Exhibit No.

Witness/Type of Exhibit: William P. Mitchell

**Direct Testimony** 

Company: Osage Water Company CASE NO. ST-2003-0562

CASE NO. ST-2003-0563

Issues: Rates, Rate Base, Cost of Capital

### BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

CASE NO. ST-2003-0562 CASE NO. WT-2003-0563 FILED<sup>3</sup>
SEP 0 3 2003

OSAGE WATER COMPANY

Service Commission

**DIRECT TESTIMONY OF** 

WILLIAM P. MITCHELL

August 22, 2003

### TABLE OF CONTENTS

1		
2	TABLE OF CONTENTS	2
3	QUALFICATION OF WITNESS	3
4	QUALIFICATIONS OF OSAGE WATER COMPANY	
5	REASONABLE RATES AND THE COST OF OPERATION	6
6	Current Tariffs and Rates	12
7	Fair Value	
8	Rates	15
9	Cost of Capital	16
10	CONCLUSION	
11	AFFIDAVIT OF WILLIAM P. MITCHELL	
12	WPM Schedules Numl	ber of pages
13	1 Estimate of hours to complete case	1
14	2 10 CSR 20-9.010 Wastewater Treatment Systems Operation	3
15	Customer counts and billed amounts by month by area	
16	4 10 CSR 60-3.030 Technical, Managerial, and Financial Capacity	
17	7 Fair value analysis	
18	8 Budget	
19	9 Water tariff	
20		
20	10 Sewer tariff	l

1 2	Q.	QUALFICATION OF WITNESS Please state your name and address.
3	A.	My name is William P. Mitchell. My office is at 328 S. Frontage Rd., Osage
4		Beach, Missouri.
5	Q.	Have you previously testified before the Commission?
6	A.	Yes. I testified on behalf of Osage Water Company in Case WA-98-236 and SA-
7		99-268, and others
8	Q.	What is your relationship to Osage Water Company?
9	Α.	I am a shareholder, the Director, and President of Osage Water Company.
10	Q.	Are you affiliated with any other regulated utilities?
11	Α.	Yes, I am the sole shareholder, Director, and President of Missouri Utilities,
12		which own and operate public water and sewer utilities in the vicinity of Sedalia,
13		Missouri. Missouri Utilities is a Commission regulated water and sewer utility
14		company.
15	Q.	Please describe your background and education.
16	A.	I hold an undergraduate degree in economics, and have completed the course
17		work for a Masters Degree in Civil Engineering. I am a shareholder and officer of
18		Water Laboratory Company, a corporation whose principal business is the testing
19		of water wells and wastewater treatment facilities in Central Missouri. I am also
20		the President, Director, and shareholder of Jackson Engineering, Inc., a
21		corporation providing civil engineering services at the Lake of the Ozarks, and

which specializes particularly in the design of water systems and wastewater

1		treatment facilities. I hold a Class A water and wastewater Treatment Operator
2		License.
3	Q.	How long have you been in the business of water and sewer utility systems?
4	A.	Since 1981.
5	Q.	Do you operate any water or sewer utility systems other than those owned by
6		Osage Water Company and Missouri Utilities?
7	A.	Not at this time. I was operating 60 wastewater treatment facilities when I sold the
8		O&M business to an employee in 1995.
9	Q.	How long have you been the president of Jackson Engineering, Inc.?
10	A.	Since 1992.
11	Q.	During that time, how many water and sewer utility systems have been designed,
12		inspected, or built by Jackson Engineering?
13	A.	The exact number would be hard to say, but more than 75.
14	Q.	Are you a registered professional engineer in the State of Missouri?
15	A.	No, I am not. Current law requires that an engineer have a bachelor's degree in
16		order to qualify to take the test to be licensed as a professional engineer. My
١7		bachelor's degree is in economics. My master's degree coursework is in
18	 	engineering, so I don't qualify to take the test to become a professional engineer.
19	Q.	Does Jackson Engineering employ any professional engineers on its staff?
20	A.	Yes, it does.
	ŀ	

#### **OUALIFICATIONS OF OSAGE WATER COMPANY**

Q. How long have you been an officer, director, and shareholder of Osage Water Company?

- A. Since 1987. My parents and I originally formed Osage Water Company for the purpose of providing regulated water utility service in the Lake of the Ozarks area.
- Q. What are your duties and responsibilities with respect to Osage Water Company?
- A. I am the sole member of the Board of Directors, and participate in all board meetings that affect the policies and management of the Company. In my capacity as a Director, I assist in developing policy and procedures for OWC, particularly with respect to technical matters. I am also President of OWC. I am not in charge of the day-to-day operations of OWC; they are handled by contract with Environmental Utilities. This includes office operations, billing, depositing of funds, responding to customer inquiries, overseeing service connections, overseeing and making repairs when necessary, overseeing regular operation, maintenance, and testing of the Company's water and sewer utility systems, and regulatory compliance. I recently filed the necessary reports and tax returns in order to reinstate the corporation's charter to good standing with the Missouri Secretary of State's Office. I also prepared and filed the corporation's State and Federal Income Tax Returns for the periods of 1999 through 2002.
- Q. Is Osage Water Company currently authorized to provide public water and sewer utility service?
- Yes. Osage Water Company has been a regulated public water utility since 1987.
   Most recently, it received authority from the Commission to expand its services in

1	<u>.</u> 1	1992 in Case No. WA-92-141, in 1994 in Case WA-94-132, in 1998 in Cases
2		WA-97-110 and WA-98-36, and in 1999 in Case WA-98-236. The Company was
3		authorized provide sewer utility service in Cases WA-97-110 and WA-98-36.
4	Q.	Who is or are the other officers of Osage Water Company?
5	A.	I am the sole officer and director.
6	Q.	Does Osage Water Company have any employees?
7	A.	Just me, and I have not been paid for any of my labor or reimbursed for any
8		expenses.
9		Reasonable Rates, Cost of Operation,
10	Q.	How does OWC provide for the operation and maintenance of its water supplies
11		and sewage treatment facilities?
12	A.	OWC has an operation contract with Environmental Utilities, LLC (EU) under the
13		terms of which that company provides regular operation, maintenance, and testing
14		of all of OWC's water supplies and sewage treatment facilities. It also provides
15		basic office operations for OWC, including secretarial support, telephone, meter
16		reading, and billing. In exchange for these services, EU receives all of the
17		revenues from OWC's water and sewer operations.
18	Q.	Do you own any interest in EU?
19	A.	No, I do not.
20	Q.	Is there any common ownership between EU and OWC?
21	A.	Yes. Gregory D. Williams owns stock in OWC, and also owns an interest in EU.
22	Q.	Has EU provided an accounting of the revenues and expenses it has received and
23		incurred in operating the OWC water and sewer systems?

- 1 A. Yes. Attached as Schedule WPM-? is a schedule of the past 12 months revenues
- and expenditures for the OWC systems. Operations have consumed all of the
- 3 revenues generated by the OWC systems.
- 4 Q. The schedule shows a considerable expenditure for legal expenses. Is OWC
- 5 actively engaged in any litigation?
- 6 A. Unfortunately, yes. The legal expenses are those incurred by OWC in defense of
- 7 the various lawsuits filed by the Public Service Commission. These expenses
- 8 have had a drastic impact on OWC's cash flow, and severly limited EU's ability
- 9 to increase expenditures for ordinary operation and maintenance.
- 10 Q. Does OWC have a choice as to whether it incurs these legal expenses?
- 11 A. As the defendant in a lawsuit which threatens its continued existence, OWC really
- has no choice whether to pay for a defense attorney.
- 13 Q. Does OWC require any additional personnel, operating contracts, or equipment in
- order to properly operate and manage the existing facilities?
- 15 A. Yes. EU needs to hire one more full time operations person to adequately operate
- and maintain the systems according to DNR and EPA regulation governing the
- operation and maintenance of wastewater treatment plants, drinking water TMF
- regulations and to provide backup in the event the primary operator is ill or
- unavailable. At the present time, EU is only able to provide one field operator,
- Jeff Smith, with the revenues generated by OWC's customer base. Mr. Smith is a
- 21 licensed water and wastewater operator, however, given the number of water
- wells and sewer plants owned by OWC, he does not have enough time to take care
- of all of the work that really should be done on those systems. He is able to

handle the weekly operation and primary maintenance of the water wells and sewer plants, and to read the meters each month and pull the water and wastewater samples for testing and reporting to MDNR. However, when major repairs are required, he is sometimes unable to inspect each system on a weekly basis.

During the summer months, EU has been providing a part time assistant for Mr. Smith to help out with the weekly inspections and sewer plant chlorination.

However, there are not enough man-hours available with the current revenue stream to increase the part time summer position to a full time position. A second person is needed in order to perform routine inspections of customer septic tanks and pumping systems, to install water meters and inspect sewer connections, and to inspect the water wells and sewer plants on a daily basis as required by DNR.

See WPM Schedule 2 for DNR requirements for operation of mechanical wastewater plants.

Q. Are there any other staffing deficiencies?

A. Yes. EU has not been able to provide detailed book keeping for OWC as a result of a shortage in revenues during the winter months. EU has had to lay off the bookkeeper in each of the past two winters in order to maintain sufficient funds from existing revenues to pay operating expenses and repairs. As a result, various accounting schedules have not been kept up to date, in particular the capital expenditures schedule and fixed asset depreciation schedule. There is not enough staff time available to break out field labor between operating expenses and capital investment on a monthly basis, and to update the fixed asset schedule as capital is advanced for fixed assets, as required by PSC. In addition, management

staff at EU is performing the basic monthly billing functions, including posting of meter readings, posting of customer payments, and generation of monthly bills to customers. This is not a particularly efficient use of management time, and there are a number of other issues to which management time could and should be devoted.

