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-0081400
Owner:	Union R-XI School District
Address:	770 Independence Drive, P.O. Box 440, Union, MO 63084
Continuing Authority:	Same as above
Address:	Same as above
Facility Name:	Beaufort Elementary School WWTF
Facility Address:	3200 Highway 50, Beaufort, MO 63013
Legal Description:	SE¼, SW¼, Sec. 34, T43N, R2W, Franklin County
UTM Coordinates:	X= 662766, Y= 4254372
Receiving Stream:	Unnamed tributary to Jordan Branch (U)
First Classified Stream and ID:	St. John's Creek (C) (1680)
USGS Basin & Sub-watershed No.:	10300200-0502

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 – Non-POTW/School – SIC #4952/8211
Single-cell lagoon / sludge retained in lagoon
Design population equivalent is 86.
Design flow is 5,800 gallons per day.
Actual flow is 3,000 gallons per day.
Design sludge production is 1.29 dry tons/year.

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

June 1, 2013
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

June 30, 2016
Expiration Date

John Madras, Director, Water Protection Program

OUTFALL #001	TABLE A-1. INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS	PAGE NUMBER 2 of 5
		PERMIT NUMBER MO-0081400

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective upon issuance and remain in effect for **July 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	MGD	*		*	once/quarter***	24 hr. estimate
Biochemical Oxygen Demand$_5$	mg/L		65	45	once/quarter***	grab
Total Suspended Solids	mg/L		120	80	once/quarter***	grab
pH – Units	SU	**		**	once/quarter***	grab
Ammonia as N	mg/L	*		*	once/quarter***	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE OCTOBER 28, 2013. 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 to be maintained at or above 6.5 pH units.
*** See table below for quarterly sampling.

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

OUTFALL #001	TABLE A-2. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS	PAGE NUMBER 3 of 5
		PERMIT NUMBER MO-0081400

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 **August 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	MGD	*		*	once/quarter***	24 hr. estimate
Biochemical Oxygen Demand$_5$	mg/L		65	45	once/quarter***	grab
Total Suspended Solids	mg/L		120	80	once/quarter***	grab
pH – Units	SU	**		**	once/quarter***	grab
Ammonia as N	mg/L				once/quarter***	grab
(April 1 – Sept 30)		3.6		1.4		
(Oct 1 – March 31)		7.5		2.9		

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE OCTOBER 28, 2017. 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 to be maintained at or above 6.5 pH units.
*** See table below for quarterly sampling

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

C. STANDARD CONDITIONS

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

D. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
   (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
      (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
      (2) controls any pollutant not limited in the permit.
   (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
   (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

   The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

2. All outfalls must be clearly marked in the field.

D. SPECIAL CONDITIONS (continued)

3. Permittee will cease discharge by connection to a facility with an area-wide management plan per 10 CSR 20-6.010(3)(B) within 90 days of notice of its availability.

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

5. Changes in Discharges of Toxic Substances
   The permittee shall notify the Director as soon as it knows or has reason to believe:
   (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
      (1) One hundred micrograms per liter (100 µg/L);
      (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
      (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
      (4) The level established 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.

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

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

8. 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.

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

10. A least one gate must be provided to access the wastewater treatment facility and provide for maintenance and mowing. The gate shall remain locked except when opened by the permittee to perform operational monitoring, sampling, maintenance, mowing, or for inspections by the Department.

D. SPECIAL CONDITIONS (continued)

11. 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.

12. 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.

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

14. The discharge from the wastewater treatment facility shall be conveyed to the receiving stream via a closed pipe or a paved or rip-rapped 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.

15. A minimum of two (2) feet freeboard must be maintained in the lagoon cell.

16. The berms of the lagoon shall be mowed and kept free of any deep-rooted vegetation, animal dens, or other potential sources of damage to the berms.

17. The facility shall ensure that adequate provisions are provided to prevent surface water intrusion into the lagoon and to divert stormwater runoff around the lagoon and protect embankments from erosion.

E. SCHEDULE OF COMPLIANCE

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

1. Within one (1) year of the effective date of this permit, the permittee shall report progress made in attaining compliance with the final effluent limits.
2. Within two (2) years of the effective date of this permit, the permittee shall submit a report detailing progress made in attaining compliance with the final effluent limits.
3. Within three (3) years of the effective date of this permit, the permittee shall submit a report detailing progress made in attaining compliance with the final effluent limits.

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

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL OF
MO-0081400
Beaufort Elementary School WWTF

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 Wastewater Treatment Facility (WWTF).

