

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

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

Permit No. MO-0091057

Owner: Jefferson County Reorganized School District R-VII
Address: 1250 Dooling Hollow Rd., Festus, MO 63028

Continuing Authority: Same as above
Address: Same as above

Facility Name: Plattin Primary School
Facility Address: 2400 Hwy 61, Festus, MO 63028

Legal Description: NE¼, NW¼, Sec. 33, T40N, R6E, Jefferson County
UTM Coordinates: X= 730964.734, Y= 4226570.998

Receiving Stream: Unnamed tributary to Selma Hollow (U) (losing)
First Classified Stream and ID: Mississippi River (P) (1707)
USGS Basin & Sub-watershed No.: (07140101-0904)

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
No Certified Operator required.

Septic tank/ recirculating sand filter/ chlorination/ contract sludge hauling.
Design population equivalent is 253.
Design flow is 4,300 gallons per day.
Actual flow is 4,540 gallons per day.
Design sludge production is 0.7 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 621.250 RSMo, Section 640.013 RSMo and Section 644.051.6 of the Law.

November 1, 2013
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

June 30, 2017
Expiration Date

John Madras, Director, Water Protection Program

OUTFALL #001	TABLE A-1. INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS			PAGE NUMBER 2 of 6		
				PERMIT NUMBER MO-0091057		
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective upon issuance and remain in effect through October 31, 2017 . Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
EFFLUENT PARAMETER(S)	UNITS	INTERIM EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	GPD	*		*	once/month	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L		15	10	once/quarter***	grab
Total Suspended Solids	mg/L		20	15	once/quarter***	grab
<i>E. coli</i> (Note 1, Page 2)	#/100 ml	126		126	once/quarter***	grab
pH – Units	SU	**		**	once/quarter***	grab
Ammonia as N (April 1 – Sept 30) (Oct 1 – March 31)	mg/L	* *		* *	once/quarter***	grab
Oil & Grease	mg/L	15		10	once/quarter***	grab
Total Residual Chlorine (Note 2, Page 3)	µg/L	17 (130ML)		8 (130ML)	once/quarter***	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2014</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

OUTFALL #001	TABLE A-2. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS	PAGE NUMBER 3 of 6
		PERMIT NUMBER MO-0091057

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 on **November 1, 2017** and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	GPD	*		*	once/month	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L		15	10	once/quarter***	grab
Total Suspended Solids	mg/L		20	15	once/quarter***	grab
<i>E. coli</i> (Note 1, Page 3)	#/100 ml	126		126	once/quarter***	grab
pH – Units	SU	**		**	once/quarter***	grab
Ammonia as N (April 1 – Sept 30) (Oct 1 – March 31)	mg/L	3.6 10.4		1.4 2.7	once/quarter***	grab
Oil & Grease	mg/L	15		10	once/quarter***	grab
Total Residual Chlorine (Note 2, Page 4)	µg/L	17 (130ML)		8 (130ML)	once/quarter***	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE JANUARY 28, 2018. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

- * 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.
- *** See table below for quarterly sampling

Minimum Sampling Requirements			
Quarter	Months	All Parameters	Report is Due
First	January, February, March	Sample at least once during any month of the quarter	April 28 th
Second	April, May, June	Sample at least once during any month of the quarter	July 28 th
Third	July, August, September	Sample at least once during any month of the quarter	October 28 th
Fourth	October, November, December	Sample at least once during any month of the quarter	January 28 th

Note 1 –Effluent limits of 126 cfu per 100 ml daily maximum and monthly average for *E. coli* are applicable year round due to losing stream designation.

Note 2 - 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 130 µg/L when using the DPD Colorimetric Method #4500 – CL G. from Standard Methods for the Examination of Waters and Wastewater. The permittee will conduct analyses in accordance with this method, or equivalent, and report actual analytical values. Measured values greater than or equal to the minimum quantification level of 130 µg/L will be considered violations of the permit and values less than the minimum quantification level of 130 µg/L will be considered to be in compliance with the permit limitation. The minimum quantification level does not authorize the discharge of chlorine in excess of the effluent limits stated in the permit.
- (b) Disinfection is required year-round.
- (c) Do not chemically de-chlorinate **if it is not needed to meet the limits in your permit.**
- (d) If no chlorine was used in a given sampling period, an actual analysis is not necessary. Simply report as “0 µg/L” TRC.

C. STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached Parts I & III standard conditions dated October 1, 1980, May 1, 2013, and August 15, 1994, and hereby incorporated as though fully set forth herein.

D. SPECIAL CONDITIONS

1. This permit establishes final ammonia limitations based on Missouri’s current Water Quality Standard. On August 22, 2013, the U.S. Environmental Protection Agency (EPA) published a notice in the Federal Register announcing of the final national recommended ambient water quality criteria for protection of aquatic life from the effects of ammonia in freshwater. The EPA’s guidance, Final Aquatic Life Ambient Water Quality Criteria for Ammonia – Fresh Water 2013, is not a rule, nor automatically part of a state’s water quality standards. States must adopt new ammonia criteria consistent with EPA’s published ammonia criteria into their water quality standards that protect the designated uses of the water bodies. The Department of Natural Resources intends to adopt the new ammonia criteria during the next water quality standards triennial review. Also, refer to Section VI of this permit’s factsheet for further information including estimated future effluent limits for this facility. It is recommended the permittee view the Department’s 2013 EPA criteria Factsheet located at <http://dnr.mo.gov/pubs/pub2481.pdf>.
2. 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.

3. All outfalls must be clearly marked in the field.
4. 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.
5. Water Quality Standards
 - (a) To the extent required by law, 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.

D. SPECIAL CONDITIONS (continued)

- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
- (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water.
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

6. 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 by the Director in accordance with 40 CFR 122.44(f).
- (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.

7. Report as no-discharge when a discharge does not occur during the report period.

8. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).

9. Bypasses are not authorized at this facility and are subject to 40 CFR 122.41(m). If a bypass occurs, the permittee shall report in accordance to 40 CFR 122.41(m)(3)(i), and with Standard Condition Part I, Section B, subsection 2.b. Bypasses are to be reported to the St. Louis Regional Office.

10. The facility must be sufficiently secured to restrict entry by children, livestock and unauthorized persons as well as to protect the facility from vandalism.

11. A least one gate must be provided to access the wastewater treatment facility and provide for maintenance and mowing. The gate shall remain closed except when temporarily opened by; the permittee to access the facility, perform operational monitoring, sampling, maintenance, mowing, or for inspections by the Department. The gate shall be closed and locked when the facility is not staffed.

12. At least one (1) warning sign shall be placed on each side of the facility enclosure in such positions as to be clearly visible from all directions of approach. There shall also be one (1) sign placed for every five hundred feet (500') (150 m) of the perimeter fence. A sign shall also be placed on each gate. Minimum wording shall be SEWAGE TREATMENT FACILITY—KEEP OUT. Signs shall be made of durable materials with characters at least two inches (2") high and shall be securely fastened to the fence, equipment or other suitable locations.

13. An Operation and Maintenance (O & M) manual shall be maintained by the permittee and made available to the operator. The O & M manual shall include key operating procedures and a brief summary of the operation of the facility.

14. An all-weather access road shall be provided to the treatment facility.

D. SPECIAL CONDITIONS (continued)

15. The discharge from the wastewater treatment facility shall be conveyed to the receiving stream via a closed pipe or a paved or riprapped open channel. Sheet or meandering drainage is not acceptable. The outfall sewer shall be protected against the effects of floodwater, ice or other hazards as to reasonably insure its structural stability and freedom from stoppage. The outfall shall be maintained so that a sample of the effluent can be obtained at a point after the final treatment process and before the discharge mixes with the receiving waters.

E. SCHEDULE OF COMPLIANCE

The facility shall attain compliance with final effluent limitations as soon as reasonably achievable or no later than **four (4) years** of the effective date of this permit.

1. Within six months of the effective date of this permit, the permittee shall report progress made in attaining compliance with the final effluent limits.
2. The permittee shall submit interim progress reports detailing progress made in attaining compliance with the final effluent limits every 12 months from issuance date.
3. Within **4 years** of the effective date of this permit, the permittee shall attain compliance with the final effluent limits.

Please submit progress reports to the Missouri Department of Natural Resources, St. Louis Regional Office, 7545 S. Lindbergh, Ste 210, St. Louis, Missouri, 63125.

Engineer Evaluation

An evaluation of the facility by an engineer registered in the State of Missouri is required due to routine exceedances of facility's design flow.

1. Within one (1) year of the effective date of this permit, the permittee shall submit an engineer's evaluation detailing reasons for exceeding design flow. The evaluation shall either determine whether upgrades are necessary to enable the facility to effectively treat the hydraulic loading to this facility, if reduction of inflow and infiltration will reduce the hydraulic overloading, or if the design flow can be adjusted.
2. If the engineer's evaluation allows for an adjustment of the design flow, within 60 days of the evaluation, the facility shall request a design flow adjustment in the form of an application to modify this permit. The facility shall submit a complete application to modify, supporting documentation, and the appropriate fees. If the engineer's evaluation does not allow for an adjustment of the design flow, the facility shall apply for a construction permit to upgrade the facility to meet the needs for the actual flow of the facility.
3. If the engineer's evaluation shows that inflow and infiltration is the cause for the hydraulic overloading, within 60 days of the evaluation, the permittee shall submit a proposal that lists the plan of action, including timelines, to be taken to comply with the findings of the engineering report, along with estimated costs for any actions to be taken. This proposal shall be submitted to the Department within 60 days of the evaluation. The permittee is to have completed the improvements to the collection system mandated by the engineering study within 4 years of the effective date of this permit.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0091057
PLATTIN PRIMARY SCHOOL

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 Minor

Part I – Facility Information

Facility Type: Public School - SIC #8211

Facility Description:

Septic tank/ recirculating sand filter/ chlorination/ contract sludge hauling.

