

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, 92nd Congress) as amended,

Permit No. MO-0050652

Owner: City of Rolla
Address: P.O. Box 979, Rolla, MO 65402

Continuing Authority: Same as above
Address: Same as above

Facility Name: Rolla Southeast Treatment Plant
Facility Address: 1801 Highway 72 East, Rolla, MO 65401

Legal Description: SE ¼, NE ¼, Sec. 18, T37N, R7W, Phelps County
UTM Coordinates: X=611958, Y=4199021

Receiving Stream: Unnamed tributary to Dutro Carter Creek (U)
First Classified Stream and ID: Dutro Carter Creek (P) (01865) 303 (d)
USGS Basin & Sub-watershed No.: Ozark/Meramec (07140102-0108)

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.

May 1, 2013
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

April 30, 2018
Expiration Date

John Madros, Director, Water Protection Program

FACILITY DESCRIPTION (continued):

Outfall #001 - Municipal Wastewater Treatment Plant- SIC #4952

The use or operation of this facility shall be by or under the supervision of a **Certified "B" Operator**

Bar Screen/Grit removal/Trickling Filter/Sand Filter/Activated Sludge/Clarifiers/Aerobic Digestion/Oxidation Ditch/Sludge is Land Applied.

Final effluent limitations will be met through the following process flow: Flow from the East and West Plants are combined immediately downstream of the East Plant Oxidation Ditch. A Flow Splitter would allow plant process water to be split equally between two Secondary Clarifiers. Clarifier effluent would be routed to an Ultraviolet Disinfection Process prior to its discharge from the facility at Outfall #001

Design population equivalent is 47,650.

Design flow is 4.765 MGD.

Actual flow is 3.2 MGD.

Design sludge production is 739 dry tons/year.

Actual sludge production is 425.03 dry tons/year.

Legal Description: SE ¼, NE ¼, Section 18, T37N, R7W, Phelps County

UTM Coordinates: X=626055, Y=41755006

Receiving Stream: Unnamed tributary to Dutro Carter Creek (U)

First Classified Stream and ID: Dutro Carter Creek (P) (1865) 303 (d)

USGS Basin & Sub-watershed No.: (07140102-0108)

Outfall(s) #002 & #003 – Discharges from these outfalls are no longer authorized, and shall be subject to 40 CFR 122.41(m) and reported according to 40 CFR 122.41(m)(3)(i) & (ii).

SM1 – Instream Monitoring point

The sampling point is located approximately 1 mile downstream from outfall #001, at the intersection of Co. Rd. 3000 and Little Dry Fork.

Legal Description: NW¼, NW¼, Section 17, T37N, R7W, Phelps County

UTM Coordinates: X=613100, Y=4199540

Receiving Stream: Little Dry Fork (P)

First Classified Stream and ID: Little Dry Fork (1863)

USGS Basin & Sub-watershed No.: (07140102-0108)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 8	
					PERMIT NUMBER MO-0050652	
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, excluding E. coli, shall become effective upon issuance and remain in effect for one (1) years and 364 days. Interim E. coli limitation shall become effective upon issuance and remain in effect until December 31, 2013. 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</u>						
Flow	MGD	*		*	once/day	24 hr. total
Biochemical Oxygen Demand ₅	mg/L		15	10	once/week	24 hr. composite**
Total Suspended Solids	mg/L		45	30	once/week	24 hr. composite**
<i>E. coli</i> (Note 1, Page 5)	#/100 mL		*	*	once/week	grab
pH – Units	SU	***		***	once/week	grab
Ammonia as N (April 1 – Sept 30) (Oct 1 – March 31)	mg/L	3.5 7.3		1.4 2.9	once/week	grab
Oil & Grease	mg/L	15		10	once/month	grab
Cyanide, Amenable to chlorination	µg/L	*		*	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> ; THE FIRST REPORT IS DUE <u>JUNE 28, 2013</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 #11		once/permit cycle 24 hr. comp.**		
MONITORING REPORTS SHALL BE SUBMITTED <u>ONCE/PERMIT CYCLE</u> ; THE FIRST REPORT IS DUE						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I, II, & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

* Monitoring requirement only.

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

*** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS	PAGE NUMBER 4 of 8
	PERMIT NUMBER MO-0050652

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, excluding E. coli, shall become effective two (2) years after issuance and remain in effect until expiration of the permit. Final E. coli effluent limitations shall become effective no later than December 31, 2013. 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</u>						
Flow	MGD	*		*	once/day	24 hr. total
Biochemical Oxygen Demand ₅	mg/L		15	10	once/week	24 hr. composite**
Total Suspended Solids	mg/L		45	30	once/week	24 hr. composite**
<i>E. coli</i> (Note 1, Page 5)	#/100 mL		1030	206	once/week	grab
pH – Units	SU	***		***	once/week	grab
Ammonia as N (April 1 – Sept 30) (Oct 1 – March 31)	mg/L	3.5 7.3		1.4 2.9	once/week	grab
Dissolved Oxygen	mg/L	*		*	once/week	grab
Oil & Grease	mg/L	15		10	once/month	grab
Cyanide, Amenable to chlorination	µg/L	8.1		4.0	once/month	grab

MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE APRIL 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 #11	once/permit cycle 24 hr. comp.**
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MONITORING REPORTS SHALL BE SUBMITTED ONCE/PERMIT CYCLE; THE FIRST REPORT IS DUE BY MAY 28, 2018.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Parts I, II, & III STANDARD CONDITIONS DATED October 1, 1980 and August 15, 1994, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

- * Monitoring requirement only.
- ** A 24-hour composite sample is composed of 48 aliquots (subsamples) collected at 30 minute intervals by an automatic sampling device.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.

C. INSTREAM MONITORING STATION (SM1): Located approximately 1 mile downstream from outfall #001, at the intersection of Co. Rd. 3000 and Little Dry Fork
X = 613100, Y = 4199540

SAMPLING LOCATION AND PARAMETER(S)	UNITS	MONITORING REQUIREMENTS	
		MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>SM1</u> Hardness	mg/L	once/month	grab

MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE JUNE 28, 2013.

D. INFLUENT MONITORING REQUIREMENTS		PAGE NUMBER 5 of 8	
		PERMIT NUMBER MO-0050652	
The facility is required to meet a removal efficiency of 85% or more as a monthly average. The monitoring requirements shall become effective upon issuance and remain in effect until expiration of the permit. To determine removal efficiencies, the influent wastewater shall be monitored by the permittee as specified below:			
SAMPLING LOCATION AND PARAMETER(S)	UNITS	MONITORING REQUIREMENTS	
		MEASUREMENT FREQUENCY	SAMPLE TYPE
Biochemical Oxygen Demand ₅	mg/L	once/month	24 hr. composite**
Total Suspended Solids	mg/L	once/month	24 hr. composite**
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> ; THE FIRST REPORT IS DUE <u>JUNE 28, 2013</u> .			

Note 1 - Final limitations and monitoring requirements for *E. coli* are applicable only during the recreational season from April 1 through October 31. The Monthly Average Limit for *E. coli* is expressed as a geometric mean. The Weekly Average for *E. coli* will be expressed as a geometric mean if more than one (1) sample is collected during a calendar week (Sunday through Saturday).

E. SPECIAL CONDITIONS

1. 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.
2. All outfalls must be clearly marked in the field.
3. Permittee will cease discharge by connection to a facility with an area-wide management plan per 10 CSR 20-6.010(3)(B) within 90 days of notice of its availability.
4. 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.
5. Report as no-discharge when a discharge does not occur during the report period.
 6. 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.

E. SPECIAL CONDITIONS (continued)

- (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.
7. The permittee shall comply with any applicable requirements listed in 10 CSR 20-8 and 10 CSR 20-9, unless the facility has received written notification that the Department has approved a modification to the requirements. The monitoring frequencies contained in this permit shall not be construed by the permittee as a modification of the monitoring frequencies listed in 10 CSR 20-9. If a modification of the monitoring frequencies listed in 10 CSR 20-9 is needed, the permittee shall submit a written request to the department for review and, if deemed necessary, approval.
 8. The permittee shall submit a report annually in May to the Southeast Regional Office with the Discharge and Monitoring reports which address measures taken to locate and eliminate sources of infiltration and inflow into the collection system serving the facility for the previous year.
 9. Bypasses are not authorized at this facility and are subject to 40 CFR 122.41(m). If a bypass occurs, the permittee shall report in accordance to 40 CFR 122.41(m)(3)(i), and with Standard Condition Part I, Section B, subsection 2.b. Bypasses are to be reported to the Southeast Regional Office.
 10. The city's industrial pretreatment program is currently on "inactive" status due to an absence of categorical industries. The city shall provide the Department with at least a sixty (60) day advance notice of the acceptance of any new or changed industrial process wastewaters into the publicly owned treatment works. If an industry is determined by the Department to be a "significant industrial user" as defined in 40 CFR 403.3(t), this permit shall be reopened and modified to require the reactivation of the pretreatment program in accordance with the current requirements of 40 CFR 403.8.
 11. 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	100%	once/permit cycle	24 hr. composite*	Any

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

Dilution Series							
AEC%= 100%	100% effluent	50% effluent	25% effluent	12.5% effluent	6.25% effluent	(Control) 100% upstream, if available	(Control) 100% Lab Water, also called synthetic water

E. SPECIAL CONDITIONS (continued)

(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) 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.
 - (b) 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 analysis performed upon any other effluent concentration.
 - (c) 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.
- (2) The WET test will be considered a failure if mortality observed in effluent concentrations equal to or less than the AEC is 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, synthetic laboratory control water may be used.
- (3) 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.
- (4) If the effluent fails the test for BOTH test species, 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: Note: Written request regarding single species multiple dilution accelerated testing will be address by THE WATER PROTECTION PROGRAM on a case by case basis.
 - (i) THREE CONSECUTIVE MULTIPLE-DILUTION TESTS PASS. No further tests need to be performed until next regularly scheduled test period.
 - (ii) A TOTAL OF THREE MULTIPLE-DILUTION TESTS FAIL.
- (5) Failure of a WET test is a violation of this permit. Follow-up tests do not negate an initial failed test. In addition, the failure of a follow-up test will constitute a separate permit violation.
- (6) 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.
- (7) Additionally, the following shall apply upon failure of the third follow up MULTIPLE DILUTION test The permittee should 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. If the permittee does not contact THE WATER PROTECTION PROGRAM upon the third follow up test failure, a toxicity identification evaluation (TIE) or toxicity reduction evaluation (TRE) is automatically triggered. 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 the automatic trigger or 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.
- (8) 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.
- (9) 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.
- (10) When WET test sampling is required to run over one DMR period, each DMR report shall contain a copy of the Department's WET test report form that was generated during the reporting period.
- (11) Submit a concise summary in tabular format of all WET test results with the annual report.

E. SPECIAL CONDITIONS (continued)

- (b) 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 unless approved by the department on a case by case basis.
 - (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.
 - (4) Test period: 48 hours at the "Allowable Effluent Concentration" (AEC) specified above.
 - (5) 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.
 - (6) Tests will be run with 100% receiving-stream water (if available), collected upstream of the outfall at a point beyond any influence of the effluent, and reconstituted water.
 - (7) If reconstituted-water control mortality for a test species exceeds 10%, the entire test will be rerun.
 - (8) If upstream control mortality exceeds 10%, the entire test will be rerun using reconstituted water as the dilutant.
 - (9) Whole-effluent-toxicity test 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

F. SCHEDULE OF COMPLIANCE

The facility shall attain compliance with final effluent limitations for **E. coli** as soon as reasonably achievable or no later than **December 31, 2013**.

1. Within six months of issuance of this permit, the permittee shall report progress made in attaining compliance with the final effluent limits.
2. Within one year of issuance of this permit, the permittee shall submit a report detailing progress made in attaining compliance with the final effluent limits.

Please submit progress reports to the Missouri Department of Natural Resources, Southeast Regional Office, 2155 North Westwood Blvd., Poplar Bluff, MO 63901.

The facility shall attain compliance with final effluent limitations for **Cyanide** as soon as reasonably achievable or no later than **2 years** of the effective date of this permit.

1. Within six months of the effective date of this permit, the permittee shall report progress made in attaining compliance with the final effluent limits.
2. Within one year of the effective date of this permit, the permittee shall submit a report detailing progress made in attaining compliance with the final effluent limits.
3. Within **2 years** of the effective date of this permit, the permittee shall attain compliance with the final effluent limits, for Cyanide.

Please submit progress reports to the Missouri Department of Natural Resources, Southeast Regional Office, 2155 North Westwood Blvd., Poplar Bluff, MO 63901.

Missouri Department of Natural Resources
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0050652
ROLLA SE WWTP

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

Part I – Facility Information

Facility Type: POTW
Facility SIC Code(s): 4952

Facility Description:

Influent screening/ flow can be split between the Trickling Filter and/or the Activate Sludge Unit (west side) or can be sent to the east side oxidation ditch. West side flows after the activated sludge unit are routed to another trickling filer, then a sand filter, before being combined with east side flows and discharged at outfall 001. East side flows routed to the oxidation ditch flow through a final clarifer before being combined with west side flows at outfall 001. The facility has the capability of operating the east side and west side treatment trains in series or in parallel. Sludge is land applied.

Have any changes occurred at this facility or in the receiving water body that effects effluent limit derivation?

- Yes. Discharges from outfall #002 and #003 are no longer authorized.

Application Date: July 18, 2011
Expiration Date: November 16, 2011
Last Inspection: 3-23-10 Non-Compliance

During the last inspection the following violations were noted:

- Caused pollution to the waters of the State of Missouri
- Violated water quality standards
- Water quality violations
- Failure to comply with permit conditions
- Warning signs were not posted

OUTFALL(S) TABLE:

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
001	7.39	Secondary	Municipal waste water	0.0

Outfall #001:

Legal Description: SE ¼, NE ¼, Section 18, T37N, R7W, Phelps County
UTM Coordinates: X=626055, Y=41755006
Receiving Stream: Unnamed tributary to Dutro Carter Creek (U)
First Classified Stream and ID: Dutro Carter Creek (P) (1865) 303 (d)
USGS Basin & Sub-watershed No.: (07140102-0108)

Receiving Water Body's Water Quality & Facility Performance History:

During 2010 inspection sludge deposits were noted in the receiving stream from this facility. No recent effluent limit violations.

Comments:

Reasonable potential analysis was conducted on copper and arsenic. No reasonable potential was found to exist, therefore, the monitoring requirement for these pollutants were removed from the permit.

Part II – Operator Certification Requirements

As per [10 CSR 20-6.010(8) Terms and Conditions of a Permit], permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with [10 CSR 20-9.020(2)] and any other applicable state law or regulation. As per [10 CSR 20-9.010(2)(A)], requirements for operation by certified personnel shall apply to all wastewater treatment systems, if applicable, as listed below:

Check boxes below that are applicable to the facility;

- Owned or operated by or for:
 - Municipalities

Each of the above entities are only applicable if they have a Population Equivalent greater than two hundred (200) and/or fifty (50) or more service connections.

This facility currently requires an operator with an A Certification Level. Please see **Appendix A - Classification Worksheet** Modifications made to the wastewater treatment facility may cause the classification to be modified.

Operator's Name: Allen McNece
Certification Number: 4601
Certification Level: WW – A

The listing of the operator above only signifies that staff drafting this operating permit have reviewed appropriate Department records and determined that the name listed on the operating permit application has the correct and applicable Certification Level.

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.

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 1st 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*	12-DIGIT HUC	EDU**
Unnamed tributary to Dutro Carter Creek	U	----	General Criteria	07140102-0108	Ozark/ Meramec
Dutro Carter Creek	P	1865	AQL, LWW, WBC "B"		

* - 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(S) LOW-FLOW VALUES TABLE:

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Dutro Carter Creek (P)	0.0	0.0	0.1

MIXING CONSIDERATIONS:

Mixing Zone: Not Allowed [10 CSR 20-7.031(4)(A)4.B.(I)(a)].

Zone of Initial Dilution: Not Allowed [10 CSR 20-7.031(4)(A)4.B.(I)(b)].

RECEIVING STREAM MONITORING REQUIREMENTS:

No receiving water monitoring requirements recommended at this time.

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

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 operating permit 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.

AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:

As per [10 CSR 20-6.010(3)(B)], ...An applicant may utilize a lower preference continuing authority by submitting, as part of the application, a statement waiving preferential status from each existing higher preference authority, providing the waiver does not conflict with any area-wide management plan approved under section 208 of the Federal Clean Water Act or any other regional sewage service and treatment plan approved for higher preference authority by the Department.

