

STATE OF MISSOURI  
**DEPARTMENT OF NATURAL RESOURCES**

MISSOURI CLEAN WATER COMMISSION



**MISSOURI STATE OPERATING PERMIT**

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92<sup>nd</sup> Congress) as amended,

Permit No. MO-0003727

Owner: Missouri American Water Company  
Address: 727 Craig Road, Creve Coeur, MO 63141

Continuing Authority: Same as above  
Address: Same as above

Facility Name: MAWC – Central Plant  
Facility Address: 901 Hog Hollow Road, Chesterfield, MO 63017

Legal Description: Land Grant 120, St. Louis County  
UTM Coordinates: X = 714495, Y = 4285174

Receiving Stream: Missouri River  
First Classified Stream and ID: Missouri River (P) (1604) 303(d) List  
USGS Basin & Sub-watershed No.: (10300200 - 130003)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

**FACILITY DESCRIPTION**

See Page 2

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

June 17, 2011  
Effective Date

  
Sara Parker Pauley, Director, Department of Natural Resources

June 16, 2016  
Expiration Date

  
John Madros, Director, Water Protection Program

FACILITY DESCRIPTION (continued)

There are 2 parallel treatment trains. Outfall 001 is the old plant, 003 is the new plant.

Outfall #001 - Drinking Water Treatment Plant - SIC code 4941  
Potable water production / Settling basin discharge / Filter backwash  
Design flow is 7.7 MGD.  
Actual flow is 4.08 MGD.

Legal Description: Land Grant 120, St. Louis County  
UTM Coordinates: X = 714495, Y = 4285174  
Receiving Stream: Missouri River  
First Classified Stream and ID: Missouri River (P) (1604) 303(d) List  
USGS Basin & Sub-watershed No.: (10300200 - 130003)

Outfall #002 - This is an alternate discharge point for Outfall 001. When the Missouri River stage reaches a certain height, Outfall 001 is valved off and the discharge is pumped to the higher elevation point of outfall 002.

Legal Description: Same as Outfall 001

Outfall #003 - Drinking Water Treatment Plant - SIC code 4941  
Potable water production / Presedimentation Basin discharge / Settling basin discharge / Filter backwash  
Design flow is 11.55 MGD.  
Actual flow is 6.12 MGD.

Legal Description: Land Grant 120, St. Louis County  
UTM Coordinates: X = 714655, Y = 4285434  
Receiving Stream: Missouri River  
First Classified Stream and ID: Missouri River (P) (1604) 303(d) List  
USGS Basin & Sub-watershed No.: (10300200 - 130003)

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

PAGE NUMBER 3 of 11

PERMIT NUMBER MO-0003727

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective upon issuance and remain in effect for two (2) years and 364 days. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	INTERIM EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001 / 002</u>						
Flow	MGD	*		*	once/day	calculated
Total Residual Chlorine	µg/L	*		*	once/week	grab
Total Suspended Solids	mg/L	*		*	once/week	24 hr. comp.**
	tons/day	*		*	once/week	calculated
Iron, Total Recoverable	µg/L	*		*	once/month	24 hr. comp.**
Fluoride	mg/L	*		*	once/month	24 hr. comp.**
pH	SU	*		*	once/week	grab
<u>Outfall #003</u>						
Flow	MGD	*		*	once/day	calculated
Total Residual Chlorine	µg/L	*		*	once/week	grab
Total Suspended Solids	mg/L	*		*	once/week	24 hr. comp.**
	tons/day	*		*	once/week	calculated
Iron, Total Recoverable	µg/L	*		*	once/month	24 hr. comp.**
Fluoride	mg/L	*		*	once/month	24 hr. comp.**
pH	SU	*		*	once/week	grab
Lime	tons	****		****	once/month	reported

MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE October 28, 2011. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

PAGE NUMBER 4 OF 11

PERMIT NUMBER MO-0003727

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective three (3) years after issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001, 002</u>						
Flow	MGD	*		*	once/day	calculated
Total Residual Chlorine (Note 1)	µg/L	209		104 130 ML	once/week	grab
Total Suspended Solids	mg/L	*		*	once/week	24 hr. comp.**
	tons/day	*		*	once/week	calculated
Iron, Total Recoverable	µg/L	*		*	once/month	24 hr. comp.**
Fluoride	mg/L	*		*	once/month	24 hr. comp.**
pH	SU	***		***	once/week	grab

MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE October 28, 2014. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

Whole Effluent Toxicity (WET) test	% Survival	See Special Conditions	twice/year	24 hr. composite**
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MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE February 28, 2012.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 5 OF 11	
					PERMIT NUMBER MO-0003727	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective three (3) years after issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #003</u>						
Flow	MGD	*		*	once/day	calculated
Total Residual Chlorine (Note 1)	µg/L	209		104 130 ML	once/week	grab
Total Suspended Solids	mg/L tons/day	*		*	once/week	24 hr. comp.** calculated
Iron, Total Recoverable	µg/L	*		*	once/month	24 hr. comp.**
Fluoride	mg/L	*		*	once/month	24 hr. comp.**
pH	SU	***		***	once/week	grab
Lime	tons	****		****	once/month	reported
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2014</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
Whole Effluent Toxicity (WET) test	% Survival	See Special Conditions			twice/year	24 hr. composite**
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>February 28, 2012</u> .						
<b>B. STANDARD CONDITIONS</b>						
IN ADDITION TO THE SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED October 1, 1980, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

\* Monitoring requirement only.