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

- No.

Application Date: 05/23/2011

Expiration Date: 12/22/2011

OUTFALL(S) TABLE:

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE
#001	0.0067	Secondary	Domestic (sanitary)

Facility Performance History:

This facility was last inspected on 10/19/2011. The inspection showed the following unsatisfactory features; incomplete DMRs, missing DMRs and failure to meet the schedule of compliance.

Part II – Operator Certification Requirements

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

Part III– Operational Monitoring

As per [10 CSR 20-9.010(4)], the facility is not required to conduct operational monitoring.

Part IV – Receiving Stream Information

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

RECEIVING STREAM(S) TABLE: OUTFALL #001

WATER-BODY NAME	CLASS	WBID	DESIGNATED USES*	12-DIGIT HUC	DISTANCE TO CLASSIFIED SEGMENT (MI)
Unnamed tributary to Selma Hollow	U	----	General Criteria	07140101-0904	~ 3.71 ~ 0.23 (losing)
Selma Hollow	U	1707	General Criteria, WBC – A		

* - 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).

RECEIVING STREAM(S) LOW-FLOW VALUES:

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Selma Hollow (U)	0.0	0.0	0.0

MIXING CONSIDERATIONS

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

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

RECEIVING STREAM MONITORING REQUIREMENTS:

No receiving water monitoring requirements recommended at this time.

Receiving Water Body's Water Quality

No water quality impacts noted at this time.

Part V – 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.

Applicable ; this facility discharges to a Losing Stream, as defined by [10 CSR 20-2.010(36)] & [10 CSR 20-7.031(1)(N)].

ANTI-BACKSLIDING:

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

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

ANTIDegradation:

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

- No degradation proposed and no further review necessary. Facility did not apply for authorization to increase pollutant loading or to add additional pollutants to their discharge.

AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:

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

BIOSOLIDS & SEWAGE SLUDGE:

Biosolids are solid materials resulting from domestic wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information regarding biosolids and sludge is located at the following web address: <http://dnr.mo.gov/env/wpp/pub/index.html>, items WQ422 through WQ449.

- Permittee is not authorized to land apply biosolids. Sludge/biosolids are removed by contract hauler, incinerated, stored in the lagoon, etc.

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)].

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 given pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for that pollutant.

Applicable ; A RPA was conducted on appropriate parameters.

REMOVAL EFFICIENCY:

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

Not Applicable ; Influent monitoring is not being required to determine percent removal.

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

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

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

- 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.

Applicable ; The time given for effluent limitations of this permit listed under Interim Effluent Limitation and Final Effluent Limitations were established in accordance with [10 CSR 20-7.031(10)]. The facility has been given a schedule of compliance to meet final effluent limits for Ammonia as N. The four (4) year schedule of compliance allowed for this facility should provide adequate time to evaluate operations, obtain an engineering report and, if necessary raise funding, obtain a construction permit and implement upgrades required to meet effluent limits.

The facility has also been given a schedule of compliance to determine the cause of continuous exceedances in design flow. The Department feels that fourteen (14) months grants sufficient time to provide an engineering evaluation and plan of action and that, if necessary, four (4) years from the effective date of the permit grants sufficient time to fix any issues this facility may have with the collection system.

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.

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

VARIANCE:

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

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

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

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

Applicable ; Wasteload allocations were calculated where applicable using water quality criteria or water quality model results and the dilution equation below:

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

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).

Number of Samples “n”:

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

WLA MODELING:

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

Not Applicable ; A WLA study was either not submitted or determined not applicable by Department staff.

WATER QUALITY STANDARDS:

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

WHOLE EFFLUENT TOXICITY (WET) TEST:

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

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

40 CFR 122.41(M) - BYPASSES:

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

Not Applicable ; This facility does not anticipate bypassing.

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

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

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

Applicable ; The Mississippi River is listed on the 2010 Missouri 303(d) List for Lead and Zinc.

– This facility is not considered to be a source of the above listed pollutant(s) or considered to contribute to the impairment of the Mississippi River.

Part VI –2013 Water Quality Criteria for Ammonia

Upcoming changes to the Water Quality Standard for ammonia may require significant upgrades to wastewater treatment facilities.

On August 22, 2013, the U.S. Environmental Protection Agency (EPA) finalized new water quality criteria for ammonia, based on toxicity studies of mussels. Missouri's current ammonia criteria are based on toxicity testing of several species, but did not include data from mussels. Missouri is home to 65 of North America's mussel species, which are spread across the state. According to the Missouri Department of Conservation nearly two-thirds of the mussel species in Missouri are considered to be "of conservation concern". Nine species are listed as federally endangered, with an additional species currently proposed as endangered and another species proposed as threatened.

The adult forms of mussels that are seen in rivers, lakes, and streams are sensitive to pollutants because they are sedentary filter feeders. They vacuum up many pollutants with the food they bring in and cannot escape to new habitats, so they can accumulate toxins in their bodies and die. But very young mussels, called glochidia, are exceptionally sensitive to ammonia in water. As a result of a citizen suit, the EPA was compelled to conduct toxicity testing and develop ammonia water quality criteria that would be protective if young mussels may be present in a waterbody. These new criteria will apply to any discharge with ammonia levels that may pose a reasonable potential to violate the standards. Nearly all discharging domestic wastewater treatment facilities (cities, subdivisions, mobile home parks, etc.), as well as certain industrial and stormwater dischargers with ammonia in their effluent, will be affected by this change in the regulations.

When new water quality criteria are established by the EPA, states must adopt them into their regulations in order to keep their authorization to issue permits under the National Pollutant Discharge Elimination System (NPDES). States are required to review their water quality standards every three years, and if new criteria have been developed they must be adopted. States may be more protective than the Federal requirements, but not less protective. Missouri does not have the resources to conduct the studies necessary for developing new water quality standards, and therefore our standards mirror those developed by the EPA; however, we will utilize any available flexibility based on actual species of mussels that are native to Missouri and their sensitivity to ammonia.

Many treatment facilities in Missouri are currently scheduled to be upgraded to comply with the current water quality standards. But these new ammonia standards may require a different treatment technology than the one being considered by the permittee. It is important that permittees discuss any new and upcoming requirements with their consulting engineers to ensure that their treatment systems are capable of complying with the new requirements. The Department encourages permittees to construct treatment technologies that can attain effluent quality that supports the EPA ammonia criteria.

Ammonia toxicity varies by temperature and by pH of the water. Assuming a stable pH value, but taking into account winter and summer temperatures, Missouri includes two seasons of ammonia effluent limitations. Typical effluent limits for ammonia for a facility in a location such as this, under current regulations, with no mixing available, would be:

Summer – 3.6 mg/L daily maximum, 1.4 mg/L monthly average.

Winter – 10.4 mg/L daily maximum, 2.7 mg/L monthly average.

Under the new EPA criteria, where mussels of the family Unionidae are present or expected to be present, your estimated effluent limitations will be:

Summer – 1.7 mg/L daily maximum, 0.6 mg/L monthly average.

Winter – 7.7 mg/L daily maximum, 2.0 mg/L monthly average.

Actual effluent limits will depend in part on the actual performance of the facility.

Operating permits for facilities in Missouri must be written based on current statutes and regulations. It is expected that the new WQS will be adopted in the next review of our standards. Therefore permits will be written with the existing effluent limitations until the new standards are adopted. To aid permittees in decision making, an advisory will be added to permit Fact Sheets notifying permittees of the expected effluent limitations for ammonia. When setting schedules of compliance for ammonia effluent limitations, consideration will be given to facilities that have recently constructed upgraded facilities to meet the current ammonia limitations.

For more information on this topic feel free to contact the Missouri Department of Natural Resources, Water Protection Program, Water Pollution Control Branch, Operating Permits Section at (573) 751-1300.

Part VII – Effluent Limits Determination

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.

Losing [10 CSR 20-7.015(4)]:

OUTFALL #001 – MAIN FACILITY OUTFALL

Effluent limitations derived and established in the below Effluent Limitations Table are based on current operations of the facility. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

EFFLUENT LIMITATIONS TABLE:

PARAMETER	Unit	Basis for Limits	Daily Maximum	Weekly Average	Monthly Average	Modified	Previous Permit Limitations
Flow	MGD	1	*		*	No	*/*
BOD ₅	mg/L	1, 4		15	10	No	15/10
TSS	mg/L	1, 4		20	15	No	20/15
pH	SU	1, 4	6.5-9.0		6.5-9.0	Yes	6.0-9.0
Ammonia as N (April 1 – Sept 30)	mg/L	2, 3, 5	3.6		1.4	Yes	*/*
Ammonia as N (Oct 1 – March 31)	mg/L	2, 3, 5	10.4		2.7	Yes	*/*
Escherichia coli	**	1, 3	126		126	Yes	Fecal Coliform 1000/400
Chlorine, Total Residual	µg/L	1, 3	17		8	Yes	19/1
Oil & Grease (mg/L)	mg/L	1, 3	15		10	Yes	***

* - Monitoring requirement only.