BIOSOLIDS & SEWAGE SLUDGE:

Biosolids are solid materials resulting from domestic wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information regarding biosolids and sludge is located at the following web address:

<http://dnr.mo.gov/env/wpp/pub/index.html>, items WQ422 through WQ449.

- Permittee land applies biosolids in accordance with Standard Conditions III and a Department approved biosolids management plan.

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

PRETREATMENT PROGRAM:

The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a Publicly Owned Treatment Works [40 CFR Part 403.3(q)].

Not Applicable

At this time the permittee's pretreatment program is inactive.

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.

In accordance with [40 CFR Part 122.44(d)(iii)] if the permit writer determines that any give pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for that pollutant.

Applicable

A RPA was conducted on appropriate parameters. Please see **APPENDIX B – RPA RESULTS**.

REMOVAL EFFICIENCY:

Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (BOD₅) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs)/municipals.

Applicable

Secondary Treatment is 85% removal [40 CFR Part 133.102(a)(3) & (b)(3)].

SANITARY SEWER OVERFLOWS (SSO) AND INFLOW AND INFILTRATION (I&I):

Sanitary Sewer Overflows (SSOs) are defined as an untreated or partially treated sewage release are considered bypassing under state regulation [10 CSR 20-2.010(11)] and should not be confused with the federal definition of bypass. SSOs have a variety of causes including blockages, line breaks, and sewer defects that allow excess storm water and ground water to (1) enter and overload the collection system, and (2) overload the treatment facility. Additionally, SSOs can also be caused by lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. SSOs also include overflows out of manholes and onto city streets, sidewalks, and other terrestrial locations.

Additionally, Missouri RSMo §644.026.1 mandates that the Department require proper maintenance and operation of treatment facilities and sewer systems and proper disposal of residual waste from all such facilities.

- In accordance with Missouri RSMo §644.026.1.(15) and 40 CFR Part 122.41(e), the permittee is required to develop and/or implement a program for maintenance and repair of the collection system and shall be required in this operating permit by either means of a Special Condition or Schedule of Compliance. In addition, the Department considers the development of this program as an implementation of this condition. Additionally, 40 CFR Part 403.3(o) defines a POTW to include any device and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of liquid nature. It also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW Treatment Plant.

At this time, the Department recommends the US EPA's Guide for Evaluating Capacity, Management, Operation and Maintenance (CMOM) Programs At Sanitary Sewer Collection Systems (Document # EPA 305-B-05-002). The CMOM identifies some of the criteria used by the EPA to evaluate a collection system's management, operation, and maintenance and was intended for use by the EPA, state, regulated community, and/or third party entities. The CMOM is applicable to small, medium, and large systems; both public and privately owned; and both regional and satellite collection systems. The CMOM does not substitute for the Clean Water Act, the Missouri Clean Water Law, and both federal and state regulations, as it is not a regulation.

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 Interim Effluent Limitation and Final Effluent Limitations were established in accordance with [10 CSR 20-7.031(10)]. The schedule for meeting *E. coli* limits is stipulated in state regulation 10 CSR 20-7.015(9)(H) and cannot be extended past December 31, 2013. Cyanide was found to have reasonable potential and therefore, was added to the permit. A schedule for Cyanide has been given to allow the facility adequate time to come into compliance with this new limit.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP):

In accordance with 40 CFR 122.44(k) *Best Management Practices (BMPs)* to control or abate the discharge of pollutants when: (1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; (2) Authorized under section 402(p) of the CWA for the control of storm water discharges; (3) Numeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (Document number EPA 833-B-09-002) [published by the United States Environmental Protection Agency (USEPA) in February 2009], BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure.

Additionally in accordance with the Storm Water Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions which prevent or control the pollution of storm water discharges.

Not Applicable

At this time, the permittee is not required to develop and implement a SWPPP.

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.

WASTELOAD 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

Wasteload 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
 - C_s = upstream concentration
 - Q_s = upstream flow
 - C_e = effluent concentration
 - Q_e = 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 wasteload 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).

Number of Samples "n":

Additionally, in accordance with the TSD for water quality-based permitting, effluent quality is determined by the underlying distribution of daily values, which is determined by the Long Term Average (LTA) associated with a particular Wasteload Allocation (WLA) and by the Coefficient of Variation (CV) of the effluent concentrations. Increasing or decreasing the monitoring frequency does not affect this underlying distribution or treatment performance, which should be, at a minimum, be targeted to comply with the values dictated by the WLA. Therefore, it is recommended that the actual planned frequency of monitoring normally be used to determine the value of "n" for calculating the AML. However, in situations where monitoring frequency is once per month or less, a higher value for "n" must be assumed for AML derivation purposes. Thus, the statistical procedure being employed using an assumed number of samples is "n = 4" at a minimum. For Total Ammonia as Nitrogen, "n = 30" is used.

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.

WATER QUALITY STANDARDS:

Per [10 CSR 20-7.031(3)], General Criteria shall be applicable to all waters of the state at all times including mixing zones. Additionally, [40 CFR 122.44(d)(1)] directs the Department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

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

Under the federal 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 (NPDES). WET testing is also required by 40 CFR 122.44(d)(1). WET testing ensures that the provisions in the 10 CSR 20-6.010(8)(A)7. and the Water Quality Standards 10 CSR 20-7.031(3)(D),(F),(G),(I)2.A & B are being met. Under [10 CSR 20-6.010(8)(A)4], the Department may require other terms and conditions that it deems necessary to assure compliance with the Clean Water Act and related regulations of the Missouri Clean Water Commission. In addition the following MCWL apply: §§644.051.3 requires the Department to set permit conditions that comply with the MCWL and CWA; 644.051.4 specifically references toxicity as an item we must consider in writing permits (along with water quality-based effluent limits, pretreatment, etc...); and 644.051.5 is the basic authority to require testing conditions. WET test will be required by all facilities meeting the following criteria:

- Facility is a designated Major.
- Facility is a municipality or domestic discharger with a Design Flow \geq 22,500 gpd.

40 CFR 122.41(M) - BYPASSES:

The federal Clean Water Act (CWA), Section 402 prohibits wastewater dischargers from “bypassing” untreated or partially treated sewage (wastewater) beyond the headworks. A bypass, which includes blending, is defined as an intentional diversion of waste streams from any portion of a treatment facility, [40 CFR 122.41(m)(1)(i)]. Additionally, Missouri regulation 10 CSR 20-2.010(11) defines a bypass as the diversion of wastewater from any portion of wastewater treatment facility or sewer system to waters of the state. Only under exceptional and specified limitations do the federal regulations allow for a facility to bypass some or all of the flow from its treatment process. Bypasses are prohibited by the CWA unless a permittee can meet all of the criteria listed in 40 CFR 122.41(m)(4)(i)(A), (B), & (C). Any bypasses from this facility are subject to the reporting required in 40 CFR 122.41(l)(6) and per Missouri’s Standard Conditions I, Section B, part 2.b. Additionally, Anticipated Bypasses include bypasses from peak flow basins or similar devices designed for peak wet weather flows.

- Outfall #002 & #003 are no longer authorized to discharge as it is a Bypass. The Department has developed a Voluntary Compliance Agreement (VCA) for communities that believe they need time to eliminate this discharge. The VCA requires communities to develop and submit bypass elimination plans, to make progress, and to report on this progress. The terms of the VCA is for five (5) years, and is renewable for another five (5) years assuming that adequate progress is being made. In return, the State of Missouri will not initiate enforcement actions for the terms contained in the VCA. The permittee has entered into a VCA.

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

Dutro Carter Creek is listed on the 2012 Missouri 303(d) List for low dissolved oxygen.

– – This facility is considered to be a source of or has the potential to contribute to the above listed pollutant.

Part V – Effluent Limits Determination

Outfall #001 – Main Facility Outfall

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	GPD	1	*		*	No	*
BOD ₅	MG/L	3		15	10	No	15/10
TSS	MG/L	1		45	30	No	45/30
pH	SU	1	6.5-9.0		6.5-9.0	YES	6.0-9.0
AMMONIA AS N (APRIL 1 – SEPT 30)	MG/L	2	3.5		1.4	YES	3.7/1.7
AMMONIA AS N (OCT 1 – MARCH 31)	MG/L	2	7.3		2.9	YES	7.5/3.7
ESCHERICHIA COLI	***	2		1030	206	YES	****
OIL & GREASE (MG/L)	MG/L	2,3	15		10	No	15/10
CYANIDE, AMENABLE TO CHLORINATION	µg/L	2	8.1		4.0	YES	*
WHOLE EFFLUENT TOXICITY (WET) TEST	% Survival	11	Please see WET Test in the Derivation and Discussion Section below.				

* - Monitoring requirement only.

** - For DO the Daily Maximum is a Daily Minimum and the Monthly Average is a Monthly Average Minimum.

*** - # of colonies/100mL; the Monthly Average for *E. coli* is a geometric mean.

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

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. Antidegradation Review | |

OUTFALL #001 – 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.
- **Biochemical Oxygen Demand (BOD₅).** Effluent limitations from the previous state operating permit have been reassessed and verified that they are still protective of the receiving stream’s Water Quality. Therefore, effluent limitations have been retained from previous state operating permit.
- **Total Suspended Solids (TSS).** Effluent limitations from the previous state operating permit have been reassessed and verified that they are still protective of the receiving stream’s Water Quality. Therefore, effluent limitations have been retained from previous state operating permit. This is consistent with 10 CSR 20-7.015 (8)(A)1
- **pH.** pH shall be maintained in the range from (6.5 – 9.0) standard units [10 CSR 20.7.015(8)(B)2.]

- **Total Ammonia Nitrogen.** Early Life Stages Present Total Ammonia Nitrogen criteria apply [10 CSR 20-7.031(4)(B)7.C. & Table B3] default pH 7.8 SU Background total ammonia nitrogen = 0.01 mg/L (Default).

Season	Temp (°C)	pH (SU)	Total Ammonia Nitrogen CCC (mg/L)	Total Ammonia Nitrogen CMC (mg/L)
Summer	26	7.8	1.5	12.1
Winter	6	7.8	3.1	12.1

Summer: April 1 – September 30

Chronic WLA: $C_e = ((7.39 + 0.0)1.5 - (0.0 * 0.01))/7.39$
 $C_e = 1.5 \text{ mg/L}$

Acute WLA: $C_e = ((7.39 + 0.0)12.1 - (0.0 * 0.01))/7.39$
 $C_e = 12.1 \text{ mg/L}$

$LTA_c = 1.5 \text{ mg/L} (0.798) = \mathbf{1.2 \text{ mg/L}}$
 $LTA_a = 12.1 \text{ mg/L} (0.348) = 4.2 \text{ mg/L}$

[CV = 0.545, 99th Percentile, 30 day avg.]
 [CV = 0.545, 99th Percentile]

Use most protective number of LTA_c or LTA_a .

MDL = 1.2 mg/L (2.88) = 3.5 mg/L
AML = 1.2 mg/L (1.17) = 1.4 mg/L

[CV = 0.545, 99th Percentile]
 [CV = 0.545, 95th Percentile, n =30]

Winter: October 1 – March 31

Chronic WLA: $C_e = ((7.39 + 0.0)3.1 - (0.0 * 0.01))/7.39$
 $C_e = 3.1 \text{ mg/L}$

Acute WLA: $C_e = ((7.39 + 0.0)12.1 - (0.0 * 0.01))/7.39$
 $C_e = 12.1 \text{ mg/L}$

$LTA_c = 3.1 \text{ mg/L} (0.784) = \mathbf{2.4 \text{ mg/L}}$
 $LTA_a = 12.1 \text{ mg/L} (0.327) = 4.0 \text{ mg/L}$

[CV = 0.587, 99th Percentile, 30 day avg.]
 [CV = 0.587, 99th Percentile]

Use most protective number of LTA_c or LTA_a .

MDL = 2.4 mg/L (3.06) = 7.3 mg/L
AML = 2.4 mg/L (1.19) = 2.9 mg/L

[CV = 0.587, 99th Percentile]
 [CV = 0.587, 95th Percentile, n =30]

- ***Escherichia coli (E. coli)*.** Monthly average of 206 per 100 ml as a geometric mean and Weekly Average of 1030 during the recreational season (April 1 – October 31), to protect Whole Body Contact Recreation (B) designated use of the receiving stream, as per 10 CSR 20-7.031(4)(C). Weekly Average effluent variability will be evaluated in development of a future effluent limit. An effluent limit for both monthly average and weekly average is required by 40 CFR 122.45(d). For POTWs if more than one (1) sample is collected in a calendar week, then the result is to be reported as a geometric mean.
- **Oil & Grease.** Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.

- **Cyanide, Amenable to Chlorination.** Protection of Aquatic Life CCC = 5 µg/L, CMC = 22 µg/L, Background CN = 0 µg/L

Chronic WLA: $C_e = ((7.39 + 0.0)5 - (0.0 * 0.0))/7.39$
 $C_e = 5 \text{ µg/L}$

Acute WLA: $C_e = ((7.39 + 0.0)22 - (0.0 * 0.0))/7.39$
 $C_e = 22 \text{ µg/L}$

$LTA_c = 5 (.527) = 2.6 \text{ µg/L}$
 $LTA_a = 22 (0.321) = 7.1 \text{ µg/L}$

[CV = 0.6, 99th Percentile]
[CV = 0.6, 99th Percentile]

Use most protective number of LTA_c or LTA_a .

MDL = 2.6 (3.11) = 8.1 µg/L
AML = 2.6 (1.55) = 4.0 µg/L

[CV = 0.6, 99th Percentile]
[CV = 0.6, 95th Percentile, n = 4]

The effluent limitation above is below the minimum quantification level (ML) of the most common and practical EPA approved methods. The Department has determined that current acceptable ML for Cyanide, Amendable to Chlorination to be 16 µg/L when using the Cyanide by Automated Colorimetric Method #335.3 from the U.S.EPA National Exposure Research Laboratory. Therefore, the operating permit will contain a Note indicating such.

- **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 ONCE/YEAR:

Facility is designated as a Major facility or has a design flow ≥ 1.0 MGD.

Part VI – Finding of Affordability

Pursuant to Section 644.145, RSMo., the Department is required to determine whether a permit or decision is affordable and makes a finding of affordability for certain permitting and enforcement decisions. This requirement applies to discharges from combined or separate sanitary sewer systems or publically-owned treatment works.

Applicable; The Department is required to determine findings of affordability because the permit applies to a **combined or separate sanitary sewer system for a publically-owned treatment works.**

Part VII – 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:

The Department shall give public notice that a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in and water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and permittee must be notified of the denial in writing.

The Department must issue public notice of a pending operating permit or of a new or reissued statewide general permit. The public comment period is the length of time not less than 30 days following the date of the public notice which interested persons may submit written comments about the proposed permit.

For persons wanting to submit comments regarding this proposed operating permit, then please refer to the Public Notice page located at the front of this draft operating permit. The Public Notice page gives direction on how and where to submit appropriate comments.

- The Public Notice period for this operating permit was from October 19, 2012 to November 19, 2012. Comments that were received are summarized below.

1. EPA requested the correction of typographical errors contained within the permit as well as additional explanation for the removal of copper and arsenic monitoring from the permit. The typographical errors were corrected and an explanation for the removal of copper and arsenic were added to the comments section.
2. The permittee requested the dates of yearly reports be changed so that most if not all reports could be submitted at the same time.
3. Throughout the previous permitting cycle the facility was required to test for Total Cyanide. Therefore, the permittee requested to removal of Cyanide effluent limits from the permit. Cyanide effluent limits were not removed from the permit. The limits were however, recalculated using the appropriate method #9012A, listed in the National Environmental Method Index (NEMI), for determining cyanide amenable to chlorination. This method is used to determine the concentration of inorganic cyanide that is present as either soluble salts or complexes in wastes or leachate. These limits will be re-evaluated upon the next permit cycle to determine.