\*\* A 24-hour composite sample is composed of 48 aliquots (subsamples) collected at 30 minute intervals by an automatic sampler.

\*\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5 to 10.5 Standard Units.

\*\*\*\* Report the tons of lime used per week in the water treatment process.

Note 1 - This permit contains a Total Residual Chlorine (TRC) limit.

- (a) The monthly average effluent limit is below the minimum quantification level (ML) of the most common and practical EPA approved CLTRC methods. The department has determined the current acceptable ML for total residual chlorine to be 130 µg/L when using the DPD Colorimetric Method #4500 – CL G. from Standard Methods for the Examination of Waters and Wastewater. The permittee will conduct analyses in accordance with this method, or equivalent, and report actual analytical values. Measured values greater than or equal to the minimum quantification level of 130 µg/L will be considered violations of the permit and values less than the minimum quantification level of 130 µg/L will be considered to be in compliance with the permit limitation. The minimum quantification level does not authorize the discharge of chlorine in excess of the effluent limits stated in the permit.
- (b) Do not chemically dechlorinate if it is not needed to meet the limits in your permit.
- (c) If no chlorine was used in a given sampling period, an actual analysis is not necessary. Simply report as “0 µg/L” TRC.

C. SPECIAL CONDITIONS

1. The permittee has submitted a study titled Residuals Management Best Professional Judgment Study (study). The Best Management Practices (BMPs) in the study become effective upon issuance. Discharges from this facility shall be timed to achieve as continuous a discharge as possible. The Supervisory Control and Data Acquisition (SCADA) system shall be operated to achieve constant discharge to the maximum extent possible.
2. Submit an annual report due January 28 of each year detailing type and quantity of water treatment chemicals (other than lime and chlorine) used during the previous year. Reports will be submitted to the St. Louis Regional Office.
3. This permit may be reopened and modified, or alternatively revoked and reissued, to:
  - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
    - (2) controls any pollutant not limited in the permit.
  - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
  - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.
4. All outfalls must be clearly marked in the field.
5. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
    - (1) One hundred micrograms per liter (100 µg/L);
    - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
    - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
    - (4) The level established in Part A of the permit by the Director.
  - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
6. Report as no-discharge when a discharge does not occur during the report period.

C. SPECIAL CONDITIONS (continued)

7. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
  - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
  - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
  - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
  - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
  - (5) There shall be no significant human health hazard from incidental contact with the water;
  - (6) There shall be no acute toxicity to livestock or wildlife watering;
  - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
  - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

8. Whole Effluent Toxicity (WET) Test shall be conducted as follows:

SUMMARY OF ACUTE WET TESTING FOR THIS PERMIT				
OUTFALL	AEC%	FREQUENCY	SAMPLE TYPE	MONTH
001/ 002, 003	10	twice per year	24 hour composite**	January and May

Dilution Series						
40% effluent	20% effluent	10% effluent	5% effluent	2.5% effluent	(Control) 100% upstream, if available	(Control) 100% Lab Water, also called synthetic water

(a) Test Schedule and Follow-Up Requirements

- (1) Perform a MULTIPLE-dilution acute WET test in the months and at the frequency specified above. For tests which are successfully passed, submit test results using the Department's WET test report form #MO-780-1899 along with complete copies of the test reports as received from the laboratory, including copies of chain-of-custody forms within 30 calendar days of availability to the WATER PROTECTION PROGRAM, P.O. Box 176, Jefferson City, MO 65102. If the effluent passes the test, do not repeat the test until the next test period.
  - (a) For discharges of stormwater, samples shall be collected within three hours from when discharge first occurs.
  - (b) For discharges of non-stormwater, samples shall be collected only when precipitation has not occurred for a period of forty-eight hours prior to sample collection. In no event shall sample collection occur simultaneously with the occurrence of precipitation excepting for stormwater samples.
  - (c) A twenty-four hour composite sample shall be submitted for analysis of non-stormwater discharges.
  - (d) Upstream receiving water samples, where required, shall be collected upstream from any influence of the effluent where downstream flow is clearly evident.
  - (e) Samples submitted for analysis of upstream receiving water may be collected as either a grab or twenty-four-hour composite as appropriate to the nature of the discharge.
  - (f) Chemical and physical analysis of the upstream control and effluent sample shall occur immediately upon being received by the laboratory, prior to any manipulation of the effluent sample beyond preservation methods consistent with federal guidelines for WET testing that are required to stabilize the sample during shipping.