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

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

Basis for Limitations Codes:

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

OUTFALL #001 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.

- **Biochemical Oxygen Demand (BOD₅).**

– Effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information.**

- **Total Suspended Solids (TSS).**

– Effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information.**

- **pH.** Effluent limitation range is 6.5 – 9.0 Standard pH Units (SU), as per the applicable section of 10 CSR 20-7.015. pH is not to be averaged.
- **Total Ammonia Nitrogen.** Early Life Stages Present Total Ammonia Nitrogen criteria apply [10 CSR 20-7.031(4)(B)7.C. & Table B3] default pH 7.8 SU Background total ammonia nitrogen = 0.01 mg/L. No mixing considerations allowed; therefore, WLA = appropriate criterion.

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

Summer: April 1 – September 30

Chronic WLA: $C_e = ((0.0067 + 0.0)1.5 - (0.0 * 0.01))/0.0067$
 $C_e = 1.5 \text{ mg/L}$

Acute WLA: $C_e = ((0.0067 + 0.0)12.1 - (0.0 * 0.01))/0.0067$
 $C_e = 12.1 \text{ mg/L}$

$LTA_c = 1.5 \text{ mg/L} (0.780) = 1.17 \text{ mg/L}$
 $LTA_a = 12.1 \text{ mg/L} (0.321) = 3.89 \text{ mg/L}$

[CV = 0.6, 99th Percentile, 30 day avg.]
 [CV = 0.6, 99th Percentile]

Use most protective number of LTA_c or LTA_a .

MDL = $1.17 \text{ mg/L} (3.11) = 3.6 \text{ mg/L}$
 AML = $1.17 \text{ mg/L} (1.19) = 1.4 \text{ mg/L}$

[CV = 0.6, 99th Percentile]
 [CV = 0.6, 95th Percentile, n =30]

Winter: October 1 – March 31

Chronic WLA: $C_e = ((0.0067 + 0.0)3.1 - (0.0 * 0.01))/0.0067$
 $C_e = 3.1 \text{ mg/L}$

Acute WLA: $C_e = ((0.0067 + 0.0)12.1 - (0.0 * 0.01))/0.0067$
 $C_e = 12.1 \text{ mg/L}$

$LTA_c = 3.1 \text{ mg/L} (0.652) = 2.02 \text{ mg/L}$
 $LTA_a = 12.1 \text{ mg/L} (0.194) = 2.34 \text{ mg/L}$

[CV = 1.06, 99th Percentile, 30 day avg.]
 [CV = 1.06, 99th Percentile]

Use most protective number of LTA_c or LTA_a .

MDL = $2.02 \text{ mg/L} (5.16) = 10.4 \text{ mg/L}$
 AML = $2.02 \text{ mg/L} (1.35) = 2.7 \text{ mg/L}$

[CV = 1.06, 99th Percentile]
 [CV = 1.06, 95th Percentile, n =30]

- ***Escherichia coli (E. coli)*.** Discharges to losing streams shall not exceed 126 per 100 ml as a Daily Maximum and Monthly Average at any time, as per 10 CSR 20-7.031(4)(C).

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

Chronic WLA: $C_e = ((0.0067 + 0.0)10 - (0.0 * 0.0))/0.0067$
 $C_e = 10 \mu\text{g/L}$

Acute WLA: $C_e = ((0.0067 + 0.0)19 - (0.0 * 0.0))/0.0067$
 $C_e = 19 \mu\text{g/L}$

$LTA_c = 10 (0.527) = 5.3 \mu\text{g/L}$
 $LTA_a = 19 (0.321) = 6.1 \mu\text{g/L}$

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

Use most protective number of LTA_c or LTA_a .

MDL = 5.3 (3.11) = 17 µg/L
 AML = 5.3 (1.55) = 8 µg/L

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

Total Residual Chlorine effluent limits of 17 µg/L daily maximum, 8 µg/L monthly average are recommended if chlorine is used as a disinfectant. Standard compliance language for TRC, including the minimum level (ML), should be included in the permit.

- **Oil & Grease.** Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.

Minimum Sampling and Reporting Frequency Requirements.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
Flow	once/quarter	once/quarter
BOD ₅	once/quarter	once/quarter
TSS	once/quarter	once/quarter
pH	once/quarter	once/quarter
Ammonia as N	once/quarter	once/quarter
<i>E. coli</i>	once/quarter	once/quarter
Total Residual Chlorine	once/quarter	once/quarter
Oil & Grease	once/quarter	once/quarter

Sampling Frequency Justification:

Sampling and Reporting Frequency was retained from previous permit.

Sampling Type Justification

As per 10 CSR 20-7.015, BOD₅ and TSS collected for sand filters may be grab samples. Grab samples must be collected for pH, Ammonia as N, *E. coli*, TRC, and Oil & Grease. This is due to the holding time restriction for *E. coli*, the volatility of Ammonia and TRC, and the fact that pH cannot be preserved and must be sampled in the field. As Ammonia and Oil & Grease samples must be immediately preserved with acid, these samples are to be collected as a grab. For further information on sampling and testing methods please review 10 CSR 20-7.015(9)(A) 2.

Part VIII – Finding of Affordability

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

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

Finding of affordability - The Department has made a reasonable search for empirical data indicating the permit is affordable. The search consisted of a review of Department records that might contain economic data on the community, a review of information provided by the applicant as part of the application, and public comments received in response to public notices of this draft permit. If the empirical cost data was used by the permit writer, this data may consist of median household income, any other ongoing projects that the Department has knowledge, and other demographic financial information that the community provided as contemplated by Section 644. 145.3. See **Appendix – Affordability Analysis**

Part IX – 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.

PERMIT SYNCHRONIZATION:

The Department of Natural Resources is currently undergoing a synchronization process for operating permits. Permits are normally issued on a five-year term, but to achieve synchronization many permits will need to be issued for less than the full five years allowed by regulation. The intent is that all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. This will allow further streamlining by placing multiple permits within a smaller geographic area on public notice simultaneously, thereby reducing repeated administrative efforts. This will also allow the Department to explore a watershed based permitting effort at some point in the future.

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 began on April 12, 2013 and ended on May 13, 2013. No comments were received during this Public Notice period. Post Public Notice, Department staff discovered a technical mistake in the permit. The Reasonable Potential Analysis (RPA) to determine if the facility had reasonable potential to exceed Water Quality Standards (WQS's) was incorrectly conducted. Department staff has re-evaluated the RPA and has calculated new final effluent limitations for Ammonia as N based on the re-evaluated RPA. This prompted the Department to conduct an Affordability Analysis for the new effluent limitations and the need for a Schedule of Compliance (SOC) in the permit to allow the permittee time to comply with the new effluent limitations. The new effluent limitations and the new SOC have prompted the need for another Public Notice period.

The second Public Notice period for this operating permit began on July 19, 2013 and ended on August 19, 2013. No comments were received during this Public Notice period.

DATE OF FACT SHEET: MARCH 11, 2013

COMPLETED BY:

**HILLARY CLARK, ENVIRONMENTAL SPECIALIST
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION - DOMESTIC WASTEWATER UNIT
(573) 573-7326
Hillary.Clark@dnr.mo.gov**

Appendices

APPENDIX – RPA RESULTS:

Parameter	CMC*	RWC Acute*	CCC*	RWC Chronic*	n**	Range max/min	CV***	MF	RP Yes/No
Total Ammonia as Nitrogen (Summer) mg/L	12.1	11.88	1.5	11.88	8.00	3.6/0.34	0.60	3.30	YES
Total Ammonia as Nitrogen (Winter) mg/L	12.1	114.11	3.1	114.11	11.00	21.6/0.23	1.06	5.28	YES

N/A – Not Applicable

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

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

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

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

n – Is the number of samples.

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

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

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

APPENDIX – AFFORDABILITY ANALYSIS:

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

**Plattin Primary School
Missouri State Operating Permit (MSOP) Renewal
MO-0091057**

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

Description:

Outfall #001 – School – SIC #8211

No Certified Operator required.

Septic tank/ recirculating sand filter/ chlorination/ contract sludge hauling.

Design population equivalent is 253.

Design flow is 4,300 gallons per day.

Actual flow is 4,540 gallons per day.

Design sludge production is 0.7 dry tons/year.

Receiving Stream:	Unnamed tributary to Selma Hollow (U) (losing)
First Classified Stream and ID:	Mississippi River (P) (1707)
USGS Basin & Sub-watershed No.:	(07140101-0904)

Total Connections: 1

New Permit Requirements or Requirements Now Being Enforced:

The proposed renewal of Missouri State Operating Permit (MSOP) # MO-0091057 contains new effluent limitations for Ammonia. The Schedule of Compliance outlines a timeline for the facility to meet the new requirements.

