A

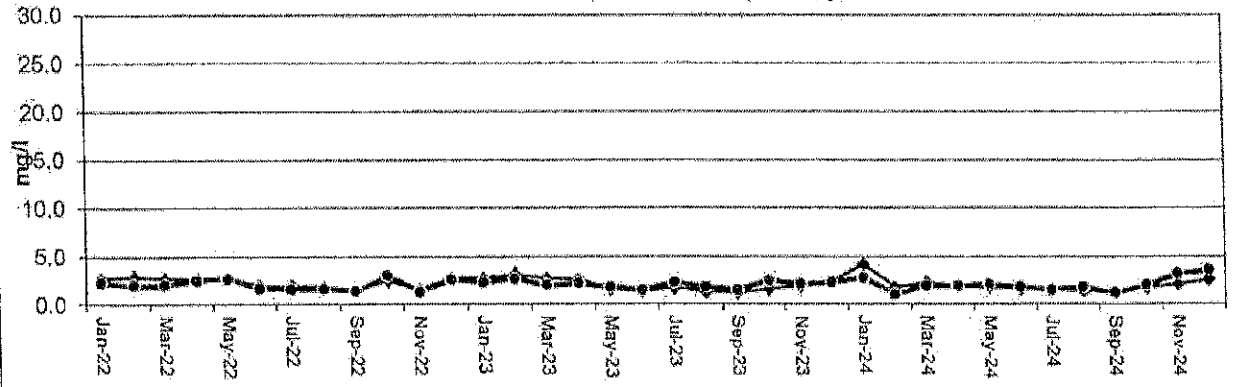


Monthly Influent Flow
Figure 3B



Effluent BOD/TSS
Figure 4

NPDES Limit for TSS and BOD = 30 mg/l

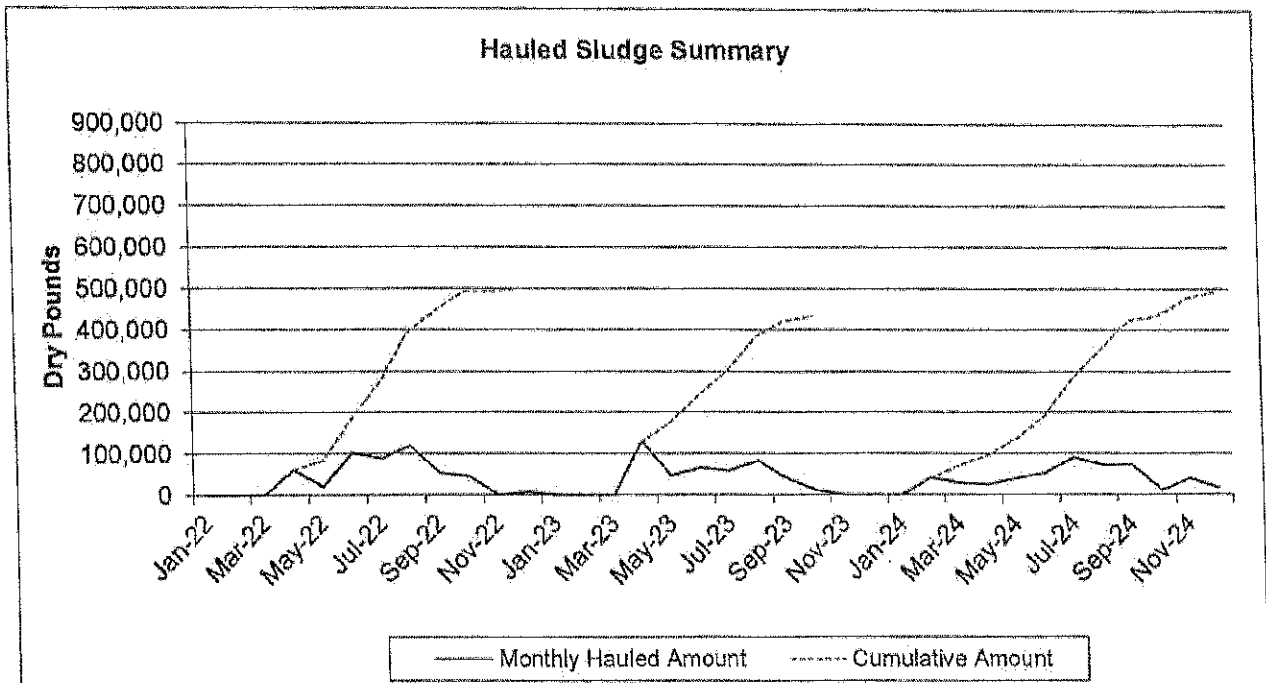
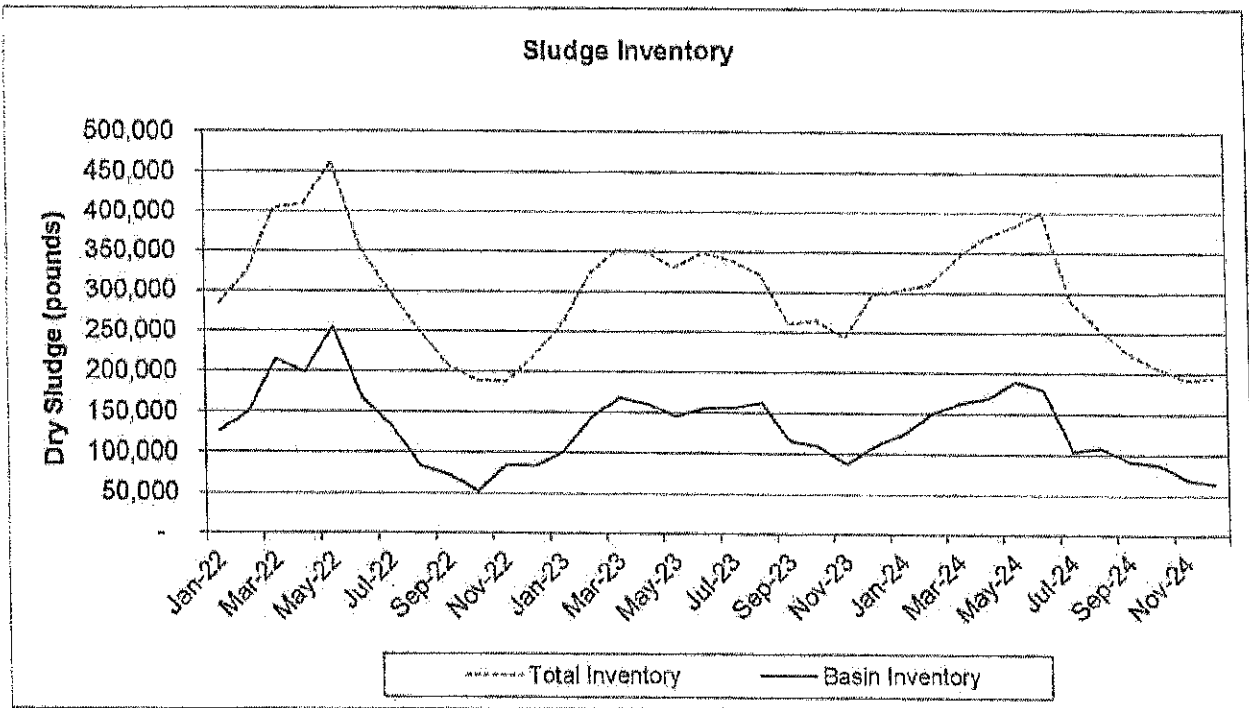


	Hauled Sludge				
	Loads	Gallons	# Dry	% Solids	Annual Cumulative # Dry
Jan-22	0	-	0	4.5%	
Feb-22	0	-	0	4.0%	
Mar-22	0	-	0	4.4%	
Apr-22	47	169,200	62,120	4.4%	62,120
May-22	16	57,600	21,017	4.4%	83,137
Jun-22	84	302,400	102,052	4.0%	185,189
Jul-22	80	288,000	88,981	3.7%	274,150
Aug-22	108	388,800	120,426	3.7%	394,576
Sep-22	51	183,600	54,073	3.5%	448,649
Oct-22	42	151,200	44,495	3.5%	493,054
Nov-22	0	-	0	3.5%	530,800
Dec-22	8	28,800	7,746	3.2%	
Jan-23	0	-	0	3.2%	
Feb-23	0	-	0	3.2%	
Mar-23	0	-	0	3.2%	
Apr-23	116	417,000	129,223	3.7%	129,223
May-23	48	172,800	46,747	3.2%	175,970
Jun-23	58	208,800	65,382	3.8%	241,352
Jul-23	51	183,600	58,307	3.8%	299,659
Aug-23	74	266,400	83,587	3.6%	383,226
Sep-23	34	122,400	39,271	3.8%	422,497
Oct-23	9.5	34,200	11,124	3.9%	433,621
Nov-23	0	-	0	3.9%	
Dec-23	0	-	0	3.9%	
Jan-24	0	-	0	3.9%	
Feb-24	36	129,600	40,863	3.8%	40,863
Mar-24	25	90,000	29,724	4.0%	70,587
Apr-24	23	82,800	24,950	3.6%	95,537
May-24	36	129,600	40,472	3.7%	136,009
Jun-24	50	180,000	53,413	3.8%	189,422
Jul-24	81	291,600	90,582	3.7%	280,004
Aug-24	70	252,000	71,427	3.4%	351,431
Sep-24	69	248,400	72,836	3.5%	424,269
Oct-24	11	38,800	11,109	3.4%	435,378
Nov-24	36	129,600	40,233	3.7%	475,611
Dec-24	17	61,200	17,624	3.5%	493,235