C. SPECIAL CONDITIONS (continued)

- (g) Any and all chemical or physical analysis of the effluent sample performed in conjunction with the WET test shall be performed at the 100% Effluent concentration in addition to analyses performed upon any
  - (h) other effluent concentration.
  - (i) All chemical analyses included in the Missouri Department of Natural Resources WET test report form #MO-780-1899 shall be performed and results shall be recorded in the appropriate field of the report form.
  - (j) Where flow-weighted composite sample is required for analysis, the samples shall be composited at the laboratory where the test is to be performed.
  - (k) Where in stream testing is required downstream from the discharge, sample collection shall occur immediately below the established Zone of Initial Dilution in conjunction with or immediately following a release or discharge.
  - (l) Samples submitted for analysis of downstream receiving water may be collected as either a grab or twenty-four-hour composite as appropriate to the nature of the discharge.
  - (m) All in-stream samples, including downstream samples, shall be tested for toxicity at the 100% concentration in addition to any other assigned AEC for in-stream samples.
- (2) All failing test results along with complete copies of the test reports as received from the laboratory, INCLUDING THOSE TESTS CONDUCTED UNDER CONDITION (3) BELOW, shall be reported to the WATER PROTECTION PROGRAM, P.O. Box 176, Jefferson City, MO 65102 within 14 calendar days of the availability of the results.
- (3) If the effluent fails the test, a multiple dilution test shall be performed for BOTH test species within 30 calendar days and biweekly thereafter (for storm water, tests shall be performed on the next and subsequent storm water discharges as they occur, but not less than 7 days apart) until one of the following conditions are met:
- (a) THREE CONSECUTIVE MULTIPLE-DILUTION TESTS PASS. No further tests need to be performed until next regularly scheduled test period.
  - (b) A TOTAL OF THREE MULTIPLE-DILUTION TESTS FAIL.
- (4) The permittee shall submit a summary of all test results for the test series along with complete copies of the test reports as received from the laboratory to the WATER PROTECTION PROGRAM, P.O. Box 176, Jefferson City, MO 65102 within 14 calendar days of the third failed test.
- (5) Additionally, the following shall apply upon failure of the third MULTIPLE DILUTION test: A toxicity identification evaluation (TIE) or toxicity reduction evaluation (TRE) is automatically triggered. The permittee shall contact THE WATER PROTECTION PROGRAM within 14 calendar days from availability of the test results to ascertain as to whether a TIE or TRE is appropriate. The permittee shall submit a plan for conducting a TIE or TRE to the WATER PROTECTION PROGRAM within 60 calendar days of the date of DNR's direction to perform either a TIE or TRE. This plan must be approved by DNR before the TIE or TRE is begun. A schedule for completing the TIE or TRE shall be established in the plan approval.
- (6) Upon DNR's approval, the TIE/TRE schedule may be modified if toxicity is intermittent during the TIE/TRE investigations. A revised WET test schedule may be established by DNR for this period.
- (7) If a previously completed TIE has clearly identified the cause of toxicity, additional TIEs will not be required as long as effluent characteristics remain essentially unchanged and the permittee is proceeding according to a DNR approved schedule to complete a TRE and reduce toxicity. Regularly scheduled WET testing as required in the permit, without the follow-up requirements, will be required during this period.
- (8) Submit a concise summary in tabular format of all WET test results with the annual report.
- (b) PASS/FAIL procedure and effluent limitations:
- (1) To pass a multiple-dilution test:
    - (a) For facilities with a computed percent effluent at the edge of the zone of initial dilution, Allowable Effluent Concentration (AEC) OF 30% OR LESS, the AEC must be less than three-tenths (0.3) of the LC<sub>50</sub> concentration for the most sensitive of the test organisms; **OR**,
    - (b) For facilities with an AEC greater than 30%, the LC<sub>50</sub> concentration must be greater than 100%; **AND**,
    - (c) All effluent concentrations equal to or less than the AEC must be nontoxic. Mortality observed in all effluent concentrations equal to or less than the AEC shall not be significantly different (at the 95% confidence level; p = 0.05) than that observed in the upstream receiving-water control sample. Where upstream receiving water is not available mortality observed in the AEC test concentration shall not be significantly different (at the 95% confidence level; p = 0.05) than that observed in the laboratory control. The appropriate statistical tests of significance shall be consistent with the most current edition of METHODS FOR MEASURING THE ACUTE TOXICITY OF EFFLUENTS AND RECEIVING WATERS TO FRESHWATER AND

C. SPECIAL CONDITIONS (continued)

MARINE ORGANISMS or other federal guidelines as appropriate or required.