DATE OF FACT SHEET: (11/23/11, 09/17/2012, 11/20/2012, 01/22/2013, 01/23/2013)

COMPLETED BY:

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Appendices

APPENDIX A - CLASSIFICATION WORKSHEET:

ITEM	POINTS POSSIBLE	POINTS ASSIGNED
Maximum Population Equivalent (P.E.) served (Max 10 pts.)	1 pt./10,000 PE or major fraction thereof.	5
Maximum: 10 pt Design Flow (avg. day) or peak month; use greater (Max 10 pts.)	1 pt. / MGD or major fraction thereof.	5
EFFLUENT DISCHARGE RECEIVING WATER SENSITIVITY:		
Missouri or Mississippi River	0	
All other stream discharges except to losing streams and stream reaches supporting whole body contact	1	
Discharge to lake or reservoir outside of designated whole body contact recreational area	2	
Discharge to losing stream, or stream, lake or reservoir area supporting whole body contact recreation	3	3
PRELIMINARY TREATMENT - Headworks		
Screening and/or comminution	3	3
Grit removal	3	3
Plant pumping of main flow (lift station at the headworks)	3	
PRIMARY TREATMENT		
Primary clarifiers	5	5
Combined sedimentation/digestion	5	
Chemical addition (except chlorine, enzymes)	4	
REQUIRED LABORATORY CONTROL – performed by plant personnel (highest level only)		
Push – button or visual methods for simple test such as pH, Settleable solids	3	
Additional procedures such as DO, COD, BOD, titrations, solids, volatile content	5	
More advanced determinations such as BOD seeding procedures, fecal coliform, nutrients, total oils, phenols, etc.	7	7
Highly sophisticated instrumentation, such as atomic absorption and gas chromatograph	10	
ALTERNATIVE FATE OF EFFLUENT		
Direct reuse or recycle of effluent	6	
Land Disposal – low rate	3	
High rate	5	
Overland flow	4	
Total from page ONE (1)	----	31

APPENDIX A - CLASSIFICATION WORKSHEET (CONTINUED):

ITEM	POINTS POSSIBLE	POINTS ASSIGNED
VARIATION IN RAW WASTE (highest level only) (DMR exceedances and Design Flow exceedances)		
Variation do not exceed those normally or typically expected	0	0
Recurring deviations or excessive variations of 100 to 200 % in strength and/or flow	2	
Recurring deviations or excessive variations of more than 200 % in strength and/or flow	4	
Raw wastes subject to toxic waste discharge	6	
SECONDARY TREATMENT		
Trickling filter and other fixed film media with secondary clarifiers	10	10
Activated sludge with secondary clarifiers (including extended aeration and oxidation ditches)	15	15
Stabilization ponds without aeration	5	
Aerated lagoon	8	
Advanced Waste Treatment Polishing Pond	2	
Chemical/physical – without secondary	15	
Chemical/physical – following secondary	10	
Biological or chemical/biological	12	
Carbon regeneration	4	
DISINFECTION		
Chlorination or comparable	5	
Dechlorination	2	
On-site generation of disinfectant (except UV light)	5	
UV light	4	
SOLIDS HANDLING - SLUDGE		
Solids Handling Thickening	5	
Anaerobic digestion	10	
Aerobic digestion	6	6
Evaporative sludge drying	2	
Mechanical dewatering	8	8
Solids reduction (incineration, wet oxidation)	12	
Land application	6	6
Total from page TWO (2)	----	45
Total from page ONE (1)	---	31
Grand Total	---	76

Facility runs parallel treatment trains of a trickling filter and activated sludge system plus an oxidation ditch.

- A: 71 points and greater
- B: 51 points – 70 points
- C: 26 points – 50 points
- D: 0 points – 25 points

APPENDIX B – RPA RESULTS:

Parameter	CMC*	RWC Acute*	CCC*	RWC Chronic*	n**	Range max/min	CV***	MF	RP Yes/No
Total Ammonia as Nitrogen (Summer) mg/L	12.10	7.68	1.5	7.68	29	3.98 – 0.160	.544768	2.326	YES
Total Ammonia as Nitrogen (Winter) mg/L	12.10	10.63	3.10	10.63	30	5.40 – 0.230	.586663	2.326	YES
Copper, Total Recoverable	30.05	16.16	18.65	16.16	19	13.2/5.0	0.389	2.326	NO
Arsenic, Total Recoverable	NA	0.00	NA	0.00	18	0.0/0.0	NA	NA	NO-all samples were non-detect
Cyanide, Total Recoverable	22	1254.49	5.0	1254.49	19	240 – 2.50	1.890015	2.114	YES

N/A – Not Applicable

* - Units are (µg/L) unless otherwise noted.

** - If the number of samples is greater than 10, then the CV value must be used in the WQBEL for the applicable constituent.

*** - Coefficient of Variation (CV) is calculated by dividing the Standard Deviation of the sample set by the Mean of the same sample set.

RWC – Receiving Water Concentration. It is the concentration of a toxicant or the parameter toxicity in the receiving water after mixing (if applicable).

n – Is the number of samples.

MF – Multiplying Factor. 99% Confidence Level and 99% Probability Basis.

RP – Reasonable Potential. It is where an effluent is projected or calculated to cause an excursion above a water quality standard based on a number of factors including, as a minimum, the four factors listed in 40 CFR 122.44(d)(1)(ii).

Reasonable Potential Analysis is conducted as per (TSD, EPA/505/2-90-001, Section 3.3.2). A more detailed version including calculations of this RPA is available upon request.

APPENDIX C – AFFORDABILITY ANALYSIS:

Missouri Department of Natural Resources
Water Protection Program
Affordability Determination and Finding
(In accordance with RSMo 644.145)

City of Rolla

Introduction & Scope

Section 644.145 RSMo requires the Missouri Department of Natural Resources (Department) to make a “finding of affordability” when “issuing permits under” or “enforcing provisions of” state or federal clean water laws “pertaining to any portion of a combined or separate sanitary sewer system or publicly-owned treatment works.”

This affordability finding covers the City’s initial obligations to implement its Bypass Elimination Program and complete upgrades to its facility that will enable the effluent to comply with all permitted effluent limitations contained in Missouri State Operating Permit No. MO-0050652. The City commits to spending at least \$243,331.00 toward its Bypass Elimination Program over the next five (5) years, which will divide the City’s collection system into an appropriate number of sub basins and include a schedule to inspect the lines in the designated areas. The Bypass Elimination Program is a required element in the Peak Flow Voluntary Compliance Agreement, which was executed by the City and the Department on May 5, 2011. The City estimates additional operating costs of supporting its efforts to reduce I/I to be \$620,000.00. In addition, the City commits to spending at least \$3,000,000.00 in capital costs for the submission of the Facility Plan, design, and construction of the disinfection equipment for completing upgrades to its facility. The City estimates additional annual operating costs of the disinfection equipment to be \$65,000.00.

Description:

The treatment facility is located at 1801 Hwy 72 East in Rolla, MO. The facility discharges to Burgher Branch.

The Facility consists of the following:

Bar Screen/Grit removal/Trickling Filter/Sand Filter/Activated Sludge/Clarifiers/Aerobic Digestion/Oxidation Ditch/Sludge is Land Applied

Legal Description: NE ¼, NE ¼, Section 18, T37N, R7W, Phelps County

UTM Coordinates: X=626055, Y=41755006

Receiving Stream: Burgher Branch (C), 303(d)

First Classified Stream and ID: Burgher Branch (C) (1865)

USGS Basin & Sub-watershed No.: (07140102-0108)

Residential Connections: 4,345

Commercial Connections: 604

Industrial Connections: Unknown

Total Connections: 4,949

Statutory Criteria

(1) A community’s financial capability and ability to raise or secure necessary funding

Municipal Bond Rating (if applicable): BBB¹
 Bonding Capacity: Not Known
 (General Obligation Bond capacity allowed by constitution:
 cities=up to 20% of taxable tangible property
 sewer districts=up to 5% of taxable tangible property)

Current outstanding debt: 23.1 Million²

The City operates the Wastewater Department solely on the monthly charge for residential sewage. The average residential household using 5,000 gallons per month provides \$20.00. A rate increase of \$0.50 per 1,000 gallons of usage was imposed in Fiscal Year (FY) 2011 to begin increasing the City’s efforts in inflow and infiltration reduction. The City’s current sewer rate that includes the costs associated with I/I reduction and elimination of discharges from Outfall No. 002 is \$20.00 per 5,000 gallons. The City’s additional increase of \$0.30 per 1,000 gallons is pending and will be implemented as its rehabilitation program progresses forward. The above annual and capital costs associated with the facility upgrades will add at least another \$0.80 per 1,000 gallons of usage. By October 2015, the City anticipates its rates to be \$24.00 for 5,000 gallons per month. The City further anticipates using a 20 year loan from the Department’s State Revolving Fund and securing a bond for financing the disinfection upgrades.

According to the City, this rate structure is sufficient to pay for the Bypass Elimination Plan and upgrades to the Facility. Therefore the City has demonstrated financial capability to raise and secure the necessary funding.

(2) Affordability of pollution control options for the individuals or households of the community

Current annual operating costs (exclude depreciation): Unknown
 Current user rate: \$20.00³
 Estimated capital cost of pollution control options: \$3,243,331.00⁴
 Annual cost of additional (*operating costs and debt service*): \$685,000.00
 Estimated resulting monthly user rate: \$24.00⁵
 Adjusted Median Household Income: \$34,120.00
 Resulting User Rate as a percent of Median Household Income: 0.84%
 (*Annual Rate/MHI*)

	Financial Impact	Residential Indicator (Usage Rate as a percent of Median Household Income)
<input checked="" type="checkbox"/>	Low	Less than 1% MHI
<input type="checkbox"/>	Medium	Between 1% and 2% MHI
<input type="checkbox"/>	High	Greater than 2% MHI, Unknown

The residential user rate is 0.84% of MHI and will be a low burden for most customers.

¹ 2010 Rolla Basic Financial Statements (page 44)
² 2010 Rolla Basic Financial Statements (page 13)
³ E-mail from Steve Hargis, City of Rolla, dated March 7, 2012
⁴ E-mail from Steve Hargis, City of Rolla, dated March 7, 2012
⁵ E-mail from Steve Hargis, City of Rolla, dated March 23, 2012

(3) An evaluation of the overall costs and environmental benefits of the control technologies

Under the Missouri Clean Water Law and the Federal Clean Water Act, SSOs are prohibited because they cause public health and environmental hazards. Effective June 30, 2010, a revision to 10 CSR 20-7.015, Effluent Regulations, eliminated the provision that allowed facilities to discharge effluent from their peak flow clarifiers, because these discharges bypass secondary treatment, a requirement of the Clean Water Act. Additionally, Missouri State Operating Permit No. MO-0050652 requires disinfection to treat bacteria, and establishes stringent effluent limitations on the receiving stream, Burgher Branch, a Class C receiving stream, which is protected for warm water aquatic life, human health-fish consumption, whole body contact recreation, and livestock and wildlife watering. The City commits to spending \$3,243,331.00 over the next five (5) years to complete I/I improvements to its collection system; eliminate discharges from its peak flow clarifiers; and install disinfection equipment at its facility. However, according to 10 CSR 20-7.015(9)(H) the City must have disinfection installed by December 31, 2013.

(4) An inclusion of ways to reduce economic impacts on distressed populations in the community, including but not limited to low and fixed income populations.

Potentially Distressed Populations	
Unemployment ⁶ for [Rolla, Phelps County]	6.5%
Adjusted Median Household Income ⁷ [Rolla, Phelps County]	\$34,120.00
Percent Population Growth/Decline ⁸ (1990-2010)	35.8% increase
Percent of Households in Poverty ⁹	22.8%

(5) An assessment of other community investments relating to environmental improvements

No known obligations at this time.

⁶ Unemployment data from Missouri Department of Economic Development for December 2011 - <http://www.missourieconomy.org/pdfs/urel1112.pdf>

⁷ Median Household Income data from American Community Survey – Median income in the past 12 months – <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

Note: The median household income is adjusted for inflation according to the method suggested in the EPA CSO guidance for financial capability assessment and schedule development (<http://www.epa.gov/npdes/pubs/csofc.pdf>)

⁸ 2010 Census Population Data - <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>
2000 Census Population Data - <http://www.census.gov/popest/data/cities/totals/2009/tables/SUB-EST2009-04-29.xls> 1990 Census Population Data – <http://www.census.gov/prod/cen1990/cp1/cp-1-27.pdf>

⁹ Poverty data – American Community Survey -<http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

- (6) **An assessment of factors set forth in the United States Environmental Protection Agency's guidance, including but not limited to the "Combined Sewer Overflow Guidance for Financial Capability Assessment and Schedule Development" that may ease the cost burdens of implementing wet weather control plans, including but not limited to small system considerations, the attainability of water quality standards, and the development of wet weather standards;**

See Section (2) of this analysis for the residential indicator as outlined in the above-referenced EPA guidance.

Secondary indicators for consideration:

Socioeconomic, Debt and Financial Indicators

Indicators	Strong (3 points)	Mid-Range (2 points)	Weak (1 point)	Score
Bond rating indicator	Above BBB or Baa	BBB or Baa (BBB)	Below BBB or Baa	2
Overall net debt as a % of full market property value	Below 2%	2% - 5%	Above 5% (9.88%)	1 <i>(Overall Net Debt is 23,100,000/Full Market Property Value of 233,741,195) x 100=9.88%</i>
Unemployment Rate	>1% below Missouri's average (1.9)	± 1% of Missouri's average	>1% above Missouri's average	3 <i>(Missouri's Unemployment Rate is 8.4 – Rolla's rate of 6.5)=1.9</i>
Median household income	More than 25% above Missouri's MHI	± 25% of Missouri's MHI (22.99%)	More than 25% below Missouri's MHI	2 <i>(Missouri's MHI is 44,306-Rolla's Adj. MHI of 34,120.00)/44,3016 x 100=22.99%</i>
Property tax revenues ¹⁰ as a % of full market property value ¹¹	Below 2% (0.46%)	2% - 4%	Above 4%	3 <i>(Property Tax Revenue is 1,084,086/Full Market Property Value of 233,741,105)x 100=0.46%</i>
Property tax collection rate ¹²	Above 98%	94% - 98% (97%)	Below 94%	2 <i>(Property Tax Bills sent total 6707/Property Taxes collected total 6528)=97% collection rate</i>

¹⁰ 2010 Rolla Basic Financial Statements (page 10)

¹¹ 2010 Rolla Basic Financial Statements (page 59)

¹² E-mail dated 3/19/2012 from Steve Hargis, City of Rolla

Average Score for Financial Capability Matrix: 2.2
Residential Indicator (from Criteria #2 above): Mid-Range

Financial Capability Matrix

Financial Capability Indicators Score from above ↓	Residential Indicator (User rate as a % of MHI)		
	Low (Below 1%)	Mid-Range (Between 1.0% and 2.0%)	High (Above 2.0%)
Weak (below 1.5)	<input type="checkbox"/> Medium Burden	<input type="checkbox"/> High Burden	<input type="checkbox"/> High Burden
Mid-Range (1.5 – 2.5)	<input checked="" type="checkbox"/> Low Burden	<input type="checkbox"/> Medium Burden	<input type="checkbox"/> High Burden
Strong (above 2.5)	<input type="checkbox"/> Low Burden	<input type="checkbox"/> Low Burden	<input type="checkbox"/> Medium Burden

Suggested Financial Burden: Low

(7) An assessment of any other relevant local community economic condition.

Rolla’s population grew 35.8% from 1990-2010. In terms of economic strength, Phelps County is below average when compared to other counties in the State. The percentage of labor force is 3% below the State average, the per capita wealth¹³ is 25% below the State average, and per capita income is 14% below the State’s average.

In terms of retail sales, Phelps County loses retail customers to surrounding counties and the County residents spend less than the State average on retail goods and services. The buying power index of Phelps County residents is about average when compared to the rest of the regional economy¹⁴.

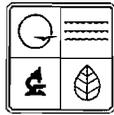
Conclusion

As a result of reviewing the above criteria, the Department hereby finds that the action described above will result in a low burden with regard to the community’s overall financial capability and a low financial impact for most individual customers/households.

¹³ Per capita wealth is calculated by taking a sum of appraised value of residential property, mobile homes and motor vehicles and this sum is then divided by County population.

¹⁴ Source: http://www.missourieconomy.org/pdfs/central_wia_retail_trade_analysis.pdf

JUL 18 2011



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH

FORM B2 – APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT FOR FACILITIES WHICH RECEIVE PRIMARILY DOMESTIC WASTE AND HAVE A DESIGN FLOW MORE THAN 100,000 GALLONS PER DAY

WATER PROTECTION PROGRAM

FACILITY NAME
Rolla Southeast Treatment Plant

PERMIT NO.
MO-0050652

COUNTY
Phelps

APPLICATION OVERVIEW

Form B2 has been developed in a modular format and consists of Parts A, B and C and a Supplemental Application Information (Parts D, E, F and G) packet. All applicants must complete Parts A, B and C. Some applicants must also complete parts of the Supplemental Application Information packet. The following items explain which parts of Form B2 you must complete. Submittal of an incomplete application may result in the application being returned.

BASIC APPLICATION INFORMATION

- A. Basic Application Information for all Applicants. All applicants must complete Part A.
- B. Additional Application Information for all Applicants. All applicants must complete Part B.
- C. Certification. All applicants must complete Part C.