Range of Anticipated Costs Associated with Complying with Requirements:

At this time, it is unknown what construction upgrades will be chosen to meet the new effluent limitations. Estimates of expected costs for plant upgrades are presented here for reference only. Using capital improvement cost estimates for plant upgrades the cost estimate is approximately \$201,800 and \$504,200 depending on the treatment technology used, according to the Department’s cost estimator matrix (see *CAP/DET estimator worksheet attached*).

(1) The school district’s financial capability and ability to raise or secure necessary funding.¹

Current Revenues:	unknown
Current Expenditures:	unknown
Current outstanding debt (2012):	\$1,002,625
Bonding Capacity:	unknown
Other indicators:	None identified at this time.

¹ Jefferson R-VII School District, http://www.jr7.k12.mo.us/staff_directory/district_administration/administration/r-vii_state_reports/

(2) Affordability of pollution control options for the individuals or households within the county;

Current annual operating costs (exclude depreciation):	unknown
Estimated capital cost of pollution control options:	\$201,800-\$504,200
Annual cost of additional (Operating Costs & Debt Service):	\$12,582-\$61,116
Median Household Income:	\$58,599
School District Tax Levy ² :	\$4.5967
Assessed Value of School District Infrastructure ² :	\$175,712,567
Percent of Median Household Income (Tax Levy/MHI):	0.008%

Check Appropriate Box	Financial Impact	Residential Indicator (Tax Levy as a percent of MHI = annual max tax/MHI)
X	Low	Less than 1% MHI
	Medium	Between 1% and 2% MHI
	High	Greater than 2% MHI

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

This evaluation is limited to those cost necessary to comply with (and therefore achieve the benefits derived from) the permit conditions identified as relevant to the affordability review. The additional treatment for Ammonia will allow the Jefferson City Public School District to meet the revised ammonia limits for the unnamed tributary to Cason Branch. The revised limit is more protective of aquatic life.

This permit renewal requires final effluent limitations for Ammonia as N based on Missouri Water Quality Standards (WQS) 10 CSR 20-7 and the Clean Water Act. Ammonia (NH₃) is toxic to early stages of aquatic life. NH₃ removal prevents damage to aquatic life and enables the receiving stream to support a healthier and more diverse aquatic life community.

(4) An inclusion of ways to reduce economic impacts on distressed populations within the school district, including but not limited to low and fixed income populations. This requirement includes but is not limited to:

Allowing adequate time in implementation schedules to mitigate potential adverse impacts on distressed populations resulting from the costs of the improvements and taking into consideration local community economic considerations; and Allowing for reasonable accommodations for regulated entities when inflexible standards and fines would impose a disproportionate financial hardship in light of the environmental benefits to be gained;

Potentially Distressed Populations	
Unemployment ³ for Jefferson County	7.0%
Median Household Income ⁴ Cole County	\$58,599
Percent change in Median Household Income ⁵ (1990-2010)	+74.7%
Percent Population Growth/Decline ⁶ (1990-2010)	+26.9%
Change in Median Age ⁷ in Years (1990-2010)	+21.8%
Percent of Households in Poverty ⁶	19.5%
Percent of Households Dependent on Food Stamps ⁶	10.5%

² Missouri Comprehensive Data System - <http://mcds.dese.mo.gov/guidedinquiry/District%20and%20School%20Information/Missouri%20School%20Directory.aspx?rp:DistrictCode=026006&rc:Toolbar=false&rc:parameters=false&rs:AsyncRendering=false>

³ Unemployment data from Missouri Department of Economic Development (April 2013) – <http://www.missourieconomy.org/indicators/laus/default.aspx?PeriodYear=2013&AreaCode=2904000051>

⁴ Median Household Income data from American Community Survey – Median income in the past 12 months – <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

⁵ 1990 Median Household Income - Summary Tape File 3 - <http://mcdc.missouri.edu/cgi-bin/broker? PROGRAM=websas.xtabs3v2.sas& SERVICE=sasapp&st=29&co=051>

⁶ 2010 Census Population Data - <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

⁷ 1990 Median Age - <http://mcdc.missouri.edu/cgi-bin/broker? PROGRAM=websas.xtabs3v2.sas& SERVICE=sasapp&st=29&co=051>

2010 Median Age by Sex - 2010 ACS 5-year estimates - B01002 - <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?ref=geo&refresh=t>

Opportunity for cost savings or cost avoidance:

If available, connection to a larger centralized sewer system in the area may be more cost effective for the community.

The permittee may apply for State Revolving Fund (SRF) financial support in order to help fund a Capital Improvements Plan. Other loans and grants also exist for which the facility may be eligible. Contact information for the Department's Financial Assistance Center (FAC) and more information can be found on the Department's website at <http://dnr.mo.gov/env/wpp/srf/wastewater-assistance.htm>.

If the permittee can demonstrate that the proposed pollution controls result in substantial and widespread economic and social impact, the permittee may use the Use Attainability Analysis (UAA) process to modify designated uses of the receiving water body.

Opportunity for changes to implementation/compliance schedule:

The facility may propose changes to the schedule of compliance based on their own cost estimate or financial information.

(5) An assessment of other school district investments relating to environmental improvements;

The Jefferson City Public School District has listed several capital improvement projects in their 2012-2013 District Budget, such as the removal of an underground storage tanks from the Simonsen facility. The total cost estimate listed may include other environmental improvement projects.

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

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

Secondary indicators for consideration:

Indicators	Strong (3 points)	Mid-Range (2 points)	Weak (1 point)	Score
Current outstanding debt as a % of assessed value of infrastructure	Below 2%	2% - 5%	Above 5%	3
Unemployment Rate	>1% below Missouri average	± 1% of Missouri average	>1% above Missouri average	2
Median household income	More than 25% above Missouri MHI	± 25% of Missouri MHI	More than 25% below Missouri average	2
Property tax revenues as a % of assessed value of infrastructure	Below 2%	2% - 4%	Above 4%	unknown
Property tax collection rate	Above 98%	94% - 98%	Below 94%	unknown

**Secondary Indicators Average Score:
 Residential Indicator (from Criteria #2 above):**

2.3
0.008%

Financial Capability Matrix:

Financial Capability Indicators Score from above ↓	School District Indicator (Tax Levy as a % of Assessed Value of Infrastructure)		
	Low (Below 1%)	Mid-Range (Between 1.0% and 2.0%)	High (Above 2.0%)
Weak (below 1.5)	Medium Burden	High Burden	High Burden
Mid-Range (1.5 – 2.5)	Low Burden	Medium Burden	High Burden
Strong (above 2.5)	Low Burden	Low Burden	Medium Burden

Estimated Financial Burden: Low Burden

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

The community/school district did not report any other relevant local economic conditions.

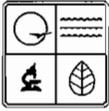
Conclusion and Finding

As a result of new regulations, the Department is proposing modifications to the current operating permit that may require the WWTF to add Ammonia as N treatment. The Department identified the actions for which an affordability analysis is required under Section 644.145 RSMo.

The Department estimates that adding Ammonia as N treatment will cost the Jefferson County Reorganized School District R-VII an estimated \$346,112 and \$1,205,196. The school district currently has a tax levy of \$4.5967, which is only 0.008% of the community's MHI.

The Department considered all seven (7) of the criteria presented in subsection 644.145.3 when evaluating the affordability of the relevant actions. Taking into consideration these criteria, this analysis examined whether the above referenced permit modifications affects the ability of an individual customer or household to pay a utility bill without undue hardship or unreasonable sacrifice in the essential lifestyle or spending patterns of the individual or household. As a result of reviewing the above criteria, the Department hereby finds that the action described above will likely result in a low burden with regard to the community's overall financial capability and a low financial impact for most individual customers/households. However, this determination is based on readily available data, and may over-estimate the financial impact on the community.

2/16/12 (K)
 Returned 5-24-11



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM B - APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT FOR FACILITIES WHICH RECEIVE PRIMARILY DOMESTIC WASTE (100,000 gallons per day) UNDER MISSOURI CLEAN WATER LAW

FOR AGENCY USE ONLY	
CHECK NUMBER	054662
DATE RECEIVED	5-23-11
FEE SUBMITTED	100.00

JH
 AP5404

REISSUE

NOTE ▶ PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM

1. This application is for:

- An operating permit and antidegradation review public notice.
- A construction permit following an appropriate operating permit and antidegradation review public notice.
- A construction permit and a concurrent operating permit and antidegradation review public notice.
- A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required).
- An operating permit for a new or unpermitted facility.
- An operating permit renewal: Permit #MO-0091057
- An operating permit modification: Permit #MO-

Construction Permit # _____
 Expiration Date DEC. 28, 2011
 Reason: _____

MAY 23 2011

1.1 Is this a Federal/State Funded Project? YES NO Funding Agency/Project #: _____
 1.2 Is the appropriate fee included with the application (See instructions for appropriate fee)? YES NO

2. FACILITY (Outfall of)

NAME: PLATTIN PRIMARY SCHOOL TELEPHONE WITH AREA CODE: (636) 937-7170
 ADDRESS (PHYSICAL): 2400 HIGHWAY 61 CITY: FESTUS STATE: MO ZIP CODE: 63028