- (c) Test Conditions
- (1) Test Type: Acute Static non-renewal
  - (2) All tests, including repeat tests for previous failures, shall include both test species listed below.
  - (3) Test species: *Ceriodaphnia dubia* and *Pimephales promelas* (fathead minnow). Organisms used in WET testing shall come from cultures reared for the purpose of conducting toxicity tests and cultured in a manner consistent with the most current USEPA guidelines. All test animals shall be cultured as described in the most current edition of Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.
  - (5) Test period: 48 hours at the "Acceptable Effluent Concentration" (AEC) specified above.
  - (6) Upstream receiving stream water shall be used as dilution water. If upstream water is unavailable or if mortality in the upstream water exceeds 10%, "reconstituted" water will be used as dilution water. Procedures for generating reconstituted water will be supplied by the MDNR upon request.
  - (7) Multiple-dilution tests will be run with:
    - (a) 100%, 50%, 25%, 12.5%, and 6.25% effluent, unless the AEC is less than 25% effluent, in which case dilutions will be 4 times the AEC, two times the AEC, AEC, 1/2 AEC and 1/4 AEC;
    - (b) 100% receiving-stream water (if available), collected upstream of the outfall at a point beyond any influence of the effluent; and
    - (c) Reconstituted water.
  - (8) If reconstituted-water control mortality for a test species exceeds 10%, the entire test will be rerun.
  - (9) If upstream control mortality exceeds 10%, the entire test will be rerun using reconstituted water as the dilutant.

C. SPECIAL CONDITIONS (continued)

**SUMMARY OF TEST METHODOLOGY FOR ACUTE WHOLE-EFFLUENT TOXICITY TESTS**

Whole-effluent-toxicity test required in NPDES permits shall use the following test conditions when performing single or multiple dilution methods. Any future changes in methodology will be supplied to the permittee by the Missouri Department of Natural Resources (MDNR). Unless more stringent methods are specified by the DNR, the procedures shall be consistent with the most current edition of Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.

Test conditions for Ceriodaphnia dubia:

Test duration:	48 h
Temperature:	25 ± 1°C Temperatures shall not deviate by more than 3°C during the test.
Light Quality:	Ambient laboratory illumination
Photoperiod:	16 h light, 8 h dark
Size of test vessel:	30 mL (minimum)
Volume of test solution:	15 mL (minimum)
Age of test organisms:	<24 h old
No. of animals/test vessel:	5
No. of replicates/concentration:	4
No. of organisms/concentration:	20 (minimum)
Feeding regime:	None (feed prior to test)
Aeration:	None
Dilution water:	Upstream receiving water; if no upstream flow, synthetic water modified to reflect effluent hardness.
Endpoint:	Pass/Fail (Statistically significant Mortality when compared to upstream receiving water control or synthetic control if upstream water was not available at $p \leq 0.05$ )
Test acceptability criterion:	90% or greater survival in controls

Test conditions for Pimephales promelas:

Test duration:	48 h
Temperature:	25 ± 1°C Temperatures shall not deviate by more than 3°C during the test.
Light Quality:	Ambient laboratory illumination
Photoperiod:	16 h light/ 8 h dark
Size of test vessel:	250 mL (minimum)
Volume of test solution:	200 mL (minimum)
Age of test organisms:	1-14 days (all same age)
No. of animals/test vessel:	10
No. of replicates/concentration:	4 (minimum) single dilution method 2 (minimum) multiple dilution method
No. of organisms/concentration:	40 (minimum) single dilution method 20 (minimum) multiple dilution method
Feeding regime:	None (feed prior to test)
Aeration:	None, unless DO concentration falls below 4.0 mg/L; rate should not exceed 100 bubbles/min.
Dilution water:	Upstream receiving water; if no upstream flow, synthetic water modified to reflect effluent hardness.
Endpoint:	Pass/Fail (Statistically significant Mortality when compared to upstream receiving water control or synthetic control if upstream water was not available at $p \leq 0.05$ )
Test Acceptability criterion:	90% or greater survival in controls

D. SCHEDULE OF COMPLIANCE

1. The permittee must attain compliance with the final effluent limits as soon as possible, but no later than three (3) years after issuance of this permit. During this interim period, while BMPs are being implemented, discharges shall be carefully monitored to assess the ability to equalize TSS discharges, and assure that pH and Total Residual Chlorine are controlled throughout the day.
2. Within one (1) year of issuance of this permit, the permittee shall submit a report detailing progress made in attaining compliance with the final effluent limits.
3. Within two (2) years of issuance of this permit, the permittee shall submit a report detailing progress made in attaining compliance with the final effluent limits.

**Missouri Department of Natural Resources**  
**FACT SHEET**  
**FOR THE PURPOSE OF RENEWAL**  
**OF**  
**MO-0003727**  
**MISSOURI AMERICAN WATER COMPANY – CENTRAL PLANT**

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of storm water from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)2.] a Factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (operating permit) listed below.

A Factsheet is not an enforceable part of an operating permit.

This Factsheet is for a Major , Minor , Industrial Facility ; Variance ; Master General Permit ; General Permit Covered Facility ; and/or permit with widespread public interest .

**Part I – Facility Information**

Facility Type: Drinking Water Treatment Plant  
 Facility SIC Code(s): 4941

Facility Description:

Potable water production / Filter backwash / Settling basin discharge

Powdered activated carbon, ferric based coagulants, and a coagulant aid polymer are applied to the raw water to remove river silts and organic materials in the presedimentation basins. Calcium oxide (lime) is fed in the Presedimentation basins to reduce water hardness. Ferric-based coagulants are applied to the mixing basins for coagulation and removal of the remaining suspended solids in the sedimentation basins and filters. Chlorine and chloramines are added for disinfection and fluoride is added for fluoridation. Other chemicals applied include filter aid polymer to enhance filtration and polyphosphate to reduce scaling of the filter media.

