

STATE OF MISSOURI  
**DEPARTMENT OF NATURAL RESOURCES**

MISSOURI CLEAN WATER COMMISSION



**MISSOURI STATE OPERATING PERMIT**

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

Permit No. MO-0136409

Owner: St. Clair R-XIII School District  
Address: 905 Bardot St., St. Clair MO 63077

Continuing Authority: Same as above  
Address: Same as above

Facility Name: Anaconda School STP  
Facility Address: 1773 S. Springfield St. Clair, MO 63077

Legal Description: NW ¼, NE ¼, NW ¼, Section 16, T41N, R1W, Franklin County  
UTM Coordinates: X = 671471, Y = 4241363

Receiving Stream: Unnamed tributary to Dry Creek (U) (Losing)  
First Classified Stream and ID: Bourbeuse River (P) (2034)  
USGS Basin & Sub-watershed No.: (07140103 – 0404)

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

**FACILITY DESCRIPTION**

Outfall #001 - School - SIC #8211  
Septic Tanks/ Recirculating sand filter/ chlorination / dechlorination / sludge disposal by contract hauler  
Design population equivalent is 10.  
Design flow is 1,000 gallons per day.  
Design sludge production is 0.07 dry tons/year.

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

June 6, 2012                      April 14, 2015  
Effective Date                      Revised Date

  
Sara Parker Pauley, Director, Department of Natural Resources

June 5, 2017  
Expiration Date

  
John Madras, Director, Water Protection Program

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 2 of 4	
					PERMIT NUMBER MO-136409	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u>						
Flow	MGD	*		*	once/day	24 hr. total
Biochemical Oxygen Demand <sub>5</sub>	mg/L		15	10	once/month	grab
Total Suspended Solids	mg/L		20	15	once/month	grab
pH – Units	SU	**		**	once/month	grab
Ammonia as N	mg/L				once/month	grab
(May 1 – Oct 31)		3.6		1.4		
(Nov 1 – April 30)		7.5		2.9		
<i>E. coli</i> ***	#/100 mL	126		126	once/month	grab
Total Residual Chlorine (Note 1)	mg/L	0.017		0.008	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> ; THE FIRST REPORT IS DUE <u>July 28, 2012</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<b>B. STANDARD CONDITIONS</b>						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

\* Monitoring requirement only.

\*\* 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.

\*\*\* Numeric Effluent Limitations are based on the proposed rule for *E. coli* published November 2, 2009 in the Missouri Register, Volume 34, Number 21.

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

- (a) This effluent limit is below the minimum quantification level (ML) of the most common and practical EPA approved CLTRC methods. The department has determined the current acceptable ML for total residual chlorine to be 0.13 mg/L when using the DPD Colorimetric Method #4500 – CL G. from Standard Methods for the Examination of Waters and Wastewater. The permittee will conduct analyses in accordance with this method, or equivalent, and report actual analytical values. Measured values greater than or equal to the minimum quantification level of 0.13 mg/L will be considered violations of the permit and values less than the minimum quantification level of 0.13 mg/L will be considered to be in compliance with the permit limitation. The minimum quantification level does not authorize the discharge of chlorine in excess of the effluent limits stated in the permit.
- (b) Do not chemically dechlorinate **if it is not needed to meet the limits in your permit.**
- (c) If no chlorine was used in a given sampling period, an actual analysis is not necessary. Simply report as “0 mg/L” TRC.

C. 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.
  - (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.

C. SPECIAL CONDITIONS (continued)

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.

**MISSOURI DEPARTMENT OF NATURAL RESOURCES**  
**STATEMENT OF BASIS**  
**MO-0136409**  
**ANACONDA SCHOOL SEWAGE TREATMENT PLANT**

This Statement of Basis (Statement) gives pertinent information regarding modification(s) to the above listed operating permit followed by a public comment process.

A Statement is not an enforceable part of a Missouri State Operating Permit.

**Part I – Facility Information**

Facility Type: School  
Facility SIC Code(s): #8211

Facility Description:

Recirculating Sand Filter/ chlorination / dechlorination / Sludge disposal by contact hauler

**Part II – Modification Rationale**

This operating permit is hereby modified to remove nitrite plus nitrate effluent limits. There are no known impacts to specific drinking water wells from the discharge of nitrate/nitrite in this facility's effluent. In the event that nitrates are reasonably expected to impact specific drinking water wells, the recommended limitations for nitrate plus nitrite of 20 mg/L for a daily maximum and 10 mg/L for a monthly average [required by 10 CSR 20-7.015(4) (B)7 as approved by the Clean Water Commission].

No other changes were made at this time.

**Part III – 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 March 6, 2015 – April 6, 2015. No comments were received.

**DATE OF STATEMENT OF BASIS:** FEBRUARY 20, 2015

**COMPLETED BY:**

**ANGELA FALLS, ENVIRONMENTAL SPECIALIST**  
**MISSOURI DEPARTMENT OF NATURAL RESOURCES**  
**WATER PROTECTION PROGRAM**  
**OPERATING PERMITS SECTION - DOMESTIC WASTEWATER UNIT**  
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**Missouri Department of Natural Resources**  
**STATEMENT OF BASIS**  
**MODIFICATION**  
**OF**  
**MO-0136409**  
**St. Clair R-XIII School District, Anaconda School STP**

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.

A Statement of Basis is not an enforceable part of an operating permit.

**Part I – Facility Information**

Facility Type: School  
Facility SIC Code(s): 8211

Facility Description:

Recirculating Sand Filter/ chlorination / dechlorination / Sludge disposal by contact hauler.

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

- Yes  
 - No.

Comments:

Facility requested this modification to change the permit to comply with the Missouri Clean Water Commission order that specifies *E. coli* sampling for facilities under 100,000 gallons per day have sampling set equal to the frequency for Biochemical Oxygen Demand (technology based limits). This order superseded the effluent regulation which required sampling of once per week for *E. coli*. The permit was drafted and public noticed before the order was issued, and when construction was complete the draft permit was issued without being modified per the order. There are no other changes to the effluent limits or conditions of this permit. For information regarding effluent limit derivation and supporting information, please see the permit issued June 6, 2012 and accompanying Fact Sheet.

**Part II - 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.

Not Applicable; The Department is not required to determine findings of affordability because the permit contains no new conditions or requirements that convey a new cost to the facility.

**COMPLETED BY:**

CURT B. GATELEY, CHIEF  
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OPERATING PERMITS SECTION  
WATER PROTECTION PROGRAM  
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**Missouri Department of Natural Resources**  
**FACT SHEET**  
**FOR THE PURPOSE OF CONSTRUCTION**  
**OF**  
**MO-0136409**  
**St. Clair R-XIII School District, Anaconda School STP**

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

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

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

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

**Part I – Facility Information**

Facility Type: School  
 Facility SIC Code(s): 8211

Facility Description:

Recirculating Sand Filter/ chlorination / dechlorination / Sludge disposal by contact hauler.

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

- Yes  
 - No.

Application Date: April 28, 2010  
 Expiration Date: NA  
 Last Inspection: NA In Compliance ; Non-Compliance

**OUTFALL(S) TABLE:**

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
#001	.00155	Secondary	Domestic	4.8

Outfall #001

Legal Description: NE ¼, NW ¼, NE ¼, Section 16, T41N, R1W, Franklin County  
 UTM Coordinates: X = 671496, Y = 4241368  
 Receiving Stream: Unnamed tributary to Dry Creek (U) (Losing)  
 First Classified Stream and ID: Bourbeuse River (P) (02034)  
 USGS Basin & Sub-watershed No.: (07140103 – 100001)

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

New Facility – no history

**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:

Not Applicable ; This facility is not required to have a certified operator.

**Part III – Receiving Stream Information**

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

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

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

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

**RECEIVING STREAM(S) TABLE:**

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	8-DIGIT HUC	EDU**
Unnamed tributary to Dry Creek	U	-	General Criteria	07140103	Ozark Meramec
Dry Creek	U	-	Losing, General Criteria		
Bourbeuse River***	P	2034	LWW, AQL, IRR, WBC(A), CLF, SCR, DWS, General Criteria		

\* - 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

\*\*\* - UAA has not been conducted.

**RECEIVING STREAM(S) LOW-FLOW VALUES TABLE:**

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Unnamed tributary to Dry Creek (U)	0.0	0.0	0.0

**MIXING CONSIDERATIONS TABLE:**

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.

- New facility, 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.

- New and/or expanded discharge, please see **APPENDIX A – ANTIDegradation ANALYSIS**.

### **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.

### **BIO-SOLIDS, SLUDGE, & SEWAGE SLUDGE:**

Bio-solids are solid materials resulting from wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sludge is any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect. 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.

Not Applicable ;

This condition is not applicable to the permittee for this specific facility.

### **COMPLIANCE AND ENFORCEMENT:**

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

Not Applicable ;

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

### **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)].

Pretreatment programs are required at any POTW (or combination of POTW operated by the same authority) and/or municipality with a total design flow greater than 5.0 MGD and receiving industrial wastes that interfere with or pass through the treatment works or are otherwise subject to the pretreatment standards. Pretreatment programs can also be required at POTWs/municipals with a design flow less than 5.0 MGD if needed to prevent interference with operations or pass through.

Several special conditions pertaining to the permittee's pretreatment program may be included in the permit, and are as follows:

- Implementation and enforcement of the program,
- Annual pretreatment report submittal,
- Submittal of list of industrial users,
- Technical evaluation of need to establish local limitations, and
- Submittal of the results of the evaluation

Not Applicable ;

The permittee, at this time, is not required to have a Pretreatment Program or does not have an approved pretreatment program.

**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

Not Applicable ;

A RPA was not conducted for this facility.

**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 (BOD<sub>5</sub>) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs)/municipals. Please see the United States Environmental Protection Agency's (EPA) website for interpretation of percent removal requirements for National Pollutant Discharge Elimination System Permit Application Requirements for Publicly Owned Treatment Works and Other Treatment Works Treating Domestic Sewage @ [www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm](http://www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm).

Not Applicable ;

Influent monitoring is not being required to determine percent removal.

**SANITARY SEWER OVERFLOWS (SSOs), BYPASSES, INFLOW & INFILTRATION (I&I) – PREVENTION/REDUCTION:**

Sanitary Sewer Systems (SSSs) are municipal wastewater collection systems that convey domestic, commercial, and industrial wastewater, and limited amounts of infiltrated groundwater and storm water (i.e. I&I), to a POTW. SSSs are not designed to collect large amounts of storm water runoff from precipitation events.

Untreated or partially treated discharges from SSSs are commonly referred to as SSOs. SSOs have a variety of causes including blockages, line breaks, sewer defects that allow excess storm water and ground water to overload the system, lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. A SSOs is defined as an untreated or partially treated sewage release from a SSS. SSOs can occur at any point in an SSS, during dry weather or wet weather. SSOs include overflows that reach waters of the state. SSOs also include overflows out of manholes and onto city streets, sidewalks, and other terrestrial locations. SSSs can back up into buildings, including private residences. When sewage backups are caused by problems in the publicly-owned portion of an SSS, they are considered SSOs.

Not Applicable ;

This facility is not required to develop or implement a program for maintenance and repair of the collection system; however, it is a violation of Missouri State Environmental Laws and Regulations to allow untreated wastewater to discharge to waters of the state.