- Q. Are there any other cash flow deficiencies?
- A. Yes. OWC is purchasing water for its Eagle Woods customers from EU under the terms of a Water Supply Agreement recently approved by the Commission in connection with a certificate case EU submitted for Golden Glade Subdivision.

  This expense is not reflected in the past 12 months operating expenses in full, as it only commenced in June of 2003 when EU's tariff received final approval from the Commission. This water supply is costing OWC on average about \$1,000 per month. In addition, OWC leases the wastewater treatment plant owned by the principals of EU in order to provide wastewater service in its KK service area.

  OWC has been unable to pay the rent of \$652.25 per month for this facility on a current basis.
- Q. Will this rate case allow the Company to provide the revenue to EU to increase the number of field operators, book-keeping staff, and to pay for its water supply and wastewater treatment on KK?
- A. Eventually, but not for 2 years. Because the PSC set this case for hearing rather than approving the tariff as filed, the Company will not see any new revenue until summer 2005 at the earliest. I estimate the cost of this case at \$37,100 just for an attorney, EU staff, and my time. CPA time would be extra. This estimate is

similar to the Commissions own finding 6 years ago in WR97-100 in its order and stipulation that the cost could run from \$20-40,000. Further the Commission stated,

" At this point the need for a more thorough investigation must be balanced with the potential for significant rate case expenses which may be passed on to customers in the form of additional rate increases."

I concur with the Commission's assessment. It will take 12 months increased revenue, until summer of 2005 just to repay the costs of this case. No new services will be provided for nearly 2 years. And this is in the public's best interest? The Commission has filed with Camden County Circuit Court a statement in the receivership case that "the Company cannot pay its bills as they come due". The continued utilization of OWC's property for service to the public without the provision of a fair return on the value of the property used, and recovery of the depreciation of the value of those assets while in use, is nothing less than a taking of private property by the PSC for the public benefit. The Commission has a duty to see that this does not continue to occur. Attached are spreadsheet analyses reflecting current customer counts, income and expenses by service area.

- Q. Are there any other costs the Commission should consider in connection with the approval of the proposed tariffs?
- A. Yes. In addition to recovery of actual operating costs, plus the anticipated costs of needed additional operating cost, the Commission is required by statute to provide a reserve for operations, a second reserve for emergencies, to provide a fair return

- on capital utilized to provide service to the public, and to provide for recovery of 2 depreciation on the capital assets of the Company.
- 3 Q. Why does OWC need a reserve for operations and emergencies?

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

A.

- The well failure at Broadwater Bay in the Osage Beach South Service Area and the simultaneous failure of the Shoney's Well pump in the Osage Beach North Service Area in August of 2002 provide the most compelling example of why a reserve for contingencies must be funded through rates. OWC incurred in excess of \$30,000 in repair expenses in order to restore both of those water wells to good working condition. Because the Shoney's Well was interconnected with OWC's High Point Well, customers in the Osage Beach North Area only experienced periods of low pressure during peak periods, but the Osage Beach South area was completely out of service for several days. Both of these equipment failures were covered by OWC's insurance policy, but because there were no cash reserves available, repairs were delayed while the insurance company made and investigation and authorized payment for repairs. In addition, the insurance policy only covered about 80% of the costs of the repairs, leaving OWC short more than \$6,000 in cash as a result. Had a cash reserve been available, OWC could have immediately made the necessary repairs, and replenished the cash reserve from the insurance proceeds later.
- Q. How much cash reserves are needed?
- A. Obviously given the number of wells and treatment plants in service, and in light of the simultaneous failure of two wells in August of 2003, an emergency reserve

1		of not less than \$50,000 is necessary to protect the public from future
2		extraordinary system failures. The TMF rule requires an additional reserve fund of
3		10% of the annual O&M budget be placed in a reserve fund. OWC proposed
4		O&M budget is \$267,491
5	Q. (	Over what period of time should these reserves be funded?
6	<b>A.</b> ]	MDNR's regulations provide that such a reserve must be funded in not less than 10
7		years from the effective date of their TMF regulation, which was September 30,
8		1999. That means that a total of \$15,350 must be added to the emergency
9	1	equipment and O& M reserve in each of the next 5 years.
10	Q.	How much revenue is needed to fund OWC's depreciation expenses?
11	<b>A</b>	According to Schedule WPM- 8, OWC currently requires the sum of \$38,893
12		(\$1,944,650/50 yrs.) be placed into its depreciation reserve on an annual basis.
13	Q.	Does this include depreciation on contributed plant?
14	A.	Yes. MDNR's TMF regulations require that depreciation be recovered on all
15		capital assets to insure that funds are available for major future repairs, rather than
16		only recovering depreciation attributable to investment by the Company.
17		CURRENT TARIFF AND RATES
18	Q.	Does OWC have a water tariff and a sewer tariff currently on file with the
19		Commission?
20	A.	Yes, it has Commission approved water and sewer tariffs.
21	Q.	What is the Company's Commission approved rate for sewer utility service?

- 1 A. For residential sewer service, a flat rate of \$26.03 per month is charged. At the
- 2 present time OWC has 299 residential sewer customers in its certificated sewer
- 3 service areas, and no commercial sewer customers.
- 4 Q. When were these sewer rates established?
- 5 A. They were established by Order of the Commission in July of 2001.
- 6 Q. What are OWC's water service rates?
- 7 A. 5/8" Metered water service is provided at a base of \$16.36, which includes 2,000
- gallons of usage, with a commodity rate of \$3.8701 per 1,000 for each additional
- 9 1,000.
- 10 Q. What are other utilities charging for similar services in the Lake area?
- 11 A. Camden County Sunnyslope Sewer District (formed in 2001) stated GOAL is to
- keep the rates below \$35/mo flat rate with subsidized interest and grants. The
- District should start construction in 2004 on a recirculating sand filter system
- similar to OWC plants. Hook ups to the system will be at the expense of the
- homeowner. I estimate \$2-5k each. Osage Beach outside of the city (no sales tax
- subsidy) flat rate is \$34.05/mo. sewer, \$49.91/mo 1st 1,000 gal. \$0.32/1,000 gal.
- water. Osage Beach sewer systems were constructed with 80% grant money.
- Water and sewer are financed with low interest bonds and operated with current
- revenue. Rocky Mount Sewer District's GOAL is \$35-50/mo sewer rates with
- subsidized interest and grants. Just formed with voter approval 8/03. Construction
- 21 in 2005-6. OWC's proposed new rates are lower than those of public districts and
- 22 municipal utilities in the Lake area with significantly larger capital costs.

- Q. Is there any reason why OWC could not charge comparable amounts for water and sewer service to those charged by other area water and sewer utility service providers?
- A. None that I can think of. That is why a base rate increase of 25% was filed with the Commission, with a subsequent increase to take effect in mid-2004 to bring OWC's rates up similar to those of other utility service providers is proposed.

#### FAIR VALUE OF OWC'S ASSETS

- Q. Did you prepare an analysis of fair value of used and useful assets for OWC?
- A. Yes, see WPM schedule 7 attached to this testimony. We subsidized the capital costs by not paying the operation costs and using the cash to buy systems for below construction cost that have long term value to repay actual fair value through customer growth. Rather than requiring the owner of the system to subsidize the O&M during the initial growth period when customer count is low, the Company required the initial system price reduced in present value due to estimated losses in initial years O&M. The Company then invested in the systems by subsidizing O&M. Not allowing for a return on fair value is a taking by the State. My analysis concludes the company's fair value is in excess of \$1,944,650.
- Q. What is fair value?

A. Missouri Law provides that regulated water and sewer utilities are entitled to a fair return on the value of their assets devoted to public use. Fair value is the value of the company's assets that form the basis for the amount of return that a company may earn on its assets. Fair value is termed Rate Base by the staff in an effort to

l	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	

circumvent the law, as the analysis is more difficult than a simple cost of construction. Fair value may be more or less than the acquisition cost, replacement cost, or construction cost. Staff utilizes a method of costs assigned to categories of similar assets (rate base) less depreciation to estimate fair value, but that approach significantly undervalues OWC's assets devoted to public use, because OWC acquired assets of substantial value at below value by agreeing to operate and maintain them until the customer base was large enough to pay current and accrued operating costs. A substantial portion of OWC's debt to my companies was incurred in this manner, and is part of the fair value of OWC's assets devoted to public use.

- Q. What are the replacement costs of OWC's assets currently used and useful in providing service to customers?
- A. \$1,944,650. See Schedule WPM-8 attached hereto.
- Q. Does this replacement cost provide a good estimate of the fair value of OWC's assets?
- A. Yes, it provides a substantially better estimate than looking solely at the capital contributions of OWC's shareholders to determine the fair value of OWC's assets.

#### **RATES**

- Q. Did you prepare a rate analysis for OWC?
- A. Yes. A spreadsheet is attached WPM Schedule 8 Budget. Rates should be much higher than the initial tariff filing in order to comply with DNR's TMF requirement. The Company proposes a phased rate increase, the first phase being the initial filed tariff approved immediately as interim rates. Interim rate increases

are within the authority of the PSC. Attached are new tariff pages proposed to be approved during the normal course of this case WPM Schedules 9 & 10.