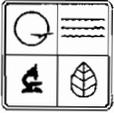
SUPPLEMENTAL APPLICATION INFORMATION

- D. Expanded Effluent Testing Data. A treatment works that discharges effluent to surface water of the United States and meets one or more of the following criteria must complete *Part D - Expanded Effluent Testing Data*:
 - 1. Has a design flow rate greater than or equal to 1 million gallons per day.
 - 2. Is required to have or currently has a pretreatment program.
 - 3. Is otherwise required by the permitting authority to provide the information.
- E. Toxicity Testing Data. A treatment works that meets one or more of the following criteria must complete *Part E - Toxicity Testing Data*:
 - 1. Has a design flow rate greater than or equal to 1 million gallons per day.
 - 2. Is required to have or currently has a pretreatment program.
 - 3. Is otherwise required by the permitting authority to provide the information.
- F. Industrial User Discharges and Resource Conservation and Recovery Act / Comprehensive Environmental Response, Compensation and Liability Act Wastes. A treatment works that accepts process wastewater from any significant industrial users, also known as SIUs, or receives a Resource Conservation and Recovery Act or CERCLA wastes must complete *Part F - Industrial User Discharges and Resource Conservation and Recovery Act /CERCLA Wastes*.

SIUs are defined as:
 - 1. All Categorical Industrial Users, or CIUs, subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations 403.6 and 40 Code of Federal Regulations 403.6 and 40 CFR Chapter 1, Subchapter N.
 - 2. Any other industrial user that meets one or more of the following:
 - i. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions).
 - ii. Contributes a process waste stream that makes up five percent or more of the average dry weather hydraulic or organic capacity of the treatment plant.
 - iii. Is designated as an SIU by the control authority.
- G. Combined Sewer Systems. A treatment works that has a combined sewer system must complete *Part G - Combined Sewer Systems*.

ALL APPLICANTS MUST COMPLETE PARTS A, B and C

HP6191
C7957



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH
FORM B2 – APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT FOR FACILITIES WHICH RECEIVE PRIMARILY DOMESTIC WASTE AND HAVE A DESIGN FLOW MORE THAN 100,000 GALLONS PER DAY

RECEIVED

FOR AGENCY USE ONLY	
CHECK NUMBER	
No Fee To Renew	
DATE RECEIVED	FEE SUBMITTED
7/18/11	Ø

WATER PROTECTION PROGRAM

PART A – BASIC APPLICATION INFORMATION

1. This application is for:

An operating permit and antidegradation review public notice.

A construction permit following an appropriate operating permit and antidegradation review public notice.

A construction permit, a concurrent operating permit and antidegradation review public notice.

A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required).

An operating permit for a new or unpermitted facility. Construction Permit # _____

An operating permit renewal: Permit # MO- 0050652 Expiration Date 11/16/11

An operating permit modification: Permit # MO- _____ Reason: _____

1.1 Is this a Federal/State Funded Project? Yes No Funding Agency/Project #: _____

1.2 Is the appropriate fee included with the application (See instructions for appropriate fee)? Yes No

2. FACILITY

NAME		TELEPHONE NUMBER WITH AREA CODE	
Rolla Southeast Treatment Plant		573-364-6122	
ADDRESS (PHYSICAL)	CITY	STATE	ZIP
1801 Hwy. 72 East	Rolla	MO	65401
2.1 LEGAL DESCRIPTION (Plant Site):	¼, NE ¼, NE ¼, Sec. 18 , T 37 , R 7W		County Phelps 7W
2.2 UTM Coordinates Easting (X): _____ Northing (Y): _____	For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)		

3. OWNER City of Rolla MO

NAME	TITLE	TELEPHONE NUMBER WITH AREA CODE	
City of Rolla	City	573-364-6122	
ADDRESS	CITY	STATE	ZIP
P.O. Box 979	Rolla	MO	65402

3.1 Request review of draft permit prior to Public Notice? Yes No

4. CONTINUING AUTHORITY: Permanent organization which will serve as the continuing authority for the operation, maintenance and modernization of the facility.

NAME	CITY		
City of Rolla	Rolla		
ADDRESS	CERTIFICATE NUMBER (IF APPLICABLE)	STATE	ZIP
P.O. Box 979	MO-0050652	MO	65402

5. OPERATOR

NAME	TITLE	TELEPHONE NUMBER WITH AREA CODE
Allen McNece	Superintendent	573-364-6122

6. FACILITY CONTACT

NAME	TITLE
Allen McNece	Superintendent

MO 780-1805 (09-08)

FACILITY NAME Rolla Southeast Treatment Plant		PERMIT NO. MO- 0050652	OUTFALL NO. 001
PART A – BASIC APPLICATION INFORMATION			
7. ADDITIONAL FACILITY INFORMATION			
7.1 BRIEF DESCRIPTION OF FACILITIES 1954 Trickling Filter: 1972 Activated Sludge: Oxidation Ditch 2000.(001) 1986 storm water clarifier(002) 2000 storm water clarifier			
7.2 TOPOGRAPHIC MAP. ATTACH TO THIS APPLICATION A TOPOGRAPHIC MAP OF THE AREA EXTENDING AT LEAST ONE MILE BEYOND FACILITY PROPERTY BOUNDARIES. THIS MAP MUST SHOW THE OUTLINE OF THE FACILITY AND THE FOLLOWING INFORMATION. (YOU MAY SUBMIT MORE THAN ONE MAP IF ONE MAP DOES NOT SHOW THE ENTIRE AREA.) a. The area surrounding the treatment plant, including all unit processes. b. The location of the downstream landowner(s). (See Item 10.) c. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable. d. The actual point of discharge. e. Wells, springs, other surface water bodies and drinking water wells that are: 1) within ¼ mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant. f. Any areas where the sewage sludge produced by the treatment works is stored, treated or disposed. g. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act, or RCRA, by truck, rail or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored or disposed.			
7.3 PROCESS FLOW DIAGRAM OR SCHEMATIC. PROVIDE A DIAGRAM SHOWING THE PROCESSES OF THE TREATMENT PLANT. ALSO, PROVIDE A WATER BALANCE SHOWING ALL TREATMENT UNITS, INCLUDING DISINFECTION (E.G. CHLORINATION AND DECHLORINATION). THE WATER BALANCE MUST SHOW DAILY AVERAGE FLOW RATES AT INFLUENT AND DISCHARGE POINTS AND APPROXIMATE DAILY FLOW RATES BETWEEN TREATMENT UNITS. INCLUDE A BRIEF NARRATIVE DESCRIPTION OF THE DIAGRAM.			
7.4 FACILITY SIC CODE <u>4952</u>	DISCHARGE SIC CODE: <u>4952</u>	FACILITY NAICS CODE: <u>2213</u>	DISCHARGE NAICS CODE: <u>2213</u>
7.5 NUMBER OF SEPARATE DISCHARGE POINTS <u>3 (001) (002) (003)</u>			
7.6 NUMBER OF PEOPLE PRESENTLY CONNECTED OR POPULATION EQUIVALENT <u>6470 connection</u>		DESIGN POPULATION EQUIVALENT 47,650	
NUMBER OF UNITS PRESENTLY CONNECTED HOMES <u>4,478</u> APARTMENTS <u>653</u> TRAILERS <u>168</u> OTHER <u>1171</u>			
TOTAL DESIGN FLOW (ALL OUTFALLS) 30.765 MGD		ACTUAL FLOW 3.2 MGD	
7.7 DOES ANY BYPASSING OCCUR ANYWHERE IN THE COLLECTION SYSTEM OR AT THE TREATMENT FACILITY? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If Yes, attach an explanation.)			
7.8 LENGTH OF THE SANITARY SEWER COLLECTION SYSTEM IN MILES <u>131.09</u> miles			
7.9 IS INDUSTRIAL WASTE DISCHARGED TO THE FACILITY IDENTIFIED IN ITEM 2? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
7.10 WILL THE DISCHARGE BE CONTINUOUS THROUGH THE YEAR? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
A. DISCHARGE WILL OCCUR DURING THE FOLLOWING MONTHS All		B. HOW MANY DAYS OF THE WEEK WILL THE DISCHARGE OCCUR? 7	
7.11 IS WASTEWATER LAND APPLIED? (If Yes, Attach Form I) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		7.12 DOES THIS FACILITY DISCHARGE TO A LOSING STREAM OR SINKHOLE? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
7.13 HAS A WASTE LOAD ALLOCATION STUDY BEEN COMPLETED FOR THIS FACILITY? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
7.14 LIST ALL PERMIT VIOLATIONS, INCLUDING EFFLUENT LIMIT EXCEEDANCES IN THE LAST FIVE YEARS. ATTACH A SEPARATE SHEET IF NECESSARY. IF NONE, WRITE NONE.			
8. LABORATORY CONTROL INFORMATION			
8.1 LABORATORY WORK CONDUCTED BY PLANT PERSONNEL			
Lab work conducted outside of plant.		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Push-button or visual methods for simple test such as pH, settleable solids.		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Additional procedures such as Dissolved Oxygen, Chemical Oxygen Demand, Biological Oxygen Demand, titrations, solids, volatile content.		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
More advanced determinations such as BOD seeding procedures, fecal coliform, nutrients, total oils, phenols, etc.		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Highly sophisticated instrumentation, such as atomic absorption and gas chromatograph.		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

FACILITY NAME Rolla Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO. 001
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PART A – BASIC APPLICATION INFORMATION

9. SLUDGE HANDLING, USE AND DISPOSAL

9.1 IS THE SLUDGE A HAZARDOUS WASTE AS DEFINED BY 10 CSR 25?
 Yes No

9.2 SLUDGE PRODUCTION, INCLUDING SLUDGE RECEIVED FROM OTHERS
 Design Dry Tons/Year 739 Actual Dry Tons/Year 425.03

9.3 CAPACITY OF SLUDGE HOLDING STRUCTURES

9.4 SLUDGE STORAGE PROVIDED
 Cubic Feet ^{100,000} Days of Storage ⁹⁰ Average Percent Solids of Sludge ^{3%} No Sludge Storage is Provided

9.5 TYPE OF STORAGE
 Holding Tank Basin Building Concrete Pad Other (Describe) _____

9.6 SLUDGE TREATMENT
 Anaerobic Digester Storage Tank Lime Stabilization Lagoon
 Aerobic Digester Air or Heat Drying Composting Other (Attach Description)

9.7 SLUDGE USE OR DISPOSAL
 Land Application Contract Hauler Hauled to Another Treatment Facility Solid Waste Landfill
 Surface Disposal (Sludge Disposal Lagoon, Sludge Held For More Than Two Years) Incineration
 Other (Attach Explanation Sheet) _____

9.8 PERSON RESPONSIBLE FOR HAULING SLUDGE TO DISPOSAL FACILITY

NAME _____

ADDRESS	CITY	STATE	ZIP
CONTACT PERSON	TELEPHONE NUMBER WITH AREA CODE	PERMIT NO MO-	

9.9 SLUDGE USE OR DISPOSAL FACILITY
 By Applicant By Others (Complete Below)

NAME _____

ADDRESS	CITY	STATE	ZIP
CONTACT PERSON	TELEPHONE NUMBER WITH AREA CODE	PERMIT NO MO-	

9.10 DO THE SLUDGE OR BIOSOLIDS DISPOSAL COMPLY WITH FEDERAL SLUDGE REGULATIONS UNDER 40 CFR 503?
 Yes No (Attach Explanation)

10. DOWNSTREAM LANDOWNER(S). (ATTACH ADDITIONAL SHEETS AS NECESSARY.)

NAME
On separatesheet.

ADDRESS	CITY	STATE	ZIP
---------	------	-------	-----

11. DRINKING WATER SUPPLY INFORMATION

11.1 SOURCE OF YOUR DRINKING WATER SUPPLY

A. PUBLIC SUPPLY (MUNICIPAL OR WATER DISTRICT WATER) (IF PUBLIC, PLEASE GIVE NAME OF PUBLIC SUPPLY)
 Rolla Municipal Utilities

B. PRIVATE WELL
 NA

C. SURFACE WATER (LAKE, POND OR STREAM)
 NA

11.2 DOES YOUR DRINKING WATER SOURCE SERVE AT LEAST 25 PEOPLE AT LEAST 60 DAYS PER YEAR (NOT NECESSARILY CONSECUTIVE DAYS)?
 Yes No

11.3 DOES YOUR SUPPLY SERVE HOUSING THAT IS OCCUPIED YEAR ROUND BY THE SAME PEOPLE? THIS DOES NOT INCLUDE HOUSING THAT IS OCCUPIED SEASONALLY?
 Yes No

END OF PART A

MAKE ADDITIONAL COPIES OF THIS FORM FOR EACH OUTFALL

FACILITY NAME Rolla Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO. 001
--	---------------------------	--------------------

PART B – ADDITIONAL APPLICATION INFORMATION

20. INFLOW AND INFILTRATION

ESTIMATE THE AVERAGE NUMBER OF GALLONS PER DAY THAT FLOW INTO THE TREATMENT WORKS FROM INFLOW AND INFILTRATION.

Gallons Per Day Varies with rainfall.

BRIEFLY EXPLAIN ANY STEPS UNDERWAY OR PLANNED TO MINIMIZE INFLOW AND INFILTRATION.

The City has a compliance agreement with the state.

20.1 OPERATION AND MAINTENANCE PERFORMED BY CONTRACTOR(S)

ARE ANY OPERATIONAL OR MAINTENANCE ASPECTS (RELATED TO WASTEWATER TREATMENT AND EFFLUENT QUALITY) OF THE TREATMENT WORKS THE RESPONSIBILITY OF A CONTRACTOR?

Yes No If Yes, list the name, address, telephone number and status of each contractor and describe the contractor's responsibilities. (Attach additional pages if necessary.)

NAME _____

MAILING ADDRESS _____

TELEPHONE NUMBER WITH AREA CODE _____

RESPONSIBILITIES OF CONTRACTOR _____

20.2 SCHEDULED IMPROVEMENTS AND SCHEDULES OF IMPLEMENTATION. PROVIDE INFORMATION ABOUT ANY UNCOMPLETED IMPLEMENTATION SCHEDULE OR UNCOMPLETED PLANS FOR IMPROVEMENTS THAT WILL AFFECT THE WASTEWATER TREATMENT, EFFLUENT QUALITY OR DESIGN CAPACITY OF THE TREATMENT WORKS. IF THE TREATMENT WORKS HAS SEVERAL DIFFERENT IMPLEMENTATION SCHEDULES OR IS PLANNING SEVERAL IMPROVEMENTS, SUBMIT SEPARATE RESPONSES FOR EACH. (IF NONE, GO TO QUESTION B-20.3.)

A. List the outfall number that is covered by this implementation schedule Outfall No. _____	B. Indicate whether the planned improvements or implementation schedule are required by local, state or federal agencies. Yes <input type="checkbox"/> No <input type="checkbox"/>
---	---

20.3 WASTEWATER DISCHARGES:
COMPLETE QUESTIONS 20.4 THROUGH 20.7 ONCE FOR EACH OUTFALL (INCLUDING BYPASS POINTS) THROUGH WHICH EFFLUENT IS DISCHARGED. DO NOT INCLUDE INFORMATION ON COMBINED SEWER OVERFLOWS IN THIS SECTION.