Application Date: 3/11/10  
 Expiration Date: 10/13/93  
 Last Inspection: 5/30/95 In Compliance ; Non-Compliance

**OUTFALL(S) TABLE:**

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
001, 002	22.475	Industrial	Industrial	0
003	22.475	Industrial	Industrial	0

Water Quality History:

No stream surveys for this facility were found

**Part III – Receiving Stream Information**

**APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:**

As per Missouri’s Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into the below listed seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall’s Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits section.

- Missouri or Mississippi River [10 CSR 20-7.015(2)]:
- Lake or Reservoir [10 CSR 20-7.015(3)]:
- Losing [10 CSR 20-7.015(4)]:
- Metropolitan No-Discharge [10 CSR 20-7.015(5)]:
- Special Stream [10 CSR 20-7.015(6)]:
- Subsurface Water [10 CSR 20-7.015(7)]:
- All Other Waters [10 CSR 20-7.015(8)]:

10 CSR 20-7.031 Missouri Water Quality Standards, the department defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and/or 1<sup>st</sup> classified receiving stream’s beneficial water uses to be maintained are located in the Receiving Stream Table located below in accordance with [10 CSR 20-7.031(3)].

**RECEIVING STREAM(S) TABLE:**

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	8-DIGIT HUC	EDU**
Missouri River	P	1604	IRR, LWV, AQL, WBC(B), SCR, DWS, IND	10300200	Ozark/Moreau/Loutre

\* - Irrigation (IRR), Livestock & Wildlife Watering (LWW), Protection of Warm Water Aquatic Life and Human Health-Fish Consumption (AQL), Cool Water Fishery (CLF), Cold Water Fishery (CDF), Whole Body Contact Recreation (WBC), Secondary Contact Recreation (SCR), Drinking Water Supply (DWS), Industrial (IND), Groundwater (GRW).

\*\* - Ecological Drainage Unit

**RECEIVING STREAM LOW-FLOW VALUE:**

Mean flow data was collected from USGS station number 06934500 located on the Missouri River at Hermann, MO. The 7Q10 value was calculated based on the previous 30 years of data. **7Q10 = 21,572 cfs.**

**MIXING CONSIDERATIONS TABLE:**

MIXING ZONE (CFS) [10 CSR 20-7.031(4)(A)4.B.(III)(a)]	ZONE OF INITIAL DILUTION (CFS) [10 CSR 20-7.031(4)(A)4.B.(III)(b)]
5393	539.3, HOWEVER ZID MAY NOT EXCEED 10X THE EFFLUENT DESIGN FLOW. ZID = 224.75

The two main facility discharges are more than one quarter (1/4) mile apart. Therefore, each discharge has its own discreet mixing zone and zone of initial dilution.

**RECEIVING STREAM MONITORING REQUIREMENTS:**

No receiving water monitoring requirements recommended at this time.

## **Part IV – Rationale and Derivation of Effluent Limitations & Permit Conditions**

### **TECHNOLOGY BASED LIMITS DERIVATION:**

The applicant has submitted an Economic Feasibility Analysis (EFA). Following is a summary of the disposal and treatment options considered by the applicant in the study:

Process Changes – Eliminating the softening process. This would require changing the coagulation process. The benefits of lime softening to the public when compared to coagulation treatment only are generally as follows:

- Savings in the consumption of soaps and detergents as compared to harder water.
- Reduction in deterioration of clothing, water heaters, plumbing, fixtures, cost of water treatment for many industries. Removal of lead, barium, chromium, arsenic, cadmium, chromium, and other inorganic contaminants.
- Removal of radionuclides.
- Enhanced removal and/or inactivation of microbial contaminants (parasites).

The EFA concluded that the benefit to cost ratio was 2 to 1 in favor of continuing to soften.

Elimination of Chemical Discharges to the river – Options considered were disposal in monofills, landfills, and beneficial reuse. In order to separate the river silts from the chemical solids, the liquid stream treatment process would require significant modifications.

Elimination of all Combined Residuals Discharges (river silts and chemical solids) – The combined residuals are not suitable for beneficial reuse and therefore must be disposed in a monofill or landfill.

Significant modifications would be required to implement monofill disposal. The 20 year present worth opinion of probable cost was \$112,000,000. Potential non-water quality environmental impacts associated with the candidate technologies include: conversion of 260 acres of agricultural land and wildlife habitat for monofill use over a 20 year period, increased energy requirements, increased air pollution, and increased traffic. In 50 years, 650 acres of land would be needed for the monofills.

The additional greenhouse gas emissions associated with these alternatives range from approximately 1,700 tons/yr to 9,800 tons/yr of carbon dioxide equivalents. It is apparent that a significant environmental benefit of the current practice of direct discharge, over the candidate technologies, is reduction of greenhouse gas emissions.