- Q. What is TMF?
- A. The EPA and DNR require that water companies meet certain minimum

  Technical, Managerial, and Financial minimums to operate. Attached is a copy of
  the CSR pertaining to TMF, WPM Schedule 4. The company is required to have
  rates sufficient to bank depreciation on all assets whether purchased or
  contributed, have a reserve fund equal to the largest piece of equipment, and meet
  minimum O&M requirements, including staffing and training requirements. This
  regulation was in effect during the course of the last rate case and was ignored by
  the staff.
- Q. Why is OWC proposing an increase in the base monthly charge, rather than both the base charge and the commodity charge?
- A. The principal purpose in choosing this method of revenue increase is to increase revenues during the "off season" at the Lake, i.e. from December through May, so that a more stable revenue stream will be derived year round. OWC has been unable to retain some of its employees or contract employees during the off season in recent years, which has required layoffs and subsequent training of new personnel, which is very time consuming for management, and is a very inefficient use of OWC's resources.

#### **COST OF CAPITAL**

Q. How much revenue is required to provide a fair return on OWC's capital used in providing service to the public?

- A. Assuming a rate of return of 18%, OWC will need annual revenues of \$288,000 in order to provide a fair rate of return on its assets devoted to public use.
- Q. Why did you assume a rate of return of 18%?

A.

- A. In order to be able to attract and retain capital, OWC will have to provide a significantly higher rate of return than other investments in light of its historically below market rate of return paid to its existing investors. Basically, it has paid nothing to its existing investors. They are all dissatisfied with their investment in OWC, and would like to have their capital back so it can be invested in other investments with a return. A rate of return of 18% may be sufficient to encourage the existing investors to allow OWC to retain their capital, or, in the alternative, may be sufficient to attract new investors to replace the existing investors. It will also enable OWC to raise additional capital, either through debt or equity, to meet current and future capital needs.
- Q. Have you researched the cost of capital?
  - Due to the inability of the staff to complete the last small rate case in a timely fashion with rates that reflect the actual cost of operation and maintenance, the Company has been regulatory lagged out of the investment capital market. No one will invest capital in the Company at any price, as the PSC has no credibility when it says that it will allow the utility an opportunity to earn an investment. The cost of this proceeding will consume the first year revenue increase initially requested. See WPM Schedule 1, Estimated cost of rate case. When a net rate increase is received and revenue is demonstrated to exceed the cost of O&M, reserves, and depreciation, capital may be available at 2 1 debt coverage ratios. At a current

interest rate of 4% prime +2% normal commercial bank interest normally available, times 2 coverage ratio = a minimum of 12% note rate, plus a first deed of trust, plus loan, title, and closing fees, plus the expense of a debt case. I estimate a gross return of 18% will be required to obtain capital.

A.

#### CONCLUSION

- Q. Based on the foregoing information, do you have a recommendation to the Commission regarding what action it should take regarding the Application submitted by Osage Water Company in this case?
  - Yes, I do. It is clear that there is a present need for a rate increase in excess of the initial tariff filed. I believe that increasing rates in steps rather than in one large amount is preferable to the Public. I recommend that the PSC immediately approve the previously filed tariff pages and then proceed with the rate case as amended. The additional rate increases will not occur until next summer at the conclusion of this case. This 2 phased increase method will reduce rate shock to the customer, allow for more time to educate the customers about the true cost of service and provide the Company with the revenue to improve service, operation and maintenance with more operators. Only then can a debt case be filed to consolidate existing debt and provide for a small amount of new capital.
- Q. Anything else?
- A. I would like to incorporate by reference all OWC Court cases and PSC cases, all EPA regulations (Federal Register), all Missouri Statutes, all Missouri Code Of State Regulations, and the PSC Mission Statement.

- 1 Q. Do you have any other recommendations to make to the Commission?
- 2 A. Yes. It should terminate its litigation with OWC so that the current expenditures
- for legal fees can be redirected to other matters which require attention by OWC.
- 4 I don't think the Commission has given adequate consideration to the impact that
- 5 litigation is having on OWC's ability to provide safe and adequate service to its
- 6 customers.
- 7 Q. Anything else?
- 8 A. Yes. I think the Commission has essentially ignored its obligation to insure that
- 9 OWC's rates are adequate to provide a fair return to OWC"s investors. Without
- the ability to pay a return on investment, OWC is and will continue to be, unable
- to raise any additional capital with which to meet the need for public water and
- sewer utility service in its certificated areas.
- 13 Q. Does this conclude your testimony in this case?
- 14 A. Yes. However I reserve the right to add to this testimony as information becomes
- 15 available.

### AFFIDAVIT OF WILLIAM P. MITCHELL

2	STATE OF MISSOURI)
3	) ss.
4	COUNTY OF CAMDEN)
5	
6	William P. Mitchell, of lawful age, on his oath states: That he has participated in the
7	preparation of the attached written direct testimony, in question and answer form, consisting of
8	pages of direct testimony including attachments to be presented in the above case; that the
9	answers in the attached written direct testimony were given by him; that he has knowledge of the
0	matters set forth in such answers; and that such matters are true to the best of his knowledge and
1	belief.
2	11/1/ YVVUINUT)
3	Will Back II
4	William P. Mitchell
15	Subscribed and sworn to before me this 3rd the day of August 2003.
6	Subscribed and sworn to before me this 3rd th day of August 2003.
7	
8	100, $110$
9	- Transpa & Dradley
20	Notary Public
21	
22	My Commission Expires: 10-15-2005 Marsha L. Bradley
23	Notary Public - Notary Seal
	State of Missouri Camden County
	My Commission Expires: October 15, 2005

WPM Schedule 1 Estimate cost to complete rate case

	hours			
	GDW	WPM	other	
1st Prehearing conference	8	8		
Direct testimony	16	40	8	
Rebuttal	16	16	8	
Surrebuttal	8	4	4	
2nd Prehearing conference	8	8		
Hearing	48	40	16	
Brief	32	8		
Review of order and filing	8	4		
Total hours	144	128	36	
Rate	\$150	\$100	\$75	
Total costs	\$21,600	\$12,800	\$2,700	\$37,100

Title 10.DEPARTMENT OF
NATURAL RESOURCES
Division 20.Clean Water
Commission
Chapter 9.Treatment Plant
Operations
10 CSR 20-9.010 Wastewater Treatment
Systems Operation Scope Monitoring
PURPOSE: This regulation sets forth the
minimum requirements for laboratory testing
to ensure adequate wastewater treatment systems
operation.
(1) Definitions Definitions as set forth in the

- (1) Definitions. Definitions as set forth in the Missouri Clean Water Law and 10 CSR 20-2.010 shall apply to the terms to be used in this rule, unless the context clearly requires otherwise.
- (2) Operational laboratory tests and related monitoring for wastewater treatment systems control shall be considered as a supplement to the National Pollutant Discharge Elimination System (NPDES) permit requirements. These monitoring reports to the department shall accompany NPDES discharge monitoring reports and shall be submitted at the frequency specified for NPDES discharge monitoring report submittal.
- (3) The department may modify required monitoring frequency required in this rule based upon the department is judgement of monitoring needs for process control at a specified facility.
- (4) These requirements for laboratory tests shall apply to all wastewater treatment systems owned or operated by or for municipalities, public sewer districts or other local government entities, private sewer companies regulated by the Public Service Commission, and the state agencies or any subdivision of them, servicing population equivalents greater than two hundred (200) or with twenty-five (25) or more service connections. All other systems are exempt.
- (5) Minimum monitoring requirements to ensure adequate wastewater treatment systems in-plant operational control are as follows:
- (A) Lagoons (All Types) Two (2)/Week Frequency.

Weather Conditions. Ambient temperature, cloud cover and

precipitation

Flow Influent or Effluent

pH Primary Cell

D.O. Primary Cell

(B) Mechanical Plants.

All types daily frequency.