Basin Depths				
Tank #1	Tank #2	AB #1	Basin Gallons	# Dry
4.5	3.0	0.0	337,500	126,664
7.0	3.0	0.0	460,000	150,120
6.0	7.0	0.0	585,000	214,672
7.0	5.0	0.0	540,000	198,255
8.5	7.0	0.0	897,500	254,503
7.0	4.0	0.0	485,000	167,049
7.0	2.5	0.0	427,500	132,951
2.0	4.0	0.0	270,000	83,829
3.5	2.0	0.0	247,500	72,893
1.0	3.0	0.0	180,000	52,863
4.0	2.5	0.0	292,500	85,361
4.0	3.0	0.0	315,000	84,722
5.0	3.5	0.0	382,500	102,082
6.5	5.5	0.0	540,000	144,115
7.0	7.0	0.0	630,000	168,134
7.5	4.0	0.0	517,500	160,367
6.0	6.0	0.0	540,000	146,084
6.0	5.0	0.0	495,000	154,953
8.0	5.0	0.0	485,000	157,200
7.0	4.5	0.0	517,500	162,373
7.5	0.5	0.0	380,000	115,503
7.5	0.0	0.0	337,500	109,776
3.0	3.0	0.0	270,000	87,820
4.5	3.0	0.0	387,500	108,775
5.5	3.0	0.0	382,500	124,412
7.0	3.5	0.0	472,500	148,980
7.0	4.0	0.0	495,000	163,482
5.5	7.0	0.0	562,500	189,497
7.0	6.5	0.0	607,500	189,713
7.0	6.5	0.0	607,500	180,289
3.0	4.5	0.0	337,500	104,840
4.0	4.5	0.0	382,500	108,416
4.0	3.0	0.0	315,000	92,367
3.5	3.5	0.0	315,000	88,387
2.0	3.0	0.0	225,000	69,849
2.0	3.0	0.0	225,000	64,794

Blanket Depths			MLSS Inventory		Blanket and MLSS Inventory		MLSS	Total Dry
Clar #1	Clar #2	Clar #3	MLSS AB #1	MLSS AB #2	Gallons	# Dry	% Solids	Sludge Inventory
1.0	3.5	0.0	5,060	5,180	3,679,929	157,136	0.0051	283,800
4.0	1.5	0.0	6,280	5,030	3,697,691	174,393	0.0057	324,513
9.0	10.0	0.0	5,670	5,760	3,937,478	190,484	0.0058	405,135
10.0	10.0	1.0	7,100	5,600	3,998,668	211,765	0.0064	410,021
2.0	10.0	1.0	6,290	6,630	3,858,572	207,778	0.0065	462,281
4.5	0.5	1.5	5,780	6,010	3,753,952	184,247	0.0059	351,287
8.0	3.0	1.5	4,740	5,890	3,860,524	186,296	0.0052	298,348
1.5	1.0	0.5	5,490	5,420	3,866,119	166,789	0.0055	250,418
1.0	1.0	0.5	4,850	4,160	3,657,238	134,359	0.0044	207,251
0.5	0.5	0.5	4,580	4,390	3,639,476	136,265	0.0045	189,149
1.0	1.0	0.0	4,330	2,340	3,635,524	101,573	0.0034	166,954
1.5	1.5	0.0	4,510	4,270	3,653,286	133,756	0.0044	216,478
1.0	1.0	0.0	4,880	5,380	3,635,524	155,543	0.0051	257,825
2.0	2.0	0.0	6,060	5,570	3,671,048	177,882	0.0058	321,997
1.0	2.0	1.0	5,310	6,640	3,696,714	184,213	0.0080	352,347
1.0	1.0	1.0	6,200	6,170	3,678,952	180,771	0.0062	350,138
0.5	9.0	0.5	6,120	6,630	3,790,453	184,142	0.0058	330,225
1.5	4.0	0.5	6,020	6,440	3,719,405	199,254	0.0062	346,207
2.0	3.5	0.5	6,030	5,710	3,719,405	182,086	0.0059	339,287
1.0	1.0	0.5	5,600	4,910	3,657,238	160,285	0.0053	322,658
1.0	1.0	0.5	4,780	4,750	3,657,238	145,339	0.0048	260,842
0.5	0.5	0.5	4,530	5,890	3,639,476	154,850	0.0051	264,426
2.0	2.0	0.5	4,550	6,540	3,692,762	155,374	0.0060	243,194
1.0	3.0	0.0	5,730	8,450	3,671,048	186,455	0.0061	296,230
1.0	5.0	0.0	5,470	6,100	3,706,572	175,831	0.0058	303,243
0.5	1.0	0.0	5,120	5,530	3,626,643	161,061	0.0053	310,041
4.0	5.0	0.0	5,960	5,540	3,759,656	180,304	0.0058	343,766
1.5	0.5	0.5	5,770	7,270	3,657,238	198,869	0.0065	368,386
6.0	2.5	0.5	6,800	5,623	3,772,691	182,561	0.0061	382,274
3.0	8.0	1.5	6,690	7,100	3,625,600	219,854	0.0089	400,223
1.0	1.0	0.5	5,860	6,260	3,657,238	184,838	0.0061	269,679
1.0	5.0	0.5	4,810	4,780	3,738,286	145,875	0.0047	254,091
1.0	0.0	0.5	4,410	4,289	3,639,476	131,585	0.0043	224,252
0.5	0.5	0.5	3,610	4,150	3,639,476	117,771	0.0039	208,138
0.5	0.5	0.0	3,840	4,340	3,617,762	123,404	0.0041	193,253
0.5	0.5	0.0	4,150	4,450	3,617,762	129,740	0.0043	194,534

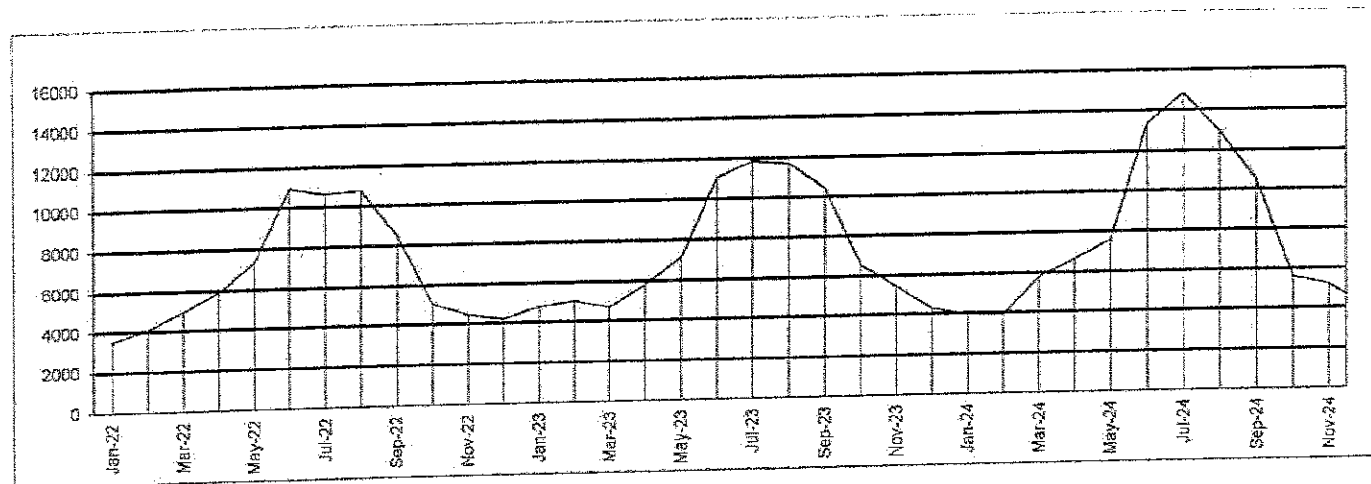
Accepted Septage	
Loads	Gallons
13	27,000
32	68,000
23	46,000
52	124,500
37	85,000
42	93,500
33	68,500
168	300,000
76	168,000
33	71,000
36	89,500
33	71,500
35	74,500
38	87,500
50	115,500
82	171,500
49	102,500
59	131,500
61	120,500
27	66,500
84	164,000
40	85,500
30	59,000
29	77,000
23	43,000
21	40,000
21	51,500
56	122,000
48	119,000
78	175,000
46	93,500
81	168,500
83	161,900
72	146,500
29	65,000
50	112,000