**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.

Not Applicable ;

This permit does not contain a SOC.

**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.

Not Applicable ;

Wasteload allocations were not calculated.

**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.

Not Applicable ;

At this time, the permittee is not required to conduct WET test for this facility.

**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

Not Applicable ;  
This facility does not discharge to a 303(d) listed stream.

**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		*		*	YES	****
BOD <sub>5</sub>	MG/L			15	10	YES	****
TSS	MG/L			20	15	YES	****
PH	SU		6.5-9.0		6.5-9.0	YES	****
AMMONIA AS N (MAY 1 – OCT 31)	MG/L		3.6		1.4	YES	****
AMMONIA AS N (NOV 1 – APR 30)	MG/L		7.5		2.9	YES	****
ESCHERICHIA COLI	***		Please see Escherichia Coli (E. coli) in the Derivation and Discussion Section below.				
CHLORINE, TOTAL RESIDUAL	MG/L		0.017		0.008	YES	****
NITRITE PLUS NITRATE (MG/L)	MG/L		20.1		10	YES	****
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements 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 Fecal Coliform 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. Dissolved Oxygen Policy               | 12. 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 (BOD<sub>5</sub>).** BOD<sub>5</sub> limits of 10 mg/L monthly average, 15 mg/L maximum daily were proposed. This is equivalent to BOD<sub>5</sub> limits set forth in 10 CSR 20-7.015(4)(B)1.

- **Total Suspended Solids (TSS).** TSS limits of 15 mg/L monthly average, 20 mg/L maximum daily were proposed. This is equivalent to TSS limits set forth in 10 CSR 20-7.015(4)(B)2.
- **pH.** pH shall be maintained in the range from six to nine (6.5 – 9.0) standard units [10 CSR 20-7.015 (8)(B)2.].
- **Total Ammonia Nitrogen.** The applicant supplied a preferred alternative limit of 1.5 mg/L and 3.1 mg/L for summer and winter seasons respectively. These submitted limits are considered to be the average monthly limits (AML's). From the AML, the long term average (LTA) can be back calculated. With the LTA a maximum daily limit (MDL) can also be calculated. Using this method, the limits would be less stringent than the Water Quality Based Effluent Limit, therefore we are applying the water quality-based effluent limits below.

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

Summer: May 1 – October 31, Winter: November 1 – April 30.

Summer Temp. = 26°C

$$WLA_c = 1.5 \text{ mg/L}$$

$$WLA_a = 12.1 \text{ mg/L}$$

$$LTA_c = 1.5 \text{ mg/L} (0.780) = \mathbf{1.17 \text{ mg/L}}$$

[CV = 0.6, 99<sup>th</sup> Percentile, 30 day average]

$$LTA_a = 12.1 \text{ mg/L} (0.321) = 3.9 \text{ mg/L}$$

[CV = 0.6, 99<sup>th</sup> Percentile, 4 day average]

$$MDL = 1.17 \text{ mg/L} (3.11) = 3.6 \text{ mg/L}$$

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

$$AML = 1.17 \text{ mg/L} (1.19) = 1.4 \text{ mg/L}$$

[CV = 0.6, 95<sup>th</sup> Percentile, n = 30]

Winter Temp. = 6°C

$$WLA_c = 3.1 \text{ mg/L}$$

$$WLA_a = 12.1 \text{ mg/L}$$

$$LTA_c = 3.1 \text{ mg/L} (0.780) = \mathbf{2.42 \text{ mg/L}}$$

[CV = 0.6, 99<sup>th</sup> Percentile, 30 day average]

$$LTA_a = 12.1 \text{ mg/L} (0.321) = 3.9 \text{ mg/L}$$

[CV = 0.6, 99<sup>th</sup> Percentile, 4 day average]

$$MDL = 2.42 \text{ mg/L} (3.11) = 7.5 \text{ mg/L}$$

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

$$AML = 2.42 \text{ mg/L} (1.19) = 2.9 \text{ mg/L}$$

[CV = 0.6, 95<sup>th</sup> Percentile, n = 30]

Season	Maximum Daily Limit (mg/l)	Average Monthly Limit (mg/l)
Summer	3.6	1.4
Winter	7.5	2.9

- **E. coli.** This facility is required to have E. coli effluent limitations. For discharge to a losing stream Missouri Water Quality Standards 10 CSR 7.031 (4)(C) requires an E. Coli effluent limit of 126 colonies per 100 mL year round for discharges to losing streams. The U.S EPA requires effluent limits to be expressed as average weekly for Publically-owned Treatment Works (POTW's) that continuously discharge. The Department is currently working with EPA to develop appropriate average weekly limits. The operating permit will likely include weekly limits for E-coli.

On April 26, 2010, Environmental Protection Agency (EPA) stated in their interim objection to a draft Missouri Operating Permit for discharging from a POTW that the draft permit did not contain an average weekly limit for bacteria in accordance to 40 CFR 122.45(d). The Department is currently in discussion with EPA and stakeholders to reach a resolution, therefore, the issuance of the final permit may be affected.

- **Nitrite plus Nitrate.** DWS criterion = 10mg/L

Chronic WLA:  $C_c = 10 \text{ mg/L}$

Set the Average Monthly Limit equal to the WLA [per EPA/505/2-90-001 Section 5.4.4]

AML = 10.0 mg/L

MDL = AML \* 2.01

[per EPA/505/2-90-001 Section 5.4.4]

MDL = 20.1 mg/L

[CV = 0.6, 99<sup>th</sup> Percentile, n = 4]

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

Chronic WLA:  $C_c = 10 \text{ }\mu\text{g/L}$

Acute WLA:  $C_c = 19 \text{ }\mu\text{g/L}$

$LTA_c = 10 (0.527) = 5.3 \text{ }\mu\text{g/L}$

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

$LTA_a = 19 (0.321) = 6.1 \text{ }\mu\text{g/L}$

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

Use most protective number of  $LTA_c$  or  $LTA_a$ .

MDL = 5.3 (3.11) = 16.5  $\mu\text{g/L}$

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

AML = 5.3 (1.55) = 8.2  $\mu\text{g/L}$

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

Minimally degrading effluent limits that are discussed in Attachment B are 0.017 mg/L as AML and 0.008 mg/L as MDL. If chlorine is used as a disinfectant, standard compliance language for TRC, including the minimum level (ML), should be included in the permit.

- **Minimum Sampling and Reporting Frequency Requirements.**

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW	ONCE/DAY	ONCE/DAY
BOD <sub>5</sub>	ONCE/MONTH	ONCE/MONTH
TSS	ONCE/MONTH	ONCE/MONTH
PH	ONCE/MONTH	ONCE/MONTH
AMMONIA AS N (MAY 1 – OCT 31)	ONCE/MONTH	ONCE/MONTH
AMMONIA AS N (NOV 1 – APR 30)	ONCE/MONTH	ONCE/MONTH
E. COLI	ONCE/WEEK	ONCE/MONTH
CHLORINE, TOTAL RESIDUAL	ONCE/MONTH	ONCE/MONTH
NITRITE PLUS NITRATE	ONCE/MONTH	ONCE/MONTH

## **Part VI – Administrative Requirements**

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

### **PUBLIC NOTICE:**

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 is tentatively scheduled to begin on July 16, 2010 or is in process.

**DATE OF FACT SHEET: AUGUST 27, 2010**

### **COMPLETED BY:**

**STEVEN LANG, P.E.**  
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**Appendices**

**APPENDIX A – ANTIDegradation ANALYSIS:**

**Water Quality and Antidegradation Review**

*For the Protection of Water Quality  
and Determination of Effluent Limits for Discharge to Dry Creek  
by  
Anaconda School Sewage Treatment Facility*



03/10/2010

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## 1. Facility Information

FACILITY NAME: Anaconda School WWTF NPDES #: NEW FACILITY

FACILITY TYPE/DESCRIPTION: The proposed facility type is a recirculating sand filter with a design flow of 0.001 MDG. This facility will replace a non-discharging unpermitted septic tank and intermittent sand filter facility. The discharge will be to an unnamed trib, to Dry Creek, which is losing and unclassified. This facility is for a school so discharge during peak summer months (May-August) will be low to zero.

EDU\*: Ozark / Meramec 8-DIGIT HUC: 07140103 LATITUDE/LONGITUDE: 3818151/-09102188

\* - Ecological Drainage Unit

LEGAL DESCRIPTION: NE ¼, NW ¼, NE ¼, Section 16, T41N, R1W COUNTY: Franklin

## 2. Water Quality Information

In accordance with Missouri's Water Quality Standard [10 CSR 20-7.031(2)] and federal antidegradation policy at Title 40 Code of Federal Regulation (CFR) Section 131.12 (a), the Missouri Department of Natural Resources (MDNR) developed a statewide antidegradation policy and corresponding procedures to implement the policy. A proposed discharge to a water body will be required to undergo a level of Antidegradation Review which documents that the use of a water body's available assimilative capacity is justified. Effective August 30, 2008, a facility is required to use *Missouri's Antidegradation Rule and Implementation Procedure (AIP)* for new and expanded wastewater discharges.

### 2.1. Water Quality History:

No history for this facility. No receiving water information.

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	RECEIVING WATERBODY	DISTANCE TO CLASSIFIED SEGMENT (MI)
001	.00155	Secondary	Unnamed trib to Dry Creek to Bourbeuse River	4.8

## 3. Receiving Waterbody Information

WATERBODY NAME	CLASS	WBID	LOW-FLOW VALUES (CFS)			DESIGNATED USES**
			1Q10	7Q10	30Q10	
Unnamed tributary	U	-	-	-	-	General Criteria
Dry Creek*	Losing	-	-	-	-	General Criteria
Bourbeuse River	P	2034	N/A no mixing			LWW, AQL, IRR, WBC(A), CLF, SCR, DWS, General Criteria

\*This is classified as a losing stream in 10 CSR 20-7.031 Table J.

\*\* 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)

RECEIVING WATER BODY SEGMENT #1: Unnamed Tributary to Dry Creek

Upper end segment\* UTM or Lat/Long coordinates: 381814/-0910220 (Outfall)

Lower end segment\* UTM or Lat/Long coordinates: 3818457/-09103188 (Confluence with Dry Creek)

RECEIVING WATER BODY SEGMENT #2: Dry Creek to Bourbeuse River

Upper end segment\* UTM or Lat/Long coordinates: 3818457/-09103188 (Confluence with Dry Creek)

Lower end segment\* UTM or Lat/Long coordinates: 3821033/-09104377 (Dry Creek Bourbeuse River Confluence)

\*Segment is the portion of the stream where discharge occurs. Segment is used to track changes in assimilative capacity and is bound at a minimum by existing sources and confluences with other significant water bodies.

## 4. General Comments

Missouri Engineering Company (MEC) prepared, on behalf of St. Clair R-XIII School District, the *Antidegradation Report Proposed Anaconda School Wastewater Treatment Facility* dated February 19, 2009. Applicant elected to assume that all pollutants of concern (POC) are significantly degrading the receiving stream in the absence of existing water quality. An alternative analysis was conducted to fulfill the requirements of the AIP. Dissolved oxygen modeling was not required because the facility will discharge to an unnamed tributary to Dry Creek, an unclassified losing stream. The majority of the unclassified segment is losing. There is also a public drinking well within one mile from the discharge location. Therefore year round disinfection will be required for this facility. Information that was provided by the applicant in the submitted report and summary forms in Appendix B was used to develop this review document. A Missouri Department of Conservation Natural Heritage Review was obtained by the applicant; and no endangered species were found to be impacted by the discharge.