Part I – Facility Information

Facility Type: POTW - SIC #4952

Facility Description:
Single-cell lagoon / sludge retained in lagoon

Have any changes occurred at this facility or in the receiving water body that effects effluent limit derivation?
☒ - No.

Application Date: 10/07/2011
Expiration Date: 05/10/2012

OUTFALL(S) TABLE:

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
#001	0.002	Equivalent to Secondary	Domestic (sanitary)	4.1

Receiving Water Body's Water Quality & Facility Performance History:
A stream survey on August 15, 2012 determined that this facility is not impacting the receiving stream.

Comments:
The facility was inspected on 11/02/2011 and found to be in compliance with permit conditions. The facility reported the following limit exceedances during the previous permit cycle.

MPED	*Parameter*	*mg/L*
02/28/2011	BOD	49.2
02/29/2012	TSS	150.4
04/30/2011	TSS	91.2
09/30/2009	TSS	98.6

Part II – Operator Certification Requirements

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

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

Part III– 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:

WATER-BODY NAME	CLASS	WBID	DESIGNATED USES*	12-DIGIT HUC
Unnamed tributary to Jordan Branch	(U)	--	General Criteria	103002000502
St. John's Creek	(C)	1680	AQL, LWW, WBC-B	

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

RECEIVING STREAM(S) LOW-FLOW VALUES:

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Unnamed tributary to Jordan Branch (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)].

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.

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

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

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

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

☒ - 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 stored in the lagoon.

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

☒ Not Applicable; The permittee/facility is not currently under Water Protection Program enforcement action.

PRETREATMENT PROGRAM:
The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a Publicly Owned Treatment Works [40 CFR Part 403.3(q)]. Pretreatment programs are required at any POTW (or combination of POTW operated by the same authority) and/or municipality with a total design flow greater than 5.0 MGD and receiving industrial wastes that interfere with or pass through the treatment works or are otherwise subject to the pretreatment standards. Pretreatment programs can also be required at POTWs/municipals with a design flow less than 5.0 MGD if needed to prevent interference with operations or pass through.

☒ 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 ammonia. Please see **APPENDIX – RPA RESULTS.** It indicated that the facility has reasonable potential to cause an excursion above water quality standards in the receiving stream. Not enough data has been collected for calculation of site-specific coefficient of variation. Thus, the limits were determined using the default CV=0.60 recommended by the EPA's technical support document, and the resulting default multipliers. The default limits provide adequate protection for aquatic life without placing unnecessarily restrictive limits on the permittee.

REMOVAL EFFICIENCY:
Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (BOD_5) 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.

☒ - 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 four (4) year schedule of compliance to meet final effluent limits for ammonia. The final effluent limitations for Ammonia as N may not be met with the current treatment technology and may require construction to upgrade or replace the facility. The Department feels that the SOC granted for Ammonia as N provides the facility adequate time to evaluate the existing facility and properly complete upgrades to the treatment system, if necessary.

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:

$$Ce = \frac{(Qe + Qs)C - (Cs \times Qs)}{(Qe)}$$ (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

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

☒ 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

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

Part VI – 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 seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall's Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits section.

☒ All Other Waters [10 CSR 20-7.015(8)]

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		65	45	No	65/45
TSS	mg/L	1, 4		120	80	No	120/80
pH	SU	1, 4	≥6.5		≥6.5	Yes	≥6.0
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	7.5		2.9	Yes	*

* - Monitoring requirement only.

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

OUTFALL #001 – DERIVATION AND DISCUSSION OF LIMITS:

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

- **Biochemical Oxygen Demand (BOD_5).**
  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 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 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: $C_e = ((0.002+ 0.0)1.5 – (0.0 * 0.01))/0.002$
$C_e = 1.5$ mg/L

Acute WLA: $C_e = ((0.002+ 0.0)12.1 – (0.0 * 0.01))/0.002$
$C_e = 12.1$ mg/L

$LTA_c = 1.5$ mg/L (0.780) = 1.17 mg/L [CV =0.6, 99th Percentile, 30 day avg.]
$LTA_a = 12.1$ mg/L (0.321) = 3.89 mg/L [CV =0.6, 99th Percentile]

Use most protective number of LTA_c or LTA_a.