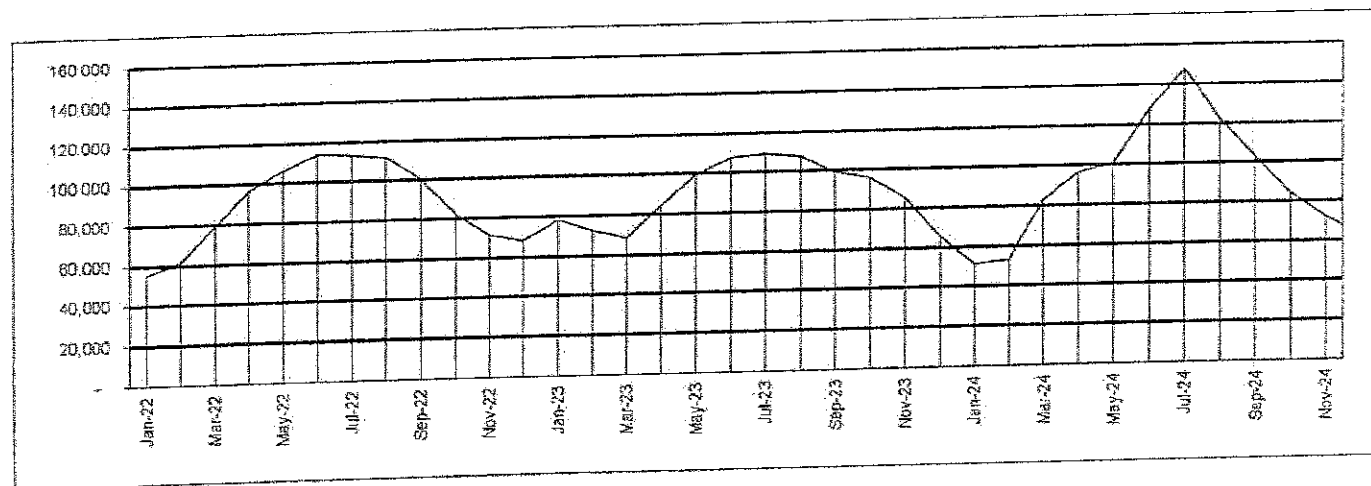
Electric Cost Kilowatts Used

Jan-22	3547	55,070
Feb-22	4063	61,330
Mar-22	4979	79,050
Apr-22	5907	96,160
May-22	7292	106,100
Jun-22	10958	113,870
Jul-22	10648	113,590
Aug-22	10800	111,690
Sep-22	8498	100,470
Oct-22	5071	82,030
Nov-22	4451	71,240
Dec-22	4224	68,000
Jan-23	4809	77,980
Feb-23	5074	72,420
Mar-23	4730	68,320
Apr-23	5801	84,440
May-23	7128	99,300
Jun-23	11076	107,520
Jul-23	11845	109,070
Aug-23	11697	107,330
Sep-23	10438	99,140
Oct-23	6553	96,000
Nov-23	5474	85,570
Dec-23	4293	65,618
Jan-24	3972	51,236
Feb-24	3925	53,460
Mar-24	5786	82,859
Apr-24	6619	96,496
May-24	7563	100,390
Jun-24	13362	127,782
Jul-24	14832	147,621
Aug-24	12915	122,157
Sep-24	10456	102,916
Oct-24	5594	84,223
Nov-24	5209	72,179
Dec-24	4135	62,553

Electric Cost



Kilowatts Used



Lake Ozark/Osage Beach WWTP
Phosphorus Removal

	Inf. mg/L	Eff. mg/L		Inf. mg/L	Eff. mg/L		Inf. mg/L	Eff. mg/L
Jan-22	4.8	1.9	Jan-23	4.9	2.7	Jan-24	5.3	3.3
Feb-22	4.6	1.7	Feb-23	5.9	3.0	Feb-24	5.3	2.8
Mar-22	4.9	2.9	Mar-23	5.1	2.9	Mar-24	4.5	3.5
Apr-22	4.7	2.9	Apr-23	6.0	3.2	Apr-24	5.5	2.1
May-22	4.4	2.8	May-23	5.6	1.9	May-24	5.2	3.6
Jun-22	4.4	3.7	Jun-23	6.2	2.8	Jun-24	4.5	1.4
Jul-22	6.2	2.8	Jul-23	7.2	0.6	Jul-24	4.0	0.8
Aug-22	3.5	1.0	Aug-23	4.7	0.6	Aug-24	4.5	5.0
Sep-22	5.3	4.5	Sep-23	5.0	4.6	Sep-24	5.1	5.7
Oct-22	6.1	6.8	Oct-23	7.0	6.6	Oct-24	5.9	4.7
Nov-22	4.8	3.6	Nov-23	7.6	5.4	Nov-24	3.3	3.4
Dec-22	4.8	2.8	Dec-23	5.9	3.6	Dec-24	5.1	3.9
Avg.	4.9	3.1	Avg.	5.9	3.2	Avg.	4.8	3.3



MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
 Discharge Monitoring Report For Municipal Wastewater Treatment Plants

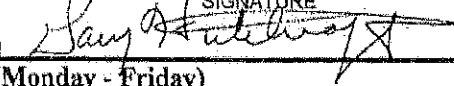
NAME OF FACILITY							LOCATION ADDRESS & CITY							COUNTY/REGION		
Lake of the Ozarks Regional WWTP #1							#3 Anderson Road							Miller/SWRO		
MONTH/YEAR		PERMIT NUMBER					OUTFALL NUMBER		TYPE TREATMENT FACILITY							
Dec-24		MO-0103241					#001		Oxidation Ditch/UV/Sludge Holding-sludge is land applied							
INFLUENT						EFFLUENT								% Removal		
DATE	pH UNITS	BOD mg/L	TSS mg/L	Ammonia as N 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	6.8				13.5	1.094	7.4				11.4		10.2			
2	6.8				14.8	1.063	7.7				11.4		10.7			
3	7.2				12.0	1.085	7.5				11.7		9.0			
4	6.7			22.3	15.2	1.067	7.4			0.02	11.2		10.9			
5	6.9				11.3	1.071	7.5				11.5		8.5			
6	7.1	173	150		9.6	1.112	7.6	3.1	5.3		12.2		8.9	98.2	96.5	
7	7.3				13.2	1.018	7.5				11.7		9.4			
8	7.0				14.0	1.041	7.5				11.2		10.3			
9	7.1				14.7	1.014	7.9				10.9		12.3			
10	6.8				12.3	1.073	7.9				11.1		11.1			
11	7.2			24.3	14.2	1.020	7.6			0.14	11.2		11.3			
12	6.9				10.6	1.071	7.8				11.6		9.8			
13	6.8	208	178		11.3	1.051	7.5	3.3	4.2		11.8		9.1	98.4	97.6	
14	6.8				13.3	1.201	7.5				11.1		11.0			
15	6.8				11.3	1.627	7.6				10.9		11.8			
16	6.7				14.1	1.094	7.6				10.7		12.6			
17	6.9				11.4	1.071	7.6				11.0		11.3			
18	6.7	183	170	20.3	12.6	0.954	7.6	2.2	2.1	0.03	11.0		11.7	98.8	98.8	
19	7.0				12.4	1.045	7.6				11.4		11.3			
20	6.9				11.2	1.067	7.6				11.4		9.9			
21	7.0				9.2	0.990	7.7				11.9		8.6			
22	6.8				11.9	1.042	7.6				11.8		7.8			
23	6.8			24.9	13.8	0.990	7.6			0.03	11.4		10.6			
24	6.9				13.9	1.025	7.7				11.2		12.0			
25	6.9				12.8	0.899	7.9				11.2		11.2			
26	7.0				13.2	0.832	7.6				11.1		11.8			
27	6.8	313	316		13.4	1.054	7.6	1.7	2.7		11.1		12.0	99.5	99.1	
28	6.8				12.9	1.162	7.6				10.9		11.6			
29	6.8				13.3	1.153	7.6				10.7		12.7			
30	6.9			41.3	13.6	1.116	7.8			0.15	10.7		12.0			
31	6.8				11.7	1.188	7.7				10.9		11.9			
Total						33.290										
Avg		219	204	26.6	12.7	1.074		2.6	3.6	0.07	11.3	0.0	10.8	98.7	96.0	
Min	6.7	173	150	20.3	9.2	0.832	7.4	1.7	2.1	0.02	10.7	0.0	7.8	98.2	96.5	
Max	7.3	313	316	41.3	15.2	1.627	7.9	3.3	5.3	0.15	12.2	0.0	12.7	99.5	99.1	

MONTHLY EFF MONITORING				QUARTERLY EFF MONITORING				MONTHLY INF MONITORING		
DATE	Phosphorus mg/L	TKN mg/L	Nitrite+Nitrate mg/L	Oil & Grease mg/L	TR. Cadmium mg/L	Selenium mg/L	Hardness mg/L	Phosphorus mg/L	TKN mg/L	Nitrite+Nitrate mg/L
1										
2										
3										
4	3.85	< 0.130	25.6					5.1	48.5	< 0.030
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Total	3.85	< 0.130	25.6					5.05	48.5	< 0.030
Avg	3.85	< 0.130	25.6					5.05	48.5	< 0.030
Min	3.85	< 0.130	25.6					5.05	48.5	< 0.030
Max	3.85	< 0.130	25.6					5.05	48.5	< 0.030