A Best Practicable Control Technology Currently Available (BPT) of gravity settling (monofills) followed by a Best Conventional Pollutant Control Technology (BCT) of filtration was evaluated. The BPT technology failed the “Total Cost of Application of Technology in Relation to the Effluent Reduction Benefits to be Achieved from Such Application” test. The BCT technology of filtration of the monofill effluent failed “The Reasonableness of the Relationship between the Costs of Attaining a Reduction in Effluent and the Effluent Benefits Derived” test. This combination of alternatives also increased “Non-Water Quality Environmental Impacts (such as energy requirements)”. As a result, the evaluation concluded that the best alternative is to continue the direct discharge practice with the BMP recommended in this report, which should be considered BPT.

A BPT of direct discharge and BCT based on gravity settling in monofills were also evaluated. A BPT of direct discharge was found to have no significant impact on the Missouri River and no additional impact on treatment or costs and therefore would pass all tests. The BCT technology of gravity settling (monofills) failed “The Reasonableness of the Relationship between the Costs of attaining a Reduction in Effluent and the Effluent Benefits Derived” test and increased “Non-Water Quality Environmental Impacts (including energy requirements). As a result, the evaluation concluded that the best alternative is to continue the direct discharge practice, which should be considered BPT.

Based on the Best Professional Judgment evaluations which were conducted in accordance with the Clean Water Act, the direct discharge practice with the BMPs recommended in this report should be considered the best disposal method and therefore BPT.

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**ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:**

As per [10 CSR 20-7.015(4)(A)], discharges to losing streams shall be permitted only after other alternatives including land application, discharges to a gaining stream and connection to a regional wastewater treatment facility have been evaluated and determined to be unacceptable for environmental and/or economic reasons.

Not Applicable ; The facility does not discharge to a Losing Stream as defined by [10 CSR 20-2.010(36)] & [10 CSR 20-7.031(1)(N)], or is an existing facility.

**ANTI-BACKSLIDING:**

A provision in the Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

- All limits in this Factsheet are at least as protective as those previously established; therefore, backsliding does not apply.

**ANTIDegradation:**

In accordance with Missouri's Water Quality Standard [10 CSR 20-7.031(2)], the department is to document by means of Antidegradation Review that the use of a water body's available assimilative capacity is justified. Degradation is justified by documenting the socio-economic importance of a discharging activity after determining the necessity of the discharge.

- Renewal no degradation proposed and no further review necessary.

**COMPLIANCE AND ENFORCEMENT:**

Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the WPP is to resolve violations and return the entity to compliance.

Not Applicable ;

The permittee/facility is not currently under Water Protection Program enforcement action.

**REASONABLE POTENTIAL ANALYSIS (RPA):**

Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above narrative or numeric water quality standard.

Not Applicable ;

A RPA was not conducted for this facility.

**SCHEDULE OF COMPLIANCE (SOC):**

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit.

Applicable ;

The time given for effluent limitations of this permit listed under Part E - Schedule of Compliance was established in accordance with [10 CSR 20-7.031(10)].

**VARIANCE:**

As per the Missouri Clean Water Law § 644.061.4, variances shall be granted for such period of time and under such terms and conditions as shall be specified by the commission in its order. The variance may be extended by affirmative action of the commission. In no event shall the variance be granted for a period of time greater than is reasonably necessary for complying with the Missouri Clean Water Law §§644.006 to 644.141 or any standard, rule or regulation promulgated pursuant to Missouri Clean Water Law §§644.006 to 644.141.

Not Applicable ;

This operating permit is not drafted under premises of a petition for variance.

**WASTE LOAD ALLOCATIONS (WLA) FOR LIMITS:**

As per [10 CSR 20-2.010(78)], the amount of pollutant each discharger is allowed by the department to release into a given stream after the department has determined total amount of pollutant that may be discharged into that stream without endangering its water quality.

Applicable ;

Waste load allocations were calculated where applicable using water quality criteria or water quality model results and the dilution equation below:

$$C = \frac{(C_s \times Q_s) + (C_e \times Q_e)}{(Q_e + Q_s)} \quad (\text{EPA/505/2-90-001, Section 4.5.5})$$

Where C = downstream concentration  
Cs = upstream concentration  
Qs = upstream flow  
Ce = effluent concentration  
Qe = effluent flow

Chronic wasteload allocations were determined using applicable chronic water quality criteria (CCC: criteria continuous concentration) and stream volume of flow at the edge of the mixing zone (MZ). Acute waste load allocations were determined using applicable water quality criteria (CMC: criteria maximum concentration) and stream volume of flow at the edge of the zone of initial dilution (ZID).

Water quality based maximum daily and average monthly effluent limitations were calculated using methods and procedures outlined in USEPA's "Technical Support Document For Water Quality-based Toxics Control" (EPA/505/2-90-001).

**WLA MODELING:**

There are two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs). If TBELs do not provide adequate protection for the receiving waters, then WQBEL must be used.

Not Applicable ;

A WLA study was either not submitted or determined not applicable by department staff.