MDL = 1.17 mg/L (3.11) = 3.6 mg/L [CV =0.6, 99th Percentile]
AML = 1.17 mg/L (1.19) = 1.4 mg/L [CV =0.6, 95th Percentile, n =30]

Winter: October 1 – March 31
Chronic WLA: $C_e = ((0.002+ 0.0)3.1 – (0.0 * 0.01))/0.002$
$C_e = 3.1$ mg/L

Acute WLA: $C_e = ((0.002+ 0.0)12.1 – (0.0 * 0.01))/0.002$
$C_e = 12.1$ mg/L

$LTA_c = 3.1$ mg/L (0.780) = 2.42 mg/L [CV =0.6, 99th Percentile, 30 day avg.]
$LTA_a = 12.1$ mg/L (0.321) = 3.89 mg/L [CV =0.6, 99th Percentile]

Use most protective number of LTA_c or LTA_a.

MDL = 2.42 mg/L (3.11) = 7.5 mg/L [CV =0.6, 99th Percentile]
AML = 2.42 mg/L (1.19) = 2.9 mg/L [CV =0.6, 95th Percentile, n =30]

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

Sampling Frequency Justification:
Sampling and Reporting Frequency was retained from previous permit.

Sampling Type Justification
As per 10 CSR 20-7.015, samples collected for lagoons shall be grab samples

Part VII – 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**
facility.

Part VIII – 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. Post Public Notice, Department staff corrected a typographical error in the permit. A narrative condition requiring annual reports be submitted detailing efforts to reduce Inflow and Infiltration (I&I) in the permit. As described in the factsheet, this facility is not required to submit this report. Therefore, the Department has removed the typographical error.

DATE OF FACT SHEET: 03/04/2013

COMPLETED BY:

HILLARY CLARK, ENVIRONMENTAL SPECIALIST
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION - DOMESTIC WASTEWATER UNIT
(573) 751-7326
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	12.10	46.68	1.50	46.68	8	18.6/3.15	0.443	2.446	Yes
Total Ammonia as Nitrogen (Winter) mg/L	12.10	52.86	3.10	52.86	7	28.3/10.6	0.280	1.824	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)

FOR THE PURPOSE OF RENEWAL OF
MO-0081400
Beaufort Elementary School WWTF

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: Single-cell lagoon / sludge retained in lagoon

Facility Name:	Beaufort Elementary School WWTF
Facility Address:	3200 Highway 50, Beaufort, MO 63013
Legal Description:	SE¼, SW¼, Sec.34, T43N, R2W, Franklin County
UTM Coordinates:	X=662766, Y= 4254372
Receiving Stream:	Unnamed tributary to Jordan Branch (U)
First Classified Stream and ID:	St. John's Creek (C) (1680)
USGS Basin & Sub-watershed No.:	10300200-0502

Total Connections: 1

New Permit Requirements or Requirements Now Being Enforced:
This permit implements ammonia limits within the next seven years.

Range of Anticipated Costs Associated with Complying with Requirements:
Capital cost associated with this new permit requirement ranges from $234,000 to $487,200. Annual operating cost increase ranges from $13,443 to $57,146.

(1) The School District's financial capability to raise or secure necessary funding.

2010-2011Revenues[1]	$38,092,645
2010-2011 Expenditures[1]	$23,400,801
Current outstanding debt	$34,358,081

Other indicators: Paid debt down $1,445,405.04 in 2010-2011 school year. Union R-XI School District consists of five schools.

[1] Annual Secretary of the Board Report - http://apps.dese.mo.gov/ASBR/PublicView.aspx

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

Estimated capital cost of pollution control options:

New Technology Requirement	Capital Costs	O & M	Estimated Resulting Cost to District
Ammonia	$234,000 – 487,200	$13,443 – 57,146	$247,443 – 544,346

Franklin County Median Household Income:	$49,655
Household Property Tax Rate[2]:	3.75%
2010-2011 Property Tax Revenue	$10,963,677
Assessed Value of School District Infrastructure[2]:	$297,593,753
School District Annual Operating and Maintenance Costs[1]:	$2,177,159
Cost per School as a percent of Assessed Valuation:	0.08%

234,000/297,593,753

New Technology	Costs per School as % of Assessed Value	Financial Impact	Financial Impact: Revenue – cost of facility upgrade and operational costs
Ammonia	0.12%	Low (<1%)	
		Medium (1-2%)	
		High (>2%)	

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

Ammonia (NH_3) is toxic to early stages of aquatic life. Removal prevents damage to aquatic life in accordance with 10 CSR 20-7 and the Clean Water Act; and enables the stream to support a healthier and diverse aquatic life community. This facility has Ammonia as N final effluent limitations based on the Water Quality Standards (WQS) found in the above citation. The following calculations illustrate the difference in pounds per day (lbs/day) of NH_3 discharged currently to lbs/day required by effluent limits in this permit:

Pounds of Ammonia as N per day = (flow, MGD) x (concentration of ammonia limitation, mg/L) x (conversion factor, 8.34)