20.4 DESCRIPTION OF OUTFALL

OUTFALL NUMBER 001

A. LOCATION
 ¼ _____ ¼ NE ¼ NE Section 18 Township 37N Range 7 E W
 UTM Coordinates Easting (X): 18 Northing (Y): 37
 For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

B. Distance from Shore (If Applicable) <u>NA</u> ft.	C. Depth Below Surface (If Applicable) <u>NA</u> ft.	D. Average Daily Flow Rate <u>3.2</u> mgd
---	---	--

E. Does this outfall have either an intermittent or periodic discharge?
 Yes No If Yes, Provide the following information:

Number of Days Per Year Discharge Occurs: <u>365</u>	Average Duration of Each Discharge: <u>24 hours</u>	Average Flow Per Discharge: <u>3.2</u> mgd	Months in Which Discharge Occurs: <u>All</u>
--	---	--	--

Is Outfall Equipped with a Diffuser? Yes No

20.5 DESCRIPTION OF RECEIVING WATER

B. Name of Receiving Water
Burgher Branch

B. Name of Watershed (If Known)	U.S. Soil Conservation Service 14-Digit Watershed Code (If Known) <u>07140102-010007</u>
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B. Name of State Management/River Basin (If Known)	U.S. Geological Survey 8-Digit Hydrologic Cataloging Unit Code (If Known)
--	---

B. Critical Flow of Receiving Stream (If Applicable) Acute _____ cfs Chronic _____ cfs	B. Total Hardness of Receiving Stream at Critical Low Flow (If Applicable) mg/L of CaCO ₃ <u>NA</u>
---	---

FACILITY NAME Rolla Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO. 001
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PART B – ADDITIONAL APPLICATION INFORMATION (CONTINUED)

20.6 DESCRIPTION OF TREATMENT

A. WHAT LEVELS OF TREATMENT ARE PROVIDED? Check All That Apply
 Primary Secondary Advanced Other (Describe)

B. INDICATE THE FOLLOWING REMOVAL RATES (AS APPLICABLE)
 Design BOD₅ Removal Or Design CBOD₅ Removal 85 % Design SS Removal 85 %
 Design P Removal ___% Design N Removal ___% Other ___%

C. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe:

If disinfection is by chlorination, is dechlorination used for this outfall? Yes No

Does the treatment plant have post aeration? Yes No

20.7 EFFLUENT TESTING DATA. ALL APPLICANTS THAT DISCHARGE TO WATERS OF THE U.S. MUST PROVIDE EFFLUENT TESTING DATA FOR THE FOLLOWING PARAMETERS. PROVIDE THE INDICATED EFFLUENT DATA FOR EACH OUTFALL THROUGH WHICH EFFLUENT IS DISCHARGED. DO NOT INCLUDE INFORMATION OF COMBINED SEWER OVERFLOWS IN THIS SECTION. ALL INFORMATION REPORTED MUST BE BASED ON DATA COLLECTED THROUGH ANALYSIS CONDUCTED USING 40 CFR PART 136 METHODS. IN ADDITION, THIS DATA MUST COMPLY WITH QA/QC REQUIREMENTS OF 40 CFR PART 136 AND OTHER APPROPRIATE QA/QC REQUIREMENTS FOR STANDARD METHODS FOR ANALYTES NOT ADDRESSED BY 40 CFR PART 136.

OUTFALL NUMBER

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	VALUE	UNITS	VALUE	UNITS	NO. OF SAMPLES
pH (Minimum)	6.37	S.U.	6.8	S.U.	700
pH (Maximum)	7.9	S.U.	7.5	S.U.	700
FLOW RATE	5.781	MGD	3.2	MGD	700
TEMPERATURE (Winter)	26	°C	18	°C	700
TEMPERATURE (Summer)	32	°C	23	°C	700

*For pH report a minimum and a maximum daily value.

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML/MDL
	CONC.	UNITS	CONC.	UNITS	NO. OF SAMPLES		

Conventional and Nonconventional Compounds

BIOCHEMICAL OXYGEN DEMAND (Report One)	BOD ₅		mg/L		mg/L		SM5210B	4 mg/l
	CBOD ₅	NA	mg/L		mg/L			
FECAL COLIFORM	NA	#/100 mL		#/100 mL				
TOTAL SUSPENDED SOLIDS (TSS)	34	mg/L	4.7	mg/L	700	SM2540D		6 mg/l
AMMONIA (AS N)	3.7	mg/L	.746	mg/L	75	SM4500 NH3D		.03mg/l
CHLORINE (TOTAL RESIDUAL, TRC)	NA	mg/L		mg/L				
DISSOLVED OXYGEN	9.1	mg/L	6.44	mg/L	200	SM 4500-O G		.01 mg/l
TOTAL KJELDAHL NITROGEN (TKN)	NA	mg/L		mg/L				
NITRATE PLUS NITRITE NITROGEN	NA	mg/L		mg/L				
OIL AND GREASE	ND	mg/L	ND	mg/L	34	EPA1664A		5.0mg/l
PHOSPHORUS (TOTAL)		mg/L		mg/L				
TOTAL DISSOLVE SOLIDS (TDS)		mg/L		mg/L				
OTHER		mg/L		mg/L				

END OF PART B

PART C - CERTIFICATION

30. CERTIFICATION

All applicants must complete the Certification Section. This certification must be signed by an officer of the company or city official. All applicants must complete all applicable sections as explained in the Application Overview. By signing this certification statement, applicants confirm that they have reviewed the entire form and have completed all sections that apply to the facility for which this application is submitted.

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

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

PRINTED NAME AND OFFICIAL TITLE (MUST BE AN OFFICER OF THE COMPANY OR CITY OFFICIAL)

Allen L. McNece Superintendent

SIGNATURE



TELEPHONE NUMBER WITH AREA CODE

573-364-6122

DATE SIGNED

7/14/11

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

For Design Flows Less than 1 Million Gallons Per Day,
Send Completed Form to:

Appropriate Regional Office

Map of regional offices with addresses and phone numbers is available on the Web at www.dnr.mo.gov/regions/ro-map.pdf.

For Design Flows of 1 Million Gallons Per Day or Greater,
Send Completed Form to:

Department of Natural Resources
Water Protection Program
ATTN: NPDES Permits and Engineering Section
P.O. Box 176
Jefferson City, MO 65102

END OF PART C.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM B2 YOU MUST COMPLETE.

Do not complete the remainder of this application, unless:

1. Your facility design flow is equal to or greater than 1,000,000 gallons per day.
2. Your facility is a pretreatment treatment works.
3. Your facility is a combined sewer system.

Submittal of an incomplete application may result in the application being returned. Permit fees for returned applications shall be forfeited. Permit fees for applications being processed by the department that are withdrawn by the applicant shall be forfeited.

MAKE ADDITIONAL COPIES OF THIS FORM FOR EACH OUTFALL.

FACILITY NAME Rolla Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO. 001
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PART D – EXPANDED EFFLUENT TESTING DATA

40. EXPANDED EFFLUENT TESTING DATA

Refer to the supplemental application information to determine whether Part D applies to the treatment works.

40.1 EFFLUENT TESTING: IF THE TREATMENT WORKS HAS A DESIGN FLOW GREATER THAN OR EQUAL TO 1 MILLION GALLONS PER DAY OR IT HAS (OR IS REQUIRED TO HAVE) A PRETREATMENT PROGRAM, OR IS OTHERWISE REQUIRED BY THE PERMITTING AUTHORITY TO PROVIDE THE DATA, THEN PROVIDE EFFLUENT TESTING DATA FOR THE FOLLOWING POLLUTANTS. PROVIDE THE INDICATED EFFLUENT TESTING INFORMATION FOR EACH OUTFALL THROUGH WHICH EFFLUENT IS DISCHARGED. DO NOT INCLUDE INFORMATION ON COMBINED SEWER OVERFLOWS IN THIS SECTION. ALL INFORMATION REPORTED MUST BE BASED ON DATA COLLECTED THROUGH ANALYSIS CONDUCTED USING 40 CFR PART 136 METHODS. IN ADDITION, THIS DATA MUST COMPLY WITH QA/QC REQUIREMENTS OF 40 CFR PART 136 AND OTHER APPROPRIATE QA/QC REQUIREMENTS FOR STANDARD METHODS FOR ANALYTES NOT ADDRESSED BY 40 CFR PART 136. INDICATE IN THE BLANK ROWS PROVIDED BELOW ANY DATA YOU MAY HAVE ON POLLUTANTS NOT SPECIFICALLY LISTED IN THIS FORM. EFFLUENT TESTING MUST NOT BE MORE THAN FOUR AND ONE-HALF YEARS OLD.

OUTFALL NUMBER (Complete Once for Each Outfall Discharging Effluent to Waters of the State.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	CONC	UNITS	MASS	UNITS	CONC	UNITS	MASS	UNITS	NO. OF SAMPLES		

METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS AND HARDNESS

ANTIMONY	ND	ug/l			ND	ug/l			1	EPA 200.7	10 ug/l
ARSENIC	ND	ug/l			ND	ug/l				EPA 200.7	10 ug/l
BERYLLIUM	ND	ug/l			ND	ug/l				EPA 200.7	1 ug/l
CADMIUM	ND	ug/l			ND	ug/l				EPA 200.7	5.0 ug/l
CHROMIUM	ND	ug/l			ND	ug/l				EPA 200.7	5.0 ug/l
COPPER	ND	ug/l			ND	ug/l				EPA 200.7	10.0 ug/l
LEAD	ND	ug/l			ND	ug/l				EPA 200.7	5.0 ug/l
MERCURY	ND	ug/l			ND	ug/l				EPA 245.1	.2 ug/l
NICKEL	ND	ug/l			ND	ug/l				EPA 200.7	5.0 ug/l
SELENIUM	ND	ug/l			ND	ug/l				EPA 200.7	15.0 ug/l
SILVER	ND	ug/l			ND	ug/l				EPA 200.7	7.0 ug/l
THALLIUM	ND	ug/l			ND	ug/l				EPA 200.7	20.0 ug/l
ZINC	61.2	ug/l			61.2	ug/l				EPA 200.7	50.0 ug/l
CYANIDE	ND	mg/l			ND	mg/l				SM 4500-CN	.0050
TOTAL PHENOLIC COMPOUNDS	ND	mg/l			ND	mg/l				EPA 420.1	.050
HARDNESS (as CaCO ₃)	65.8	mg/l			65.8	mg/l				SM 2340B	.10

USE THIS SPACE (OR A SEPARATE SHEET) TO PROVIDE INFORMATION ON OTHER METALS REQUESTED BY THE PERMIT WRITER.

FACILITY NAME Rolla Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO. 001
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PART D – EXPANDED EFFLUENT TESTING DATA (CONTINUED)

40.1 EXPANDED EFFLUENT TESTING DATA (CONTINUED)

Complete Once for Each Outfall Discharging Effluent to Waters of the State.

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	CONC	UNITS	MASS	UNITS	CONC	UNITS	MASS	UNITS	NO. OF SAMPLES		
VOLATILE ORGANIC COMPOUNDS											
ACROLEIN	ND	ug/l			ND	ug/l			1	EPA 624 low	100 ug/l
ACRYLONITRILE	ND	ug/l			ND	ug/l			1	EPA 624 low	20 ug/l
BENZENE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
BROMOFORM	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
CARBON TETRACHLORIDE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
CHLOROBENZENE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
CHLORODIBROMO-METHANE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
CHLOROETHANE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
2-CHLORO-ETHYLVINYL ETHER	ND	ug/l			ND	ug/l			1	EPA 624 low	10.0 ug/l
CHLOROFORM	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
DICHLOROBROMO-METHANE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
1,1-DICHLORO-ETHANE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
1,2-DICHLORO-ETHANE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
TRANS-1,2-DICHLOROETHYLENE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
1,1-DICHLORO-ETHYLENE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
1,2-DICHLORO-PROPANE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
1,3-DICHLORO-PROPYLENE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
ETHYLBENZENE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
METHYL BROMIDE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
METHYL CHLORIDE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
METHYLENE CHLORIDE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
1,1,2,2-TETRACHLOROETHANE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
TETRACHLORO-ETHANE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
TOLUENE	ND	ug/l			ND	ug/l			1	EPA 624 low	1.0 ug/l
3,4-BENZO-FLUORANTHENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
BENZO(GH) PHERYLENE	NA										
BENZO(K) FLUORANTHENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l

MO 780-1805 (09-08)

FACILITY NAME Rolla Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO. 001
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PART D – EXPANDED EFFLUENT TESTING DATA (CONTINUED)

40.1 EXPANDED EFFLUENT TESTING DATA (CONTINUED)

Complete Once for Each Outfall Discharging Effluent to Waters of the State.

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	CONC	UNITS	MASS	UNITS	CONC	UNITS	MASS	UNITS	NO. OF SAMPLES		
BIS (2-CHLOROTHOXY) METHANE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
BIS (2-CHLOROETHYL) – ETHER	ND	ug/l			ND	ug/l			1	EPA 625	6.0 ug/l
BIS (2-ETHYLHEXYL) PHTHALATE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
4-BROMOPHENYL PHENYL ETHER	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
BUTYL BENZYL PHTHALATE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
2-CHLORONAPH-THALENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
4-CHLORPHENYL PHENYL ETHER	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
CHRYSENE	nd	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
DI-N-BUTYL PHTHALATE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
DEBENZO (A,H) ANTHRACENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
1,2-DICHLORO-BENZENE	ND	ug/l			ND	ug/l			1	EPA 624	1.0 ug/l
1,3-DICHLORO-BENZENE	ND	ug/l			ND	ug/l			1	EPA 624	1.0 ug/l
1,4-DICHLORO-BENZENE	ND	ug/l			ND	ug/l			1	EPA 624	1.0 ug/l
3,3-DICHLORO-BENZIDINE	ND	ug/l			ND	ug/l			1	EPA 625	20 ug/l
DIETHYL PHTHALATE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
DIMETHYL PHTHALATE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
2,4-DINITRO-TOLUENE	ND	ug/l			ND	ug/l			1	EPA 625	6.0 ug/l
2,6-DINITRO-TOLUENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
1,2-DIPHENYL-HYDRAZINE											
1,1,1-TRICHLORO-ETHANE	ND	ug/l			ND	ug/l			1	EPA 624	1.0 ug/l
1,1,2-TRICHLORO-ETHANE	ND	ug/l			ND	ug/l			1	EPA 624	1.0 ug/l
TRICHLORETHYLENE	ND	ug/l			ND	ug/l			1	EPA 624	1.0 ug/l
VINYL CHLORIDE	ND	ug/l			ND	ug/l			1	EPA 624	1.0 ug/l

USE THIS SPACE (OR A SEPARATE SHEET) TO PROVIDE INFORMATION ON OTHER VOLATILE ORGANIC COMPOUNDS REQUESTED BY THE PERMIT WRITER

FACILITY NAME Rolla Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO. 001
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PART D – EXPANDED EFFLUENT TESTING DATA (CONTINUED)

40.1 EXPANDED EFFLUENT TESTING DATA (CONTINUED)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	CONC	UNITS	MASS	UNITS	CONC	UNITS	MASS	UNITS	NO. OF SAMPLES		
BASE-NEUTRAL COMPOUNDS											
ACENAPHTHENE	NA										
ACENAPHTHYLENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
ANTHRACENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
BENZIDINE	ND	ug/l			ND	ug/l			1	EPA 625	50 ug/l
BENZO(A)ANTHRACENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
BENZO(A)PYRENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
FLUORANTHENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
FLUORENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
HEXACHLOROBENZENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
HEXACHLOROCYCLO-PENTADIENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
HEXACHLOROETHANE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
INDENO (1,2,3-CD) PYRENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
ISOPHORONE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
NAPHTHALENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
NITROBENZENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
N-NITROSODI-PROPYLAMINE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
N-NITROSODI-METHYLAMINE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
N-NITROSODI-PHENYLAMINE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
PHENANTHRENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
PYRENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l
1,2,4-TRICHLOROBENZENE	ND	ug/l			ND	ug/l			1	EPA 625	5.0 ug/l

USE THIS SPACE (OR SEPARATE SHEET) TO PROVIDE INFORMATION ON OTHER BASE-NEUTRAL COMPOUNDS REQUESTED BY THE PERMIT WRITER.

END OF PART D

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM B2 YOU MUST COMPLETE.

MAKE ADDITIONAL COPIES OF THIS FORM FOR EACH OUTFALL.		
FACILITY NAME Rolla Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO. 001

PART E – TOXICITY TESTING DATA

50. TOXICITY TESTING DATA

Refer to the Supplemental Application Information to determine whether Part E applies to the treatment works.

Publicly owned treatment works, or POTWS, meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points.

- A. POTWS with a design flow rate greater than or equal to 1 million gallons per day.
- B. POTWS with a pretreatment program (or those that are required to have one under 40 CFR Part 403).
- C. POTWS required by the permitting authority to submit data for these parameters
 - ◆ At a minimum, these results must include quarterly testing for a 12-month period within the past one year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute or chronic toxicity, depending on the range of receiving water dilution. Do not include information about combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
 - ◆ If EPA methods were not used, report the reason for using alternative methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E. If no biomonitoring data is required, do not complete Part E. Refer to the application overview for directions on which other sections of the form to complete.