Weather Conditions. Ambient temperature and precipitation

Flow Influent or Effluent

pH Influent

2. Additional laboratory test requirements

#### WPM Schedule 2

for wastewater activated sludge processes and modifications: Influent Mixed Liquor NFR 1/week 1/week (sample reaeration basin for contact stabilization) Settle- Daily (sample contact ability and reaeration basins for contact stabilization) D.O. Daily (sample contact and reaeration basins for contact stabilization) 3. Facilities having digesters shall perform the following additional laboratory tests: Anaerobic Aerobic pH Daily Temperature Daily . (if heated) D.O. Daily (C) Facilities which chlorinate for disinfection shall perform total chlorine residual analyses of the effluent on a daily basis during those periods when chlorination facilities are in use. (D) Facilities employing disinfection technology other than chlorine shall have disinfection process control testing parameters and frequency determined by the department on a case-by-case basis. (6) Laboratory procedures shall be performed according to the most current edition of Standard Methods for the Examination of Water and Wastewater or other methods approved by the department. (7) All owners of wastewater facilities operated by or for municipalities, sewer and water districts or Public Service Commission a self-analysis of the wastewater utility each calendar year utilizing the Missouri Municipal Water Pollution Prevention (MWPP) survey forms supplied by the

- (PSC) regulated sewer companies may complete department. Participation in this program is voluntary. For owners who have submitted an MWPP survey for the last five (5) consecutive calendar years; or for owners who have submitted an MWPP survey for every calendar year since the inception of the program, the department will. (A) Not impose administrative penalties
- until the process of conference, conciliation and persuasion (CC&P) as per 10 CSR 20-3.010 plus at least one (1) additional communication separated by at least ten (10) days from other communications are completed by the department; and
- (B) Reduce any base penalty calculated as per 10 CSR 20-3.010(8)(B)6. by up to onethird (1/3) of the amount between the midpoint and least figure of the penalty range.
- (8) A copy of all reports required by this rule shall be retained by the facility for a minimum of three (3) years.
- (9) Penalties. Penalties for violation of this rule shall be as provided in the Missouri

#### WPM Schedule 2

Clean Water Law. (10) Severance. If a section, subsection, paragraph, subparagraph, part or subpart of these rules or any part of them be declared unconstitutional or invalid for any reason, the remainder of these rules shall not be affected and shall remain in full force and effect. (11) Effective Date. This rule becomes effective July 1, 1977, after adoption and compliance with the requirements of section 644.036.3. of the Missouri Clean Water Law and Chapter 536, RSMo. AUTHORITY: section 644.026, RSMo, Supp. 1997.\* Original rule filed July 15, 1976, effective July 1, 1977. Amended: Filed Nov. 1, 1983, effective July 1, 1984. Amended: Filed July 29, 1994, effective March 30, 1995. Amended: Filed Nov. 3, 1997, effective July 30, 1998. \*Original authority 1972, amended 1973, 1987, 1993, 1995.

### Osage Water Company Billing Summary June-02

				Sewer					Custome
System	Water	Sewer	Water Connect	Connect	Tax	Total	% Change	Gallons	_rs
CG	2,357.55	3,592.14	150.00	150.00		6,249.69	1.00%	135,400	138
KK	422.25	858.99	150.00	150.00		1,581.24	4.59%	•	33
F-12	661.11	624.72	•	_		1,285.83	5.81%	107,526	27
SB 5	926.09	1,223.41	150.00	150.00		2,449.50	12.28%	64,510	<u>50</u>
	4,367.00	6,299.26	Out County Subt	otal		11,566.26	4.10%	333,536	248
Super 8	442.07				31.92	473.99	44.72%	112,000	1
OBN	3,997.01				288.57	4,285.58	21.88%	2,806,399	30
OBS	683.95				9.13	693.08	29.34%	111,970	<u>23</u>
	5,123.03		Osage Beach Su	ıbtotal	329.62	5,452.65	24.54%	3,030,369	54
Total % Change	<b>9,490.03</b> 0.16	<b>6,299.26</b> 0.02	450.00	450.00	<b>329.62</b> 0.24	<b>\$ 17,018.91</b> \$ 0.12	9.96% Net Revenue	3,363,905	302

### Sales Tax Report for 2nd Quarter

	1% Sales	1% Tax	7.225 Sales	7.225 Tax
Super 8			1,000.35	72.22
OB North			10,364.65	737.17
OB South	1,793.29	24.86		
Totals	1,793.29	24.86	11,365.00	809.39

## Osage Water Company Billing Summary July-02

			Water	Sewer			%		Customer
System	Water	Sewer	Connect	Connect	Тах	Total	Change	Gallons	_s
CG	2.503.47	3,696.26	250.00	150.00		6,599.73	4%	211,200	142
KK	464.23	858.99	200.00	100.00		1,323.22	3%	45,200	33
F-12	764.04	676.78	-	-		1,440.82	12%	126,324	30
SB 5	901.09	1,223.41	150.00	150.00		2,424.50	-1%	62,060	<u>50</u>
	4,632.83	6,455.44	Out Coun	ty Subtotai		11,788.27	4%	444,784	255
Super 8	488.90				35.30	524.20	11%	124,100	1
OBN	4,660.89				336.49	4,997.38	17%	1,123,006	29
OBS	965.13				9.22	974.35	41%	192,664	<u>24</u>
	6,114.92		Osage Be	each Subto	381.01	6,495.93	19%	1,439,770	54
Total	10,747.75	6,455.44	400.00	300.00	381.01	\$ 18,284.20	9%	1,884,554	309
% Change	1	0.02			0.16	\$ 0.07	Net Reven	ue	

## Osage Water Company Billing Summary August-02

			Water	Sewer			%		Customer
System	Water	Sewer	Connect	Connect	Tax	Total	Change	Gallons	s
CG	2,572.38	3,618.17				6,190.55	-0.15%	258,382	139
KK	521.05	885.02				1,406.07	6.26%	•	34
F-12	875.95	650.75				1,526.70		•	28
SB 5	1,079.08	1,431.65				2,510.73	<u>18.18%</u>	76,100	<u>55</u>
	5,048.46	6,585.59	Out Coun	ty Subtotal		11,634.05	4.92%	535,513	256
Super 8	582.94				42.09	625.03	19.24%	148,400	1
OBN	5,250.06				379.05	5,629.11	12.64%	1,278,097	25
OBS	1,149.73				15.07	1,164.80	<u>19.13%</u>	238,284	<u>24</u>
	6,982.73		Osage B	each Subto	436.21	7,418.94	14.19%	1,664,781	50
Totai	12,031.19	6,585.59	-	-	436.21	\$ 19,052.99	8.22%	2,200,294	306
% Change	11.94%	2.02%	ı		14.49%	4.20%	)		

### Osage Water Company Billing Summary September-02

			Water	Sewer			%		
System	Water	Sewer	Connect	Connect	Tax	Total	Change	Gallons	Customers
00	0.634.07	2 640 47				6,252.54	1.00%	267,200	139
CG	2,634.37	3,618.17				1,362.53	-3.10%	= -	34
KK	477.51	885.02				•			
F-12	775.67	650.75				1,426.42	-6.57%	•	28
SB 5	981.31	1,405.62				2,386.93	<u>-4.93%</u>	51,350	<u>54</u>
	4,868.86	6,559.56	Out County \$	Subtotal		11,428.42	-1.77%	482,695	255
Super 8	666.92				48.15	715.07	14.41%	170,100	1
OBN	5,609.62				405.01	6,014.63	6.85%	1,371,954	25
OBS	1,349.63				16.27	1,365.90	<u>17.39%</u>	292,946	<u>23</u>
	7,626.17		Osage Beac	h Subtota	1 469.43	8,095.60	9.21%	1,835,000	49
Total % Change	<b>12,495.03</b> 3.86%	<b>6,559.56</b> -0.40%	-	-	<b>469.43</b> 7.62%	\$ 19,524.02	2.35%	2,317,695	304

#### Sales Tax Report for 3rd Quarter

	1% Sales	1% Tax		7,225 Sales	7.225 Tax
Super 8				1,738.76	125.54
OB North				15,520.57	1,120.55
OB South	3,464.49		40.56		
Totals	3,464.49		40.56	17,259.33	1,246.09

### Osage Water Company Billing Summary October-02

644.20 885.02 650.75 .561.80	Connect	Тах	6,082.42 1,352.74 1,449.98	-2.72% -0.72%	178,700 20,250	140 34
885.02 650.75			1,352.74	-0.72%	20,250	· -
885.02 650.75			1,352.74	-0.72%	20,250	· -
650.75			•		,	34
			1 449 98	4 000		
.561.80 100.00			1,445.50	1.65%	137,795	28
<u> </u>			2,701.86	<u>9.00%</u>	41,110	<u>63</u>
741.77 Out Coun	ty Subtotal		11,587.00	0.51%	377,855	265
		35.52	527.52	-26.23%	124,900	1
		302.46	4,491.95	-25.32%	1,000,372	28
		<u>15.64</u>	<u>1,227.73</u>	<u>-10.19%</u>	246,162	<u>25</u>
Osage Be	each Subto	353.62	6,247.20	-22.72%	1,371,434	54
741.77 100.00 2 78%	-	<b>353.62</b>	\$ 17,834.20 -8.66%	-8.79%	1,749,289	319
,7	741.77 Out Coun Osage B	Osage Beach Subtor	741.77 Out County Subtotal  35.52 302.46 15.64 Osage Beach Subtol 353.62  741.77 100.00 - 353.62	741.77 Out County Subtotal 11,587.00  35.52 527.52 302.46 4,491.95 15.64 1,227.73 Osage Beach Subtol 353.62 6,247.20  741.77 100.00 - 353.62 \$ 17,834.20	741.77 Out County Subtotal 11,587.00 0.51%  35.52 527.52 -26.23% 302.46 4,491.95 -25.32% 15.64 1,227.73 -10.19% Osage Beach Subtol 353.62 6,247.20 -22.72%  741.77 100.00 - 353.62 \$ 17,834.20 -8.79%	741.77 Out County Subtotal  11,587.00  0.51%  377,855  35.52 527.52 -26.23% 124,900 302.46 4,491.95 -25.32% 1,000,372 15.64 1,227.73 -10.19% 246,162  Osage Beach Subtol 353.62 6,247.20 -22.72% 1,371,434  741.77 100.00 - 353.62 \$ 17,834.20 -8.79% 1,749,289