## 5. Antidegradation Review Information

The following is a review of the *Antidegradation Report Proposed Anaconda School Wastewater Treatment Facility* dated February 19, 2009.

### 5.1. TIER DETERMINATION

Below is a list of pollutants of concern reasonably expected to be in the discharge (see Appendix C: Tier Determination and Effluent Limit Summary). Pollutants of concern are defined as those pollutants “proposed for discharge that affects beneficial use(s) in waters of the state. POCs include pollutants that create conditions unfavorable to beneficial uses in the water body receiving the discharge or proposed to receive the discharge.” (AIP, Page 7). Tier 2 was assumed for all POCs (see Appendix C).

Table 1. Pollutants of Concern and Tier Determination

POLLUTANTS OF CONCERN	TIER*	DEGRADATION	COMMENT
BOD5/DO	2	Significant	
Total Suspended Solids (TSS)	**	Significant	
Ammonia	2	Significant	
pH	***		
Nitrite plus Nitrate	2	Significant	
E. Coli	2	Significant	
Fecal coliform	2	Significant	

\* Tier assumed.

\*\* No in-stream standards for these parameters.

\*\*\* Standards for these parameters are ranges

The following Antidegradation Review Summary attachments in Appendix D were used by the applicant:

Tier Determination and Effluent Summary

For pollutants of concern, the attachments are:

Attachment A, Tier 2 with significant degradation.

Attachment B, Tier 2 with minimal degradation.

Attachment D, Tier 1 Review. Additionally, a Tier 2 review must be conducted for each pollutant of concern on the appropriate water body segment

### 5.2. EXISTING WATER QUALITY

No existing water quality data was submitted. All POCs were considered to be Tier 2 and significantly degraded in the absence of existing water quality.

**5.3. DEMONSTRATION OF NECESSITY AND SOCIAL AND ECONOMIC IMPORTANCE**

Missouri’s antidegradation implementation procedures specify that if the proposed activity results in significant degradation then a review of reasonable alternatives and social and economic considerations is required. Six (6) alternatives from non-degrading to less degrading to degrading alternatives were evaluated. The six alternatives and the level of degradation are: recirculating sand filter, base case, degrading; land application, non-degrading; trickling filter system, degrading; regionalization, non-degrading; repair of existing facility, degrading; and mechanical aeration (extended aeration), degrading.

The base case alternative is to remove the old system and to install two septic tanks followed by a recirculating sand filter system. This system will allow for high treatment levels of all pollutants reasonably expected to be discharged at a relatively low cost. The expected cost of this system is \$34,500. One non-degrading alternative considered was land application. This alternative was technically feasible however at a cost significantly higher (over 300%) than the base case recirculating sand filter system. The expected cost of this system is \$136,000. Land application systems tend to be rather expensive due to the fact that the effluent must be treated prior to application. Therefore the system requires land to apply to, an application system, as well as a treatment system comparable to the base case. Considering all this information, this system is considered not economically efficient. The trickling filter facility is a degrading alternative. This option was not deemed technically feasible due to the fact that the stream is a losing stream and this facility would not be capable of meeting losing stream limits for BOD. This facility would also cost approximately \$86,000, which is over 200% of the base case cost. So the facility is not economically efficient. Alternative 4, discharge to a regional system, while always the preferred option of the Department was very cost prohibitive. The City of St. Clair is a regional authority and has the authority to require Anaconda School to connect to their treatment system. However a waiver was obtained from the City, allowing Anaconda School to develop their own treatment system. The estimated cost for the school to pay for connection to the regional treatment system is \$195,000. The majority of this cost is the approximately 3 miles of forcemain piping required to connect. At over 500% the cost of the base case this option is not economically efficient. Alternative 5 is the repair of the existing system. The current system is a septic tank system followed by an intermittent recirculating sand filter that discharges to an absorption field. The soil at this site is Hobson Loam at a 3 to 8 percent grade. This is not a conducive system. The soil at this site and in this region is the reason why the currently unpermitted system is being replaced. Therefore this treatment type is not practicable. The final treatment option is a mechanical or extended aeration plant. This alternative’s treatment is not capable of meeting the losing stream limits therefore this is not a practicable treatment. Since there was only one treatment option deemed feasible and economically efficient, affordability was not considered in the report in this review.

Alternatives	Alternative type	Practicable	Present Worth	Cost / day over 20 years	Economic Efficiency	Affordable
recirculating sand filter	base case	Y	\$34,500	\$5	Y	
land application	non-degrading	Y	\$136,200	\$19	N	
trickling filter	degrading	N	N/A			
regionalization	non-degrading	Y	\$195,100	\$27	N	
repair of existing system	degrading	N	N/A			
mechanical plan	degrading	N	N/A			

The following is an excerpt from the social and economic importance section in the Antidegradation Review Report submitted by the consultant:

“The Anaconda School treatment facility currently serves the operations at the school. The Anaconda School is the Franklin County Special Education Cooperative that provides special education for the surrounding school districts (Steelville, St. Clair, etc.) for grades pre-K through 12. The school also employs 20 staff. The social impact provided by the school and its continued existence is immeasurable.”

The upgrade of the current facility is required for continued operation of the school. The school provides access to learning for students that would otherwise have to pay substantial amounts for private education or not have the opportunity to participate in school at all. This facility has significant social importance to the community of St. Clair and the immediate surrounding areas.

### 5.3.1.REGIONALIZATION ALTERNATIVE

Within Section II B 1. of the AIP, discussion of the potential for discharge to a regional waste water collection system is mentioned. The applicant provided discussion of this alternative. The alternative analysis mentions the City of St. Clair as the regional authority. This authority is operative, however they provided a waiver required under 10 CSR 20-6.010(3) (B). The aforementioned wavier is attached as Appendix B.

NEEDS A WAIVER TO PREVENT CONFLICT WITH AREA WIDE MANAGEMENT PLAN APPROVED UNDER SECTION 208 OF THE CLEAN WATER ACT AND UNDER 10 CSR 20-6.010(3) (B) 1 CONTINUING AUTHORITIES? (Y OR N) Y

## 6. General Assumptions of the Water Quality and Antidegradation Review

1. A Water Quality and Antidegradation Review (WQAR) assumes that [10 CSR 20-6.010(3) Continuing Authorities and 10 CSR 20-6.010(4) (D), consideration for no discharge] has been or will be addressed in a Missouri State Operating Permit or Construction Permit Application.
2. A WQAR does not indicate approval or disapproval of alternative analysis as per [10 CSR 20-7.015(4) Losing Streams], and/or any section of the effluent regulations.
3. Changes to Federal and State Regulations made after the drafting of this WQAR may alter Water Quality Based Effluent Limits (WQBEL).
4. Effluent limitations derived from Federal or Missouri State Regulations (FSR) may be WQBEL or Effluent Limit Guidelines (ELG).
5. WQBEL supercede ELG only when they are more stringent. Mass limits derived from technology based limits are still appropriate.
6. A WQAR does not allow discharges to waters of the state, and shall not be construed as a National Pollution Discharge Elimination System or Missouri State Operating Permit to discharge or a permit to construct, modify, or upgrade.
7. Limitations and other requirements in a WQAR may change as Water Quality Standards, Methodology, and Implementation procedures change.
8. Nothing in this WQAR removes any obligations to comply with county or other local ordinances or restrictions.

## 7. Mixing Considerations

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

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

## 8. Permit Limits and Information

WASTELOAD ALLOCATION  
STUDY CONDUCTED (Y OR N):

N

USE ATTAINABILITY  
ANALYSIS CONDUCTED (Y OR N):

N

WHOLE BODY CONTACT  
USE RETAINED (Y OR N):

N

**OUTFALL #001**

TABLE 2. EFFLUENT LIMITS

PARAMETER	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	BASIS FOR LIMIT (NOTE 1)	MONITORING FREQUENCY
FLOW	*		*	FSR	Daily
BOD <sub>5</sub> (MG/L)		15	10	FSR	Once/month
TSS (MG/L)		20	15	FSR	Once/month
PH (S.U.)	6.5 – 9.0		6.5 – 9.0	FSR	Once/month
AMMONIA AS N (MG/L) (MAY 1 – OCT 31)	3.6		1.4	WQBEL	Once/month
AMMONIA AS N (MG/L) (NOV 1 – APR 30)	7.5		2.9	WQBEL	Once/month
ESCHERICHIA COLIFORM (E. COLI)			126***	WQS	Once/Week
FECAL COLIFORM	1000		400***	FSR	Once/month
CHLORINE, TOTAL RESIDUAL (MG/L)	0.017		0.008	MDL	Once/month
NITRITE PLUS NITRATE(MG/L)**	20.1		10	WQBEL	Once/month

\* Monitoring requirements only.

\*\* Limits for Nitrates may be imposed for losing stream pending Nitrates plus Nitrites policy

\*\*\* Average Monthly Values for Fecal Coliform and E. Coli are geometric means, reported in # colonies / 100mL

NOTE 1– WATER QUALITY-BASED EFFLUENT LIMITATION -- WQBEL; MINIMALLY DEGRADING EFFLUENT LIMIT -- MDEL; NO DEGRADATION LIMIT -- NDL; FSR -- FEDERAL/STATE REGULATION; MINIMUM DETECTION LIMIT -- MDL; WATER QUALITY STANDARD – WQS; NOT APPLICABLE -- N/A. ALSO, PLEASE SEE THE **GENERAL ASSUMPTIONS OF THE WQAR #4 & #5.**

## 9. Receiving Water Monitoring Requirements

No receiving water monitoring requirements recommended at this time.

## 10. Derivation and Discussion of Limits

Wasteload allocations and limits were calculated using two methods:

- 1) Water quality-based – Using water quality criteria or water quality model results and the dilution equation below:

$$C = \frac{(Cs \times Qs) + (Ce \times Qe)}{(Qe + Qs)} \quad (\text{EPA/505/2-90-001, Section 4.5.5})$$

Where C = downstream concentration

Cs = upstream concentration

Qs = upstream flow

Ce = effluent concentration

Qe = effluent flow

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

- 2) **Alternative Analysis-based** – Using the preferred alternative’s treatment capacity provided by the consultant as the WLA, the significantly-degrading effluent average monthly and daily maximum limits are determined by applying the WLA as the average monthly (AML) and multiplying the AML by 1.5 to derive the maximum daily limit. This is an accepted procedure that is defined in USEPA’s “Technical Support Document For Water Quality-based Toxics Control” (EPA/505/2-90-001).

Note: Significantly-degrading effluent limits have been based on the authority included in Section III. Permit Consideration of the AIP. Also under 40 CFR 133.105, permitting authorities shall require more stringent limitations than equivalent to secondary treatment limitations for 1) existing facilities if the permitting authority determines that the 30-day average and 7-day average BOD<sub>5</sub> and SS effluent values that could be achievable through proper operation and maintenance of the treatment works, and 2) new facilities if the permitting authority determines that the 30-day average and 7-day average BOD<sub>5</sub> and SS effluent values that could be achievable through proper operation and maintenance of the treatment works, considering the design capability of the treatment process.