50.1 REQUIRED TESTS. INDICATE THE NUMBER OF WHOLE EFFLUENT TOXICITY TESTS CONDUCTED IN THE PAST FOUR AND ONE-HALF YEARS.

CHRONIC	ACUTE
	XXXXX

INDIVIDUAL TEST DATA. Complete the following chart for the last three whole effluent toxicity tests. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

	MOST RECENT	2 ND MOST RECENT	3 RD MOST RECENT
A. TEST INFORMATION			
TEST NUMBER	6084002002	6084002002	6064409
TEST SPECIES AND TEST METHOD NUMBER	Pim. EPA/600/4-90/027F	C dubia EPA821-C-02-006	Pim. EPA/600/4-90/027F
AGE AT INITIATION OF TEST	1-14 days	<24 hours	1-14 days
OUTFALL NUMBER	001	001	001
DATES SAMPLE COLLECTED	8/17/10	8/17/10	8/11/09
DATE TEST STARTED	8/18/10	8/18/10	8/13
DURATION	48 hrs.	48 hrs	48 hrs.
B. GIVE TOXICITY TEST METHODS FOLLOWED			
MANUAL TITLE	EPA821-C-02-006	EPA821-C-02-006	EPA821-C-02-006
EDITION NUMBER AND YEAR OF PUBLICATION	Nov.2002	Nov. 2002	Nov. 2002
PAGE NUMBER(S)			
C. GIVE THE SAMPLE COLLECTION METHOD(S) USED. FOR MULTIPLE GRAB SAMPLES, INDICATE THE NUMBER OF GRAB SAMPLES USED.			
24-HOUR COMPOSITE	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
GRAB			
D. INDICATE WHERE THE SAMPLE WAS TAKEN IN RELATION TO DISINFECTION. (CHECK ALL THAT APPLY FOR EACH)			
BEFORE DISINFECTION	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
AFTER DISINFECTION	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AFTER DECHLORINATION	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. DESCRIBE THE POINT IN THE TREATMENT PROCESS AT WHICH THE SAMPLE WAS COLLECTED			
SAMPLE WAS COLLECTED	Eff.	Eff.	Eff.
F. FOR EACH TEST, INCLUDE WHETHER THE TEST WAS INTENDED TO ASSESS CHRONIC TOXICITY, ACUTE TOXICITY OR BOTH.			
CHRONIC TOXICITY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ACUTE TOXICITY	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
G. PROVIDE THE TYPE OF TEST PERFORMED			
STATIC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
STATIC STATIC-RENEWAL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FLOW-THROUGH	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. SOURCE OF DILUTION WATER. IF LABORATORY WATER, SPECIFY TYPE; IF RECEIVING WATER, SPECIFY SOURCE			
LABORATORY WATER			
RECEIVING WATER	upstream	upstream	upstream

FACILITY NAME Rolla Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO.
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PART E – TOXICITY TESTING DATA (CONTINUED)

50.1 WHOLE EFFLUENT TOXICITY TESTS DATA (CONTINUED)

	MOST RECENT	2 ND MOST RECENT	3 RD MOST RECENT
I. TYPE OF DILUTION WATER, IF SALT WATER, SPECIFY "NATURAL" OR TYPE OF ARTIFICIAL SEA SALTS OR BRINE USED.			
FRESH WATER	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
SALT WATER			
J. GIVE THE PERCENTAGE EFFLUENT USED FOR ALL CONCENTRATIONS IN THE TEST SERIES.			
	100%	100%	100%
K. PARAMETERS MEASURED DURING THE TEST. (STATE WHETHER PARAMETER MEETS TEST METHOD SPECIFICATIONS)			
pH	YES	YES	YES
SALINITY	YES	YES	YES
TEMPERATURE	YES	YES	YES
AMMONIA	YES	YES	YES
DISSOLVED OXYGEN	YES	YES	YES
L. TEST RESULTS			
ACUTE:			
PERCENT IN SURVIVAL IN 100% EFFLUENT			
LC ₅₀	>100%	>100%	>100%
95% C.I.			
CONTROL PERCENT SURVIVAL	100%	100%	100%
OTHER (DESCRIBE)			
CHRONIC:			
NOEC			
IC ₂₅			
CONTROL PERCENT SURVIVAL			
OTHER (DESCRIBE)			
M. QUALITY CONTROL ASSURANCE			
IS REFERENCE TOXICANT DATA AVAILABLE?	Yes	YES	YES
WAS REFERENCE TOXICANT TEST WITHIN ACCEPTABLE BOUNDS?	Yes	YES	YES
WHAT DATE WAS REFERENCED TOXICANT TEST RUN (MM/DD/YYYY)?	Yes	YES	YES
OTHER (DESCRIBE)			

50.2 TOXICITY REDUCTION EVALUATION

Is the treatment works involved in a toxicity reduction evaluation? Yes No
 If yes, describe:

50.3 SUMMARY OF SUBMITTED BIOMONITORING TEST INFORMATION

If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date Submitted (MM/DD/YYYY)

Summary of Results (See Instructions)

END OF PART E

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM B2 YOU MUST COMPLETE.

Part A , 7.7

Does any Bypassing occur anywhere in the collection system or at the Treatment Plant?

When there is a large amount of rain (> 2" in 24 hours), we have a possibility of a SSO in the collection system. The City has signed a compliance agreement with the state and has hires a consultant to address I&I issues. Over the last 4 years we have averaged 8 SSOs per year. The city has in place, an aggressive replacement and rehabilitate program of the Collection system.

In the last 5 years there has been no unpermitted bypass at the Treatment Plant.

Part A, 7.14

List all permit violations, including effluent limit exceedances in the last five years.

We have had only one permit violations in the last 5 years, it was on outfall 003, the BOD was 51 mg/l our limit is 45mg/l.

Part A, 10

Downstream Landowners.

West side of Burgher Branch: Highway Seventy Two LLC

East side of Burgher Branch: Steven D Harrison Trust

AUG 19 2011

MAKE ADDITIONAL COPIES OF THIS FORM FOR EACH OUTFALL.			
FACILITY NAME Southeast Treatment Plant		PERMIT NO. MO- 0050652	OUTFALL NO. 003
WATER PROTECTION PROGRAM			
PART F – INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES			
60. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES			
Refer to the Supplemental Application Information to determine whether Part F applies to the treatment works.			
All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete this form.			
GENERAL INFORMATION			
60.1 PRETREATMENT PROGRAM			
Does the treatment works have, or is it subject to, an approved pretreatment program?			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
60.2 NUMBER OF NON-CATEGORICAL SIGNIFICANT INDUSTRIAL USERS, or SIUs AND CATEGORICAL INDUSTRIAL USERS, or CIUs. PROVIDE THE NUMBER OF EACH OF THE FOLLOWING TYPES OF INDUSTRIAL USERS THAT DISCHARGE TO THE TREATMENT WORKS.			
A.	Number of Non-Categorical SIUs 0	B.	Number of CIUs 0
60.3 SIGNIFICANT INDUSTRIAL USER INFORMATION			
Supply the following information for each SIU. If more than one SIU discharges to the treatment works, provide the information requested for each. Submit additional pages as necessary.			
NAME			
MAILING ADDRESS		CITY	STATE ZIP
60.4 INDUSTRIAL PROCESSES			
DESCRIBE ALL OF THE INDUSTRIAL PROCESSES THAT AFFECT OR CONTRIBUTE TO THE SIU'S DISCHARGE.			
60.5 PRINCIPAL PRODUCT(S) AND RAW MATERIAL (S)			
Describe all of the principle processes and raw materials that affect or contribute to the SIU's discharge.			
PRINCIPAL PRODUCT(S)			
RAW MATERIAL(S)			
60.6 FLOW RATE			
A.	PROCESS WASTEWATER FLOW RATE. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day, or gpd, and whether the discharge is continuous or intermittent.		
	gpd <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent		
B.	NON-PROCESS WASTEWATER FLOW RATE. Indicate the average daily volume of non-process wastewater discharged into the collection system in gallons per day, or gpd, and whether the discharge is continuous or intermittent.		
C.	gpd <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent		
60.7 PRETREATMENT STANDARDS			
Indicate whether the SIU is subject to the following			
A.	Local Limits	<input type="checkbox"/> Yes	<input type="checkbox"/> No
B.	Categorical Pretreatment Standards	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If subject to categorical pretreatment standards, which category and subcategory?			
60.8 PROBLEMS AT THE TREATMENT WORKS ATTRIBUTED TO WASTE DISCHARGED BY THE SIU			
Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?			
<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, describe each episode			

MAKE ADDITIONAL COPIES OF THIS FORM FOR EACH OUTFALL.

FACILITY NAME Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO. 001
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PART F – INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES (CONTINUED)

60.9 RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE

RCRA WASTE. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail or dedicated pipe?
 Yes No

WASTE TRANSPORT. Method by which RCRA waste is received. (Check all that apply)
 Truck Rail Dedicated Pipe

WASTE DESCRIPTION. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA HAZARDOUS WASTE NUMBER	AMOUNT	UNITS

60.10 CERCLA, OR SUPERFUND, WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER AND OTHER REMEDIAL ACTIVITY WASTEWATER

REMEDIAL WASTE. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?
 Yes No Provide a list of sites and the requested information for each current and future site.

60.11 WASTE ORIGIN

Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

60.12 POLLUTANTS

List the hazardous constituents that are received (or are expected to be received). Included data on volume and concentration, if known. (Attach additional sheets if necessary)

60.13 WASTE TREATMENT

A. Is this waste treated (or will it be treated) prior to entering the treatment works?
 Yes No

If Yes, describe the treatment (provide information about the removal efficiency):

B. Is the discharge (or will the discharge be) continuous or intermittent?
 Continuous Intermittent

If intermittent, describe the discharge schedule:

END OF PART F

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM B2 YOU MUST COMPLETE.

MAKE ADDITIONAL COPIES OF THIS FORM FOR EACH OUTFALL.

FACILITY NAME Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO. 001
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PART F – INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

60. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

Refer to the Supplemental Application Information to determine whether Part F applies to the treatment works.

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete this form.

GENERAL INFORMATION

60.1 PRETREATMENT PROGRAM

Does the treatment works have, or is it subject to, an approved pretreatment program?

Yes No

60.2 NUMBER OF NON-CATEGORICAL SIGNIFICANT INDUSTRIAL USERS, or SIUs AND CATEGORICAL INDUSTRIAL USERS, or CIUs. PROVIDE THE NUMBER OF EACH OF THE FOLLOWING TYPES OF INDUSTRIAL USERS THAT DISCHARGE TO THE TREATMENT WORKS.

A. Number of Non-Categorical SIUs 0	B. Number of CIUs 0
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60.3 SIGNIFICANT INDUSTRIAL USER INFORMATION

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, provide the information requested for each. Submit additional pages as necessary.

NAME			
MAILING ADDRESS	CITY	STATE	ZIP

60.4 INDUSTRIAL PROCESSES

DESCRIBE ALL OF THE INDUSTRIAL PROCESSES THAT AFFECT OR CONTRIBUTE TO THE SIU'S DISCHARGE.

60.5 PRINCIPAL PRODUCT(S) AND RAW MATERIAL (S)

Describe all of the principle processes and raw materials that affect or contribute to the SIU's discharge.

PRINCIPAL PRODUCT(S)
RAW MATERIAL(S)

60.6 FLOW RATE

A. PROCESS WASTEWATER FLOW RATE. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day, or gpd, and whether the discharge is continuous or intermittent.

gpd Continuous Intermittent

B. NON-PROCESS WASTEWATER FLOW RATE. Indicate the average daily volume of non-process wastewater discharged into the collection system in gallons per day, or gpd, and whether the discharge is continuous or intermittent.

C. gpd Continuous Intermittent

60.7 PRETREATMENT STANDARDS

Indicate whether the SIU is subject to the following

A. Local Limits Yes No
B. Categorical Pretreatment Standards Yes No

If subject to categorical pretreatment standards, which category and subcategory?

60.8 PROBLEMS AT THE TREATMENT WORKS ATTRIBUTED TO WASTE DISCHARGED BY THE SIU

Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

Yes No If Yes, describe each episode

MAKE ADDITIONAL COPIES OF THIS FORM FOR EACH OUTFALL.

FACILITY NAME Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO. 001
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PART F – INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES (CONTINUED)

60.9 RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE

RCRA WASTE. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail or dedicated pipe?
 Yes No

WASTE TRANSPORT. Method by which RCRA waste is received. (Check all that apply)

Truck Rail Dedicated Pipe

WASTE DESCRIPTION. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA HAZARDOUS WASTE NUMBER	AMOUNT	UNITS

60.10 CERCLA, OR SUPERFUND, WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER AND OTHER REMEDIAL ACTIVITY WASTEWATER

REMEDIAL WASTE. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

Yes No Provide a list of sites and the requested information for each current and future site.

60.11 WASTE ORIGIN

Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

60.12 POLLUTANTS

List the hazardous constituents that are received (or are expected to be received). Included data on volume and concentration, if known. (Attach additional sheets if necessary)

60.13 WASTE TREATMENT

A. Is this waste treated (or will it be treated) prior to entering the treatment works?

Yes No

If Yes, describe the treatment (provide information about the removal efficiency):

B. Is the discharge (or will the discharge be) continuous or intermittent?

Continuous Intermittent

If intermittent, describe the discharge schedule:

END OF PART F

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM B2 YOU MUST COMPLETE.

MAKE ADDITIONAL COPIES OF THIS FORM FOR EACH OUTFALL.			
FACILITY NAME Southeast Treatment Plant		PERMIT NO. MO- 0050652	OUTFALL NO. 002
PART F – INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES			
60. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES			
Refer to the Supplemental Application Information to determine whether Part F applies to the treatment works.			
All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete this form.			
GENERAL INFORMATION			
60.1 PRETREATMENT PROGRAM			
Does the treatment works have, or is it subject to, an approved pretreatment program?			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
60.2 NUMBER OF NON-CATEGORICAL SIGNIFICANT INDUSTRIAL USERS, or SIUs AND CATEGORICAL INDUSTRIAL USERS, or CIUs. PROVIDE THE NUMBER OF EACH OF THE FOLLOWING TYPES OF INDUSTRIAL USERS THAT DISCHARGE TO THE TREATMENT WORKS.			
A.	Number of Non-Categorical SIUs 0	B.	Number of CIUs 0
60.3 SIGNIFICANT INDUSTRIAL USER INFORMATION			
Supply the following information for each SIU. If more than one SIU discharges to the treatment works, provide the information requested for each. Submit additional pages as necessary.			
NAME			
MAILING ADDRESS		CITY	STATE ZIP
60.4 INDUSTRIAL PROCESSES			
DESCRIBE ALL OF THE INDUSTRIAL PROCESSES THAT AFFECT OR CONTRIBUTE TO THE SIU'S DISCHARGE.			
60.5 PRINCIPAL PRODUCT(S) AND RAW MATERIAL (S)			
Describe all of the principle processes and raw materials that affect or contribute to the SIU's discharge.			
PRINCIPAL PRODUCT(S)			
RAW MATERIAL(S)			
60.6 FLOW RATE			
A.	PROCESS WASTEWATER FLOW RATE. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day, or gpd, and whether the discharge is continuous or intermittent.		
	gpd <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent		
B.	NON-PROCESS WASTEWATER FLOW RATE. Indicate the average daily volume of non-process wastewater discharged into the collection system in gallons per day, or gpd, and whether the discharge is continuous or intermittent.		
C.	gpd <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent		
60.7 PRETREATMENT STANDARDS			
Indicate whether the SIU is subject to the following			
A.	Local Limits	<input type="checkbox"/> Yes	<input type="checkbox"/> No
B.	Categorical Pretreatment Standards	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If subject to categorical pretreatment standards, which category and subcategory?			
60.8 PROBLEMS AT THE TREATMENT WORKS ATTRIBUTED TO WASTE DISCHARGED BY THE SIU			
Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?			
<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, describe each episode			

MAKE ADDITIONAL COPIES OF THIS FORM FOR EACH OUTFALL.

FACILITY NAME Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO. 001
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PART F – INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES (CONTINUED)

60.9 RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE

RCRA WASTE. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail or dedicated pipe?
 Yes No

WASTE TRANSPORT. Method by which RCRA waste is received. (Check all that apply)
 Truck Rail Dedicated Pipe

WASTE DESCRIPTION. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA HAZARDOUS WASTE NUMBER	AMOUNT	UNITS

60.10 CERCLA, OR SUPERFUND, WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER AND OTHER REMEDIAL ACTIVITY WASTEWATER

REMEDIAL WASTE. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?
 Yes No Provide a list of sites and the requested information for each current and future site.

60.11 WASTE ORIGIN

Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

60.12 POLLUTANTS

List the hazardous constituents that are received (or are expected to be received). Included data on volume and concentration, if known. (Attach additional sheets if necessary)

60.13 WASTE TREATMENT

A. Is this waste treated (or will it be treated) prior to entering the treatment works?
 Yes No

If Yes, describe the treatment (provide information about the removal efficiency):

B. Is the discharge (or will the discharge be) continuous or intermittent?
 Continuous Intermittent

If intermittent, describe the discharge schedule:

END OF PART F

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM B2 YOU MUST COMPLETE.