### Osage Water Company Billing Summary November-02

System	Water	Sewer	Water Connect	Sewer Connect	Tav	Total	% Change	Gallons	Custome rs
Oyotom .	- Tracei	OGWEI	Comiect	Connect	1 ax	TOTAL	Change	Gallons	15
CG	2,429.17	3,696.26	450.00	450.00		7,025.43	0.71%	137,300	142
KK	432.61	911.05				1,343.66	-0.67%	31,370	35
F-12	684.59	650.75				1,335.34	-7.91%	104,108	28
SB 5	1,009.78	1,561.80				2,571.58	<u>-1.16%</u>	29,250	<u>63</u>
	4,556.15	6,819.86	Out County	y Subtotal		12,276.01	-0.97%		268
Super 8	365.06				26.36	391.42	-25.80%	92,100	1
OBN	3,417.23				246.71	3,663.94	-18.43%	2,971,501	28
OBS	824.08				11.52	835.60	<u>-32.01%</u>	145,131	<u>24</u>
	4,606.37		Osage Bea	ach Subtot	284.59	4,890.96	-21.84%	3,208,732	53
Total % Change	<b>9,162.52</b> -13.88%	<b>6,819.86</b> 1.16%	450.00	450.00	<b>284.59</b> -19.52%	<b>\$ 17,166.97</b> -3.74%	-8.04%	3,510,760	321

### Osage Water Company Billing Summary December-02

			Water	Sewer			%		Customer
System	Water	Sewer	Connect	Connect	Tax	Total	Change	Gallons	S
CG	2,439.71	3,722.29	150.00	150.00		6,462.00	0.60%	119,200	143
KK	416.20	885.02	150.00	100.00		1,301.22	-3.16%	•	34
F-12	700.09	676.78				1,376.87	3.11%	104,590	29
SB 5	974.73	1,535.77				2,510.50	<u>-2.38%</u>	17,410	<u>59</u>
	4,530.73	6,819.86	<b>Out County</b>	/ Subtotal		11,650.59	-0.22%	263,410	265
0	000.05				40.04	070.70	20 520/	6E 200	1
Super 8	260.95				18.84	279.79	-28.52%	•	1
OBN	3,543.17				255.80	3,798.97	3.69%	, ,	26 24
OBS	613.98				10.42	624.40	<u>-25.50%</u>		<u>24</u>
	4,418.10		Osage Bea	ch Subtota	285.06	4,703.16	-4.09%	3,223,929	51
<b>Total</b> % Change	<b>8,948.83</b> -2.33%	<b>6,819.86</b> 0.00%	150.00	150.00	<b>285.06</b> 0.17%	<b>\$ 16,353.75</b> -4.74%	-1.34%	3,487,339	316

#### Sales Tax Report for 4th Quarter 2002

	1% Sales	1% Tax	7.225 Sales	7.225 Tax
Super 8			1,118.01	80.72
OB North			11,149.89	804.97
OB South	2,650.15	37.58		
Totals	2,650.15	37.58	12,267.90	885.69

Osage Water Company
Billing Summary
12 Months Ending 11/1/02

System	Jan-02	Feb-02	<u>Mar-02</u>	Apr-02	<u>Μαγ-02</u>	<u>Jun-02</u>	<u>Jul-02</u>	Aug-02	Sep-02	Oct-02	Nov-02	Dec-02	12 Month Total	Monthly Avg
				<del></del>			<u> </u>							
CG	5,404.23	5,633.01	5,685.00	5,792.58	6,182.42	6,249.69	6,599.73	6,190.55	6,252.54	6,082.42	7,025.43	6,462.00	73,559.60	6,129.97
KK	944.63	839.45	1,307.50	1,224.26	1,225.03	1,581.24	1,323.22	1,406.07	1,362.53	1,352.74	1,343.66	1,301.22	15,211.55	1,267.63
F-12	1,256.94	1,345.17	1,305.07	1,198.88	1,215.27	1,285.83	1,440.82	1,526.70	1,426.42	1,449.98	1,335.34	1,376.87	16,163.29	1,346.94
<u>SB 5</u>	<u>1,834.26</u>	<u>1,849.56</u>	1,836.48	<u>1,865.99</u>	2,214.40	2,449.50	2,424.50	2,510.73	2,386.93	2,701.86	2,571.58	<u>2,510.50</u>	27,156.29	2,263.02
	9,440.06	9,667.19	10,134.05	10,081.71	10,837.12	11566.26	11,788.27	11,634.05	11,428.42	11,587	12,276.01	11,651	132,090.73	11,007.56
													-	
Super 8	234.97	253.23	322.53	271.07	327.51	473. <del>9</del> 9	524.20	625.03	715.07	527.52	391.42	279.79	4,946.33	412.19
OBN	3,177.48	3,649.89	3,116.92	3,146.20	3,516.20	4,285.58	4,997.38	5,629.11	6,014.63	4,491.95	3,663.94	3,798.97	49,488.25	4,124.02
<u>OBS</u>	<u>1,479.03</u>	<u>1,467.93</u>	<u>1,361.03</u>	<u>588.77</u>	536.30	693.08	<u>974.35</u>	<u>1,164.80</u>	<u>1,365.90</u>	1,227.73	835.60	624.40	12,318.92	1,026.58
	4,891.48	5,371.05	4,800.48	4,006.04	4380.01	5,452.65	6,495.93	7,418.94	8,095.60	6,247	4,890.96	4,703	66,753.50	5,562.79
													-	
Total	14,331.54	15,038.24	14,934.53	14,087.75	15,217.13	17,018.91	18,284.20	19,052.99	19,524.02	17,834.20	17,166.97	16,353.75	198,844.23	16,570.35
System	Credits		Credits											
<u> </u>	<del>Oleans</del>		Orcuits											
CG	(763.53)	?	(1,280.57)											
KK	-	Ó	-											
F-12	(140.28)	?	(256.78)		•							•		
<u>SB 5</u>	(371.04)	?	(519.79)											
	(1,274.85)	?	(2,057.14)											
	,													
Super 8	(347.32)	?	(253.46)								-			
OBN	(2,190.70)	?	(1,925.90)											
<u>OBS</u>	(753.29)	?	(569.62)											
	(3,291.31)	?	(2,748.98)											
			, ,											
Total			A 44											
1000	\$ (4,566.16)		\$ (4,806.12)											
Connect	\$ (4,566.16) 600.00		\$ (4,806.12)	900	600	900	700			100	900	300	5,000.00	416.67

# Osage Water Company Billing Summary January-03

			Water	Sewer			%		Customer
System	Water	Sewer	Connect	Connect	Tax	Total	Change	Gallons	<u>s</u>
CG	2.584.08	3,722.29				6,306.37	2.34%	139,010	143
KK	416.33	885.02				1,301.35	0.01%	•	34
F-12	707.41	676.78				1,384.19	0.53%	104,666	29
SB 5	959.14	_1,535. <u>77</u>				2,494.91	<u>-0.62%</u>	12,520	<u>62</u>
	4,666.96	6,819.86	Out Coun	ty Subtotal	l	11,486.82	1.20%	271,436	268
Super 8	184.32				13.31	197.63	-29.37%	45,400	1
OBN	3,683.15				265.90	3,949.05	3.95%	875,277	28
OBS	598.37				11.23	609.60	<u>-2.54%</u>	83,175	<u>24</u>
	4,465.84		Osage B	each Subto	290.44	4,756.28	1.08%	1,003,852	53
Total	9,132.80	6,819.86	-		290.44	\$ 16,243.10	1.17%	1,275,288	321
% Change	2.06%	0.00%			1.89%	-0.68%			

## Osage Water Company Billing Summary February-03

			Water	Sewer			%		Customer
System	Water	Sewer	Connect	Connect	Tax	Total	Change	Gallons	s
CG	2.050.07	2 700 00				0.075.00	4.000/	404.040	440
	2,652.97	3,722.29				6,375.26	1.09%	•	143
KK	423.33	885.02				1,308.35	0.54%	32,940	34
F-12	753.24	676.78				1,430.02	3.31%	111,995	30
SB 5	970.83	1,535.77				2,506.60	<u>0.47%</u>	14,050	<u>62</u>
	4,800.37	6,819.86	Out Coun	ty Subtotal		11,620.23	1.16%	320,295	269
Super 8	184.59				13.33	197.92	0.15%	45,468	1
OBN	2,920.66				210.86	3,131.52	-20.70%	3,171,088	28
OBS	524.75				9.66	534.41	<u>-12.30%</u>	60,614	<u>24</u>
	3,630.00		Osage Be	each Subto	233.85	3,863.85	-18.72%	3,277,170	53
Total	8,430.37	6,819.86	-	-	233.85	\$ 15,484.08	-4.40%	3,597,465	322
% Change	-7.69%	0.00%			-19.48%	-4.67%			

### Osage Water Company Billing Summary March-03

•	•••	_	Water	Sewer		<b>.</b>	%	<b>.</b>	Custome
System	Water	Sewer	Connect	Connect	Tax	Total	Change	Gallons	rs
CG	2,454.79	3,722.29				6,177.08	-3.11%		143
KK	437.64	885.02				1,322.66	1.09%	30,070	35
F-12	671.31	676.78				1,348.09	-5.73%	95,104	29
SB 5	965.41	1,535.77				2,501.18	<u>-0.22%</u>	13,910	<u>62</u>
	4,529.15	6,819.86	Out Coun	ty Subtotal		11,349.01	-2.33%	232,174	269
Super 8	245.74				17.74	263.48	33.13%	61,270	1
OBN	2,226.49				160.73	2,387.22	-23.77%	2,609,431	28
OBS	532.03				10.08	542.11	<u>1.39%</u>	447,233	<u>24</u>
	3,004.26		Osage B	each Subto	188.55	3,192.81	-17.24%	3,117,934	53
Total % Change	<b>7,533.41</b> -10.64%	<b>6,819.86</b> 0.00%	•	-	<b>188.55</b> -19.37%	<b>\$ 14,541.82</b> -6.09%	-5.88%	3,350,108	322