### **10.1. OUTFALL #001 – MAIN FACILITY OUTFALL**

#### **10.2. LIMIT DERIVATION**

- **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 (BOD<sub>5</sub>).** BOD<sub>5</sub> limits of 10 mg/L monthly average, 15 mg/L maximum daily were proposed. This is equivalent to BOD<sub>5</sub> limits set forth in 10 CSR 20-7.015(4)(B)1.
- **Total Suspended Solids (TSS).** TSS limits of 15 mg/L monthly average, 20 mg/L maximum daily were proposed. This is equivalent to TSS limits set forth in 10 CSR 20-7.015(4)(B)2.
- **pH.** pH shall be maintained in the range from six to nine (6.5 – 9.0) standard units [10 CSR 20-7.015 (8)(B)2.].

- **Total Ammonia Nitrogen.** The applicant supplied a preferred alternative limit of 1.5 mg/L and 3.1 mg/L for summer and winter seasons respectively. These submitted limits are considered to be the average monthly limits (AML's). From the AML, the long term average (LTA) can be back calculated. With the LTA a maximum daily limit (MDL) can also be calculated. Using this method, the limits would be less stringent than the Water Quality Based Effluent Limit, therefore we are applying the water quality-based effluent limits below.

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

Summer: May 1 – October 31, Winter: November 1 – April 30.

Summer Temp. = 26°C

$$WLA_c = 1.5 \text{ mg/L}$$

$$WLA_a = 12.1 \text{ mg/L}$$

$$LTA_c = 1.5 \text{ mg/L} (0.780) = \mathbf{1.17 \text{ mg/L}}$$

[CV = 0.6, 99<sup>th</sup> Percentile, 30 day average]

$$LTA_a = 12.1 \text{ mg/L} (0.321) = 3.9 \text{ mg/L}$$

[CV = 0.6, 99<sup>th</sup> Percentile, 4 day average]

$$MDL = 1.17 \text{ mg/L} (3.11) = 3.6 \text{ mg/L}$$

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

$$AML = 1.17 \text{ mg/L} (1.19) = 1.4 \text{ mg/L}$$

[CV = 0.6, 95<sup>th</sup> Percentile, n = 30]

Winter Temp. = 6°C

$$WLA_c = 3.1 \text{ mg/L}$$

$$WLA_a = 12.1 \text{ mg/L}$$

$$LTA_c = 3.1 \text{ mg/L} (0.780) = \mathbf{2.42 \text{ mg/L}}$$

[CV = 0.6, 99<sup>th</sup> Percentile, 30 day average]

$$LTA_a = 12.1 \text{ mg/L} (0.321) = 3.9 \text{ mg/L}$$

[CV = 0.6, 99<sup>th</sup> Percentile, 4 day average]

$$MDL = 2.42 \text{ mg/L} (3.11) = 7.5 \text{ mg/L}$$

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

$$AML = 2.42 \text{ mg/L} (1.19) = 2.9 \text{ mg/L}$$

[CV = 0.6, 95<sup>th</sup> Percentile, n = 30]

Season	Maximum Daily Limit (mg/l)	Average Monthly Limit (mg/l)
Summer	3.6	1.4
Winter	7.5	2.9

- **E. coli.** This facility is required to have E. coli effluent limitations. For discharge to a losing stream Missouri Water Quality Standards 10 CSR 7.031 (4)(C) requires an E. Coli effluent limit of 126 colonies per 100 mL year round for discharges to losing streams. The U.S EPA requires effluent limits to be expressed as average weekly for Publically-owned Treatment Works (POTW's) that continuously discharge. The Department is currently working with EPA to develop appropriate average weekly limits. The operating permit will likely include weekly limits for E-coli.
- **Fecal Coliform.** Discharge shall not contain more than a monthly geometric mean of 400 colonies/100 mL and a daily maximum of 1000 colonies/100 mL. Disinfection is required year round. 10 CSR 20-7.015(4)(B)4(will be removed on 06/15/2010). If the permit becomes effective prior to 06/15/2010 then the permittee will be required to test for fecal coliform. If the permit becomes effective subsequent to 06/15/2010, fecal coliform shall not be included in the operating permit.

- **Nitrite plus Nitrate.** DWS criterion = 10mg/L

Chronic WLA:  $C_c = 10 \text{ mg/L}$

Set the Average Monthly Limit equal to the WLA [per EPA/505/2-90-001 Section 5.4.4]

$$\text{AML} = 10.0 \text{ mg/L}$$

$$\text{MDL} = \text{AML} * 2.01 \quad [\text{per EPA/505/2-90-001 Section 5.4.4}]$$

$$\text{MDL} = 20.1 \text{ mg/L} \quad [\text{CV} = 0.6, 99^{\text{th}} \text{ Percentile, } n = 4]$$

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

Chronic WLA:  $C_c = 10 \text{ } \mu\text{g/L}$

Acute WLA:  $C_c = 19 \text{ } \mu\text{g/L}$

$$\text{LTA}_c = 10 (0.527) = 5.3 \text{ } \mu\text{g/L} \quad [\text{CV} = 0.6, 99^{\text{th}} \text{ Percentile}]$$

$$\text{LTA}_a = 19 (0.321) = 6.1 \text{ } \mu\text{g/L} \quad [\text{CV} = 0.6, 99^{\text{th}} \text{ Percentile}]$$

Use most protective number of  $\text{LTA}_c$  or  $\text{LTA}_a$ .

$$\text{MDL} = 5.3 (3.11) = 16.5 \text{ } \mu\text{g/L} \quad [\text{CV} = 0.6, 99^{\text{th}} \text{ Percentile}]$$

$$\text{AML} = 5.3 (1.55) = 8.2 \text{ } \mu\text{g/L} \quad [\text{CV} = 0.6, 95^{\text{th}} \text{ Percentile, } n = 4]$$

Minimally degrading effluent limits that are discussed in Attachment B are 0.017 mg/L as AML and 0.008 mg/L as MDL. If chlorine is used as a disinfectant, standard compliance language for TRC, including the minimum level (ML), should be included in the permit.

## 11. ANTIDegradation Review Preliminary Determination

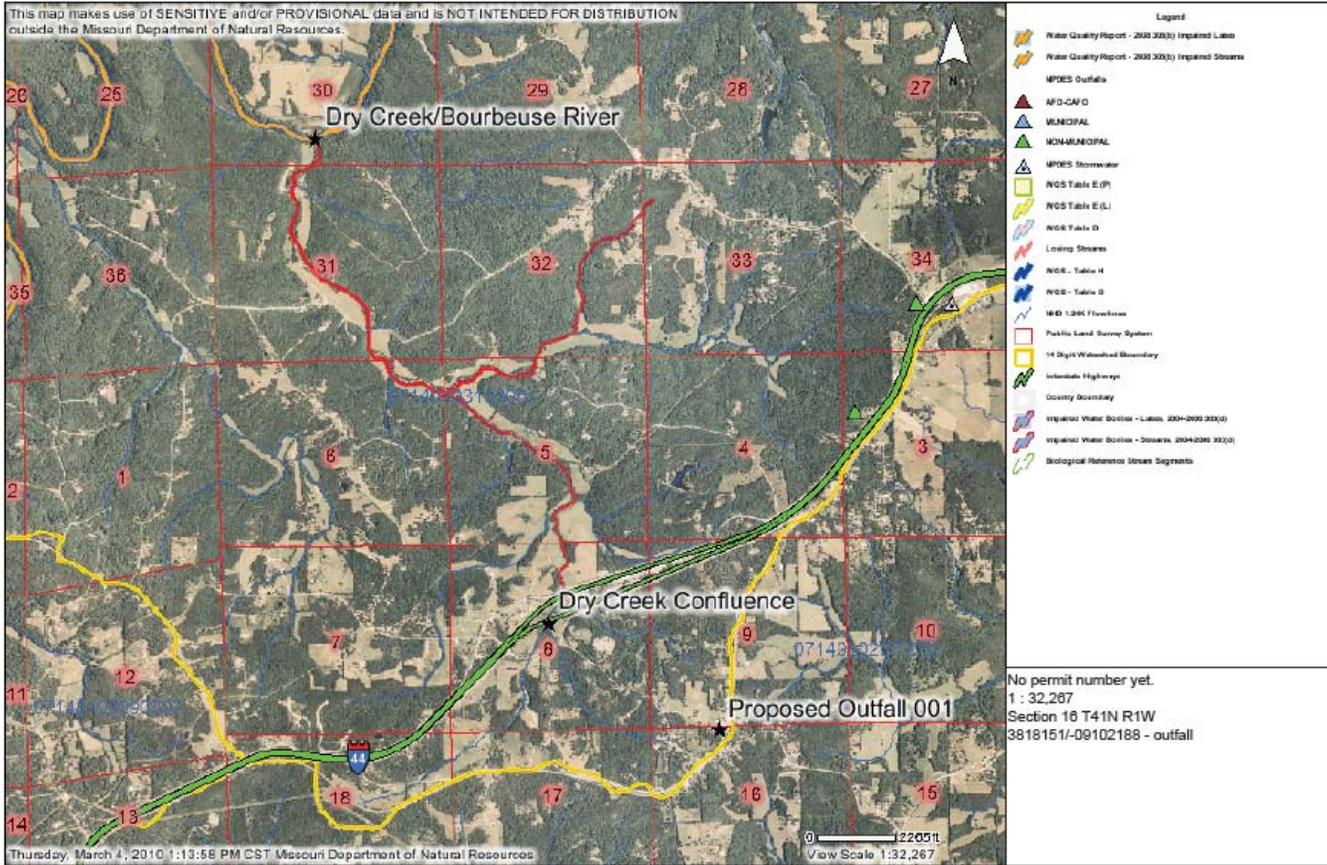
The proposed new facility discharge, Anaconda School WWTF, 0.001 MGD will result in significant degradation of the stream segments identified. A recirculating sand filter was determined to be the base case technology, the lowest cost alternative that meets technology and water quality based effluent limitations. The cost effectiveness of the other technologies were evaluated, and no other treatment alternatives were found to be practicable, and economically efficient.

Per the requirements of the AIP, the effluent limits in this review were developed to be protective of beneficial uses and to attain the highest statutory and regulatory requirements. MDNR has determined that the submitted review is sufficient and meets the requirements of the AIP. No further analysis is needed for this discharge.

Reviewer: Greg Brossier  
Date: 03/18/2010  
Unit Chief: John Rustige, P.E.