**WHOLE EFFLUENT TOXICITY (WET) TEST:**

A WET test is a quantifiable method of determining if a discharge from a facility may be causing toxicity to aquatic life by itself, in combination with or through synergistic responses when mixed with receiving stream water.

Applicable ;

In accordance with the Clean Water Act (CWA) §101(a)(3), requiring WET testing is reasonably appropriate for site-specific Missouri State Operating Permits for discharges to waters of the state issued under the National Pollutant Discharge Elimination System.

Furthermore, WET testing is a means by which the department determines that [10 CSR 20-7.031(3)(D, F, & G)] are being met by the permitted facility. In addition to justification for the WET testing, WET tests are required under [10 CSR 20-6.010(8)(A)4] to be performed by specialists who are properly trained in conducting the test according to the methods prescribed by the Federal Government as referenced in [40 CFR Part 136]. WET test will be required by all facilities meeting the following criteria:

- Facility handles large quantities of toxic substances, or substances that are toxic in large amounts.
- Facility has Water Quality-based Effluent Limitations for toxic substances (other than NH<sub>3</sub>)

**303(d) LIST & TOTAL MAXIMUM DAILY LOAD (TMDL):**

Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation

Applicable ;  
 The Missouri River is listed on the 2008 Missouri 303(d) List for bacteria.

– This facility is not considered to be a source of the above listed pollutants.

**Part V – Effluent Limits Determination**

**Outfall #001, 002 – Facility Outfalls**

**EFFLUENT LIMITATIONS TABLE:**

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	9	*		*	NO	
TOTAL RESIDUAL CHLORINE	µG/L	3	209		104		**
TSS	MG/L	9	*		*		**
pH	SU	1/2	*		*		**
IRON, TOTAL RECOVERABLE	µG/L	1/3	*		*		**
FLUORIDE	MG/L	1/3	*		*		**
WHOLE EFFLUENT TOXICITY (WET) TEST	% Survival	11	Please see WET Test in the Derivation and Discussion Section below.				
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

\* - Monitoring requirement only

\*\* Parameter not previously established in previous state operating permit.

N/A – Not applicable

**Basis for Limitations Codes:**

- |  |                                    |
|--|------------------------------------|
| 1. State or Federal Regulation/Law       | 7. Antidegradation Policy          |
| 2. Water Quality Standard (includes RPA) | 8. Water Quality Model             |
| 3. Water Quality Based Effluent Limits   | 9. Best Professional Judgment      |
| 4. Lagoon Policy                         | 10. TMDL or Permit in lieu of TMDL |
| 5. Ammonia Policy                        | 11. WET Test Policy                |
| 6. Dissolved Oxygen Policy               |                                    |

**OUTFALL #001 & 002 – DERIVATION AND DISCUSSION OF LIMITS:**

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the department, which may require the submittal of an operating permit modification.
- **Lime, Total Suspended Solids (TSS).** Monitoring requirement only.
- **pH.** 10 CSR 20-7.015 (8) (G) 1.

- **Total Residual Chlorine (TRC).**

Warm-water Protection of Aquatic Life CCC = 10 µg/L, CMC = 19 µg/L [10 CSR 20-7.031, Table A]. Background TRC = 0.0 µg/L.

Chronic WLA:  $C_e = ((22.475 + 5393)10 - (5393 * 0.0))/22.475$   
 $C_e = 2409.6 \mu\text{g/L}$

Acute WLA:  $C_e = ((22.475 + 224.75)19 - (224.75 * 0.0))/22.475$   
 $C_e = 209 \mu\text{g/L}$

$LTA_c = 2409.6 (0.527) = 1269.9 \mu\text{g/L}$

[CV = 0.6, 99<sup>th</sup> Percentile]

$LTA_a = 209 (0.321) = 67.1 \mu\text{g/L}$

[CV = 0.6, 99<sup>th</sup> Percentile]

$MDL = 67.1 (3.11) = 208.7 \mu\text{g/L}$

[CV = 0.6, 99<sup>th</sup> Percentile]

$AML = 67.1 (1.55) = 104 \mu\text{g/L}$

[CV = 0.6, 95<sup>th</sup> Percentile, n = 4]

Total Residual Chlorine effluent limits of 209 µg/L daily maximum, 104 µg/L monthly average are recommended. Standard compliance language for TRC, including the minimum level (ML), should be included in the permit.

- **Iron, Fluoride.** Monitoring requirement only. A Reasonable Potential Analysis will be performed at renewal to verify if numeric effluent limitations are appropriate for these constituents.

- **WET Test.** WET Testing schedules and intervals are established in accordance with the department's Permit Manual; Section 5.2 *Effluent Limits / WET Testing for Compliance Bio-monitoring*. It is recommended that WET testing be conducted during the period of lowest stream flow.

Acute

**No less than TWICE/YEAR:**

Facility is subject to production processes alterations throughout the year.

Facility handles large quantities of toxic substances, or substances that are toxic in large amounts.

Facility has been granted seasonal relief of numeric limitations.

Sampling is recommended in the months of January and May because these are the approximate months when turbidity in the Missouri River is highest. Higher turbidity means an increased use of water treatment chemicals and therefore higher discharge volumes from the facility.