#### Sales Tax Report for 1st Quarter 2003

	1% Sales	1% Tax		7.225 Sale	7.225 Tax
Super 8				614.65	44.38
OB North				8,830.30	637.49
OB South	1,655.15		30.97		
Totals	1,655.15		30.97	9,444.95	681.87

### Osage Water Company Billing Summary April-03

			Water	Sewer			%		Customer
System	Water	Sewer	Connect	Connect	Tax	Total	Change	Gallons	<u>s</u>
CG KK F-12 SB 5	2,771.12 435.55 640.49 969.62 4,816.78	4,320.98 885.02 676.78 1,535.77 7,418.55	Out Coun	ty Subtotal		7,092.10 1,320.57 1,317.27 2,505.39 12,235.33	14.81% -0.16% -2.29% <u>0.17%</u> 7.81%	28,580 87,257 15,020	166 35 29 <u>62</u> 292
Super 8 OBN OBS	308.41 1,877.72 489.12 2,675.25		Osage Be	each Subto	22.27 135.57 9.56 167.40	330.68 2,013.29 498.68 <b>2,842.65</b>	25.50% -15.66% <u>-8.07%</u> -10.95%	2,335,319 51,850	1 26 <u>24</u> 51
Total % Change	<b>7,492.03</b> -0.55%	<b>7,418.55</b> 8.78%	-	-	<b>167.40</b> -11.22%	<b>\$ 15,077.98</b> 3.69%	3.88%	2,679,196	343

## Osage Water Company Billing Summary May-03

_			Water	Sewer			%		Customer
System	Water	Sewer	Connect	Connect	Tax	Total	Change	Gallons	<u>s</u>
CG	2830.22	4,294.95				7,125.17	0.47%	161,518	165
KK	471.06	911.05				1,382.11	4.66%	36,900	36
F-12	674.49	650.75				1,325.24	0.61%	100,373	28
SB 5	980.15	1,535.77				2,515.92	0.42%	25,160	<u>62</u>
	4,955.92	7,392.52	Out Coun	ty Subtotal	l	12,348.44	0.92%	323,951	291
Super 8	346.87				25.04	371.91	12.47%	87,400	1
OBN	2,304.29				166.38	2,470.67	22.72%	2,739,812	25
OBS	594.35				5.90	600.25	<u>21.51%</u>	89,215	<u>24</u>
	3,245.51		Osage Be	each Subto	197.32	3,442.83	21.32%	2,916,427	50
<b>Total</b> % Change	<b>8,201.43</b> 9%	<b>7,392.52</b> 0%	-	-	<b>197.32</b> 18%	<b>\$ 15,791.27</b> 5%	4.58%	3,240,378	341

# Osage Water Company Billing Summary June-03

			Water	Sewer			%		Customer
System	Water	Sewer	Connect	Connect	Tax	Total	Change	Gallons	S
00	0000 70	4.070.00				7 070 07	0.400/	407 440	400
CG	2903.79	-,				7,276.87	2.13%	137,418	169
KK	458.07	911.05				1,369.12	-0.94%	33,650	36
F-12	685.72	650.75				1,336.47	0.85%	105,740	28
SB 5	1,015.06	1,535.77				2,550.83	<u>1.39%</u>	33,900	<u>62</u>
	5,062.64	7,470.65	Out County	y Subtotal		12,533.29	1.50%	310,708	295
Super 8	406.47				29.35	435.82	17.18%	102,800	1
OBN	2,436.68				175.92	2,612.60	5.75%	2,741,646	25
OBS	640.85				6.36	647.21	<u>7.82%</u>	13,296	<u>24</u>
	3,484.00		Osage Bea	ach Subtot	ε 211.63	3,695.63	7.35%	2,857,742	50
Total % Change	<b>8,546.64</b> 4.21%	<b>7,470.65</b> 1.06%	-	-	<b>211.63</b> 7.25%	<b>\$ 16,228.92</b> 2.77%	2.71%	3,168,450	345

### Sales Tax Report for 2nd Quarter 2003

	1% Sales	1% Tax	7.225 Sale: 7	7.225 Tax
Super 8			1,061.75	76.66
OB North			9,040.49	477.87
OB South	1,724.32	21.82		
Totals	1,724.32	21.82	10,102.24	554.53

## Osage Water Company Billing Summary July-03

			Water	Sewer			%		Customer
System	Water	Sewer	Connect	Connect	Tax	Total	Change	Gallons	<u>s</u>
CG	3037.52	4,477.16				7,514.68	3.27%	206,618	175
KK	480.55	885.02				1,365.57	-0.26%	•	34
F-12	817.62	676.78				1,494.40	11.82%	•	29
SB 5	1,238.61	1,874.16				3,112.77	<u>22.03%</u>	44,070	<u>72</u>
	5,574.30	7,913.12	Out Coun	ty Subtotal		13,487.42	7.61%	432,424	310
Cumar 0	456.70				32.98	489.76	12.38%	115,800	1
Super 8 OBN	456.78 3,040.56				219.52	3,260.08	24.78%	,	23
OBS	786.17				7.82	793.99	22.68%	•	<u>25</u>
	4,283.51		Osage B	each Subto	260.32	4,543.83	22.95%	974,792	49
Total % Change	<b>9,857.81</b> 15.34%	<b>7,913.12</b> 5.92%	-	-	<b>260.32</b> 23.01%	<b>\$ 18,031.25</b> 11.11%	10.95%	1,407,216	359

# Osage Water Company Billing Summary August-03

		Water	Sewer			%		Customer
Water	Sewer	Connect	Connect	Tax	Total	Change	Gallons	_ <u>s</u>
3667.72	4.711.43				8,379.15	11.50%	422,863	181
504.75	937.08				1,441.83			36
836.36	624.72				1,461.08	-2.23%	151,119	27
1,588.38	1,848.13				3,436.51	<u>10.40%</u>	142,600	<u>71</u>
6,597.21	8,121.36	Out Coun	ty Subtotal		14,718.57	9.13%	752,732	315
661.12				47.73	708.85	44.73%		1
3,682.28				265.85	3,948.13	21.11%	884,132	23
1,255.98				15.10	1,271.08	<u>59.76%</u>	264,855	<u>25</u>
5,599.38		Osage Be	each Subto	328.68	5,928.06	30.72%	1,148,987	49
<b>12,196.59</b>	8,121.36 2.63%	-	•	<b>328.68</b>	\$ 20,646.63 14.50%	14.33%	1,901,719	364
	836.36 1,588.38 6,597.21 661.12 3,682.28 1,255.98 5,599.38 12,196.59	3667.72 4,711.43 504.75 937.08 836.36 624.72 1,588.38 1,848.13 6,597.21 8,121.36 661.12 3,682.28 1,255.98 5,599.38 12,196.59 8,121.36	Water         Sewer         Connect           3667.72         4,711.43         504.75         937.08         836.36         624.72 <td>Water         Sewer         Connect         Connect           3667.72         4,711.43         504.75         937.08           836.36         624.72         624.72         624.72           1,588.38         1,848.13         6,597.21         Out County Subtotal           661.12         3,682.28         6,597.21         0.599.38         Osage Beach Subtotal           5,599.38         Osage Beach Subtotal         -         -</td> <td>Water         Sewer         Connect         Connect         Tax           3667.72         4,711.43</td> <td>Water         Sewer         Connect         Connect         Tax         Total           3667.72         4,711.43         8,379.15           504.75         937.08         1,441.83           836.36         624.72         1,461.08           1,588.38         1,848.13         3,436.51           6,597.21         8,121.36         Out County Subtotal         14,718.57           661.12         47.73         708.85           3,682.28         265.85         3,948.13           1,255.98         15.10         1,271.08           5,599.38         Osage Beach Subtol         328.68         5,928.06           12,196.59         8,121.36         -         -         328.68         \$20,646.63</td> <td>Water         Sewer         Connect         Connect         Tax         Total         Change           3667.72         4,711.43         8,379.15         11.50%           504.75         937.08         1,441.83         5.58%           836.36         624.72         1,461.08         -2.23%           1,588.38         1,848.13         3,436.51         10.40%           6,597.21         8,121.36         Out County Subtotal         14,718.57         9.13%           661.12         47.73         708.85         44.73%           3,682.28         265.85         3,948.13         21.11%           1,255.98         15.10         1,271.08         59.76%           5,599.38         Osage Beach Subtol         328.68         5,928.06         30.72%           12,196.59         8,121.36         -         -         328.68         \$20,646.63         14.33%</td> <td>Water         Sewer         Connect         Connect         Tax         Total         Change         Gallons           3667.72         4,711.43         8,379.15         11.50%         422,863           504.75         937.08         1,441.83         5.58%         36,150           836.36         624.72         1,461.08         -2.23%         151,119           1,588.38         1,848.13         3,436.51         10.40%         142,600           6,597.21         8,121.36         Out County Subtotal         14,718.57         9.13%         752,732           661.12         265.85         3,948.13         21.11%         884,132           1,255.98         265.85         3,948.13         21.11%         884,132           15.10         1,271.08         59.76%         264,855           5,599.38         Osage Beach Subtol         328.68         5,928.06         30.72%         1,148,987           12,196.59         8,121.36         -         -         328.68         \$20,646.63         14.33%         1,901,719</td>	Water         Sewer         Connect         Connect           3667.72         4,711.43         504.75         937.08           836.36         624.72         624.72         624.72           1,588.38         1,848.13         6,597.21         Out County Subtotal           661.12         3,682.28         6,597.21         0.599.38         Osage Beach Subtotal           5,599.38         Osage Beach Subtotal         -         -	Water         Sewer         Connect         Connect         Tax           3667.72         4,711.43	Water         Sewer         Connect         Connect         Tax         Total           3667.72         4,711.43         8,379.15           504.75         937.08         1,441.83           836.36         624.72         1,461.08           1,588.38         1,848.13         3,436.51           6,597.21         8,121.36         Out County Subtotal         14,718.57           661.12         47.73         708.85           3,682.28         265.85         3,948.13           1,255.98         15.10         1,271.08           5,599.38         Osage Beach Subtol         328.68         5,928.06           12,196.59         8,121.36         -         -         328.68         \$20,646.63	Water         Sewer         Connect         Connect         Tax         Total         Change           3667.72         4,711.43         8,379.15         11.50%           504.75         937.08         1,441.83         5.58%           836.36         624.72         1,461.08         -2.23%           1,588.38         1,848.13         3,436.51         10.40%           6,597.21         8,121.36         Out County Subtotal         14,718.57         9.13%           661.12         47.73         708.85         44.73%           3,682.28         265.85         3,948.13         21.11%           1,255.98         15.10         1,271.08         59.76%           5,599.38         Osage Beach Subtol         328.68         5,928.06         30.72%           12,196.59         8,121.36         -         -         328.68         \$20,646.63         14.33%	Water         Sewer         Connect         Connect         Tax         Total         Change         Gallons           3667.72         4,711.43         8,379.15         11.50%         422,863           504.75         937.08         1,441.83         5.58%         36,150           836.36         624.72         1,461.08         -2.23%         151,119           1,588.38         1,848.13         3,436.51         10.40%         142,600           6,597.21         8,121.36         Out County Subtotal         14,718.57         9.13%         752,732           661.12         265.85         3,948.13         21.11%         884,132           1,255.98         265.85         3,948.13         21.11%         884,132           15.10         1,271.08         59.76%         264,855           5,599.38         Osage Beach Subtol         328.68         5,928.06         30.72%         1,148,987           12,196.59         8,121.36         -         -         328.68         \$20,646.63         14.33%         1,901,719