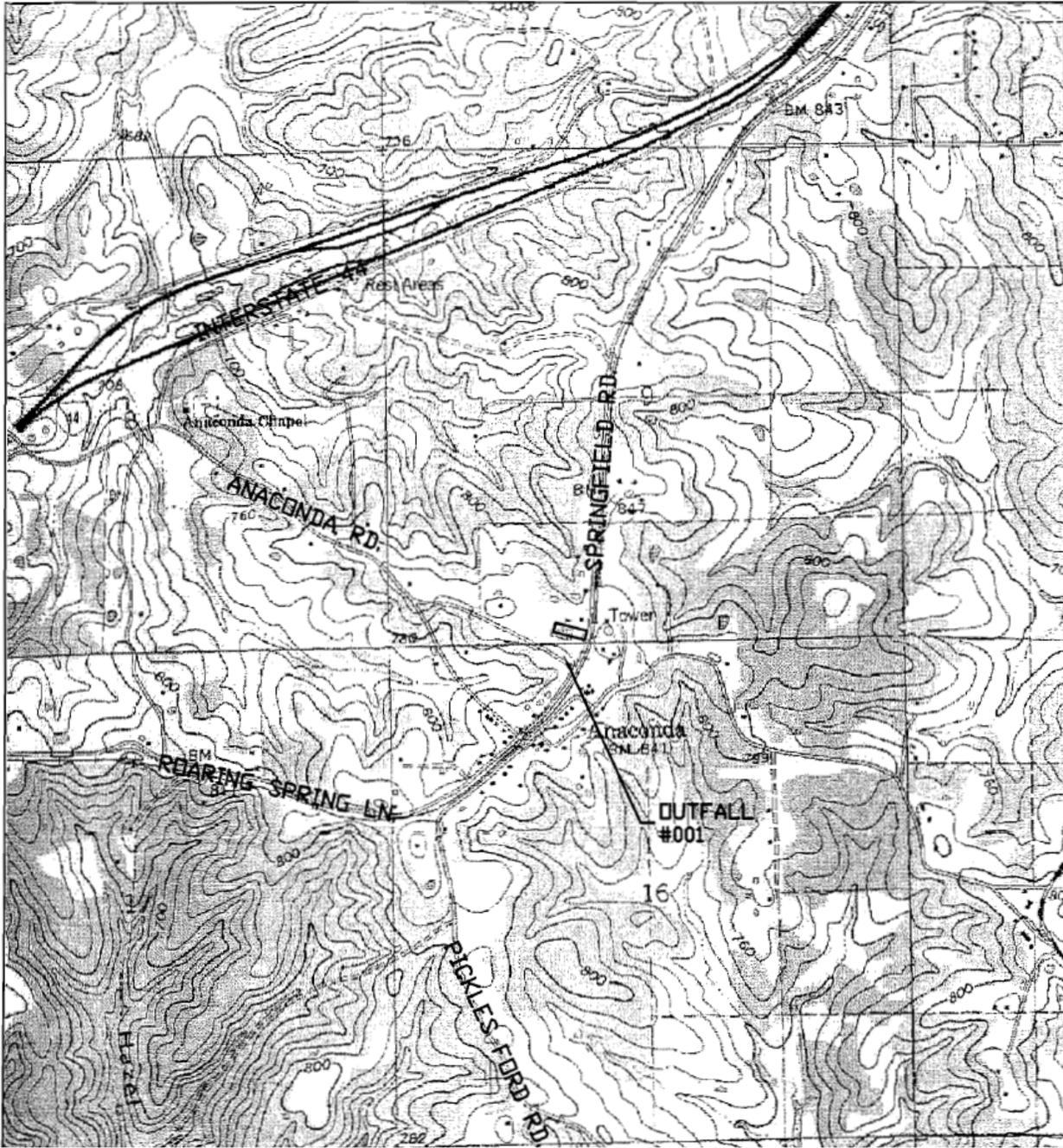
Appendix A: Map of Facility and Location Information

Anaconda School Sewage Proposed Facility



Missouri Department of Natural Resources

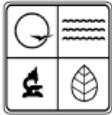
Disclaimer: Although this map has been compiled by the Missouri Department of Natural Resources, no warranty, expressed or implied, is made by the department as to the accuracy of the data and related materials. The act of distribution shall not constitute any such warranty, and no responsibility



### **Appendix B: Antidegradation Review Summary Attachments**

The attachments that follow contain summary information provided by the applicant, St. Clair R-XIII School District. MDNR staff determined that changes must be made to the information contained within these attachments. The following were modified and can be found within the MDNR WQAR:

- 1) Tier Determination and Effluent Limit Summary Sheet:
  - a. The bacteria listed was correct as E.Coli, however the applicant used the fecal coliform limits from the effluent regulations. These limits are to be removed from the effluent regulations leaving only E.Coli. Therefore staff used the E.Coli limits found in the Water Quality Standards.



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
 WATER PROTECTION PROGRAM  
**ANTIDEGRADATION REVIEW SUMMARY**  
**TIER DETERMINATION AND EFFLUENT LIMIT SUMMARY**

<b>1. FACILITY</b>			
NAME ST. CLAIR R-XIII SCHOOL DISTRICT		TELEPHONE NUMBER WITH AREA CODE 636-629-7670	
ADDRESS (PHYSICAL) 1773 S. Springfield	CITY ST. CLAIR	STATE MO	ZIP CODE 63077
<b>2. RECEIVING WATER BODY SEGMENT #1</b>			
NAME UNNAMED TRIBUTARY DRY CREEK			
2.1	UPPER END OF SEGMENT (Location of discharge) UTM _____ OR Lat 38d18'14"N Long 91d02'20"W		
2.2	LOWER END OF SEGMENT UTM _____ OR Lat _____ Long _____		
Per the Missouri Antidegradation Rule and Implementation Procedure, or AIP, the definition of a segment, "a segment is a section of water that is bound, at a minimum, by significant existing sources and confluences with other significant water bodies."			
<b>3. WATER BODY SEGMENT #2 (IF APPLICABLE)</b>			
NAME DRY CREEK			
3.1	UPPER END OF SEGMENT UTM _____ OR Lat 38d19'21"N Long 91d03'08"W		
3.2	LOWER END OF SEGMENT UTM _____ OR Lat _____ Long _____		
<b>4. WATER BODY SEGMENT #3 (IF APPLICABLE)</b>			
NAME BOURBEUSE RIVER			
4.1	UPPER END OF SEGMENT UTM _____ OR Lat 38d21'00"N Long 91d04'38"W		
4.2	LOWER END OF SEGMENT UTM _____ OR Lat _____ Long _____		
<b>5. PROJECT INFORMATION</b>			
<p><b>Is the receiving water body an Outstanding National Resource Water, an Outstanding State Resource Water, or drainage thereto?</b>  <input type="checkbox"/> Yes      <input checked="" type="checkbox"/> No</p> <p>In Tables D and E of 10 CSR 20-7.031, Outstanding National Resource Waters and Outstanding State Resource Water are listed. Per the Antidegradation Implementation Procedure Section 1.B.3., "any degradation of water quality is prohibited in these waters unless the discharge only results in temporary degradation." Therefore, if degradation is significant or minimal, the Antidegradation Review will be denied.</p>			
<p><b>Will the proposed discharge of all pollutants of concern, or POCs, result in no net increase in the ambient water quality concentration of the receiving water after mixing?</b>  <input type="checkbox"/> Yes      <input checked="" type="checkbox"/> No</p> <p>If yes, submit a summary table showing the levels of each pollutant of concern before and after the proposed discharge in the receiving water and then complete Attachment B for the first downstream classified water body segment.</p>			
<p><b>Will the discharge result in temporary degradation?</b>  <input type="checkbox"/> Yes      <input checked="" type="checkbox"/> No</p> <p>If yes, complete Attachment C.</p>			
<p><b>Has the project been determined as non-degrading?</b>  <input type="checkbox"/> Yes      <input checked="" type="checkbox"/> No</p> <p>If yes, complete No Degradation Evaluation – Conclusion of Antidegradation Review form.          Submit with the appropriate Construction Permit Application as no antidegradation review is required.</p>			
<b>If yes to one of the above questions, skip to Section 8 - Wet Weather.</b>			



**STANDARD CONDITIONS FOR NPDES PERMITS  
ISSUED BY  
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES  
MISSOURI CLEAN WATER COMMISSION**

Revised  
October 1, 1980

**PART I - GENERAL CONDITIONS  
SECTION A - MONITORING AND REPORTING**

1. **Representative Sampling**
  - a. Samples and measurements taken as required herein shall be representative of the nature and volume, respectively, of the monitored discharge. All samples shall be taken at the outfall(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.
  - b. Monitoring results shall be recorded and reported on forms provided by the Department, postmarked no later than the 28th day of the month following the completed reporting period. Signed copies of these, and all other reports required herein, shall be submitted to the respective Department Regional Office, the Regional Office address is indicated in the cover letter transmitting the permit.
2. **Schedule of Compliance**

No later than fourteen (14) calendar days following each date identified in the "Schedule of Compliance", the permittee shall submit to the respective Department Regional Office as required therein, either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements, or if there are no more scheduled requirements, when such noncompliance will be corrected. The Regional Office address is indicated in the cover letter transmitting the permit.
3. **Definitions**

Definitions as set forth in the Missouri Clean Water Law and Missouri Clean Water Commission Definition Regulation 10 CSR 20-2.010 shall apply to terms used herein.
4. **Test Procedures**

Test procedures for the analysis of pollutant shall be in accordance with the Missouri Clean Water Commission Effluent Regulation 10 CSR 20-7015.
5. **Recording of Results**
  - a. For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:
    - (i) the date, exact place, and time of sampling or measurements;
    - (ii) the individual(s) who performed the sampling or measurements;
    - (iii) the date(s) analyses were performed;
    - (iv) the individual(s) who performed the analyses;
    - (v) the analytical techniques or methods used; and
    - (vi) the results of such analyses.
  - b. The Federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six (6) months per violation, or both.
  - c. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
6. **Additional Monitoring by Permittee**

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Monitoring Report Form. Such increased frequency shall also be indicated.

7. **Records Retention**

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recording for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

**SECTION B - MANAGEMENT REQUIREMENTS**

1. **Change in Discharge**
  - a. All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant not authorized by this permit or any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.
  - b. Any facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants shall be reported by submission of a new NPDES application at least sixty (60) days before each such change, or, if they will not violate the effluent limitations specified in the permit, by notice to the Department at least thirty (30) days before such changes.
2. **Noncompliance Notification**
  - a. If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Department with the following information, in writing within five (5) days of becoming aware of such conditions:
    - (i) a description of the discharge and cause of noncompliance, and
    - (ii) the period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.
  - b. Twenty-four hour reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally with 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided with five (5) days of the time the permittee becomes aware of the circumstances. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
3. **Facilities Operation**

Permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions. Operators or supervisors of operations at publicly owned or publicly regulated wastewater treatment facilities shall be certified in accordance with 10 CSR 209.020(2) and any other applicable law or regulation. Operators of other wastewater treatment facilities, water contaminant source or point sources, shall, upon request by the Department, demonstrate that wastewater treatment equipment and facilities are effectively operated and maintained by competent personnel.
4. **Adverse Impact**

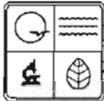
The permittee shall take all necessary steps to minimize any adverse impact to waters of the state resulting from noncompliance with any effluent limitations specified in this permit or set forth in the Missouri Clean Water Law and Regulations (hereinafter the Law and Regulations), including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