2.1 LEGAL DESCRIPTION: NW 1/4, NE 1/4, NW 1/4, Sec. 33, T40N, R 6E County JEFFERSON

2.2 UTM Coordinates Easting (X): +3809269 Northing (Y): -09021501
 For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

2.3 Name of receiving stream: TRIBUTARY TO SELMA HOLLOW (U) (LOSING) MISSISSIPPI RIVER (R) (1707)

3. OWNER

NAME: JEFFERSON COUNTY REORGANIZED SCHOOL DIST. R-7 E-MAIL ADDRESS: SCHERLET@JCY.K12.MO. TELEPHONE WITH AREA CODE: (636) 937-9188
 ADDRESS: 1250 DOOLING HOLLOW RD. CITY: FESTUS STATE: MO ZIP CODE: 63028

3.1 Request review of draft permit prior to Public Notice? YES NO

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

NAME: JEFFERSON COUNTY REORGANIZED SCHOOL DIST. R-7 TELEPHONE WITH AREA CODE: (636) 937-9188
 ADDRESS: 1250 DOOLING HOLLOW RD. CITY: FESTUS STATE: MO ZIP CODE: 63028

5. OPERATOR

NAME: NOT NEEDED, NOT BIG ENOUGH CERTIFICATE NUMBER: _____ TELEPHONE WITH AREA CODE: _____

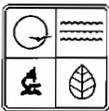
6. FACILITY CONTACT

NAME: TOM SCHERLE TITLE: DIRECTOR OF MAINTENANCE TELEPHONE WITH AREA CODE: (636) 937-9188 EXT. 22

7.0 ADDITIONAL FACILITY INFORMATION

7.1 Description of facilities (Attach additional sheet if required). Attach a 1" = 2,000' scale U.S. Geological Survey topographic map showing location of all outfalls and downstream lowdowners. (See Item 9.)
 7.2 Facility SIC code: 4952 Discharge SIC code: 4952 Facility NAICS code: 61110 Discharge NAICS code: 61110
 7.3 Number of people presently connected or population equivalent (P.E.): 253 Design P.E.: 100
 Number of units presently connected: Homes 0 Trailers 0 Apartments 0 Other 0
 Design flow for this outfall: 4300 Total design flow for the facility: 4300 Actual flow for this outfall: 3000
 Commercial Establishment: Daily number of employees working 0.5 Daily number of customers/guests 253
 7.4 Length of pipe in the sewer collection system? 500 feet/miles (Please denote which unit is appropriate.)
 7.5 Does any bypassing occur in the collection system or at the treatment facility? Yes No (If yes, attach explanation.)
 7.6 Does significant infiltration occur in the collection system? Yes No (If yes, attach explanation and proposed repair.)
 7.7 Is industrial waste discharged to the facility identified in Item 2? Yes No (If yes, see instructions.)
 7.8 Will the discharge be continuous through the year? Yes No
 a. Discharge will occur during the following months: JAN, FEB, MARCH, APRIL, MAY, AUG, SEPT, OCT, NOV, DEC.
 b. How many days of the week will the discharge occur? 5
 7.9 Is wastewater land applied? Yes No (If yes, attach Form I.)
 7.10 Will chlorine be added to the effluent? Yes No
 a. If chlorine is added, what is the resulting residual? _____ µg/l (micrograms per liter) ACCEPTABLE EFFLUENT WITHIN GWDE LINES.
 7.11 Does this facility discharge to a losing stream or sinkhole? Yes No
 7.12 Attach a flow chart showing all influents, treatment facilities and outfalls.
 7.13 Has a waste load allocation study been completed for this facility? Yes No
 7.14 List all permit violations, including effluent limit exceedances in the last five years. Attach a separate sheet if necessary.
 If none, write none. NONE

2/16/12 (F)
 Returned 5-24-11



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM B - APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT FOR FACILITIES WHICH RECEIVE PRIMARILY DOMESTIC WASTE (100,000 gallons per day) UNDER MISSOURI CLEAN WATER LAW

FOR AGENCY USE ONLY	
CHECK NUMBER	054662
DATE RECEIVED	5-23-11
FEE SUBMITTED	100.00

REISSUE

NOTE ▶ PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM

1. This application is for:

- An operating permit and antidegradation review public notice.
- A construction permit following an appropriate operating permit and antidegradation review public notice.
- A construction permit and a concurrent operating permit and antidegradation review public notice.
- A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required).
- An operating permit for a new or unpermitted facility.
- An operating permit renewal: Permit #MO-0091057 Construction Permit # _____ Expiration Date DEC. 28, 2011 Reason: _____
- An operating permit modification: Permit #MO- _____

MAY 23 2011

1.1 Is this a Federal/State Funded Project? YES NO Funding Agency/Project #: _____
 1.2 Is the appropriate fee included with the application (See instructions for appropriate fee)? YES NO

2. FACILITY (Outfall of _____)

NAME: PLATTIN PRIMARY SCHOOL TELEPHONE WITH AREA CODE: (636) 937-7170
 ADDRESS (PHYSICAL): 2400 HIGHWAY 61 CITY: FESTUS STATE: MO ZIP CODE: 63028

2.1 LEGAL DESCRIPTION: NW 1/4, NE 1/4, NW 1/4, Sec. 33, T40N, R6E County JEFFERSON
 2.2 UTM Coordinates Easting (X): +3809269 Northing (Y): -09021501
 For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)
 2.3 Name of receiving stream: TRIBUTARY TO SELMA HOLLOW (U) (LOSING) MISSISSIPPI RIVER (P) (1701)

3. OWNER

NAME: JEFFERSON COUNTY REORGANIZED SCHOOL DIST. R-7 E-MAIL ADDRESS: SCHERLE@JCY.K12.MO.US TELEPHONE WITH AREA CODE: (636) 937-9188
 ADDRESS: 1250 DOOLING HOLLOW RD. CITY: FESTUS STATE: MO ZIP CODE: 63028

3.1 Request review of draft permit prior to Public Notice? YES NO

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

NAME: JEFFERSON COUNTY REORGANIZED SCHOOL DIST. R-7 TELEPHONE WITH AREA CODE: (636) 937-9188
 ADDRESS: 1250 DOOLING HOLLOW RD. CITY: FESTUS STATE: MO ZIP CODE: 63028

5. OPERATOR

NAME: NOT NEEDED, NOT BIG ENOUGH CERTIFICATE NUMBER: _____ TELEPHONE WITH AREA CODE: _____

6. FACILITY CONTACT

NAME: TOM SCHERLE TITLE: DIRECTOR OF MAINTENANCE TELEPHONE WITH AREA CODE: (636) 937-9188 EXT. 22

7.0 ADDITIONAL FACILITY INFORMATION

7.1 Description of facilities (Attach additional sheet if required). Attach a 1" = 2,000' scale U.S. Geological Survey topographic map showing location of all outfalls and downstream landowners. (See Item 9.)
 7.2 Facility SIC code: 4952 Discharge SIC code: 4952 Facility NAICS code: 61110 Discharge NAICS code: 61110
 7.3 Number of people presently connected or population equivalent (P.E.): 253 Design P.E.: 100
 Number of units presently connected: Homes 0 Trailers 0 Apartments 0 Other 0
 Design flow for this outfall: 4300 Total design flow for the facility: 4300 Actual flow for this outfall: 3000
 Commercial Establishment: Daily number of employees working 25 Daily number of customers/guests 253
 7.4 Length of pipe in the sewer collection system? 500 miles (Please denote which unit is appropriate.)
 7.5 Does any bypassing occur in the collection system or at the treatment facility? Yes No (If yes, attach explanation.)
 7.6 Does significant infiltration occur in the collection system? Yes No (If yes, attach explanation and proposed repair.)
 7.7 Is industrial waste discharged to the facility identified in Item 2? Yes No (If yes, see instructions.)
 7.8 Will the discharge be continuous through the year? Yes No
 a. Discharge will occur during the following months: JAN. FEB. MARCH APRIL MAY AUG. SEPT. OCT. NOV. DEC.
 b. How many days of the week will the discharge occur? 5
 7.9 Is wastewater land applied? Yes No (If yes, attach Form I.)
 7.10 Will chlorine be added to the effluent? Yes No
 a. If chlorine is added, what is the resulting residual? _____ µg/l (micrograms per liter) ACCEPTIBLE AFFLUENT WITHIN GUIDE LINES,
 7.11 Does this facility discharge to a losing stream or sinkhole? Yes No
 7.12 Attach a flow chart showing all influents, treatment facilities and outfalls.
 7.13 Has a waste load allocation study been completed for this facility? Yes No
 7.14 List all permit violations, including effluent limit exceedances in the last five years. Attach a separate sheet if necessary.
 If none, write none. NONE

8. SLUDGE HANDLING, USE AND DISPOSAL

- 8.1 Is the sludge a hazardous waste as defined by 10 CSR 25? Yes No
- 8.2 Sludge Production, including sludge received from others: 0 Design Dry Tons/Year 0.7 Actual Dry Tons/Year
- 8.3 Capacity of sludge holding structures:
 Sludge storage provided: 869 cubic feet; 120 days of storage; 3 average percent solids of sludge;
 No sludge storage is provided.
- 8.4 Type of Storage: Holding tank Building
 Basin Other (Please describe) _____
 Concrete Pad
- 8.5 Sludge Treatment:
 Anaerobic Digester Lagoon Composting
 Storage Tank Aerobic Digester Other (Attach description)
 Lime Stabilization Air or Heat Drying
- 8.6 Sludge Use or Disposal:
 Land Application Surface Disposal (Sludge Disposal Lagoon, Sludge held for more than two years)
 Contract Hauler Incineration
 Hauled to Another Treatment Facility Sludge Retained in Wastewater treatment lagoon
 Solid Waste Landfill Other _____ Attach explanation sheet.
- 8.7 PERSON RESPONSIBLE FOR HAULING SLUDGE TO DISPOSAL FACILITY
 By Applicant By Others (complete below)

NAME: ABR SEPTIC SERVICE, INC.