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

DATE Dec-24	SLUDGE DISP. LBS. DRY WEIGHT	#1 Aeration Basin, O-Ditch, Etc.				#2 Aeration Basin, O-Ditch, Etc.				*Weather Conditions		
		MIXED LIQUOR				MIXED LIQUOR				* Ambient Temp ° F	*RAIN inches	Time
		* DO	** MLSS	*Settleability		* DO	** MLSS	*Settleability				
				*30 min ml	Temp ° C			*30 min ml	Temp ° C			
		mg/l	mg/l			mg/l	mg/l					
1		4.1	4,150	260	11.0	4.1	4,240	260	11.4	34	0	7:30
2		3.7	4,290	260	11.0	4.1	4,290	270	11.3	36	0	7:30
3		4.3	3,720	270	9.0	5.2	4,290	270	9.4	27	0	7:30
4		2.6	4,150	250	11.0	2.9	4,130	260	11.1	47	0	7:30
5		2.6	3,720	250	9.5	3.2	4,230	290	9.7	26	0	7:30
6		3.7	3,700	250	9.1	3.7	4,620	310	9.0	23	0	7:30
7		4.3	3,720	240	9.5	4.2	4,510	300	9.8	32	0	7:30
8		3.5	3,740	230	11.6	2.9	4,430	280	11.1	49	0	7:30
9		1.4	4,000	240	12.6	1.6	4,000	280	12.7	51	0	7:30
10		1.7	3,830	250	11.1	1.5	4,470	290	11.6	36	0	7:30
11	5,765	2.5	3,510	240	10.8	2.3	3,770	270	10.8	37	0	7:30
12	4,083	2.7	3,290	250	9.3	2.8	3,590	300	9.9	29	0	7:30
13		3.4	3,420	250	9.3	3.4	4,220	300	9.9	31	0	7:30
14		1.7	3,840	270	11.2	1.7	4,070	270	11.5	48	1.0	7:30
15		1.2	4,330	300	12.8	1.4	3,840	260	12.5	48	0.5	7:30
16		1.5	4,670	330	12.9	1.9	3,800	360	13.9	54	0	7:30
17		1.4	4,860	350	11.2	1.8	3,820	270	12.0	34	0	7:30
18		1.4	4,360	320	12.2	1.8	3,640	260	12.6	46	0	7:30
19		1.4	3,530	300	10.6	2.5	3,710	260	10.7	32	0	7:30
20	7,776	2.1	4,200	310	9.9	3.2	3,840	280	10.9	32	0	7:30
21		3.7	3,750	280	9.4	4.9	3,570	280	9.5	25	0	7:30
22		4.1	3,990	300	8.7	5.2	3,950	300	9.0	28	0	7:30
23		2.8	3,600	280	10.7	3.9	4,090	290	10.5	49	0	7:30
24		2.1	3,510	280	12.0	2.6	4,650	280	12.5	49	0	7:30
25		3.4	3,950	280	11.3	4.1	4,310	320	11.2	45	0	7:30
26		2.6	3,990	280	12.2	3.1	4,650	340	12.4	50	0	7:30
27		1.7	4,100	290	12.7	1.7	4,150	330	12.8	52	0.2	7:30
28		1.5	3,900	300	13.1	2.1	4,530	350	13.2	46	0	7:30
29		1.3	4,040	310	13.1	1.4	4,480	350	13.2	50	0	7:30
30		1.2	3,950	300	12.3	1.6	4,340	360	12.7	39	0	7:30
31		1.5	4,150	320	11.9	1.6	4,450	350	12.5	43	0.2	7:30

COMMENTS:

TESTS PERFORMED BY (PRINT)	SIGNATURE	PHONE #	DATE
John Hornback		(573)365-0455	1/7/2025
REPORT APPROVED BY (PRINT)	SIGNATURE	PHONE #	DATE
Gary Hutchcraft		(573)365-0455	1/7/2025

*Required Daily (Monday - Friday)

**Required 1/week

Lake of the Ozarks Regional
WWTP 1
#3 Anderson Road
LAKE OZARK, MO, Miller

State of Missouri
Department of Natural Resources
National Pollutant Discharge Elimination System (NPDES)
Discharge Monitoring Report (DMR)

Central Field Operations
P O Box 178
Jefferson City, MO, 65102

Permit Number	Outfall Number
MO0103241	001M
Monitoring Period	
12/1/24	12/31/24
NODR:	*****

Parameters	Reporting Requirements			Unit	Reporting Requirements		Unit
Flow, in conduit or thru treatment plant	*****	*****	*****	*****	1.627	1.074	Mgal/d
Mon. Location.: End of Pipe	*****	*****	*****		Daily Max.: Monitoring Required	Monthly Avg.: Monitoring Required	
Sample Type: Total Measured							
Frequency: Daily							
BOD, 5-day, 20 deg. C	*****	3.3	2.6	mg/L	*****	*****	*****
Mon. Location.: End of Pipe	*****	Weekly Avg.:45	Monthly Avg.:30		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Weekly							
Total Suspended Solids (TSS)	*****	5.3	3.6	mg/L	*****	*****	*****
Mon. Location.: End of Pipe	*****	Weekly Avg.:45	Monthly Avg.:30		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Weekly							
Phosphorus, total (as P)	3.85	*****	3.85	mg/L	*****	*****	*****
Mon. Location.: End of Pipe	Daily Max.: Monitoring Required	*****	Monthly Avg.: Monitoring Required		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Monthly							
Nitrogen, Kjeldahl, total (as N)	<0.130	*****	<0.130	mg/L	*****	*****	*****
Mon. Location.: End of Pipe	Daily Max.: Monitoring Required	*****	Monthly Avg.: Monitoring Required		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Monthly							
Nitrite plus nitrate total (as N)	25.6	*****	25.6	mg/L	*****	*****	*****
Mon. Location.: End of Pipe	Daily Max.: Monitoring Required	*****	Monthly Avg.: Monitoring Required		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Monthly							
Nitrogen, ammonia total (as N)	0.15	*****	0.07	mg/L	*****	*****	*****
Mon. Location.: End of Pipe	Daily Max.: 12.1	*****	Monthly Avg.: 13.1		*****	*****	
Sample Type: 24 Hour Composite							
Frequency: Weekly							

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

State of Missouri
Department of Natural Resources
National Pollutant Discharge Elimination System (NPDES)
Discharge Monitoring Report (DMR)

Central Field Operations
P O Box 176
Jefferson City, MO, 65102

pH	7.4	*****	7.9	SU	*****	*****	*****
Mon. Location.: End of Pipe	Minimum: 6.0	*****;*****	Maximum: 9.0		*****;*****	*****;*****	
Sample Type: Grab							
Frequency: Weekly							
BOD, 5-day, percent removal	*****	*****	98.2	%	*****	*****	*****
Mon. Location.: End of Pipe	*****;*****	*****;*****	Monthly Avg. Min.: 85		*****;*****	*****;*****	
Sample Type: Calculated							
Frequency: Monthly							
Suspended Solids, percent removal	*****	*****	96.5	%	*****	*****	*****
Mon. Location.: End of Pipe	*****;*****	*****;*****	Monthly Avg. Min.: 85		*****;*****	*****;*****	
Sample Type: Calculated							
Frequency: Monthly							
Comments:							

State of Missouri
Department of Natural Resources
National Pollutant Discharge Elimination System (NPDES)
Discharge Monitoring Report (DMR)

Central Field Operations
P O Box 176
Jefferson City, MO, 65102

Permit Number	Outfall Number
MOU1324	INFIM
Monitoring Period	
12/1/24	12/31/24
NOD:	NOI/NOA/NOI

Parameters	Reporting Requirements			Unit	Reporting Requirements		Unit
BOD, 5-day, 20 deg. C Mon. Location.: Influent Sample Type: 24 Hour Composite Frequency: Monthly	***** *****;*****	***** *****;*****	219 Monthly Avg.;Monitoring Required	mg/L	***** *****;*****	***** *****;*****	*****
Total Suspended Solids (TSS) Mon. Location.: Influent Sample Type: 24 Hour Composite Frequency: Monthly	***** *****;*****	***** *****;*****	204 Monthly Avg.;Monitoring Required	mg/L	***** *****;*****	***** *****;*****	*****
Nitrogen, ammonia total (as N) Mon. Location.: Influent Sample Type: 24 Hour Composite Frequency: Monthly	41.3 Daily Max.;Monitoring Required	***** *****;*****	26.6 Monthly Avg.;Monitoring Required	mg/L	***** *****;*****	***** *****;*****	*****
Phosphorus, total (as P) Mon. Location.: Influent Sample Type: 24 Hour Composite Frequency: Monthly	5.05 Daily Max.;Monitoring Required	***** *****;*****	5.05 Monthly Avg.;Monitoring Required	mg/L	***** *****;*****	***** *****;*****	*****
Nitrogen, Kjeldahl, total (as N) Mon. Location.: Influent Sample Type: 24 Hour Composite Frequency: Monthly	48.5 Daily Max.;Monitoring Required	***** *****;*****	48.5 Monthly Avg.;Monitoring Required	mg/L	***** *****;*****	***** *****;*****	*****
Nitrite plus nitrate total (as N) Mon. Location.: Influent Sample Type: 24 Hour Composite Frequency: Monthly	<0.030 Daily Max.;Monitoring Required	***** *****;*****	<0.030 Monthly Avg.;Monitoring Required	mg/L	***** *****;*****	***** *****;*****	*****
Comments:							