- a. Any bypass or shut down of a wastewater treatment facility and tributary sewer system or any part of such a facility and sewer system that results in a violation of permit limits or conditions is prohibited except:
    - (i) where unavoidable to prevent loss of life, personal injury, or severe property damages; and
    - (ii) where unavoidable excessive storm drainage or runoff would catastrophically damage any facilities or processes necessary for compliance with the effluent limitations and conditions of this permit;
    - (iii) where maintenance is necessary to ensure efficient operation and alternative measures have been taken to maintain effluent quality during the period of maintenance.
  - b. The permittee shall notify the Department in writing of all bypasses or shut down that result in a violation of permit limits or conditions. This section does not excuse any person from liability, unless such relief is otherwise provided by the statute.
6. **Removed Substances**  
Solids, sludges, filter backwash, or any other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutants from entering waters of the state unless permitted by the Law, and a permanent record of the date and time, volume and methods of removal and disposal of such substances shall be maintained by the permittee.
  7. **Power Failures**  
In order to maintain compliance with the effluent limitations and other provisions of this permit, the permittee shall either:
    - a. in accordance with the "Schedule of Compliance", provide an alternative power source sufficient to operate the wastewater control facilities; or,
    - b. if such alternative power source is not in existence, and no date for its implementation appears in the Compliance Schedule, halt or otherwise control production and all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.
  8. **Right of Entry**  
For the purpose of inspecting, monitoring, or sampling the point source, water contaminant source, or wastewater treatment facility for compliance with the Clean Water Law and these regulations, authorized representatives of the Department, shall be allowed by the permittee, upon presentation of credentials and at reasonable times;
    - a. to enter upon permittee's premises in which a point source, water contaminant source, or wastewater treatment facility is located or in which any records are required to be kept under terms and conditions of the permit;
    - b. to have access to, or copy, any records required to be kept under terms and conditions of the permit;
    - c. to inspect any monitoring equipment or method required in the permit;
    - d. to inspect any collection, treatment, or discharge facility covered under the permit; and
    - e. to sample any wastewater at any point in the collection system or treatment process.
  9. **Permits Transferable**
    - a. Subject to Section (3) of 10 CSR 20-6.010 an operating permit may be transferred upon submission to the Department of an application to transfer signed by a new owner. Until such time as the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
    - b. The Department, within thirty (30) days of receipt of the application shall notify the new permittee of its intent to revoke and reissue or transfer the permit.
  10. **Availability of Reports**  
Except for data determined to be confidential under Section 308 of the Act, and the Law and Missouri Clean Water Commission Regulation for Public Participation, Hearings and Notice to Governmental Agencies 10 CSR 20-6.020, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by statute, effluent data shall not be considered confidential. Knowingly making any false statement on any such report shall be subject to the imposition of criminal penalties as provided in Section 204.076 of the Law.
  - a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
    - (i) violation of any terms or conditions of this permit or the Law;
    - (ii) having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
    - (iii) a change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge, or
    - (iv) any reason set forth in the Law and Regulations.
  - b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
12. **Permit Modification - Less Stringent Requirements**  
If any permit provisions are based on legal requirements which are lessened or removed, and should no other basis exist for such permit provisions, the permit shall be modified after notice and opportunity for a hearing.
  13. **Civil and Criminal Liability**  
Except as authorized by statute and provided in permit conditions on "Bypassing" (Standard Condition B-5) and "Power Failures" (Standard Condition B-7) nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.
  14. **Oil and Hazardous Substance Liability**  
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act, and the Law and Regulations. Oil and hazardous materials discharges must be reported in compliance with the requirements of the Federal Clean Water Act.
  15. **State Laws**  
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state statute or regulations.
  16. **Property Rights**  
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of or violation of federal, state or local laws or regulations.
  17. **Duty to Reapply**  
If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit 180 days prior to expiration of this permit.
  18. **Toxic Pollutants**  
If a toxic effluent standard, prohibition, or schedule of compliance is established, under Section 307(a) of the Federal Clean Water Act for a toxic pollutant in the discharge of permittee's facility and such standard is more stringent than the limitations in the permit, then the more stringent standard, prohibition, or schedule shall be incorporated into the permit as one of its conditions, upon notice to the permittee.
  19. **Signatory Requirement**  
All reports, or information submitted to the Director shall be signed (see 40 CFR-122.6).
  20. **Rights Not Affected**  
Nothing in this permit shall affect the permittee's right to appeal or seek a variance from applicable laws or regulations as allowed by law.
  21. **Severability**  
The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

RECEIVED

AP 20099

NOV 18 2014



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
WATER PROTECTION PROGRAM  
FORM B: APPLICATION FOR OPERATING PERMIT FOR FACILITIES THAT RECEIVE  
PRIMARILY DOMESTIC WASTE AND HAVE A DESIGN FLOW LESS THAN OR  
EQUAL TO 100,000 GALLONS PER DAY

FOR AGENCY USE ONLY	
CHECK NUMBER	59003
DATE RECEIVED	11/18/14
FEE SUBMITTED	\$25.00

(25.00)  
8B

PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM

1. THIS APPLICATION IS FOR:

- An operating permit for a new or unpermitted facility. Construction Permit # \_\_\_\_\_  
(Please include completed antidegradation review or request for antidegradation review, see instructions)
- A site-specific operating permit renewal: Permit #MO- \_\_\_\_\_ Expiration Date \_\_\_\_\_
- A site-specific operating permit modification: Permit #MO- 0136409 Reason: Remove Nitrite plus Nitrate limits
- General permit (MOGD - Non POTWs discharging < 50,000 GPD): Permit #MO- \_\_\_\_\_ Expiration Date \_\_\_\_\_

1.1 Is the appropriate fee included with the application (see instructions for appropriate fee)?  YES  NO

2. FACILITY

NAME Anaconda School Sewage Treatment Facility		TELEPHONE NUMBER WITH AREA CODE (636) 629-7670	
ADDRESS (PHYSICAL) 1773 S. Springfield	CITY St. Clair	STATE MO	ZIP CODE 63077
2.1 Legal description: SE ¼, SE ¼, SW ¼, Sec. 9, T 41n, R 1W County Frankli			
2.2 UTM Coordinates Easting (X): 4241362.5 Northing (Y): 671471 <i>For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)</i>			
2.3 Name of receiving stream: Unnamed tributary to Dry Creek			
2.4 Number of outfalls: 1 Wastewater outfalls: 1 Stormwater outfalls: Instream monitoring sites:			

3. OWNER

NAME St. Clair R-XIII School District		EMAIL ADDRESS mdenbow@stcmo.org	TELEPHONE NUMBER WITH AREA CODE (636) 629-7670
ADDRESS 905 Bardot St.	CITY St. Clair	STATE MO	ZIP CODE 63077
3.1 Request review of draft permit prior to public notice? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
3.2 Are you a publicly owned treatment works? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
3.3 Are you a privately owned treatment works? YES <input checked="" type="checkbox"/> NO			
3.4 Are you a privately owned treatment facility regulated by the Public Service Commission? YES <input checked="" type="checkbox"/> NO			

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

NAME St. Clair R-XIII School District		EMAIL ADDRESS mdenbow@stcmo.org	TELEPHONE NUMBER WITH AREA CODE (636) 629-7670
ADDRESS 905 Bardot St.	CITY St. Clair	STATE MO	ZIP CODE 63077

If the continuing authority is different than the owner, please include a copy of the contract agreement between the two parties and a description of the responsibilities of both parties within the agreement.

5. OPERATOR

NAME Robert J. Pelton	TITLE Operator	CERTIFICATE NUMBER 9337
EMAIL ADDRESS ripelton@sbcglobal.net	TELEPHONE NUMBER WITH AREA CODE (636) 629-3979	

6. FACILITY CONTACT

NAME David Vogt		TITLE Maintenance Supervisor	
EMAIL ADDRESS dvogt@stcmo.org	TELEPHONE NUMBER WITH AREA CODE (636) 629-7670		
ADDRESS 905 Bardot St.	CITY St. Clair	STATE MO	ZIP CODE 63077

SLR  
Franklin

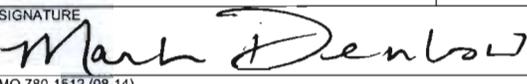
**7. DESCRIPTION OF FACILITY**

**7.1 Process Flow Diagram or Schematic:** Provide a diagram showing the processes of the treatment plant. Show all of the treatment units, including disinfection (e.g. – chlorination and dechlorination), influents and outfalls. Indicate any treatment process changes in the routing of wastewater during dry weather and peak wet weather. Include a brief narrative description of the diagram. Attach sheets as necessary.

See attached Process Flow Diagram

**7.2** Attach an aerial photograph or USGS topographic map showing the location of the facility and outfall.

8. ADDITIONAL FACILITY INFORMATION	
8.1	Facility SIC code: <u>8211</u> Discharge SIC code: _____
8.2	Number of people presently connected or population equivalent (P.E.) <u>10</u> Design P.E. <u>10</u>
8.3	Connections to the facility: Number of units presently connected: Homes _____ Trailers _____ Apartments _____ Other (including industrial) <u>1</u> Number of commercial establishments: _____
8.4	Design flow: <u>1,000</u> gpd Actual flow: <u>700</u> gpd
8.5	Will discharge be continuous through the year? Yes <input checked="" type="checkbox"/> No (If yes, explain.) Discharge will occur during the following months: <u>August - May</u> How many days of the week will discharge occur? <u>5</u>
8.6	Is industrial waste discharged to the facility? Yes <input checked="" type="checkbox"/> No
8.7	Does the facility accept or process leachate from landfills? Yes <input checked="" type="checkbox"/> No
8.8	Is wastewater land applied? Yes <input checked="" type="checkbox"/> No If yes, is Form I attached? Yes <input type="checkbox"/> No
8.9	Does the facility discharge to a losing stream or sinkhole? Yes <input checked="" type="checkbox"/> No
8.10	Has a wasteload allocation study been completed for this facility? Yes <input checked="" type="checkbox"/> No
9. LABORATORY CONTROL INFORMATION	
LABORATORY WORK CONDUCTED BY PLANT PERSONNEL	
Lab work conducted outside of plant. <input checked="" type="checkbox"/> Yes No	
Push-button or visual methods for simple test such as pH, settleable solids. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Additional procedures such as dissolved oxygen, chemical oxygen demand, biological oxygen demand, titrations, solids, volatile content. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
More advanced determinations such as BOD seeding procedures, fecal coliform, nutrients, total oils, phenols, etc. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Highly sophisticated instrumentation, such as atomic absorption and gas chromatograph. Yes <input checked="" type="checkbox"/> No	
10. COLLECTION SYSTEM	
10.1	Length of pipe in the sewer collection system? <u>100</u> Feet, or _____ Miles (either unit is appropriate)
10.2	Does significant infiltration occur in the collection system? Yes <input checked="" type="checkbox"/> No If yes, briefly explain any steps underway or planned to minimize inflow and infiltration:
11. BYPASSING	
Does any bypassing occur in the collection system or at the treatment facility? Yes <input checked="" type="checkbox"/> No If yes, explain:	