ADDRESS: P.O. BOX 2 9133 RIDGE RD. CITY: DITTMER STATE: MO. ZIP CODE: 63023

CONTACT PERSON: MIKE RUSTIGE TELEPHONE WITH AREA CODE: (636) 214-0522 PERMIT NO. MO-: 682118

- 8.8 SLUDGE USE OR DISPOSAL FACILITY
 By Applicant By Others (Please complete below.)

NAME: ABR SEPTIC SERVICE, INC.

ADDRESS: P.O. BOX 248 9133 RIDGE RD. CITY: DITTMER STATE: MO. ZIP CODE: 63023

CONTACT PERSON: MIKE RUSTIGE TELEPHONE WITH AREA CODE: (636) 214-0522 PERMIT NO. MO-: 682118

- 8.9 Does the sludge or biosolids disposal comply with federal sludge regulations under 40 CFR 503?
 Yes No (Please attach explanation)

9. DOWNSTREAM LANDOWNER (S). ATTACH ADDITIONAL SHEETS AS NECESSARY. SEE INSTRUCTIONS.

NAME: CONSERVATION CLUB

ADDRESS: 2567 HWY 61 CITY: FESTUS STATE: MO. ZIP CODE: 63028

10. DRINKING WATER SUPPLY INFORMATION

- 10.1 WHAT IS THE SOURCE OF YOUR DRINKING WATER SUPPLY:
 A. Public supply (municipal or water district water) PUBLIC WATER SUPPLY # 12
 If public, please give name of the public supply 12301 HWY TT FESTUS, MO. 63028 (636) 937-9188
 B. Private well _____
 C. Surface water (lake, pond or stream) NO

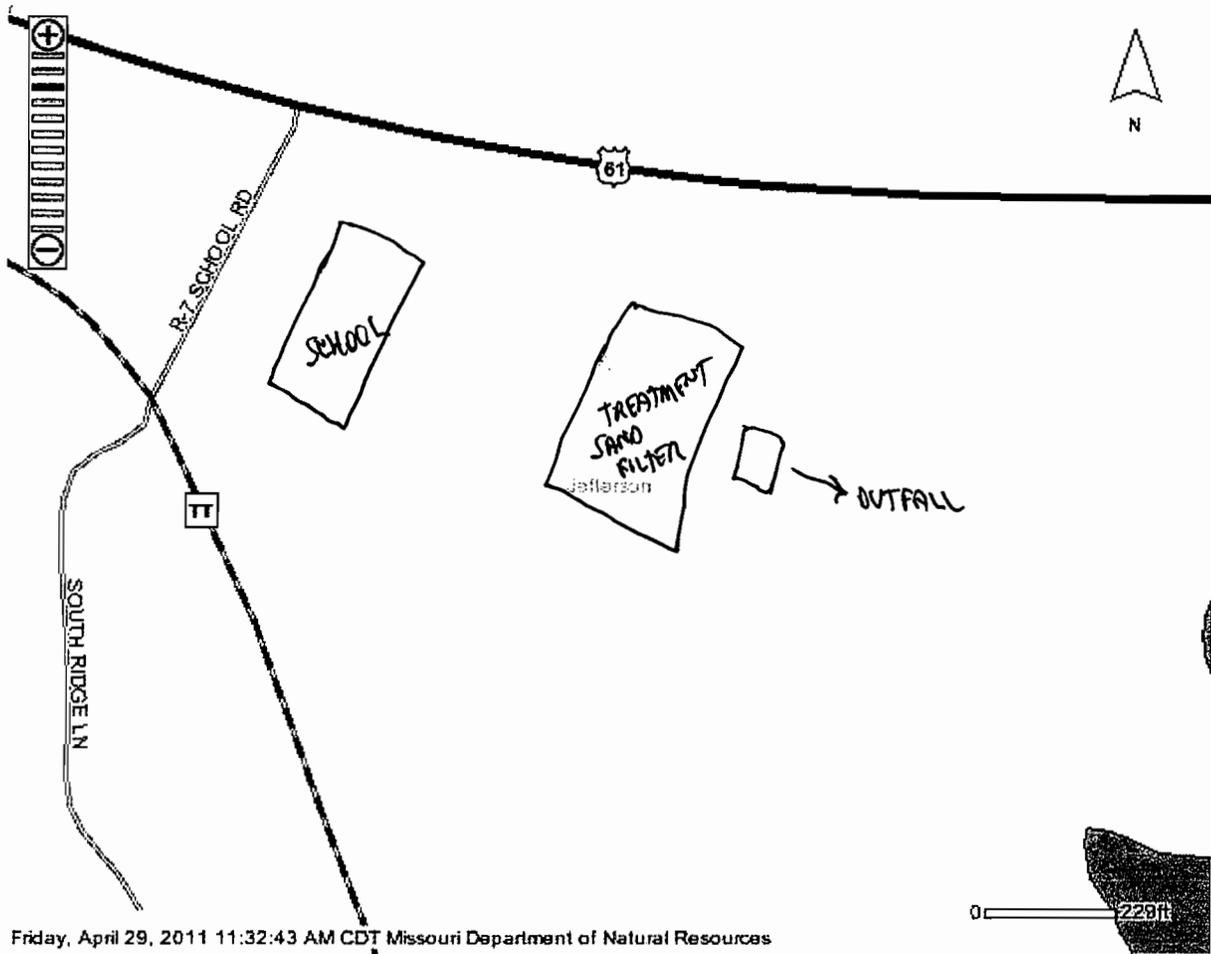
- 10.2 Does your drinking water source serve at least 25 people at least 60 days per year (not necessarily consecutive days)?
 Yes No

- 10.3 Does your supply serve housing which is occupied year round by the same people? This does not include housing which is occupied seasonally?
 Yes No

11. 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 AND OFFICIAL TITLE (TYPE OR PRINT): TOM SENEALE / DIRECTOR OF MAINTENANCE TELEPHONE WITH AREA CODE: (636) 937-9188 EXT 22

SIGNATURE: [Signature] DATE SIGNED: APRIL 29, 2011



Friday, April 29, 2011 11:32:43 AM CDT Missouri Department of Natural Resources

MAY 23 2011

MO0091057
PLATTIN PRIMARY SCHOOL
1250 DOOLIN HOLLOW RD
FESTUS, MO 63028
FORM(S) NEEDED: B



MAY 23 2011
MISSOURI DEPARTMENT OF NATURAL RESOURCES
ST. LOUIS REGIONAL OFFICE

Dear Permittee:

A renewal application must be filed 180 days before your current permit expires. Failure to submit a renewal application for a facility still in operation is a violation of the Missouri Clean Water Law [644.051 RSMo]. Information on the current nature of the discharge, any information regarding abandonment, non-use or change in ownership of the facility is required with the renewal application. No application fee is required.

If the activity covered by this permit has ceased, you must complete and submit a Request for Termination Form. All forms above can be found at dnr.mo.gov/forms/index.html#WaterPollution.

Send the appropriate completed forms to:
Missouri Department of Natural Resources, St Louis Regional Office
7545 S Lindbergh Suite 210, St Louis, MO 63125.

Additional information is available at dnr.mo.gov or call 314-416-2960.

DUPLICATE

Returned 9-21-11
KS



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM B - APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT FOR
FACILITIES WHICH RECEIVE PRIMARILY DOMESTIC WASTE (≤100,000 gallons per
day) UNDER MISSOURI CLEAN WATER LAW

FOR AGENCY USE ONLY
CHECK NUMBER: 055251
DATE RECEIVED: 9-20-11
FEE SUBMITTED: 100.00

NOTE: PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM.