Lake of the Ozarks Regional
WWTP 1
#3 Anderson Road
LAKE OZARK, MO, Miller

State of Missouri
Department of Natural Resources
National Pollutant Discharge Elimination System (NPDES)
Discharge Monitoring Report (DMR)

Central Field Operations
P O Box 176
Jefferson City, MO, 65102

I 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 properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who 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 penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

eSignature Gary Hutchcraft	Submission Date January 7, 2025	User Phone Number (573)365-0455
-------------------------------	------------------------------------	------------------------------------

FOR DISSEMINATION 2024
~~SECRET~~ 1994

Date 12/21/2015

The Lake of the Ozark Regional Wastewater Treatment Plant #1

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

January 2025

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.

Table of Contents	Page #
 Section I	
• Preliminary Damage Assessment Check List	03
• Personnel Inventory, Contact Order & Training	04
• Facility Emergency Equipment Inventory	05
• Command Post Designation	04
• Communication Policy	06
• Emergency Action Plan	07-08
• Fire Protection Plan & Hot Work Permit	09
• Emergency Identification and Analysis	10
• Facilities Security	11
• Priority Equipment and Processes	11
• Emergency Response Guidelines	12
• Emergency Action Procedure for Epidemic/Pandemic	13
 Section II	
• Damage and Response	14-18
 Section III	
• Contingency Plan for Total Loss of Power	18
• Contingency Plan for High Flows	18-19
• Contingency Plan for Toxic Chemical Releases	19-20
• Contingency Plan for SSO's	20
• Contingency Plan for Sludge Spills	20
 Appendix 1	
• List of Key Contacts & Local Utilities/Services/Suppliers	21-24
 Appendix 2	
• Chemical List & Facilities Map	25
 Appendix 3	
• Standard Conditions for NPDES Permits	26
 Appendix 4	
• Daily Readings-Weekly Maintenance Instructions	26-27
 Appendix 5	
• Permit Required Confined Spaces & Entry Permit	27-29
 Appendix 6	
• Lockout Instructions & LOTO Permit	30-31
 Appendix 7	
• Deviation Notification Form & Wastewater Bypass Report Form	32-33

Purpose of this Manual

This Emergency Response/Operations Plan Manual has been designed to assist in the first hours and days after a major disaster has damaged or destroyed the wastewater treatment system for the Lake of the Ozarks.

The manual is set up into several chapters of which some are in checklist format to assist you in prioritizing and planning your response.

The manual is designed to comply with MoDNR 10 CSR 60-12.101 Emergency Response/Operations Plan.

Updated/Reviewed for Accuracy Annually:

<i>Date: 1/4/16</i>	2016	<i>Initials:</i>	GH
<i>Date: 1/4/17</i>	2017	<i>Initials:</i>	GH
<i>Date: 1/4/18</i>	2018	<i>Initials:</i>	GH
<i>Date: 12/20/18</i>	2019	<i>Initials:</i>	GH
<i>Date: 1/3/20</i>	2020	<i>Initials:</i>	GH
<i>Date: 2/12/21</i>	2021	<i>Initials:</i>	GH
<i>Date: 12/14/21</i>	2022	<i>Initials:</i>	GH
<i>Date: 1/13/23</i>	2023	<i>Initials:</i>	GH
<i>Date: 1/10/24</i>	2024	<i>Initials:</i>	GH
<i>Date: 1/9/25</i>	2025	<i>Initials:</i>	GH

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 Joint Sewer Board Representatives 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
Robert Lenearts	Utility Worker I	573-365-0455		563-542-2772
Mark Mahler	Director of Compliance & Safety	573-874-8080	Ext. 226	573-825-8169
Josh Duncan	Division Manager	573-874-8080		573-216-4506
Tim Geraghty	Director of Operations AWR President	573-874-8080	Ext. 229	314-575-4738

2: Contact Order

Contact Order	Corporate Office Contact	Division Contact	Outside Support Contact
1		Gary Hutchcraft	
2		John Hornback	
3		Robert Lenearts	
4			Lonnie Madole
5			Kevin Klein
6			Regan Dorman
7	Mark Mahler		
8	Josh Duncan		
9	Tim Geraghty		
Client	Mike Welty		
Contact:	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)
Robert Lenaerts	573-216-3878 (duty phone)

b. Telephones

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 RKI GX-3R gas detector - (Admin. Bldg.- Lab)

3. Other Equipment

- a. Ford 6" trash pump, City owned (Lake Ozark)
- b. 30' 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. Ford F250, 4WD pickup truck w/ snow blade & sand spreader
- e. Mack pump truck w/ 3600-gallon tank.
- f. Miller Wire feed Welder & Hobart Stickmate Stick Welder
- g. 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
• Robert Lenaerts	573-365-0455	563-542-2772	
• John Hornback	573-365-0455	573-480-4065	573-369-2761
• Lonnie Madole	573-378-5737	573-789-5242	
• Kevin Klein	573-378-5737	573-378-8510	
• Regan Dornan	573-378-5737	573-569-8043	
• Mark Mahler	573-874-8080x226	573-825-8169	
• Josh Duncan	573-874-8080	573-216-4506	
• Tim Geraghty	573-874-8080x229	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 Department Central Office Phone: 573-751-3443 & FBI Phone is 1-800-CALLFBI
Central Field Operations 573-522-3322 or Environmental Emergence Response 573-634-2436
P.O. Box 176
Jefferson City, MO 65102-0176

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.
 1. 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.
 2. 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.

Alliance WATER RESOURCES		HOT WORK PERMIT/ CHECKLIST	
Location:		Date:	Supervisor:
Work to be done:			
Special Precautions:			
Time Started:		Time Completed:	
Signed:		Date:	
(Individual responsible for Hot Work authorization.)			

ATTENTION			
Before approval of the Hot Work Permit, the Supervisor or appointee shall inspect the work area and confirm that all precautions have been taken to prevent fire.			

Yes	No	N/A	Precautions
			Is all cutting and welding equipment in good repair/ condition?
			Has pre-task Tool Box Talk been administered?

Yes	No	N/A	Within 25 Feet of Work
			Floor/ ground clear of combustibles if possible?
			Combustible floors wet down, covered, or shielded?
			No combustible material or flammable liquids?
			Combustibles and flammable liquids covered or shielded?

Yes	No	N/A	Work on Enclosed Equipment
			Equipment cleaned of all combustibles?
			Containers/ drums purged of flammable vapors/ materials?

Yes	No	N/A	Fire Watch
x			To be provided during and 30 minutes after work completion?
x			Supplied with fire extinguisher and or small charged fire hose?
x			Trained in the use of equipment and emergency procedures?

Yes	No	N/A	Final Check-Up
			Completed 30 minutes after work completion?
Supervisor Signature:			Date:
(To be signed by individual responsible for Final Check-Up, after its completion.)			

G. Emergency Identification and Analysis

Emergency	Analysis
Severe storms, high wind, lightning, floods.	• Damage can range from low to medium depending on severity of storm. • Electrical supply, electrical pathways, exposed equipment and equipment located in underground vaults (when flooding is a concern), are most susceptible to damage.
Severe cold, ice storms, blizzards.	• Damage can range from low to medium depending on severity of conditions. • 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. • Ice storms and blizzards can cause damage to the electrical supply and also hinder access to the Wastewater Treatment Plant.
Earthquakes.	• Damage can range from low to high. • 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. • 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.
Sabotage, civil unrest, riots, terrorist attacks.	• 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.). • Measures to prevent damage from terrorist attacks are detailed in the following section on facilities security.
Air borne chemicals, water borne chemicals, toxic chemical spills, weapons of mass destruction.	• Damage to bacteria mass in the treatment process, and can also affect health of treatment personnel. • Caution should always be taken when confronting a chemical - biological emergency. • 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.

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
1. Raw sewage force mains to WWTP.	1. Oxidation Ditches (at least one aerator per unit that WW is entering)
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.

K. Emergency Action Procedure for Epidemic/Pandemic

Description

- ❖ A pandemic is a global disease outbreak. A flu pandemic occurs when a new influenza virus emerges for which people have little or no immunity and for which there is no vaccine. The disease spreads easily person-to-person, causes serious illness, and can sweep across the country and around the world in a very short time.