### 10 CSR 60-3.030 Technical, Managerial, and Financial Capacity

PURPOSE: This rule establishes minimum technical, managerial and financial capacity requirements for community and nontransient noncommunity water systems commencing operation after October 1, 1999. The rule also includes technical and financial capacity recommendations.

- (1) Applicability. This rule applies to community and nontransient noncommunity water systems commencing operation after October 1, 1999.
- (2) General Requirements.
- (A) Community and nontransient noncommunity water systems commencing operation after October 1, 1999, shall show, as part of their permit application, that the public water system will meet the requirements of this rule. The department will not issue a permit to dispense water until requirements of this rule are met.
- (B) Public water systems commencing operation after October 1, 1999 shall show as part of their application that the public water system will meet the minimum technical, managerial, and financial capacity requirements of this rule. The department will not issue a written construction authorization until it determines that the proposed water system will meet the requirements of this rule.
- (C) Community and nontransient noncommunity water systems shall maintain compliance with this rule and shall provide the department with information during sanitary surveys and upon written request for the department's use in assessing their compliance with this rule.
- (D) Community and nontransient noncommunity water systems subject to this rule shall consider and plan for the potential impact of future regulations on their technical, managerial and financial capacity.
- (3) Minimum Technical, Managerial, and Financial Capacity Requirements.
- (A) Minimum Technical Capacity Requirements.
- All community water systems subject to this rule must conform to the department's "Standards for Community Public Water Supplies."
- 2. All nontransient noncommunity water systems subject to this rule must conform to the department's "Standards for Non-Community Public Water Supplies."
- 3. All public water systems subject to this rule shall have a sufficient number of operators certified as required in 10 CSR 60-14 to provide proper operation and maintenance of all source, treatment, storage, and distribution facilities so that the public water system meets all requirements of sections

640.100–640.140, RSMo and regulations promulgated thereunder. These operators shall be properly trained and be provided all equipment needed, including safety equipment, to perform all tasks in their job duties.

4. All public water systems subject to this rule shall have and maintain an updated distribution system map showing, at a minimum, the size and location of all waterlines, valves, hydrants, storage facilities, pumping facilities, treatment facilities, and water sources and shall make the map available to the department on request.

(B) Minimum Managerial Capacity Requirements.

1. Community and nontransient noncommunity water systems subject to this rule shall have an organization chart that shows

- 1. Community and nontransient noncommunity water systems subject to this rule shall have an organization chart that shows every position that provides any drinking water function with the position title, name, business address, and telephone number of the person filling that position. This chart shall show clear lines of authority and supervision. Elected officials and managers that have overall jurisdiction shall also be shown on this chart. The chart shall state the name(s) of the persons or legal entity who own the public water system along with the business address and telephone number of the owner(s). This chart shall be publicly displayed and shall be updated within thirty (30) calendar days of any changes. An updated copy of the organization chart shall be made available to the department.
- 2. Community and nontransient noncommunity water systems subject to this rule shall designate a person or persons who will receive customer complaints and shall have a written procedure for receiving, investigating, resolving, and recording customer complaints. The name, title, business address, business telephone number and office hours of the person(s) designated to receive complaints shall be publicly displayed, along with the written complaint procedure. Complaint records shall be kept for a minimum of five (5) years and shall be made available to the department upon request. Results of investigations shall be used as part of the planning process for future improvements.
- 3. Community and nontransient noncommunity water systems subject to this rule shall have a written rate structure and service fees, and the rate structure and service fees shall be publicly displayed and shall be made available to the department upon request.
- 4. Community and nontransient noncommunity water systems subject to this rule shall hold at least one (1) public meeting prior to changing the rate structure or service fees and shall notify the customers in advance of the public meeting by posting notice in the principal business office and providing notice

in the area served, unless the rate increase procedure is regulated by other state or federal regulations. Records of customers' notice and summary of the public meeting shall be kept for a minimum of five (5) years and shall be made available to the department upon request.

- 5. Community and nontransient noncommunity water systems subject to this rule shall designate a person to deal with compliancerelated issues in accordance with the public drinking water regulations in 10 CSR 60, including reporting and public notice requirements. This person shall be trained in public drinking water regulation requirements and shall act as liaison with the department on drinking water issues. The department will refer compliance actions to this person. The name, position title, business address, business telephone number, and office hours for this person shall be made available to the department and the department shall be notified within thirty (30) calendar days of any
- (C) Minimum Financial Capacity Requirements.

  1. Community and nontransient noncommunity water systems subject to this rule shall adhere to standard accounting practices in accordance with the Generally Accepted Accounting Principles and Practices, or the National Association of Regulated Utility Companies Uniform System of Accounts, as appropriate.
- 2. Community and nontransient noncommunity water systems subject to this rule shall develop and implement a system of collection of water fees that includes disconnection of service for nonpayment or other measures for obtaining payment. The total of uncollected fees and the percentage of uncollected fees compared to sum of collected and uncollected fees shall be recorded monthly. These records shall be made available to the department upon request.
- 3. Community and nontransient noncommunity water systems subject to this rule shall develop an annual budget showing public water system revenues and expenditures. shall prepare a report at the end of each fiscal year showing public water system revenues and expenditures for that year and a comparison with the annual budget prepared for that year, and shall prepare a five (5)-year capital improvement budget and capital improvement plan that will be updated annually. The capital improvement plan shall include the potential financial impacts of future regulations. These records shall be kept for a minimum of ten (10) years and shall be made available to the department upon request.
- 4. Annual revenues shall cover all public

water system costs for the system including operating costs, maintenance costs, debt service costs, operating reserves, debt service reserves, emergency equipment replacement reserves, and revenue collection costs.