1. This application is for:
 An operating permit and antidegradation review public notice.
 A construction permit following an appropriate operating permit and antidegradation review public notice.
 A construction permit and a concurrent operating permit and antidegradation review public notice.
 A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required).
 An operating permit for a new or unpermitted facility.
 An operating permit renewal: Permit #MO-0091057
 An operating permit modification: Permit #MO-
Construction Permit #
Expiration Date DEC. 28, 2011
Reason:

1.1 Is this a Federal/State Funded Project? YES NO Funding Agency/Project #:
1.2 Is the appropriate fee included with the application (See instructions for appropriate fee)? YES NO

2. FACILITY (Outfall of)

NAME: PLATTIN PRIMARY SCHOOL
ADDRESS (PHYSICAL): 2400 HIGHWAY 61
CITY: FESTUS
STATE: MO ZIP CODE: 63028
TELEPHONE WITH AREA CODE: (636) 937-7170

2.1 LEGAL DESCRIPTION: NW 1/4, NE 1/4, NW 1/4, Sec. 33, T40N, R6E County JEFFERSON
2.2 UTM Coordinates Easting: 1889269 Northing (Y): 09021501
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)
2.3 Name of receiving stream: TRIBUTARY TO SELMA HOLLOW (U) (LOSING) MISSISSIPPI RIVER (F) (1707)

3. OWNER

NAME: JEFFERSON COUNTY REORGANIZED SCHOOL DIST. R-7
ADDRESS: 1250 DOOLING HOLLOW RD.
CITY: FESTUS
STATE: MO ZIP CODE: 63028
E-MAIL ADDRESS: SCHEALE@JRY.K12.MO.US
TELEPHONE WITH AREA CODE: (636) 937-9188

3.1 Request review of draft permit prior to Public Notice? YES NO

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

NAME: JEFFERSON COUNTY REORGANIZED SCHOOL DIST. R-7
ADDRESS: 1250 DOOLING HOLLOW RD.
CITY: FESTUS
STATE: MO ZIP CODE: 63028
TELEPHONE WITH AREA CODE: (636) 937-9188

5. OPERATOR

NAME: NOT NEEDED, NOT BIG ENOUGH
CERTIFICATE NUMBER:
TELEPHONE WITH AREA CODE:

6. FACILITY CONTACT

NAME: TOM SCHEALE
TITLE: DIRECTOR OF MAINTENANCE
TELEPHONE WITH AREA CODE: (636) 937-9188 EXT. 22

7.0. ADDITIONAL FACILITY INFORMATION

7.1 Description of facilities (Attach additional sheet if required). Attach a 1" = 2,000' scale U.S. Geological Survey topographic map showing location of all outfalls and downstream landowners. (See Item 9.)
7.2 Facility SIC code: 4952 Discharge SIC code: 4952 Facility NAICS code: 61110 Discharge NAICS code: 61110
7.3 Number of people presently connected or population equivalent (P.E.): 253 Design P.E.: 100
Number of units presently connected: Homes 0 Trailers 0 Apartments 0 Other 0
Design flow for this outfall: 4300 Total design flow for the facility: 4300 Actual flow for this outfall: 3000
Commercial Establishment: Daily number of employees working 25 Daily number of customers/guests 253
7.4 Length of pipe in the sewer collection system? 500 feet/miles (Please denote which unit is appropriate.)
7.5 Does any bypassing occur in the collection system or at the treatment facility? Yes No (If yes, attach explanation.)
7.6 Does significant infiltration occur in the collection system? Yes No (If yes, attach explanation and proposed repair.)
7.7 Is industrial waste discharged to the facility identified in Item 2? Yes No (If yes, see instructions.)
7.8 Will the discharge be continuous through the year? Yes No
a. Discharge will occur during the following months: JAN. FEB. MARCH APRIL MAY AVG. SEPT. OCT. NOV. DEC.
b. How many days of the week will the discharge occur? 5
7.9 Is wastewater land applied? Yes No (If yes, attach Form I.)
7.10 Will chlorine be added to the effluent? Yes No
a. If chlorine is added, what is the resulting residual? ACCEPTABLE AFFILIANT WITHIN GWDE LINES.
7.11 Does this facility discharge to a losing stream or sinkhole? Yes No
7.12 Attach a flow chart showing all influents, treatment facilities and outfalls.
7.13 Has a waste load allocation study been completed for this facility? Yes No
7.14 List all permit violations, including effluent limit exceedances in the last five years. Attach a separate sheet if necessary.
If none, write none. NONE

MO 780-1512 (09-08)

MO DEPT. NATURAL RESOURCES
St. Louis Regional Office
Fee Received 9-20-11
Date: 9-20-11

RECEIVED
SEP 20 2011
MO DEPT. NATURAL RESOURCES
ST. LOUIS REGIONAL OFFICE

8. SLUDGE HANDLING, USE AND DISPOSAL

8.1 Is the sludge a hazardous waste as defined by 10 CSR 25? Yes No

8.2 Sludge Production, including sludge received from others: 0 Design Dry Tons/Year 0.7 Actual Dry Tons/Year

8.3 Capacity of sludge holding structures:
 Sludge storage provided: 869 cubic feet; 120 days of storage; 3 average percent solids of sludge;
 No sludge storage is provided.

8.4 Type of Storage: Holding tank Building
 Basin Other (Please describe) _____
 Concrete Pad

8.5 Sludge Treatment:
 Anaerobic Digester Lagoon Composting
 Storage Tank Aerobic Digester Other (Attach description)
 Lime Stabilization Air or Heat Drying

8.6 Sludge Use or Disposal:
 Land Application Surface Disposal (Sludge Disposal Lagoon, Sludge held for more than two years)
 Contract Hauler Incineration
 Hauled to Another Treatment Facility Sludge Retained in Wastewater treatment lagoon
 Solid Waste Landfill Other _____ Attach explanation sheet.

8.7 PERSON RESPONSIBLE FOR HAULING SLUDGE TO DISPOSAL FACILITY
 By Applicant By Others (complete below)

NAME: ABR SEPTIC SERVICE, INC.

ADDRESS: <u>P.O. BOX 2 9133 RIDGE RD.</u>	CITY: <u>DITTMER</u>	STATE: <u>MO.</u>	ZIP CODE: <u>63023</u>
CONTACT PERSON: <u>MIKE RUSTIGE</u>	TELEPHONE WITH AREA CODE: <u>(636) 214-0522</u>	PERMIT NO. MO-: <u>682118</u>	

8.8 SLUDGE USE OR DISPOSAL FACILITY
 By Applicant By Others (Please complete below.)

NAME: ABR SEPTIC SERVICE, INC.

ADDRESS: <u>P.O. BOX 248 9133 RIDGE RD.</u>	CITY: <u>DITTMER</u>	STATE: <u>MO.</u>	ZIP CODE: <u>63023</u>
CONTACT PERSON: <u>MIKE RUSTIGE</u>	TELEPHONE WITH AREA CODE: <u>(636) 214-0522</u>	PERMIT NO. MO-: <u>682118</u>	

8.9 Does the sludge or biosolids disposal comply with federal sludge regulations under 40 CFR 503?
 Yes No (Please attach explanation)

9. DOWNSTREAM LANDOWNER (S). ATTACH ADDITIONAL SHEETS AS NECESSARY. SEE INSTRUCTIONS.

NAME: CONSERVATION CLUB

ADDRESS: <u>HWY 61</u>	CITY: <u>FESTUS</u>	STATE: <u>MO.</u>	ZIP CODE: <u>63028</u>
------------------------	---------------------	-------------------	------------------------

10. DRINKING WATER SUPPLY INFORMATION

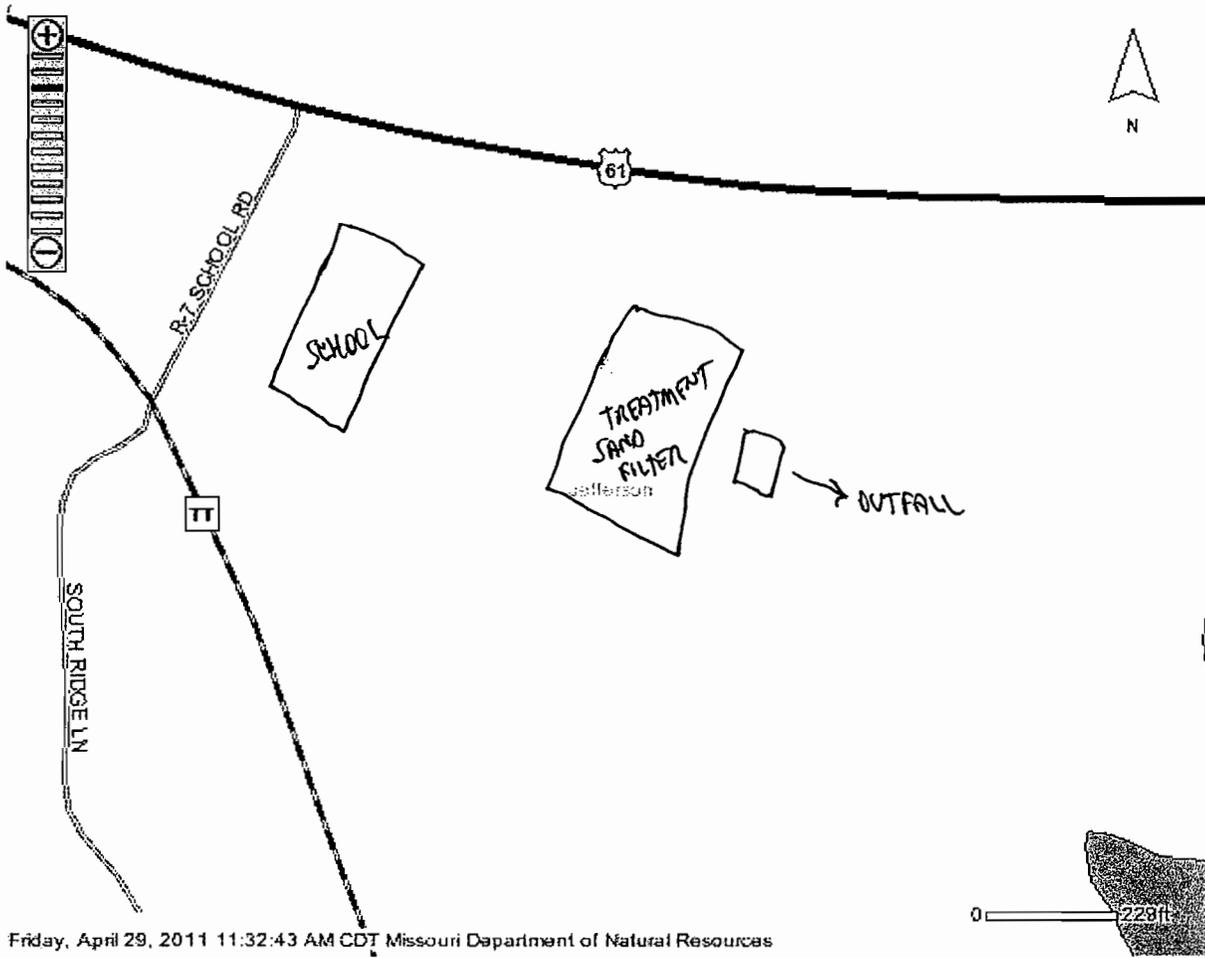
10.1 WHAT IS THE SOURCE OF YOUR DRINKING WATER SUPPLY:
 A. Public supply (municipal or water district water) PUBLIC WATER SUPPLY # 12
 If public, please give name of the public supply 12301 HWY TT FESTUS, MO. 63028 (636) 937-9697
 B. Private well _____
 C. Surface water (lake, pond or stream) NO