Current Performance (2011-2012 DMR data)
Actual Flow = 0.0014 MGD:

Summer Season:				
Monthly Average	=	0.0014 x 12.7 x 8.34	=	0.15 lbs/day
Winter Season:				
Monthly Average	=	0.0014 x 17.7 x 8.34	=	0.21 lbs/day

Necessary Performance
Design Flow = 0.0058 MGD:

Summer Season:				
Monthly Average	=	0.0058 x 1.4 x 8.34	=	0.07 lbs/day
Winter Season:				
Monthly Average	=	0.0058 x 2.9 x 8.34	=	0.14 lbs/day

Environmental Benefit to Ammonia Removal
Design Flow = 0.0215 MGD:

		Summer	Winter
Current average performance (lbs/day)	=	0.15	0.21
-Necessary average performance limitations (lbs/day)	=	-0.07	-0.14
Environmental Benefit (lbs/day)	=	0.08	0.07

More advanced conventional technologies than the current treatment type at the facility may be required in order to meet the final effluent limitations, which may be more costly than the current operating costs of the facility.

[2] Review of 2011 Property Tax Rates - http://www.auditor.mo.gov/press/2011-118.pdf

(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:

(a) 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;

(b) 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 Franklin County	7.2%
Median Household Income[4] Franklin County	$49,655
Percent change in Median Household Income[5] (1990-2010)	73.5%
Percent Population Growth/Decline[6] (1990-2010)	25.9%
Change in Median Age[7] (1990-2010)	+19.2%
Percent of Households in Poverty[8]	21.2%
Percent of Households Dependent on Food Stamps[9]	8.7%

Opportunity for cost savings or cost avoidance:
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 for. More information about the SRF and other loans and grants can be found on the Department's website at http://dnr.mo.gov/env/wpp/srf/wastewater-assistance.htm. You may also contact the Financial Assistance Center (FAC) by clicking on the appropriate link on the website listed above.

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:.
If the permittee feels that the six year schedule of compliance for Ammonia as N does not provide enough time to make necessary preparations and upgrades, the permittee may submit justification to the Department detailing reasons for an extended schedule of compliance.

(5) An assessment of other school district investments relating to environmental improvements;
No other environmental investments were reported by the permittee.

[3] Unemployment data from Missouri Department of Economic Development (October 2012) – http://www.missourieconomy.org/pdfs/urel1210.pdf
[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/websas/xtabs3menus/mo/Places/
[6] 2010 Census Population Data - http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t
2000 Census Population Data - http://www.census.gov/popest/data/cities/totals/2009/tables/SUB-EST2009-04-29.xls 1990 Census Population Data – http://www.census.gov/prod/cen1990/cp1/cp-1-27.pdf
[7] 1990 Median Age - http://www.oseda.missouri.edu/mscdc/census/mo/trendplaces.html 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
[8 and 7] Poverty and Food stamps data – American Community Survey 5-year estimates DP03 - http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t

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

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

Secondary indicators for consideration:

Socioeconomic, Debt and Financial Indicators

Indicators	Strong (3 points)	Mid-Range (2 points)	Weak (1 point)	Score
Overall net debt as a % of assessed valuation	Below 2%	2% - 5%	Above 5% *34,358,081/297,593,753 = 11%*	1
Unemployment Rate	>1% below Missouri average	± 1% of MO average *6.6% - 7.2% = -0.6%*	>1% above Missouri average	2
Median household income	More than 25% above Missouri MHI	± 25% of Missouri MHI *49,655/44,306 = +12%*	More than 25% below Missouri average	2
Property tax revenues as a % of full market property value[2]	Below 2%	2% - 4% *8,302,866/297,593,753 = 2.8%*	Above 4%	2
Property tax collection rate[2]	Above 98%	94% - 98% *10,963,677/11,159,766 = 98%*	Below 94%	2

Average Score for Financial Capability Matrix: 1.8
School District Indicator (from Criteria #2 above): Low Burden

Financial Capability Matrix

Financial Capability Indicators Score from above ↓	**School District Indicator (User rate as a % of MHI)**		
	Low (Below 1%)	Mid-Range (Between 1.0% - 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.

Franklin County's population increased 25.9% from 1990-2010. In terms of economic strength, Franklin County is above average when compared to other counties in the State. The percentage of labor force is 2% above the State average, the per capita wealth[10] is 9% above the State average, and the per capita income is the 6% below the State's average.

In terms of retail Sales, Franklin County loses retail customers to surrounding counties and County residents spend less than the state average on retail goods and services. The buying power index of Franklin County residents is above average compared to the rest of the regional economy[11].