12. SLUDGE HANDLING, USE AND DISPOSAL			
12.1	Is the sludge a hazardous waste as defined by 10 CSR 25? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
12.2	Sludge production, including sludge received from others: .07 Design dry tons/year .07 Actual dry tons/year		
12.3	Capacity of sludge holding structures: Sludge storage provided: _____ cubic feet; _____ days of storage; _____ average percent solids of sludge; <input checked="" type="checkbox"/> No sludge storage is provided. <input type="checkbox"/> Sludge is stored in lagoon.		
12.4	Type of Storage:	<input type="checkbox"/> Holding tank <input type="checkbox"/> Basin <input type="checkbox"/> Concrete Pad	<input type="checkbox"/> Building <input type="checkbox"/> Lagoon <input type="checkbox"/> Other (Please describe) _____
12.5	Sludge Treatment:	<input type="checkbox"/> Anaerobic Digester <input type="checkbox"/> Storage Tank <input type="checkbox"/> Lime Stabilization	<input type="checkbox"/> Lagoon <input type="checkbox"/> Aerobic Digester <input type="checkbox"/> Air or Heat Drying <input type="checkbox"/> Composting <input type="checkbox"/> Other (Attach description)
12.6	Sludge Use or Disposal: <input type="checkbox"/> Land Application <input checked="" type="checkbox"/> Contract Hauler <input type="checkbox"/> Incineration <input type="checkbox"/> Solid waste landfill <input type="checkbox"/> Surface Disposal (Sludge Disposal Lagoon, Sludge held for more than two years) <input type="checkbox"/> Hauled to Another treatment facility <input type="checkbox"/> Sludge Retained in Wastewater treatment lagoon		
12.7	Person responsible for hauling sludge to disposal facility: <input type="checkbox"/> By applicant <input checked="" type="checkbox"/> By others (complete below)		
NAME		EMAIL ADDRESS	
Central Missouri Septic Service Inc.			
ADDRESS	CITY	STATE	ZIP CODE
9267 Highway AN	Rosebud	MO	63091
CONTACT PERSON	TELEPHONE NUMBER WITH AREA CODE	PERMIT NO.	
Alex Dwyer	(573) 764-3407	MO- G 821045	
12.8	Sludge use or disposal facility <input type="checkbox"/> By applicant <input checked="" type="checkbox"/> By others (Please complete below.)		
NAME		EMAIL ADDRESS	
Central Missouri Septic Service Inc.			
ADDRESS	CITY	STATE	ZIP CODE
9267 Highway AN	Rosebud	MO	63091
CONTACT PERSON	TELEPHONE NUMBER WITH AREA CODE	PERMIT NO.	
Alexy Dwyer	(573) 764-3407	MO- G 821045	
12.9	Does the sludge or biosolids disposal comply with federal sludge regulations under 40 CFR 503? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Please explain)		
13. CERTIFICATION			
I certify that I am familiar with the information contained in the application, that to the best of my knowledge and belief such information is true, complete and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions, subject to any legitimate appeal available to applicant under the Missouri Clean Water Law.			
NAME (TYPE OR PRINT)		OFFICIAL TITLE	TELEPHONE NUMBER WITH AREA CODE
Mark Denbow		Assistant Superintendent	(636) 629-7670
SIGNATURE		DATE SIGNED	
		10/31/14	

**INSTRUCTIONS FOR COMPLETING FORM B: APPLICATION FOR OPERATING PERMIT FOR FACILITIES THAT RECEIVE PRIMARILY DOMESTIC WASTE AND HAVE A DESIGN FLOW LESS THAN OR EQUAL TO 100,000 GALLONS PER DAY**

**(Facilities over 100,000 gallons per day of domestic waste must use FORM B2)  
(Facilities that receive wastes other than domestic please contact the department)**

1. Check the appropriate box. **Do not check more than one item.** Operating permit refers to a permit issued by the Department of Natural Resources' Water Protection Program. If an Antidegradation Review has not been conducted, please submit the application located at the following link to the Missouri Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102: [dnr.mo.gov/forms/780-1893-f.pdf](http://dnr.mo.gov/forms/780-1893-f.pdf).

**1.1 Fees Information:**

**DOMESTIC OPERATING PERMIT FEES – PRIVATE**

Annual operating permit fees are based on flow.

Annual fee/Design flow	Annual fee/Design flow	Annual fee/Design flow
\$100.....<5,000 gpd	\$375.....10,000-10,999 gpd	\$650.....16,000-16,999 gpd
\$150.....5,000-5,999 gpd	\$400.....11,000-11,999 gpd	\$800.....17,000-19,999 gpd
\$175.....6,000-6,999 gpd	\$450.....12,000-12,999 gpd	\$1,000.....20,000-22,999 gpd
\$200.....7,000-7,999 gpd	\$500.....13,000-13,999 gpd	\$2,000.....23,000-24,999 gpd
\$225.....8,000-8,999 gpd	\$550.....14,000-14,999 gpd	\$2,500.....25,000-29,999 gpd
\$250.....9,000-9,999 gpd	\$600.....15,000-15,999 gpd	\$3,000.....30,000 gpd -1 mgd

New domestic wastewater treatment facilities must submit the annual fee with the original application.

**If the application is for a site-specific permit re-issuance, send no fees.** You will be invoiced separately by the department on the anniversary date of the original permit. Permit fees must be current for the department to reissue the operating permit. Late fees of two percent per month are charged and added to outstanding annual fees.

**PUBLIC SEWER SYSTEM OPERATING PERMIT FEES** (city, public sewer district, public water district, or other publicly owned treatment works). Annual fee is based on number of service connections. The table of fees is in 10 CSR 20-6.011 and is available at [www.sos.mo.gov/adrules/csr/current/10csr/10c20-6a.pdf](http://www.sos.mo.gov/adrules/csr/current/10csr/10c20-6a.pdf). New public sewer system facilities should not submit any fee as the department will invoice the permittee.

**OPERATING PERMIT MODIFICATIONS**, including transfers, are subject to the following fees:

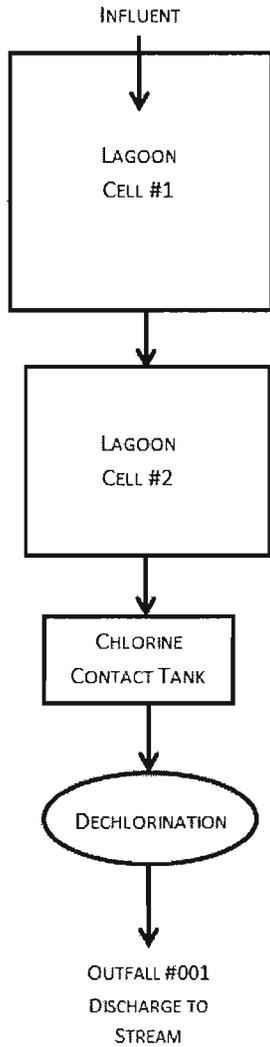
- a. Municipals - \$200 each.
- b. All others – \$100 each.

Note: Facility name or address changes where owner, operator and continuing authority remain the same are not considered transfers.

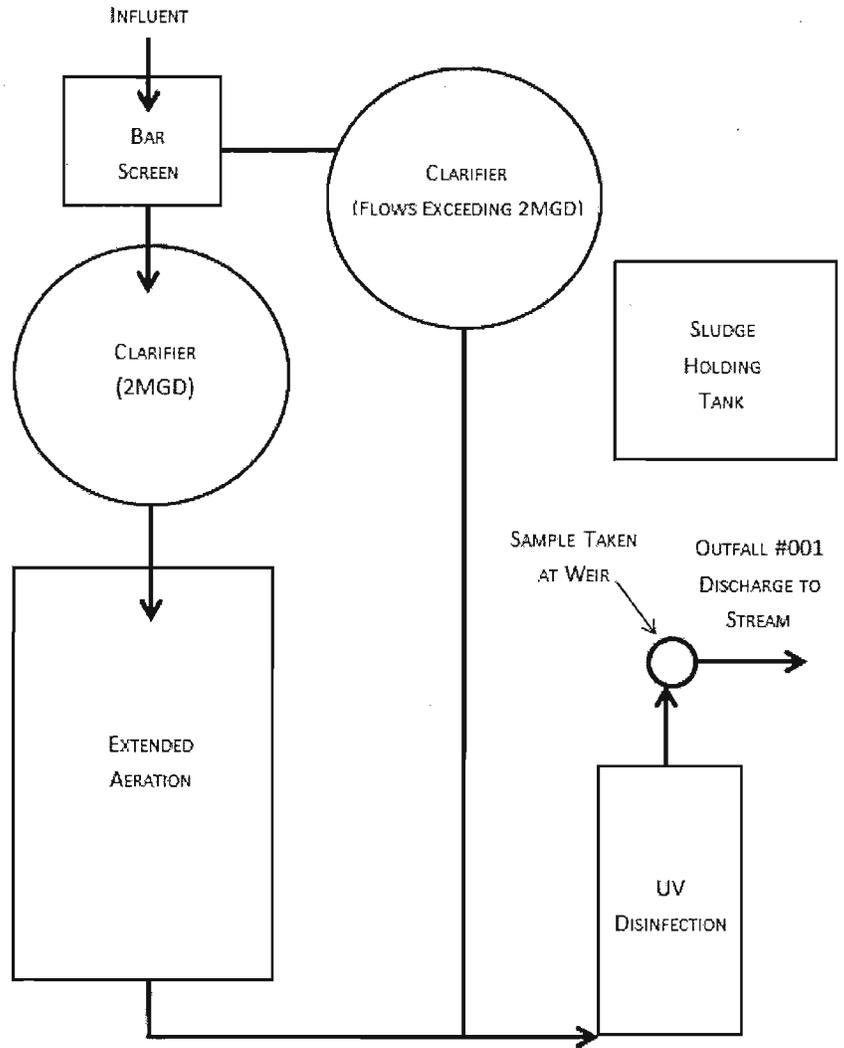
2. Name of Facility – Include the name by which this facility is locally known. Example: Southwest Sewage Treatment Plant, Country Club Mobile Home Park, etc. Provide the street address or location of the facility. If the facility lacks a street name or route number, provide the names of the closest intersection, highway, country road, etc.
  - 2.1 Self-explanatory
  - 2.2 Global Positioning System, or GPS, is a satellite-based navigation system. The department prefers that a GPS receiver is used at the outfall pipe and the displayed coordinates submitted. If access to a GPS receiver is not available, use a mapping system to approximate the coordinates; the department's mapping system is available at [www.dnr.mo.gov/internetmapviewer/](http://www.dnr.mo.gov/internetmapviewer/).
  - 2.3-2.4 Self-explanatory
3. Owner – Provide the legal name, mailing address, phone number, and email address of the owner. Prior to submitting a permit to public notice, the Department of Natural Resources shall provide the permit applicant 15 days to review the draft permit for nonsubstantive drafting errors. In the interest of expediting permit issuance, permit applicants may waive the opportunity to review draft permits prior to public notice.
  - 3.2-3.4 Self-explanatory.
4. Continuing Authority – Include the permanent organization that will serve as the continuing authority for the operation, maintenance and modernization of the facility. The regulatory requirement regarding continuing authority is available at [www.sos.mo.gov/adrules/csr/current/10csr/10c20-6a.pdf](http://www.sos.mo.gov/adrules/csr/current/10csr/10c20-6a.pdf) or contact the Department of Natural Resources Water Protection Program (see contact information below).
5. Operator – Provide the name, certificate number, title, mailing address, phone number, and e-mail address of the operator of the facility.
6. Provide the name, title, mailing address, work phone number, and e-mail address of a person who is thoroughly familiar with the operation of the facility and with the facts reported in this application and who can be contacted by the department.

7.1 Process Flow Diagram Examples

WASTEWATER TREATMENT LAGOON



WASTEWATER TREATMENT FACILITY



7.2 A topographic map is available on the Web at [www.dnr.mo.gov/internetmapviewer/](http://www.dnr.mo.gov/internetmapviewer/) or from the Department of Natural Resources' Geological Survey Division in Rolla at 573-368-2125.