Notification chain

Note: Phone numbers are in Section I. Personnel Inventory, Contact Order & Training

- Local Manager notifies
 - o Plant Personnel
 - o Division Manager
 - o Joint Sewer Board Representatives

Preparation/Mitigation

- Scheduling redundancy
- Proper PPE on hand
 - o Masks, gloves, and sanitizer
- Essential supplies for prolonged hours
 - o Côt, non-perishable food

Response

- Masks and other PPE will be required as recommended by AWR and CDC.
 - o Masks are to be worn indoors when more than one person is on the premises.
 - o Masks are to be worn when riding in a vehicle with others.
- Cards will be distributed identifying employees as essential.
- Surfaces, door handles, keyboards/mouse and all common use items must be disinfected on a regular basis.
- No visitors are to be allowed at the plant without approval of superintendent or above.
- Teams and crews are to stay separated from other groups.
- Employees are to spread out in large environments for meetings and lunch.
- Wastewater Plant specific response:
 - o Separate employees into two teams.
 - Operating Team A
 - 2 operators
 - Operating Team B
 - 2 operators
 - o Operating Team A reports and works.
 - o When operating team B performs work at plant, they must inform operator team A of what rooms they will be working in.
 - o Disinfection of common use items is to occur at the beginning and end of each shift.

Recovery

- Normal operations are to resume once CDC or AWR deems it safe.

Remediation

- Normal operations are to resume once CDC or AWR deems it safe.

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. When power goes out the standby/backup generator will automatically come on and feed both MCC1 & 2 but everything will not come back on automatically. Manually restart all equipment that was going before outage if capable following every precaution mentioned in this ERP.

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 Carroussels. 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 carousel 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 Camdenon 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. The employee on call must come to the plant and make sure the generator is going, then 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 carousel 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 carousel 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

Appendix 1

Local Radio Stations

Call Letters	Frequency	Location	Phone#	Fax#
KRMS	AM 1150	Osage Beach, Mo	573-302-7000	
KRMS	FM 93.5	" " "	573-348-2779	
KLOZ	FM 92.7	" " "	573-302-1993	
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	
KRCG	CBS 13	Jefferson City, MO	573-896-5144	
KMOU	NBC 8	Columbia, MO	573-882-8888	

Local Newspapers

Name of Paper	Address	Contact Person	Phone#	Fax#
Lake Sun Leader	450 N. Hwy. 5 Camdenton	Justin	573-346-2132	
Eldon Advertiser	415 S. Maple St., Eldon		573-392-5658	
Leader-Statesman	104 W. Jasper, Versailles		573-378-5441	
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
Robert Lenaerts	Utility Worker I	573-365-0455	563-542-2772	
Mark Mahler	Director of Compliance & Safe	573-874-8080 x226	573-825-8169	
Josh Duncan	Division Manager AWR Director of Operations	573-874-8080	573-216-4506	

City Personnel

Name	Position	Work Phone#	Mobile Phone#
Devin Lake	City Admin. Osage Beach	573-302-2000 ext. 1010	573-286-3705
Zachary Wilbur	Public Works Op Manager	573-302-2020 Ext. 2000	573-280-0241
Nathan Earp	Osage Beach Sewer Supervisor	573-302-2020	573-280-2473
Harrison Fry	City Admin. Lake Ozark	573-365-5378	573-280-9517
Matt Michalik	Dir. P/W Lake Ozark	573-365-5378	573-216-6063
Nathaniel Boggs	Lake Ozark Sewer Supervisor	573-365-1741	573-216-6991
L.O. Police Dept.		573-365-5371	
O.B. Police Dept.		573-302-2010	

City Engineer

Name	Company	Work Phone#	Mobile Phone#	Fax#
	Osage Beach	573-320-2020		

Sewer Board

Name	Position/Department	Work Phone#
Michael Harmison	Mayor / Osage Beach	573-302-2000
Kevin Rucker	Board Member / Osage Beach	573-302-2000
Gary Hamner	Board Member / Osage Beach	573-302-2000
Dennis Newberry	Mayor / Lake Ozark	573-365-5378
Pat Thompson	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	
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	
Zachary Wilbur	Osage Beach	573-302-2020	573-280-0241	
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	David	Ferrell Gas	573-392-5400	573-280-7184
UV System	John of Walt	ITT Wedeco	704-996-9233	704-409-9818
Standby Generator	Nelson Coblentz	Martin Energy Group	800-436-9190	573-681-8027
Laboratory	Ann Wagner	EAS Labs	573-204-8817	
Electrician	Steve Durban	Aesthetix Electric	573-348-1429	573-219-0043
Electrician	David	Catalyst Electric	573-552-8488	573-286-9435
Truck Repair	Norm	Crump Truck & Trailer	417-869-2515	417-861-8055
Truck Repair	Noah	Tri-State Truck Center	417-869-0566	417-496-7113
Truck Repair	Larry	Roemer Equipment Repair		573-280-5432
Truck Repair	Tom Irwin	Irwin Diesel Repair	573-286-25	573-286-2585
Truck Repair	Jonathan	Tri-State Truck Center		417-294-6422
Truck Parts	Levi	Tri-State Truck Center		417-459-2078
Heat A/C		Controlled Heating & Air	573-348-5455	
Heat A/C & KVAR		Comfort Heating & Cooling	573-348-9999	
Auto Mechanic		Precision Auto	573-348-2233	
Auto Mechanic	Tim	C.A.R Automotive	573-693-1500	
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	Wendell Love	JCI		316-251-4590
Pumps / Motors	Ben	SRI/MO		573-508-6440
Clarifiers	Field Service	Eimco	801-526-2000	

Pumps / Motors, Aerator Gear Boxes	Tom Rudloff	Zeller Technologies	314-638-9641 x259	
Building Repair	Jeff Carroll	Above & Beyond	573-302-0354	573-286-2006
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	Steve	Purcell Tire	573-348-4010	417-861-1955
Truck Tires	Kevin	McKnight Tire	573-635-0101	573-338-3350
Truck Tires	Joel	JCB Tire	573-374-8854	573-434-4539
Piping Supplies	Justin	Core & Main	573-348-1273	
Welding Service	Gary Koerber	GL Welding		573-680-3957
Welding Service	Eric	PMF		573-680-6434
Backhoe / Dirt Work	Steve Butler	Drain Masters, LLC		573-216-1169

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
United Rental	All Types	Kaiser, MO		573-693-9044

MODNR & FBI Contacts

Names	Office	Phone #	Fax #
Keith Forck	Jefferson City	573-526-4232	
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	
FBI		1-800-CALLFBI	

Appendix 2

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

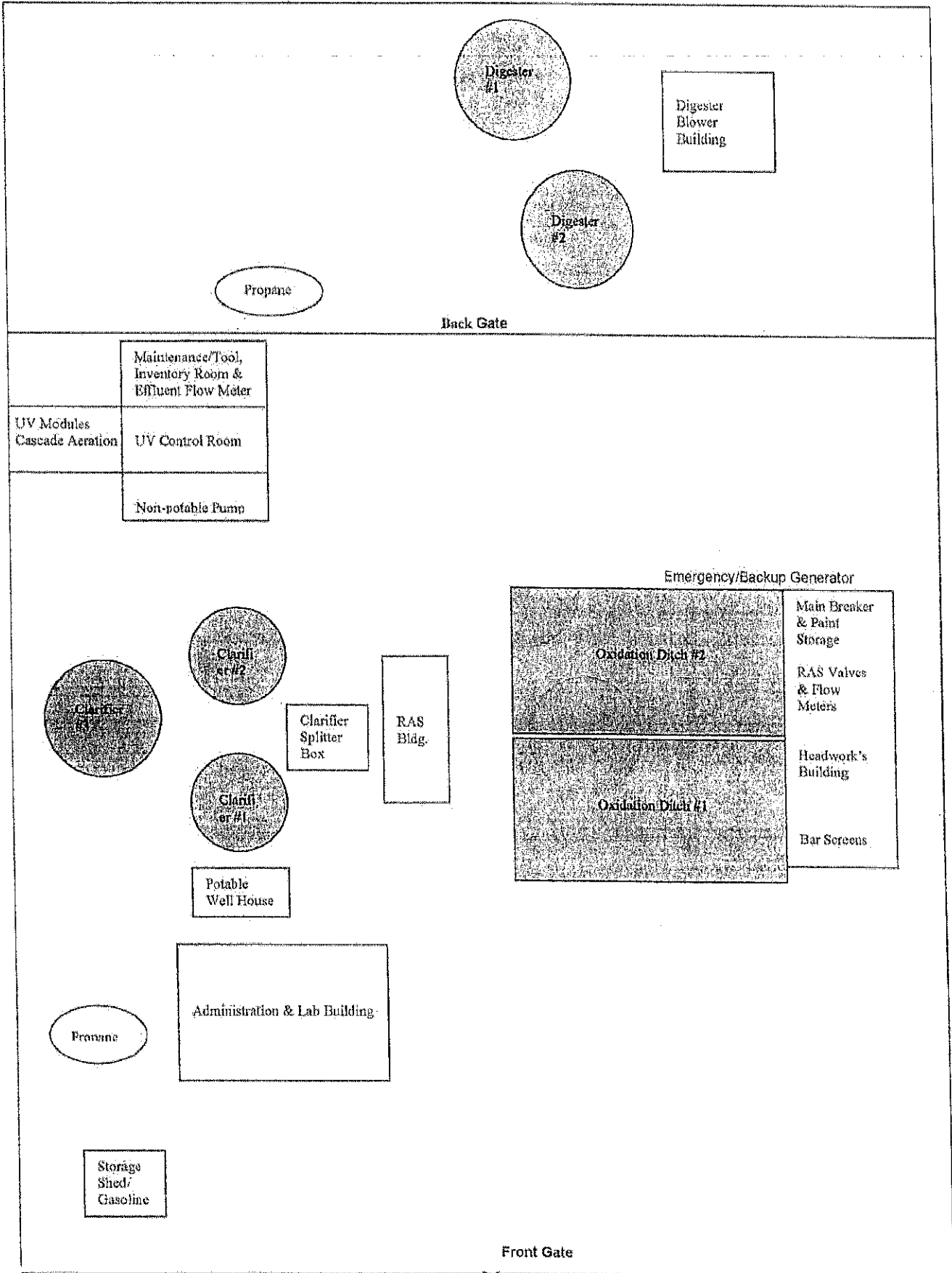
- Chevron Tube Grease
- Mystic tube Grease
- Hydraulic fluid
- Assorted cans spray paint
- Assorted cans building and grounds paint.
- Paint thinner / solvents