5. Community and nontransient noncommunity water systems subject to this rule and not subject to state regulation of rates for water service, in addition to all other financial capacity requirements, shall have and maintain—

A. An operating reserve equal to or greater than one-tenth (1/10) of the annual operations and maintenance budget. The public water system must establish this reserve in at least annual payments not to exceed ten (10) years. Funds from the operating reserve shall be used for operating and maintenance expenses only and shall be replaced within ten (10) years from the date of use. This reserve shall be invested in an account with ready access to the funds. Records of this reserve shall be made available to the department upon request. Other private, state, or federal reserves may be applied to meet this requirement; B. An emergency equipment replacement reserve equal to or greater than the replacement cost of the most expensive mechanical equipment item needed for operation. The public water system must establish this reserve in at least annual payments over a minimum of ten (10) years. Funds from the reserve shall be used for emergency equipment replacement expenses only and any funds so used shall be replaced within ten (10) years from the date of use. This reserve shall be invested in an account with ready access to the funds. Records of this reserve shall be made available to the department upon request. Other private, state, or federal reserves may be applied to meet this requirement; and C. If there is debt on the public water system facilities, a debt service reserve no less than ten percent (10%) of the principle and interest or the amount required in the bonding agreement. Funds from the debt service reserve shall be used only for debt service expenses and for purposes agreed to in the bonding agreement and shall be replaced no less than as required in the bonding agreement. Records of this reserve shall be made available to the department upon request. (4) Recommendations. This section includes recommendations for further enhancing managerial and financial capacity. These recommendations will not be used to determine if minimum regulatory requirements are met for issuance of permits to dispense water. (A) Managerial capacity recommendations include the following:

- 1. All public water systems should designate a person to be liaison with other public water systems and officials of entities that may impact drinking water systems. This person should be trained in water resource planning and general public drinking water system issues: and
- 2. All public water systems should have management with sufficient expertise to ensure that all public drinking water facilities are properly operated, maintained and in compliance with department regulations; improvements needed for future population and commercial growth are properly planned and that these plans are financed and executed; all personnel providing drinking water functions continue to be trained to achieve professional expertise in their field; the personnel are organized and motivated to provide good customer service, good interaction with the department and other regulatory agencies, good interaction with other regional water systems and water users including participating in long-term strategic planning for management of regional water resources; and that the supply finances are fiscally sound.
- (B) Financial capacity recommendations include the following:
- 1. Revenues from drinking water sales should cover all public water system costs for the system including operating costs, maintenance costs, debt service costs, operating reserves, debt reserves, emergency equipment replacement reserves, and revenue collection costs. Capital improvement funding for facilities needed for upgrading the existing system should come from revenue from water sales or other sources of capital. Rates should be set accordingly;
- 2. New connection fees, development fees, and other funding sources should cover all public water supply capital improvements costs for facilities needed for expanding the system for new customers. Fees should be set accordingly; and
- 3. All drinking water generated revenues should be used for drinking water purposes. For public water systems owned by entities that provide other services in addition to drinking water, drinking water purposes should include equitable share of administrative costs for the entire entity.

AUTHORITY: sections 640.100 and 640.115, RSMo Supp. 1998.\* Emergency rule filed Sept. 20, 1999, effective Sept. 30, 1999, expired March 27, 2000. Original rule filed July 1, 1999, effective March 30, 2000.
\*Original authority: 640.100, RSMo 1939, amended 1978, 1981, 1982, 1988, 1989, 1992, 1993, 1995, 1996, 1998, 1999; and 640.115, RSMo 1939, amended 1949, 1978, 1998

fair value analysis				WPM
OWC	count	fair value	total	
8/22/2003	<b>,</b>			
Certificates	total		\$311,000	
Public Well	6	\$75,000	\$450,000	
Meters	361	\$650	\$234,650	
water main 4"+	15000	\$18	\$270,000	
f-12 wastewater	1	\$75,000	\$75,000	
kk wastewater	1	\$100,000	\$100,000	
cedar glen ww	1	\$250,000	\$250,000	
sb-5 ww plant	1	\$100,000	\$100,000	
sewer main 2"+	6000	\$13	\$78,000	
4+ unit lift stations	10	\$6,000	\$60,000	
residential lift st.	8	\$2,000	\$16,000	
total			\$1,944,650	

W	/PM	Sche	8 elub	Budget
---	-----	------	--------	--------

AALM Schednie 9 Bridget			4.4
2002-3	-	budget 2004-5	
Water and Sewer Receipts	<u>213,770.90</u>	•	increased by \$41,000 in first filing
Total Revenues	<u>213,770.90</u>		
Cost of Sales			
Purchased Water	1,735.24	\$12,000	kk from EU
Purchased Power	17,171.66	\$18,889	cost multiplier inflation
Total Cost of Sales	18,906.90		
Gross Profit	194,864.00		
Expenses			
Operating Expenses	3,702.00	\$4,072	•
Depreciation Expenses	0.00	•	\$1,944,650 50 total plant years
Amort. Util. Plant Acq. Adj.	0.00	•	
Taxes Other than Income	14,404.55		payroll and sales
Income Taxes	0.00		payron and balos
Interest Expense	3,132.09		\$1,600,000 9 debt interest no principal
Reimbursed Employee Mileage	0.00		1,000,000 3 dept wherest no principal
Salary & Wages - Employees			\$9,000 por mo
	66,205.97	-	· · · · · · · · · · · · · · · · · · ·
Salary & Wages - Off, Dir, S/H	0.00		•
Emp. Pensions & Benefits	296.00	•	•
Materials & Supplies	1,771.83		cost multiplier inflation
Contractual Services	745.00		cost multiplier inflation
Legal Expenses	39,441.04	•	
Accounting Expenses	2,165.00		•
Rents	6,522.50		\$625 kk wastewater per month
Equipment Rent	4,184.33	,	mowers bobcat excavators etc.
Repairs	11,488.08	\$12,637	cost multiplier inflation
Transportation Expenses	5,411.16	\$11,905	one more vehicle
Insurance Expense	9,188.22	\$10,107	cost multiplier inflation
Regulatory Commission Expense			estimate
Bad Debt Expense	0.00	\$0	
Misc. Expenses	7,273.22	,	cost multiplier inflation
Advertising	0.00	•	•
Bank Service Charges	575.03	• -	cost multiplier inflation
Real Estate Taxes	230.00	* * * * *	cost multiplier inflation
Misc. Tax & Licenses	2,665.38	. •	DNR fees
purchased wastewater treatment	0.00		sludge
Total Expenses	179,401.40		•
Net Income	15,462.60	•	
principal payments CBOLO	12,792.00		
principal payments CBOLO	12,792.00		
OSM Budget		<b>6004.404</b>	
O&M Budget		\$261,194	
O&M reserve		\$26,119.41	
Emergency equipment reserve		\$50,000	
years to fill reserves		5	
cash into reserves from rates		\$15,223.88	
value of common stock		\$211,850	
return on common		18%	
dividend including taxes		\$38,133	•
preferred		\$132,800	
return on preferred stock		12.00%	
dividend including taxes		\$15,936	
			unfunded expenses in first tariff filing
			tariff increase required above first filing
initial filed	l tariff	2nd tariff filing	•
water	\$20.45	<del>-</del>	
sewer	\$32.54		
	•		

P.S.C. MO No. 1 5th Revised Sheet No. 5

Cancelling P.S.C. MO No. 1 4<sup>rd</sup> Revised Sheet No. 5

Osage Water Company

Name of Issuing Company

For:

Certificated Water Service Areas in Camden County

Community, Town or City

### Rules Governing the Rendering of Water Service

#### **Schedule of Rates**

#### Rate Schedule W-1

<u>Availability</u>: This rate is available to metered water customers served off the Company's mains suitable for supplying the service requested and located in one of the Company's Certificated Water Service Areas.

Monthly Minimum: (Includes 2,000 gallons of water)

For Service through a 5/8" water meter \$ 43.55 per month
For Service through a 1" water meter \$ 60.26 per month
For Service through a 1 1/2" water meter \$ 103.40 per month
For Service through a 2" meter \$ 117.78 per month
For Service through a 3" meter \$ 169.14 per month
For Service through a 4" meter \$ 428.88 per month

(One dollar of the above charges is to recover Organizational Costs)

Commodity Charge: For metered usage greater than 2,000 gallons per month

\$3.8701 per 1,000 gallons

<u>Taxes</u>: Any applicable Federal, State, or local taxes computed on a billing basis shall be added as a separate item in rendering each bill.

- \* indicates new rate or text
- + indicates change

Date of Issue: September 4, 2003

Date Effective: July 6, 2004

Issued By:

William P. Mitchell

Name of Officer

President 328 S. Frontage Rd. Osage Beach, Mo. 65065

Title

Address

P.S.C. MO No. 1 4th R

th Revised

Sheet No. 10

Cancelling

P.S.C. MO No. 1

3<sup>rd</sup> Revised

Sheet No. 10

Osage Water Company

Name of Issuing Company

For: Certificated Water Service Areas in Camden County

Community, Town or City

### Rules Governing the Rendering of **Sewer Service**

#### **Schedule of Rates**

#### Rate Schedule S-1

<u>Availability</u>: This rate is available to Residential Sewer customers adjacent to the Company's collector sewers suitable for supplying the service requested and located in one of the Company's Certificated Sewer Service Areas.

#### Monthly Bill:

Unmetered Water Service	\$ 69.29 per month
For Service with a 5/8" Water Meter	\$ 69.29 per month
For Service with a 1" water meter	\$ 119.91 per month
For Service with a 1 1/2" water meter	\$ 262.51 per month
For Service with a 2" meter	\$ 309.15 per month
For Service with a 3" meter	\$ 475.69 per month
For Service with a 4" meter	\$ 866.94 per month

<u>Taxes</u>: Any applicable Federal, State, or local taxes computed on a billing basis shall be added as a separate item in rendering each bill.

MDNR Permit Fees: Permit Fees assessed by the Missouri Department of Natural Resources for the Company's Wastewater Treatment Plants shall be pro-rated among the Sewer Customers receiving service from each such treatment plant and one-twelfth theref shall be added each month as a separate item in rendering each bill.

- \* indicates new rate or text
- + indicates change

Date of Issue: September 4, 2003

Issued By: William P. Mitchell

Name of Officer

President Title Date Effective: July 6, 2004

328 S. Frontage Rd. Osage Beach, Mo. 65065

Address