Acute AEC% = [Design Flow / (ZID + Design Flow)] x 100 = [22.475 / (224.75 + 22.475)] x 100 = 9.1%; however, 10% is the minimum allowed unless diffusers are used.

**Part V – Effluent Limits Determination (continued)**

**Outfall #003 – Facility Outfall**  
**EFFLUENT LIMITATIONS TABLE:**

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	GPD	9	*		*	NO	
TOTAL RESIDUAL CHLORINE	µG/L	3	209		104		**
TSS	MG/L	9	*		*		**
pH	SU	1/2	*		*		**
IRON, TOTAL RECOVERABLE	µG/L	1/3	*		*		**
FLUORIDE	MG/L	1/3	*		*		**
WHOLE EFFLUENT TOXICITY (WET) TEST	% Survival	11	Please see WET Test in the Derivation and Discussion Section below.				
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

\* Monitoring requirement only

\*\* Parameter not previously established in previous state operating permit.

N/A – Not applicable

Basis for Limitations Codes:

- |  |                                    |
|--|------------------------------------|
| 7. State or Federal Regulation/Law       | 7. Antidegradation Policy          |
| 8. Water Quality Standard (includes RPA) | 8. Water Quality Model             |
| 9. Water Quality Based Effluent Limits   | 9. Best Professional Judgment      |
| 10. Lagoon Policy                        | 10. TMDL or Permit in lieu of TMDL |
| 11. Ammonia Policy                       | 11. WET Test Policy                |
| 12. Dissolved Oxygen Policy              |                                    |

**OUTFALL #003 – DERIVATION AND DISCUSSION OF LIMITS:**

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the department, which may require the submittal of an operating permit modification.
- **Lime, Total Suspended Solids (TSS).** Monitoring requirement only.
- **pH.** 10 CSR 20-7.015 (8) (G) 1.

- **Total Residual Chlorine (TRC).**

Warm-water Protection of Aquatic Life CCC = 10 µg/L, CMC = 19 µg/L [10 CSR 20-7.031, Table A]. Background TRC = 0.0 µg/L.

Chronic WLA:  $C_e = ((22.475 + 5393)10 - (5393 * 0.0))/22.475$   
 $C_e = 2409.6 \mu\text{g/L}$

Acute WLA:  $C_e = ((22.475 + 224.75)19 - (224.75 * 0.0))/22.475$   
 $C_e = 209 \mu\text{g/L}$

$LTA_c = 2409.6 (0.527) = 1269.9 \mu\text{g/L}$  [CV = 0.6, 99<sup>th</sup> Percentile]  
 $LTA_a = 209 (0.321) = 67.1 \mu\text{g/L}$  [CV = 0.6, 99<sup>th</sup> Percentile]

MDL = 67.1 (3.11) = 208.7 µg/L [CV = 0.6, 99<sup>th</sup> Percentile]  
AML = 67.1 (1.55) = 104 µg/L [CV = 0.6, 95<sup>th</sup> Percentile, n = 4]

Total Residual Chlorine effluent limits of 209 µg/L daily maximum, 104 µg/L monthly average are recommended. Standard compliance language for TRC, including the minimum level (ML), should be included in the permit.

- **Iron, Fluoride.** Monitoring requirement only. A Reasonable Potential Analysis will be performed at renewal to verify if numeric effluent limitations are appropriate for these constituents.
- **WET Test.** WET Testing schedules and intervals are established in accordance with the department's Permit Manual; Section 5.2 *Effluent Limits / WET Testing for Compliance Bio-monitoring*. It is recommended that WET testing be conducted during the period of lowest stream flow.

Acute

**No less than TWICE/YEAR:**

- Facility is subject to production processes alterations throughout the year.
- Facility handles large quantities of toxic substances, or substances that are toxic in large amounts.
- Facility has been granted seasonal relief of numeric limitations.

Run WET Tests on the discharge from the Pre-Sedimentation basins only.

Sampling is recommended in the months of January and May because these are the approximate months when turbidity in the Missouri River is highest. Higher turbidity means an increased use of water treatment chemicals and therefore higher discharge volumes from the facility.

Acute AEC% = [Design Flow / (ZID + Design Flow)] x 100 = [22.475 / (224.75 + 22.475)] x 100 = 9.1%; however, 10% is the minimum allowed unless diffusers are used.

## **Part VI – Administrative Requirements**

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

### **PUBLIC NOTICE:**

As per the Missouri Clean Water Law, the Missouri Clean Water Commission, and the federal Clean Water Act, persons wishing to comment on Missouri State Operating Permits are directed to do so by a department approved Public Notice coversheet. This Public Notice coversheet is attached to a Missouri State Operating Permit during the Public Notice period.

- The Public Notice period for this operating permit was from December 17, 2010 to January 16, 2011.

**DATE OF FACT SHEET:** JUNE 9, 2011

### **COMPLETED BY:**

**ALAN MOREAU, ENVIRONMENTAL SPECIALIST III**  
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