MAKE ADDITIONAL COPIES OF THIS FORM FOR EACH OUTFALL			
FACILITY NAME Rolla Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO. 003	
PART B – ADDITIONAL APPLICATION INFORMATION			
20. INFLOW AND INFILTRATION			
ESTIMATE THE AVERAGE NUMBER OF GALLONS PER DAY THAT FLOW INTO THE TREATMENT WORKS FROM INFLOW AND INFILTRATION. Gallons Per Day <u>NA</u>			
BRIEFLY EXPLAIN ANY STEPS UNDERWAY OR PLANNED TO MINIMIZE INFLOW AND INFILTRATION. <u>The City has a compliance agreement with the state.</u>			
20.1 OPERATION AND MAINTENANCE PERFORMED BY CONTRACTOR(S)			
ARE ANY OPERATIONAL OR MAINTENANCE ASPECTS (RELATED TO WASTEWATER TREATMENT AND EFFLUENT QUALITY) OF THE TREATMENT WORKS THE RESPONSIBILITY OF A CONTRACTOR? Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes, list the name, address, telephone number and status of each contractor and describe the contractor's responsibilities. (Attach additional pages if necessary.)			
NAME			
MAILING ADDRESS			
TELEPHONE NUMBER WITH AREA CODE			
RESPONSIBILITIES OF CONTRACTOR			
20.2 SCHEDULED IMPROVEMENTS AND SCHEDULES OF IMPLEMENTATION. PROVIDE INFORMATION ABOUT ANY UNCOMPLETED IMPLEMENTATION SCHEDULE OR UNCOMPLETED PLANS FOR IMPROVEMENTS THAT WILL AFFECT THE WASTEWATER TREATMENT, EFFLUENT QUALITY OR DESIGN CAPACITY OF THE TREATMENT WORKS. IF THE TREATMENT WORKS HAS SEVERAL DIFFERENT IMPLEMENTATION SCHEDULES OR IS PLANNING SEVERAL IMPROVEMENTS, SUBMIT SEPARATE RESPONSES FOR EACH. (IF NONE, GO TO QUESTION B-20.3.)			
A. List the outfall number that is covered by this implementation schedule Outfall No.		B. Indicate whether the planned improvements or implementation schedule are required by local, state or federal agencies. Yes <input type="checkbox"/> No <input type="checkbox"/>	
20.3 WASTEWATER DISCHARGES: COMPLETE QUESTIONS 20.4 THROUGH 20.7 ONCE FOR EACH OUTFALL (INCLUDING BYPASS POINTS) THROUGH WHICH EFFLUENT IS DISCHARGED. DO NOT INCLUDE INFORMATION ON COMBINED SEWER OVERFLOWS IN THIS SECTION.			
20.4 DESCRIPTION OF OUTFALL			
OUTFALL NUMBER			
A. LOCATION <u>UTM Easting X: 626055</u> 1/4 ___ 1/4 ___ 1/4 ___ Section ___ Township ___ Range ___ <input type="checkbox"/> E <input type="checkbox"/> W UTM Coordinates Easting (X): ___ Northing (Y): <u>Nothing Y: 41755006</u> For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)			
B. Distance from Shore (If Applicable) <u>NA</u> ft.		C. Depth Below Surface (If Applicable) <u>NA</u> ft.	D. Average Daily Flow Rate <u>NA</u> mgd
E. Does this outfall have either an intermittent or periodic discharge? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Provide the following information:			
Number of Days Per Year Discharge Occurs: <u>50+ or -</u>	Average Duration of Each Discharge: <u>24 hours</u>	Average Flow Per Discharge: <u>1.9</u> mgd	Months in Which Discharge Occurs: <u>All</u>
Is Outfall Equipped with a Diffuser? <input type="checkbox"/> Yes <input type="checkbox"/> No			
20.5 DESCRIPTION OF RECEIVING WATER			
B. Name of Receiving Water <u>Burgher Branch</u>			
B. Name of Watershed (If Known)		U.S. Soil Conservation Service 14-Digit Watershed Code (If Known) <u>07140102-010007</u>	
B. Name of State Management/River Basin (If Known)		U.S. Geological Survey 8-Digit Hydrologic Cataloging Unit Code (If Known)	
B. Critical Flow of Receiving Stream (If Applicable) Acute <u>NA</u> cfs Chronic <u>NA</u> cfs		B. Total Hardness of Receiving Stream at Critical Low Flow (If Applicable) <u>NA</u> mg/L of CaCO ₃	

FACILITY NAME Rolla Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO. 003
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PART B – ADDITIONAL APPLICATION INFORMATION (CONTINUED)

20.6 DESCRIPTION OF TREATMENT

A. WHAT LEVELS OF TREATMENT ARE PROVIDED? Check All That Apply

Primary Secondary Advanced Other (Describe)

B. INDICATE THE FOLLOWING REMOVAL RATES (AS APPLICABLE)

Design BOD₅ Removal Or Design CBOD₅ Removal NA % Design SS Removal NA %
 Design P Removal % Design N Removal % Other %

C. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe:

If disinfection is by chlorination, is dechlorination used for this outfall? Yes No

Does the treatment plant have post aeration? Yes No

20.7 EFFLUENT TESTING DATA. ALL APPLICANTS THAT DISCHARGE TO WATERS OF THE U.S. MUST PROVIDE EFFLUENT TESTING DATA FOR THE FOLLOWING PARAMETERS. PROVIDE THE INDICATED EFFLUENT DATA FOR EACH OUTFALL THROUGH WHICH EFFLUENT IS DISCHARGED. DO NOT INCLUDE INFORMATION OF COMBINED SEWER OVERFLOWS IN THIS SECTION. ALL INFORMATION REPORTED MUST BE BASED ON DATA COLLECTED THROUGH ANALYSIS CONDUCTED USING 40 CFR PART 136 METHODS. IN ADDITION, THIS DATA MUST COMPLY WITH QA/QC REQUIREMENTS OF 40 CFR PART 136 AND OTHER APPROPRIATE QA/QC REQUIREMENTS FOR STANDARD METHODS FOR ANALYTES NOT ADDRESSED BY 40 CFR PART 136.

OUTFALL NUMBER

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	VALUE	UNITS	VALUE	UNITS	NO. OF SAMPLES
pH (Minimum)	6.3	S.U.		S.U.	27
pH (Maximum)	8.0	S.U.		S.U.	27
FLOW RATE	13	MGD	1.9	MGD	27
TEMPERATURE (Winter)	NA	°C		°C	
TEMPERATURE (Summer)	NA	°C		°C	

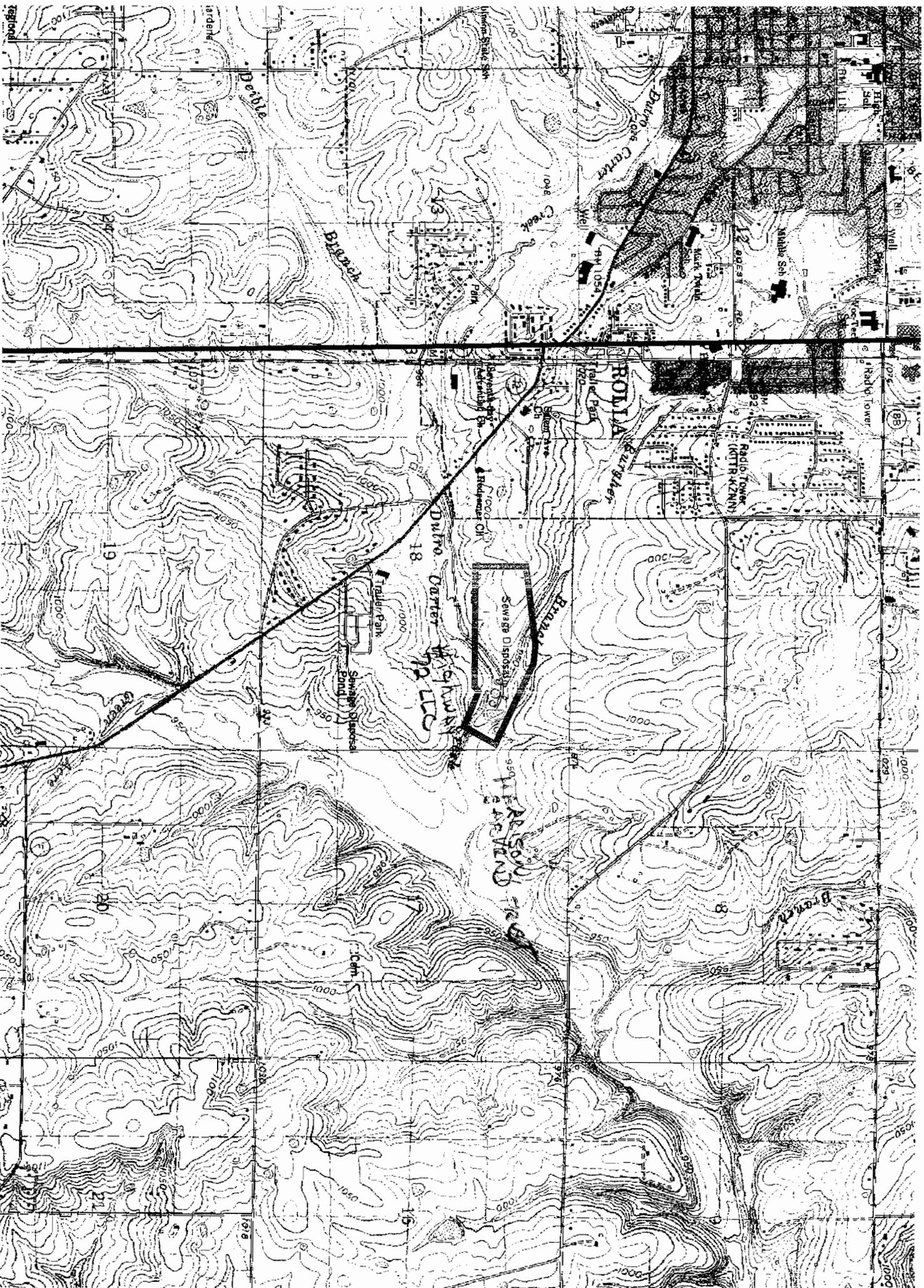
*For pH report a minimum and a maximum daily value.

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML/MDL
	CONC.	UNITS	CONC.	UNITS	NO. OF SAMPLES		

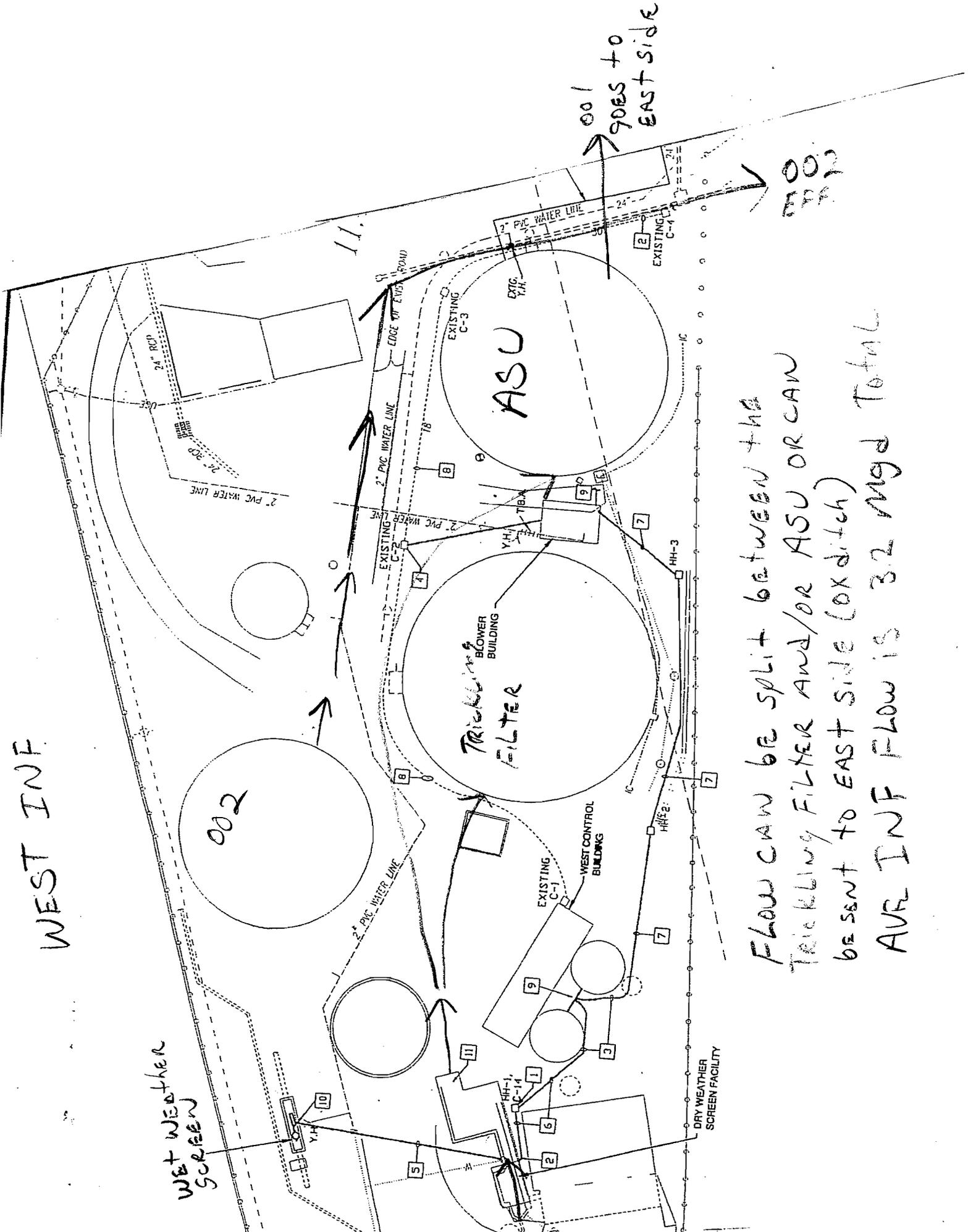
Conventional and Nonconventional Compounds

BIOCHEMICAL OXYGEN DEMAND (Report One)	BOD ₅	51	mg/L	26	mg/L	27	SM5210B	4 mg/l
	CBOD ₅		mg/L		mg/L			
FECAL COLIFORM			#/100 mL		#/100 mL			
TOTAL SUSPENDED SOLIDS (TSS)	49		mg/L	22	mg/L	27	SM2540D	6 mg/l
AMMONIA (AS N)			mg/L		mg/L			
CHLORINE (TOTAL RESIDUAL, TRC)			mg/L		mg/L			
DISSOLVED OXYGEN			mg/L		mg/L			
TOTAL KJELDAHL NITROGEN (TKN)			mg/L		mg/L			
NITRATE PLUS NITRITE NITROGEN			mg/L		mg/L			
OIL AND GREASE			mg/L		mg/L			
PHOSPHORUS (TOTAL)			mg/L		mg/L			
TOTAL DISSOLVE SOLIDS (TDS)			mg/L		mg/L			
OTHER			mg/L		mg/L			

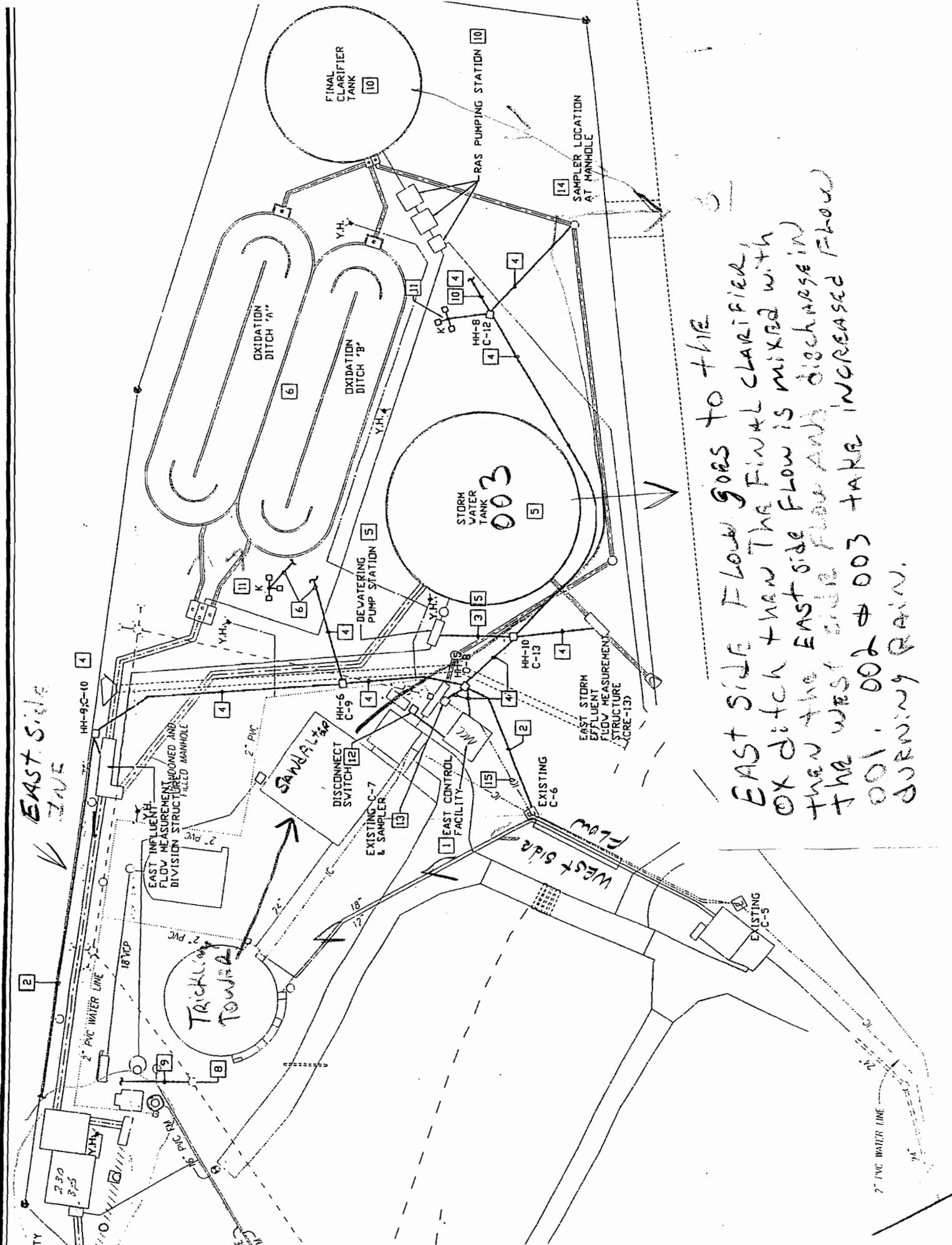
END OF PART B



WEST INF



Flow can be split between the
 Trickling Filter and/or ASU or can
 be sent to east side (oxiditch)
 AVE INF Flow is 32 Mgd Total



EAST SIDE FLOW GOES TO THE
 OX DITCH + NOW THE FINAL CLARIFIER,
 THEN THE EAST SIDE FLOW IS MIXED WITH
 THE WEST SIDE FLOW AND DISCHARGED
 001. 002 + 003 TAKE INCREASED FLOW
 DURING RAIN.