8.1 For Standard Industrial Codes visit [www.osha.gov/pls/imis/sic\\_manual.html](http://www.osha.gov/pls/imis/sic_manual.html) or contact the Department of Natural Resources' Water Protection Program. For example, a family style restaurant has a Facility SIC code of 5812.

8.2-8.7 Self-explanatory.

8.8 If wastewater is land applied please submit for Form I: [www.dnr.mo.gov/forms/780-1686-f.pdf](http://www.dnr.mo.gov/forms/780-1686-f.pdf).

8.9-8.10 Self-explanatory

**INSTRUCTIONS FOR COMPLETING FORM B: APPLICATION FOR OPERATING PERMIT FOR FACILITIES  
THAT RECEIVE PRIMARILY DOMESTIC WASTE AND HAVE A DESIGN FLOW  
LESS THAN OR EQUAL TO 100,000 GALLONS PER DAY (continued)**

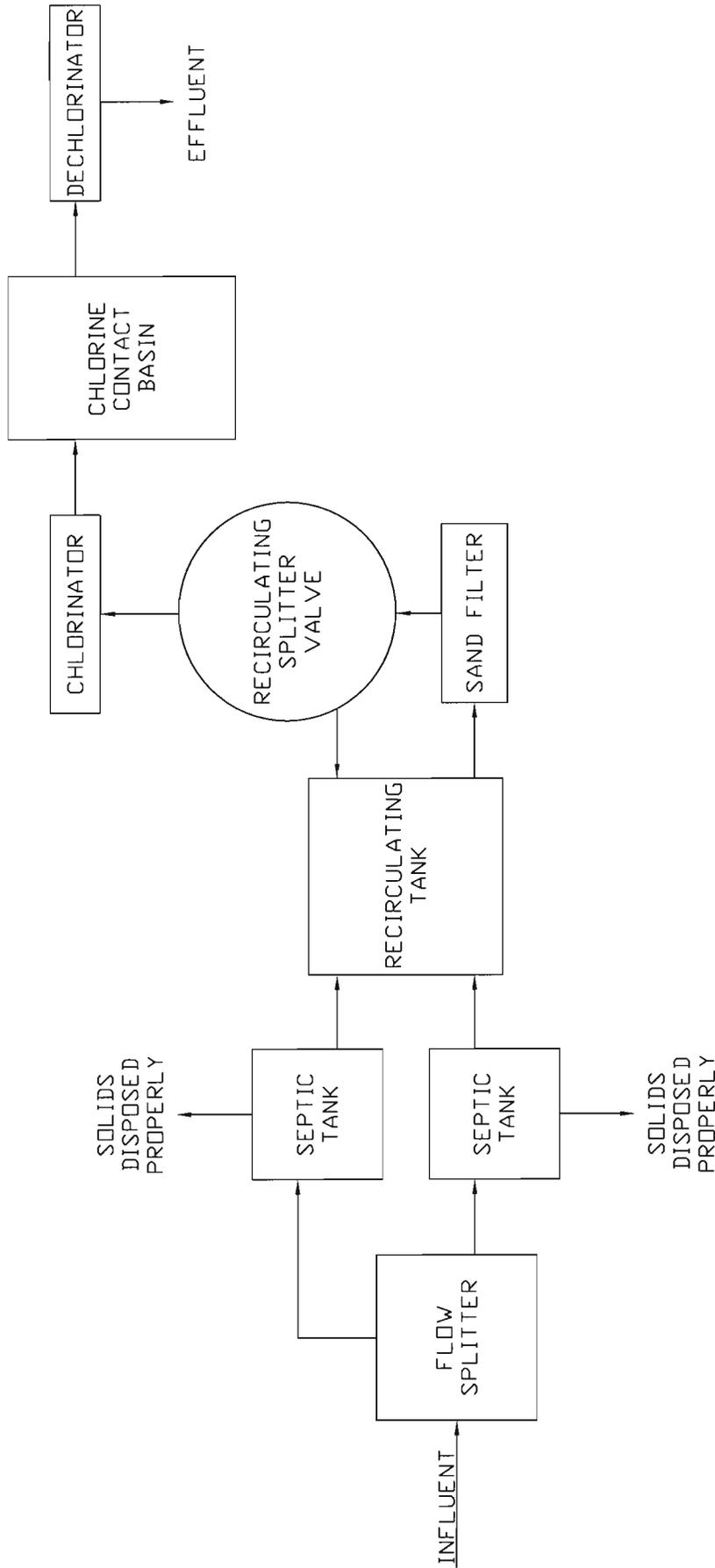
- 9. Self-explanatory.
- 10.1 Self-explanatory.
- 10.2 If Inflow and Infiltration (I&I) is a problem at the facility, list possible actions to be taken to repair the collection and treatment facility.
- 11. Include overflows of combined sewers and lift stations or bypassing of the wastewater treatment facility. Provide a detailed description of the circumstances that sewage bypassing occurs and the frequency of occurrence.
- 12. A copy of 10 CSR 25 is available on the Web at [www.sos.mo.gov/adrules/csr/current/10csr/10csr.asp#10-25](http://www.sos.mo.gov/adrules/csr/current/10csr/10csr.asp#10-25).
- 12.1-12.9 Self-explanatory.
- 12.9 Refer to University of Missouri Extension Environmental Quality publications about biosolids (WQ420-WQ426). The documents are available at [extension.missouri.edu/main/DisplayCategory.aspx?C=74](http://extension.missouri.edu/main/DisplayCategory.aspx?C=74). In addition, the federal sludge regulations are available through the U.S. Government Printing Office at [www.gpoaccess.gov/cfr/index.html](http://www.gpoaccess.gov/cfr/index.html).
- 13. **CERTIFICATION**  
Signature - All applications must be signed as follows and the signatures must be **original**:
  - a. For a corporation, by an officer having responsibility for the overall operation of the regulated facility or activity or for environmental matters.
  - b. For a partnership or sole proprietorship, by a general partner or the proprietor.
  - c. For a municipal, state, federal or other public facility, by either a principal executive officer or by an individual having overall responsibility for environmental matters at the facility.

**Submittal of an incomplete application may result in the application being returned.**

This completed form and any attachments along with the applicable permit fees, should be submitted to:

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

Map of regional offices with addresses and phone numbers are available on the Web at [www.dnr.mo.gov/regions/ro-map.pdf](http://www.dnr.mo.gov/regions/ro-map.pdf). If there are any questions concerning this form, please contact the appropriate regional office or the Department of Natural Resources, Water Protection Program, NPDES Permits and Engineering Section at 800-361-4827 or 573-751-6825.

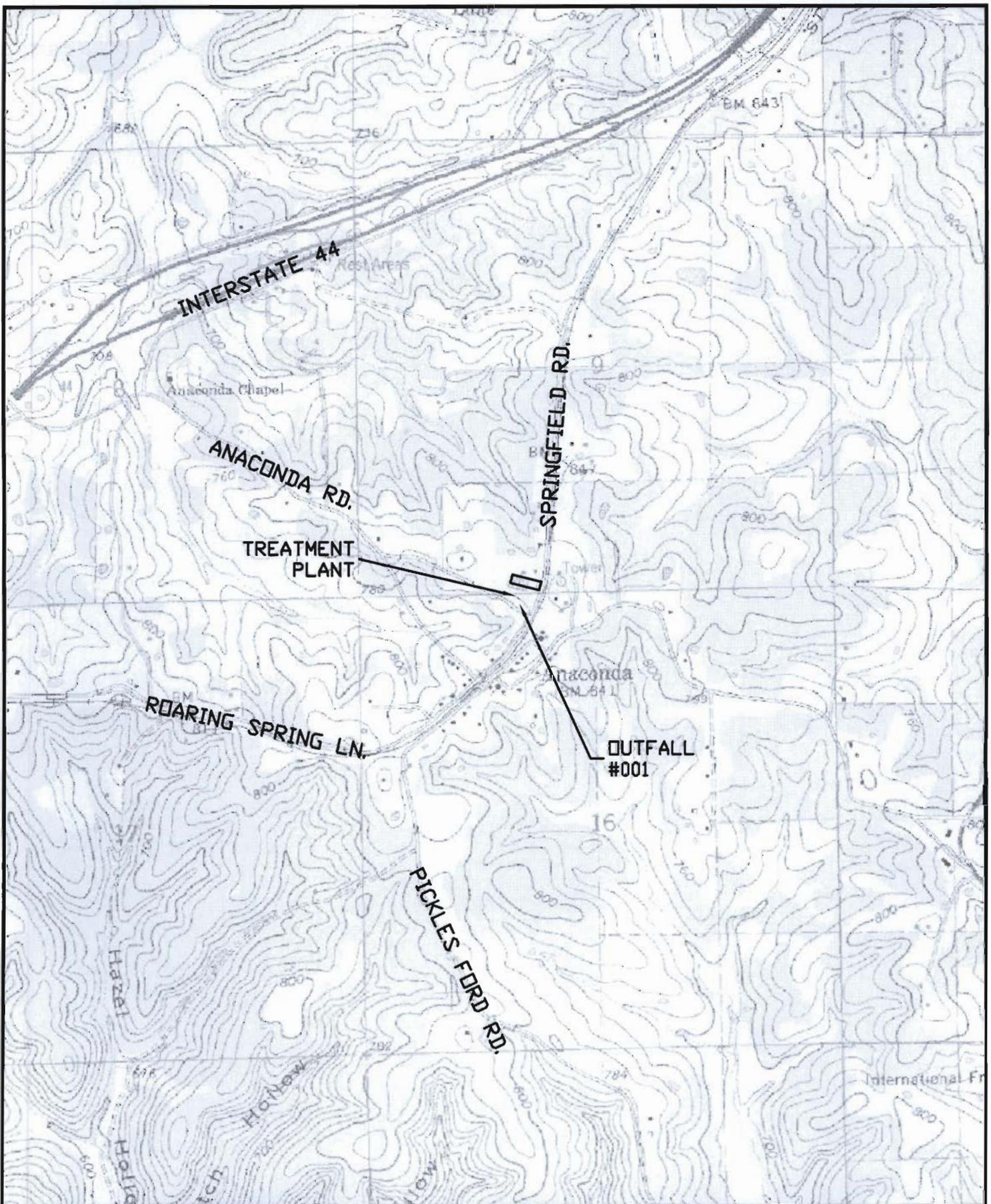


**MISSOURI ENGINEERING COMPANY, INC.**

211 S. BISHOP AVE.  
 ROLLA, MO 65401  
 PHONE: (573) 364-4003  
 FAX: (573) 364-0468

CREATED: 0/25/2013  
 LAST SAVED: 11/10/2011  
 CAD FILE: 09-004-ANA-FLOW1.DWG  
 SCALE: N.T.S.

SEWAGE TREATMENT FACILITY  
 ANACONDA SCHOOL  
 PROCESS FLOW DIAGRAM



**MISSOURI  
ENGINEERING  
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211 S. BISHOP AVE.  
ROLLA, MO 65401

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FAX: (573) 364-0468

SEWAGE TREATMENT FACILITY  
ANACONDA SCHOOL

CREATED:  
0/25/2013

LAST SAVED:  
11/9/2011

CAD FILE:  
09-004-ANA-L0C1.DWG

SCALE:  
1"=1500'

LOCATION MAP