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 700-gallon diesel tank mounted under the emergency/standby generator located at the headworks building beside the electrical room. There is a 100-gallon portable diesel tank located normally stored at the sludge digester building over the hill.

Facility Map



Appendix 3

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 as necessary. Check operation of influent sampler/refrigerator, and record temperature. Weekly checks include 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 monthly. 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 online at the time are working. If all are working and if there are no failures, then go out to outfall structure and visually inspect channels for any excess algae or debris buildup. Remove all banks monthly 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.



CONFINED SPACE ENTRY PERMIT

Post Confined Space Permit at Job Site

Date: _____ Start Time: _____ Time Valid to: _____ (End of Shift)

Space to be Entered: _____ Exact Location: _____
 Purpose of Entry: _____
 Customer Name & Location: _____
 Recognized Hazards of Space: ☐ Sewer Gas ☐ O₂ deficiency ☐ Other _____

GENERAL PREPARATIONS CHECKLIST: (Check All Items That Apply)

REQUIRED

VERIFIED COMPLETE

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) ☐ Verbal ☐ Visual Signal ☐ Radio

ATMOSPHERIC TESTING RECORD

Meter Make/Model/Serial #: _____

Initials	Time	Acceptable Levels →	Oxygen 19.5-23.5%	Combustible Gases <10% LEL	Carbon Monoxide <25 ppm	Hydrogen Sulfide <10 ppm

ENTRY AUTHORIZATION: _____

Entry Supervisor Signature

Customer Health & Safety Representative
(If Applicable)

Rescue Team Status: ☐ Rescue Team Notified ☐ Team Needed at Space

PERMIT CANCELLATION (Check Only One)

☐ Work Complete, All Entrants/Tools Out, Ready For Re-Activation ☐ Work NOT Complete, Entrants Out

Entry Supervisor _____

Date _____

Time _____

Rescue & Emergency Services:

Plant Emergency #: _____

Nearest Phone: _____

Other Means of Summoning Help: _____

AUTHORIZED ENTRANTS:

Name (Print)	Signature	Y/N? Witness air test (optional)	Entry Time	Exit Time

AUTHORIZED ATTENDANT:

Name	Signature	Department	Time

ENTRY SUPERVISOR:

Name	Signature	Department	Time

Return Expired Permit to Office

Appendix 6

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 Isolated: _____ Exact Location: _____
 Purpose of Isolation: _____
 LOTO procedure used: _____

GENERAL PREPARATIONS CHECKLIST: (Check All Items That Apply)

REQUIRED

VERIFIED COMPLETE

INITIAL

- ☐ Alliance Lockout/ Tagout Devices Applied
- ☐ Temporary Lines/Hoses Removed/ Isolated
- ☐ Energy Sources Locked/Tagged/Tried
- ☐ Notification of Affected Employees
- ☐ Other Applicable Permits (Hot Work, etc.)
- ☐ Additional PPE Required
- ☐ Lockout/ Tagout Devices Visible
- ☐ Special Requirements (List in Comments)

☐
☐
☐
☐
☐
☐
☐
☐

Comments: _____

ISOLATION AUTHORIZATION: _____
 Supervisor Signature

Customer Health & Safety Representative
 (If Applicable)

AUTHORIZED EMPLOYEES:

Name (Print)	Signature

Return Expired Permit to Safety Coordinator

VERSION 1.0
 APRIL 2007

Appendix 7

ReCAP
DEVIATION NOTIFICATION FORM

Date of Incident: Time: Division:

Location of deviation:

Type of deviation: ☐ W. Treatment ☐ Distribution ☐ W.W. Treatment ☐ Collections
Note: Double-click on checkbox and select 'Checked' under Default Value.

Description of deviation: ☐ SSO ☐ Bypass ☐ Pressure Loss ☐ Sample Analysis

SAMPLE TYPE & LIMIT	SAMPLE RESULT

How did we become aware of the issue:

Possible reason(s) for or event(s) leading to deviation:

Immediate corrective actions taken:

Further action planned to eliminate or reduce future incidents:

Other information or attachments:

Completed by: Title: Date Reported:

Who was notified?

Name	Title	Date	Time
Comments			

Completed form is to be filled out electronically and e-mailed 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 NUMBER:

SSO OR BYPASS DETAILS	
a. Street Address/Landmark/Cross Street:	
b. Complaint Name & Telephone #:	
c. Start Date & Time	End Date & Time:
d. Total Time:	Volume (Gallons):
e. Categories of SSO	
☐ 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 Treatment ☐ Digester ☐ Primary Basins ☐ Clarifiers ☐ Solids Handling/Drying Beds ☐ Other	
g. Strength of SSO/Bypass: ☐ Raw (Dry weather SSO or Influent)	
☐ Partially Treated Bypass or Wet weather SSO Was sampling performed? ☐ yes ☐ no	
Type of Samples Taken: ☐ BOD ☐ TSS ☐ Fecal ☐ Ammonia ☐ DO ☐ Other	

WATER COURSE INFORMATION	
a. Name of Receiving Stream:	Length Affected:
b. Discharge Course	
☐ Runs on ground and absorbs into the soil. ☐ Ditch. Name of surface water it drains to: _____ ☐ Storm sewer. Name of surface water it drains to: _____ ☐ Surface water direct discharge: _____ ☐ Other, describe: _____	

CITY ACTIONS/ CLEAN UP	
a. ☐ Flushing ☐ Removing ☐ Chemical Application ☐ Other:	
b. Describe detailed actions taken to correct & clean up the SSO/Bypass and any follow up actions:	
CLEAN UP PERFORMED BY:	

REPORT PREPARED/SUBMITTED BY	
NAME (PRINTED):	TITLE:
SIGNATURE:	DATE:

Lake Ozark / Osage Beach Joint Wastewater Plant
INVENTORY LIST
January 2025

Item No.	Quantity & Item	TOOLS	Purchased In 2024
1	1 - Craftsman 3 drawer tool box		
2	1 - Craftsman 5 drawer tool box		
3	1 - Assortment SAE Allen wrenches		
4	1 - Assortment Metric Allen wrenches		
5	1 - 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	1 - Assortment of straight & Phillips screwdrivers		
12	1 - 1/2" straight 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		
31	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		
34	1 - 10 piece ignition wrench set 5/32 - 7/16		
35	2 - Boxed end wrench's 1/2-9/16 & 5/8-11/16		
36	3 - 3/8, 4 - 7/16, 2 - 11/16, 2 - 3/4, 2 - 13/16, 2 - 7/8 combination wrenches		
37	4 - 15/16, 4 - 1", 3 - 1 1/16, 5 - 1 1/4 & 4 - 1 1/8 comb. wrenches		
38	3 - open end wrenches 7/16-17/32, 5/8-11/16, & 3/4-7/8		
39	1 - Set pm comb. Wrench's 1/4 thru 7/8 in pouch		
40	3 - snap ring pliers		
41	2 - pair channel lock pliers, 1 blue handle & 1 black		

Lake Ozark / Osage Beach Joint Wastewater Plant
INVENTORY LIST
January 2025

TOOLS		Purchased In
Item No.	Quantity & Item	2024
42	2 - pair electrical channel lock pliers, 6 & 10"	
43	1 - set of left handed drill bits	
44	6 - electrical screwdrivers, 3 straight & 3 philips head	
45	2 - wire strippers	
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	4 - pipe wrenches, 14", 18", 24", & 36"	1 - 14"
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	1 - 6" square	
78	2 - rag pullers	
79	1 - crow bar	
80	1 - garden rake	
81	1 - round point shovel	