MAKE ADDITIONAL COPIES OF THIS FORM FOR EACH OUTFALL			
FACILITY NAME Rolla Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO. 002	
PART B – ADDITIONAL APPLICATION INFORMATION			
20. INFLOW AND INFILTRATION			
ESTIMATE THE AVERAGE NUMBER OF GALLONS PER DAY THAT FLOW INTO THE TREATMENT WORKS FROM INFLOW AND INFILTRATION. Gallons Per Day <u>NA</u>			
BRIEFLY EXPLAIN ANY STEPS UNDERWAY OR PLANNED TO MINIMIZE INFLOW AND INFILTRATION. <u>The City has a compliance agreement with the state.</u>			
20.1 OPERATION AND MAINTENANCE PERFORMED BY CONTRACTOR(S)			
ARE ANY OPERATIONAL OR MAINTENANCE ASPECTS (RELATED TO WASTEWATER TREATMENT AND EFFLUENT QUALITY) OF THE TREATMENT WORKS THE RESPONSIBILITY OF A CONTRACTOR? Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes, list the name, address, telephone number and status of each contractor and describe the contractor's responsibilities. (Attach additional pages if necessary.)			
NAME			
MAILING ADDRESS			
TELEPHONE NUMBER WITH AREA CODE			
RESPONSIBILITIES OF CONTRACTOR			
20.2 SCHEDULED IMPROVEMENTS AND SCHEDULES OF IMPLEMENTATION. PROVIDE INFORMATION ABOUT ANY UNCOMPLETED IMPLEMENTATION SCHEDULE OR UNCOMPLETED PLANS FOR IMPROVEMENTS THAT WILL AFFECT THE WASTEWATER TREATMENT, EFFLUENT QUALITY OR DESIGN CAPACITY OF THE TREATMENT WORKS. IF THE TREATMENT WORKS HAS SEVERAL DIFFERENT IMPLEMENTATION SCHEDULES OR IS PLANNING SEVERAL IMPROVEMENTS, SUBMIT SEPARATE RESPONSES FOR EACH. (IF NONE, GO TO QUESTION B-20.3.)			
A. List the outfall number that is covered by this implementation schedule Outfall No.		B. Indicate whether the planned improvements or implementation schedule are required by local, state or federal agencies. Yes <input type="checkbox"/> No <input type="checkbox"/>	
20.3 WASTEWATER DISCHARGES: COMPLETE QUESTIONS 20.4 THROUGH 20.7 ONCE FOR EACH OUTFALL (INCLUDING BYPASS POINTS) THROUGH WHICH EFFLUENT IS DISCHARGED. DO NOT INCLUDE INFORMATION ON COMBINED SEWER OVERFLOWS IN THIS SECTION.			
20.4 DESCRIPTION OF OUTFALL			
OUTFALL NUMBER			
A. LOCATION 1/4 <u> </u> 1/4 <u> </u> 1/4 <u> </u> Section <u> </u> Township <u> </u> Range <u> </u> <input type="checkbox"/> E <input type="checkbox"/> W UTM Coordinates Easting (X): <u>UTM Easting: 677962.1897796759</u> Nothing (Y): <u>UTM Northing: 4096742.059086483</u> For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)			
B. Distance from Shore (If Applicable) <u>NA</u> ft.		C. Depth Below Surface (If Applicable) <u>NA</u> ft.	
D. Average Daily Flow Rate <u>NA</u> mgd			
E. Does this outfall have either an intermittent or periodic discharge? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Provide the following information:			
Number of Days Per Year Discharge Occurs: <u>50+ or -</u>	Average Duration of Each Discharge: <u>24 hours</u>	Average Flow Per Discharge: <u>2.2</u> mgd	Months in Which Discharge Occurs: <u>All</u>
Is Outfall Equipped with a Diffuser? <input type="checkbox"/> Yes <input type="checkbox"/> No			
20.5 DESCRIPTION OF RECEIVING WATER			
B. Name of Receiving Water <u>Burgher Branch</u>			
B. Name of Watershed (If Known)		U.S. Soil Conservation Service 14-Digit Watershed Code (If Known) <u>07140102-010007</u>	
B. Name of State Management/River Basin (If Known)		U.S. Geological Survey 8-Digit Hydrologic Cataloging Unit Code (If Known)	
B. Critical Flow of Receiving Stream (If Applicable) Acute <u>NA</u> cfs Chronic <u>NA</u> cfs		B. Total Hardness of Receiving Stream at Critical Low Flow (If Applicable) mg/L of CaCO ₃ <u>NA</u>	

FACILITY NAME Rolla Southeast Treatment Plant	PERMIT NO. MO- 0050652	OUTFALL NO. 002
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PART B – ADDITIONAL APPLICATION INFORMATION (CONTINUED)

20.6 DESCRIPTION OF TREATMENT

A. WHAT LEVELS OF TREATMENT ARE PROVIDED? Check All That Apply

Primary Secondary Advanced Other (Describe)

B. INDICATE THE FOLLOWING REMOVAL RATES (AS APPLICABLE)

Design BOD₅ Removal Or Design CBOD₅ Removal NA % Design SS Removal NA %
 Design P Removal % Design N Removal % Other %

C. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe:

If disinfection is by chlorination, is dechlorination used for this outfall? Yes No

Does the treatment plant have post aeration? Yes No

20.7 EFFLUENT TESTING DATA. ALL APPLICANTS THAT DISCHARGE TO WATERS OF THE U.S. MUST PROVIDE EFFLUENT TESTING DATA FOR THE FOLLOWING PARAMETERS. PROVIDE THE INDICATED EFFLUENT DATA FOR EACH OUTFALL THROUGH WHICH EFFLUENT IS DISCHARGED. DO NOT INCLUDE INFORMATION OF COMBINED SEWER OVERFLOWS IN THIS SECTION. ALL INFORMATION REPORTED MUST BE BASED ON DATA COLLECTED THROUGH ANALYSIS CONDUCTED USING 40 CFR PART 136 METHODS. IN ADDITION, THIS DATA MUST COMPLY WITH QA/QC REQUIREMENTS OF 40 CFR PART 136 AND OTHER APPROPRIATE QA/QC REQUIREMENTS FOR STANDARD METHODS FOR ANALYTES NOT ADDRESSED BY 40 CFR PART 136.

OUTFALL NUMBER

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	VALUE	UNITS	VALUE	UNITS	NO. OF SAMPLES
pH (Minimum)	6.2	S.U.		S.U.	27
pH (Maximum)	8.2	S.U.		S.U.	27
FLOW RATE	12.956	MGD	2.2	MGD	27
TEMPERATURE (Winter)	NA	°C		°C	
TEMPERATURE (Summer)	NA	°C		°C	

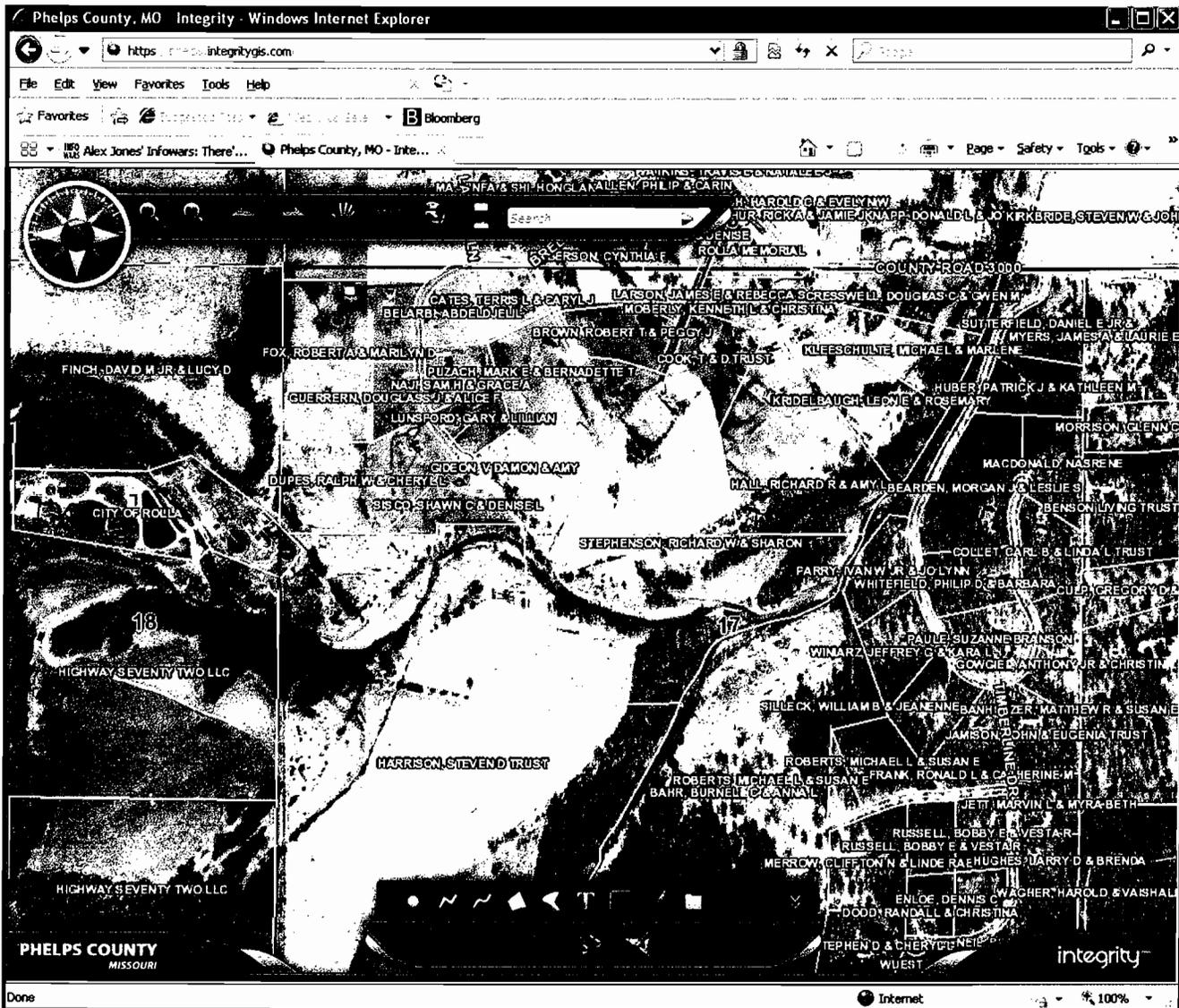
*For pH report a minimum and a maximum daily value.

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML/MDL
	CONC.	UNITS	CONC.	UNITS	NO. OF SAMPLES		

Conventional and Nonconventional Compounds

BIOCHEMICAL OXYGEN DEMAND (Report One)	BOD ₅	45	mg/L	21.8	mg/L	27	SM5210B	4 mg/l
	CBOD ₅		mg/L		mg/L			
FECAL COLIFORM			#/100 mL		#/100 mL			
TOTAL SUSPENDED SOLIDS (TSS)	42	mg/L	21.7	mg/L	27	SM2540D	6 mg/l	
AMMONIA (AS N)		mg/L		mg/L				
CHLORINE (TOTAL RESIDUAL, TRC)		mg/L		mg/L				
DISSOLVED OXYGEN		mg/L		mg/L				
TOTAL KJELDAHL NITROGEN (TKN)		mg/L		mg/L				
NITRATE PLUS NITRITE NITROGEN		mg/L		mg/L				
OIL AND GREASE		mg/L		mg/L				
PHOSPHORUS (TOTAL)		mg/L		mg/L				
TOTAL DISSOLVE SOLIDS (TDS)		mg/L		mg/L				
OTHER		mg/L		mg/L				

END OF PART B



Highway SEVENTY TWO LLC
 HARRISON, STEVEN D TRUST



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH
FORM B2 - APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT FOR FACILITIES WHICH RECEIVE PRIMARILY DOMESTIC WASTE AND HAVE A DESIGN FLOW MORE THAN 100,000 GALLONS PER DAY

RECEIVED
 JUL 18 2011

FOR AGENCY USE ONLY	
CHECK NUMBER	
NO FEE TO Renew	
DATE RECEIVED	FEE SUBMITTED
7/18/11	∅

WATER PROTECTION PROGRAM

PART A - BASIC APPLICATION INFORMATION

1. This application is for:

- An operating permit and antidegradation review public notice.
- A construction permit following an appropriate operating permit and antidegradation review public notice.
- A construction permit, a concurrent operating permit and antidegradation review public notice.
- A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required).
- An operating permit for a new or unpermitted facility. Construction Permit # _____
- An operating permit renewal: Permit #MO- 0050652 Expiration Date 11/16/11
- An operating permit modification: Permit #MO- _____ Reason: _____

1.1 Is this a Federal/State Funded Project? Yes No Funding Agency/Project #: _____

1.2 Is the appropriate fee included with the application (See instructions for appropriate fee)? Yes No

2. FACILITY

NAME	Rolla Southeast Treatment Plant	TELEPHONE NUMBER WITH AREA CODE	573-364-6122
ADDRESS (PHYSICAL)	1801 Hwy. 72 East	STATE	MO
		CITY	Rolla
		ZIP	65401
2.1 LEGAL DESCRIPTION (Plant Site)	3/4 NE 1/4 NE 1/4, Sec. 18, T 37, R 7W County Phelps7W		
2.2 UTM Coordinates Easting (X): _____ Northing (Y): _____	For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)		

3. OWNER City of Rolla MO

NAME	City of Rolla	TITLE	City	TELEPHONE NUMBER WITH AREA CODE	573-364-6122
ADDRESS	P.O. Box 979	CITY	Rolla	STATE	MO
				ZIP	65402

3.1 Request review of draft permit prior to Public Notice? Yes No

4. CONTINUING AUTHORITY: Permanent organization which will serve as the continuing authority for the operation, maintenance and modernization of the facility.

NAME	City of Rolla	CITY	Rolla
ADDRESS	P.O. Box 979	CERTIFICATE NUMBER (IF APPLICABLE)	MO-0050652
		STATE	MO
		ZIP	65402

5. OPERATOR

NAME	Allen McNece	TITLE	Superintendent	TELEPHONE NUMBER WITH AREA CODE	573-364-6122
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6. FACILITY CONTACT

NAME	Allen McNece	TITLE	Superintendent
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