Conclusion and Finding

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

[10] Per capita wealth is calculated by taking a sum of appraised value of residential property, mobile homes and motor vehicles and this sum is then divided by County population.
http://www.missourieconomy.org/pdfs/stl_wia_retail_trade_analysis.pdf

AP8107

NS

REISSUE

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	NO FEE required
DATE RECEIVED	FEE SUBMITTED
2/16/12	Ø

(P)

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. Construction Permit # ____
- ☒ An operating permit renewal: Permit #MO- MO0081400 Expiration Date 5/10/2012
- ☐ An operating permit modification: Permit #MO- ____ Reason: ____

1.1 Is this a Federal/State Funded Project? ☐ YES ☒ NO Funding Agency/Project #: ____

1.2 Is the appropriate fee included with the application (See instructions for appropriate fee)? ☐ YES ☒ NO

2. FACILITY (Outfall of)

NAME		TELEPHONE WITH AREA CODE
BEAUFORT ELEMENTARY SCHOOL		573-484-3221
ADDRESS (PHYSICAL)	**CITY**	**STATE / ZIP CODE**
3200 HWY 50	BEAUFORT	MO 63013

2.1 LEGAL DESCRIPTION: SE ¼, SE ¼, SW ¼, Sec. 34, T 43N R 2W County FRANKLIN

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

2.3 Name of receiving stream: WET WEATHER TRIBUTARY TO JORDAN BRANCH (MO RIVER AND EASTERN TRIB)

3. OWNER

NAME	E-MAIL ADDRESS	TELEPHONE WITH AREA CODE
UNION R-XI SCHOOL DISTRICT	UNION.KID.MO.US	636-583-8626
ADDRESS	**CITY**	**STATE / ZIP CODE**
770 INDEPENDENCE DR. P.O. BOX 440	UNION	MO 63084

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		TELEPHONE WITH AREA CODE
UNION R-XI SCHOOL DISTRICT		636-583-8626
ADDRESS	**CITY**	**STATE / ZIP CODE**
770 INDEPENDENCE DR. P.O. BOX 440	UNION	MO 63084

5. OPERATOR

NAME	CERTIFICATE NUMBER	TELEPHONE WITH AREA CODE
MARK SPANN		573-484-3221

6. FACILITY CONTACT

NAME	TITLE	TELEPHONE WITH AREA CODE
NORMAN		

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: 8495 Discharge SIC code: N/A; Facility NAICS code: ____; Discharge NAICS code: ____.

7.3 Number of people presently connected or population equivalent (P.E.) ____ Design P.E. ____
Number of units presently connected: Homes ____ Trailers ____ Apartments ____ Other 1-SCHOOL
Design flow for this outfall: 5,800 Total design flow for the facility: 5,800 Actual flow for this outfall: 3,000
Commercial Establishment: Daily number of employees working 40 Daily number of customers/guests 360

7.4 Length of pipe in the sewer collection system? 100 (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-JAN.
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)

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

RECEIVED
OCT - 7 2011
DEPARTMENT OF NATURAL RESOURCES
SOUTHWEST REGIONAL OFFICE

MO 780-1512 (09-08)

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: _____ Design Dry Tons/Year _____ Actual Dry Tons/Year

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

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

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
☐ Other _____ Attach explanation sheet.
☐ Solid Waste Landfill

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

NAME			
N/A			
ADDRESS	CITY	STATE	ZIP CODE
CONTACT PERSON	TELEPHONE WITH AREA CODE	PERMIT NO.	
		MO-	

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

NAME			
N/A			
ADDRESS	CITY	STATE	ZIP CODE
CONTACT PERSON	TELEPHONE WITH AREA CODE	PERMIT NO.	
		MO-	

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			
MIKE AND KAREN FOGELBACH			
ADDRESS	CITY	STATE	ZIP CODE
HWY 50	BEAUFORT		

10. DRINKING WATER SUPPLY INFORMATION

10.1 WHAT IS THE SOURCE OF YOUR DRINKING WATER SUPPLY:
A. Public supply (municipal or water district water) X
If public, please give name of the public supply PUBLIC WATER DIST
P.O BOX 127
B. Private well _____
C. Surface water (lake, pond or stream) _____ BEAUFORT, MO. 63013

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)	TELEPHONE WITH AREA CODE
NORMAN SCHROEDER MAINT. SUP	636-583-2432
SIGNATURE	DATE SIGNED
Norman Schroeder	10-7-11

MO 780-1512 (09-08)