Lake Ozark / Osage Beach Joint Wastewater Plant
INVENTORY LIST
January 2025

TOOLS		Purchased In
Item No.	Quantity & Item	2024
82	1 - flat shovel	
83	1 - 10lb straight bar	
84	1 - pick	
85	1 - anti freeze tester	
86	1 - flat bar	
87	1 - Craftsman 28 pc. tap & die set	
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*	

MISCELLANEOUS TOOLS from Old Sludge Trk.		Purchased In
Item No.	Quantity & Item	2024
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	1 - assortment Buse fuses	

Lake Ozark / Osage Beach Joint Wastewater Plant
INVENTORY LIST
January 2025

MISCELLANEOUS EQUIPMENT		Purchased In
Item No.	Quantity & Item	2024
121	1 - Hobart Stickmate 160i Stick Welder	
122	1 - Ryobi 18 volt Drill, Circular Saw, Recip saw, Flashlight, Vacuum Combo Kit w/2 batteries	
123	1 - Millermatic Wire feed welder w/helmet & gloves	
124	4 - metal lockers in men's restroom	
125	2 - metal lockers in women's restroom	
126	1 - plastic mop bucket w/wringer	
127	1 - Gorilla ladder MPX-22	
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	1 - Schumacher battery charger model SE-82-6	
139	1 - DieHard 12 volt automatic battery charger/engine starter model 28.71331	
140	1 - 10-3 100ft Extension cord	
141	1 - 100' extension cord	
142	2 - 50' extension cord	
143	1 - 1 gallon plastic gas cans	
144	2 - 5 gallon steel safety gas cans	
145	1 - misc. log chains, headwork's tool room	
146	3 - 50'x1 1/2" fire hoses with 2 nozzles	
147	5 - Garden hoses	
148	1 - mechanic creeper	
149	1 - Craftsman gas leaf blower	
150	1 - Craftsman 4 cycle weed eater	
151	1 - cherry picker (engine hoist)	
152	1 - 9 gallon portable air tank	
153	1 - Campbell Hausfield 26 gallon air compressor	
154	1 - 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	

Lake Ozark / Osage Beach Joint Wastewater Plant
INVENTORY LIST
January 2025

MISCELLANEOUS EQUIPMENT		Purchased In
Item No.	Quantity & Item	2024
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	
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	1 - 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	3 - 2 wheel wheel-barrows, 2 are being used for bar screen tubs	
187	1 - garden cart	
188	1 - Garden power 65ft. 5/8" Auto-Retractable Garden Hose reel in RAS basement	
189	1 - portable hand work light	
190	1 - portable work light stand w/ dual mounted lights	
191	3 - Strong Arm electric winches for clarifier skimmer baskets	
192	1 - Strongway electric hoist for lift station pumps	
193	1 - AMT 3" trash pump w/wheel kit	
194	1 - 3" 50ft & 1 - 30ft suction/discharge hose w/couplings	
195	1 - North Star 3000 PSI Steam and Hot Water Pressure Washer w/ 2 wand ext. & floor wand	2 - wand ext. & floor wand
196	1 - Warn 120 volt Winch/Hoist for pulling UV channel basket	
197	1 - Chapin Homepro backpack sprayer	

Lake Ozark / Osage Beach Joint Wastewater Plant
INVENTORY LIST
January 2025

OFFICE INVENTORY		Purchased In
Item No.	Quantity & Item	2024
198	1 - wooden desk	
199	1 - metal desk	
200	4 - Office chairs	
201	3 - file cabinets, 1 - 4 drawer & 2 - 2 drawer	
202	1 - 3 shelf bookshelf	
203	1 - PC , w, speaker in monitor, keyboard, and surge arrest---DELL	
204	1 - MFC-L2685DW Brother copier / printer	
205	1 - conference table	
206	27 - folding steel chairs	
207	1 - Samsung Mobile phone w/ AT&T service	
208	1 - Fellowes paper shredder	
209	1 - Bissell vacuum cleaner	
210	1 - Emerson TV / VCR Combo (for training)	
211	1 - Emerson microwave	
212	1 - Magic chef refrigerator	
213	1 - Culligan water cooler	

CONSUMABLE MATERIALS		Purchased In
Item No.	Quantity & Item	2024
214	2 - 500 Gallon propane tanks, w/ 405 gallons as of 1/10/25	578 gal.
215	1 - 700 Gallon diesel fuel tank in Generator, w/ 490 gallons as of 1/10/25	372 gal.

VEHICLE'S		Purchased In
Item No.	Quantity & Item	2024
216	1 - TRYN SP-575X-1 Mini Pro Tailgate Spreader SN#190730300540SP-575X-1	
217	1 - 2018 Ford F-250 w/Knapplied snow blade vin# 1FTBF2B66JEC64283	
218	1 - 2022 Mack Granite Sludge Truck w/3600 gallon tank vin# 1M2GR2GC7NM028115	
219	1 - John Deere Z915E ZTrak 54" Zero-Turn Mower	

LABORATORY EQUIPMENT		Purchased In
Item No.	Quantity & Item	2024
220	1 - OHAUS adventurer analytical balance	
221	1 - Orion & 1 no name brand bench top electrode arms	
222	1 - USA Bluebook electric stirrer	
223	3 - Isco Auto samplers, 1 - NI-CAD batteries, 1 small & 1 larger charger	
224	1 - Isco Auto sampler pump	
225	1 - Hach Sension+ MM340 Ammonia meter & probe	
226	1 - Hach HQ411D pH/mv meter & probe with stand	
227	1 - Allied stirrer and hot plate	
228	1 - Vector spotlight, for discharging Isco batteries	
229	2 - VWR ASTM certified / calibrated thermometers	

Lake Ozark / Osage Beach Joint Wastewater Plant
INVENTORY LIST
January 2025

LABORATORY EQUIPMENT		Purchased In
Item No.	Quantity & Item	2024
230	2 - Nalgene desiccators	
231	1 - muffle furnace-Therolyne	
232	1 - vacuum pump-Fisher	
233	1 - sterilizer-Electric Steno Clave	
234	1 - Incubator-Fisher ISO temp	
235	1 - drying oven-Fisher ISO temp oven	
236	1 - portable D.O. meter-YSI 550-A	
237	1 - BOD Incubator- Revco	
238	1 - microscope-Micromaster	
239	1 - Lab refrigerator w/ ice maker-Criterion	
240	2 - timers-West Bend	
241	1 - Hanna portable pH meter	
242	1 - Hach HQ40D meter w/ LBOD probe	
243	1 - Hach HQ1130 DO meter w/ Rugged LDO probe	
244	1 - Hach Distillation Glassware set for Ammonia	
245	1 - Thermo Hot plate for distillation	
246	1 - Igloo Ice Maker for Samplers	
247	10 - Safety Glasses / Goggles	
248	2 - Face Shield	

SAFETY EQUIPMENT		Purchased In
Item No.	Quantity & Item	2024
249	2 - UV Face shields	
250	4 - Rubber Gloves	
251	50 - Disposable Face mask	
252	200 - Disposable Nitrile/Rubber Gloves	200
253	160 - pair disposable ear plugs	
254	2 - Ear Protection muffs	
255	1 - Eye Wash Stations	
256	2 - Back Supports	
257	1 - Gas Detector / Monitor, portable RKI GX-3R with (Bump/Calibration kit)	
258	1 - Lock Out/Tagout Station	
259	2 - Full Body Harness	
260	1 - Lanyards & 1 spreader bar	
261	1 - Tripod, Winch and air machine	
262	3 - First Aid Kits	
263	6 - Fire Extinguishers, Plant	
264	1 - Fire Extinguishers, Office	
265	3 - Fire Extinguishers, Vehicles	

Lake Ozark / Osage Beach Joint Wastewater Plant
INVENTORY LIST
January 2025

SPARE EQUIPMENT & PARTS		Purchased In
Item No.	Quantity & Item	2024
266	4 - electrical contact relay	
267	1 - 3 phase monitors	
268	3 - Allen Bradley PLC I/O Boards for UV control panel	
269	43 - UV bulbs	
270	60 - UV quartz sleeve	
271	3 - UV ballast	
272	2 - UV air cylinder rebuild kit & 2 outer bands	
273	5 - New UV air cylinder	
274	1 - UV air cylinder hose, approx. 20 ft.	
275	1 - Wiper Rings	
276	2 - UV bulb cord w/2 bulb sockets	
277	1 - Blue Poly tubing for outdoor UV panel 5ft 6mm & 5ft 10mm	
278	2 - UV sensor brushes	
279	1 - blower for digesters	
280	1 - Carboy for BOD water	
281	6 - Fluorescent bulb ballast & 7 - T-8 bulbs	
282	1 - quantity of assorted 3/4, & 1" PVC pipe fittings	
283	1 - quantity of assorted nuts & bolts	
284	1 - Transtector ACP-100 surge suppressor	
285	1 - Transtector PDS 1 tube surge protector	
286	1 - Alternating relay for lift stations	
287	9 - Ice cube relays for UV system	
288	3 - Thermal overloads for aerator MDP	