10.2 Does your drinking water source serve at least 25 people at least 60 days per year (not necessarily consecutive days)?
 Yes No

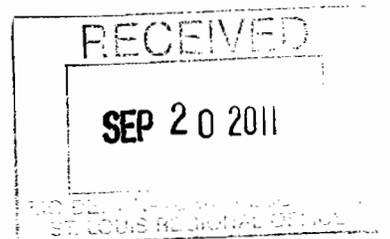
10.3 Does your supply serve housing which is occupied year round by the same people? This does not include housing which is occupied seasonally? Yes No

11. 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 AND OFFICIAL TITLE (TYPE OR PRINT): <u>TOM SCHEELE / DIRECTOR OF MAINTENANCE</u>	TELEPHONE WITH AREA CODE: <u>(636) 937-9188 EXT. 22</u>
SIGNATURE: 	DATE SIGNED: <u>APRIL 29, 2011</u>



Friday, April 29, 2011 11:32:43 AM CDT Missouri Department of Natural Resources



**INSTRUCTIONS FOR COMPLETING FORM B
APPLICATION FOR CONSTRUCTION OR OPERATING PERMITS FOR
FACILITIES WHICH RECEIVE BASICALLY DOMESTIC WASTE
(Facilities over 100,000 gallons per day of domestic waste must use FORM B2)**

(Facilities that receive wastes other than domestic must fill out FORM A and other forms as appropriate)

1. Check which parameter is applicable. **Do not check more than one item.** Construction and operating permit refer to permits issued by the Department of Natural Resources, Water Protection Program, Water Pollution Branch. Effective Sept. 1, 2008, a facility will be required to use *MISSOURI'S ANTIDegradation Rule AND IMPLEMENTATION PROCEDURE*. For more information, this document is available on the Web at www.dnr.mo.gov/env/wpp/docs/aip-cwc-appr-050708.pdf. This procedure will be applicable to new and expanded wastewater facilities and requires the proposed discharge to a water body to undergo a level of Antidegradation Review which documents that the use of a water body's available assimilative capacity is justified.

1.1 Self-explanatory.

- 1.2 An operating permit and antidegradation review public notice requires a Water Quality/Antidegradation Review Sheet to be submitted with the application (No fee required).

CONSTRUCTION PERMIT FEES (Please include fee with application.)

\$750 for a sewage treatment facility with a design flow of less than 500,000 gallons per day, or gpd.

\$2,200 for sewage treatment facility with a design flow of 500,000 gpd or more.

DOMESTIC OPERATING PERMIT FEES (Annual operating permit fees are based on flow and are due each year on the anniversary date of the permit.)

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 2 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. 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 - 25 percent of annual fee

Note: Facility name or address changes where owner, operator and continuing authority remain the same are not considered transfers. Incomplete permit applications or related engineering documents will be returned by the department if they are not completed in the time frame established by the department in a comment letter to the owner. Permit fees for returned applications shall be forfeited. Permit fees for applications being processed by the department that are withdrawn by the applicant shall be forfeited.

2. If the facility has multiple outfalls, designate the outfall number and total number and use a separate form for each outfall. Name of Facility - The name by which is this facility locally known. Example: Southwest Sewage Treatment Plant, Country Club Mobile Home Park, etc. Give the street address or location of the facility. If the facility lacks a street name or route number, give the names of the closest intersection, highway, country road, etc.
- 2.1 Point of discharge should be given in terms of the legal description of the waste treatment plant. Sufficient information should be submitted that it may be located by department staff.
- 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/.
- 2.3 Receiving stream(s) - Include the name of the stream or streams to which the discharge is directed and any subsequent tributary until a continuous flowing stream is reached.
3. Owner - Include the legal name and address of the owner.
- 3.1 Prior to submitting a permit to public notice, the Department of Natural Resources shall provide the permit applicant 10 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. Check yes to review the draft permit prior to public notice. Check no to waive the process and expedite the permit.
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 or contact the appropriate Department of Natural Resources Regional Office.
5. Operator - Provide the name, certificate number and telephone number of the operator of the facility.
6. Provide the name, title and work telephone number 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, if necessary.

INSTRUCTIONS FOR COMPLETING FORM B
APPLICATION FOR CONSTRUCTION OR OPERATING PERMITS FOR
FACILITIES WHICH RECEIVE BASICALLY DOMESTIC WASTE
(CONTINUED)

- 7.1 Provide a brief description of the wastewater treatment facilities. Attach a 1"=2,000' scale U.S. Geological Survey topographic map showing location of all outfalls. This type of map is available on the Web at www.dnr.mo.gov/internetmapviewer/ or from the Department of Natural Resources' Division of Geology and Land Survey in Rolla, Missouri at 573-368-2125.
- 7.2 For Standard Industrial Codes, visit www.osha.gov/pls/imis/sicsearch.html and for the North American Industry Classification System at www.census.gov/naics or contact the appropriate Department of Natural Resources Regional Office. For example, a family style restaurant has a Facility SIC code of 5812 and a Facility NAICS code of 722210.
- 7.3 Indicate the total number of people presently served by the wastewater treatment facility. If this is a commercial establishment, indicate the number of employees and the number of guests or patrons served by the wastewater treatment facility on a daily basis.
- 7.4 Self-explanatory.
- 7.5 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.
- 7.6 Self-explanatory.
- 7.7 Attach a list of industrial discharges into the system. For each industry, provide the name of facility, address, flow, type of industry/SIC code/ NAICS code and a list of the pollutants discharged by that industry into the collection system.
- 7.8 - 7.14 Self-explanatory.
- 8.1 A copy of 10 CSR 25 is available on the Web at www.sos.mo.gov/adrules/csr/current/10csr/10csr.asp#10-25 or at the Department of Natural Resources Regional Offices.
- 8.2 - 8.8 Self-explanatory.
- 8.9 Refer to University of Missouri Extension Environmental Quality publications about biosolids - numbers WQ420-426. Available on the Web at extension.missouri.edu/explore/envqual/. In addition, the federal sludge regulations are available through the U.S. Government Printing Office at www.gpoaccess.gov/cfr/index.html.
9. Provide the name and address of the first downstream landowner, different from that of the permitted facility, through whose property the discharge will flow. For discharges that leave the permitted facility and flow under a road or highway, or along the right-of-way, the downstream property owner is the landowner that the discharge flows to after leaving the right-of-way.
10. - 10.3 Self-explanatory.
- 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.

This completed form, along with the applicable permit fees, should be submitted to the appropriate Regional Office. Submittal of an incomplete application may result in the application being returned. Map of regional offices with addresses and phone numbers can be viewed on the web at 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, Water Pollution Branch, NPDES Permits and Engineering Section at 573-751-6825.

Riebeling, Donna

From: Smith, Kevin C.
Sent: Tuesday, September 20, 2011 2:54 PM
To: Riebeling, Donna
Cc: Murray, Byron; Bell, Sherry
Subject: RE: Question

Hello Donna,

That would be correct...

Thanks,

From: Riebeling, Donna
Sent: Tuesday, September 20, 2011 2:53 PM
To: Smith, Kevin C.
Subject: Question

Kevin,

Just a quick question that I want to make sure of.

If a facility usually gets invoiced for their annual fee in March and this year they didn't get invoiced because we couldn't collect fees at that time, then they lucked out and will not owe a fee for 2011, correct?

Thank you

Donna Riebeling
Engineering Unit
MDNR, St. Louis Regional Office
7545 S. Lindbergh, Suite 210
St. Louis, MO 63125
314-416-2960
314-416-2970 (fax)
donna.riebeling@dnr.mo.gov