

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

The Missouri Department of Natural Resources hereby issues a permit to:

Sikeston Board of Municipal Utilities
Sikeston Wastewater Treatment Plant
860 South Ingram Road
Sikeston, MO 63801

for the construction of (described facilities):

See attached.

Permit Conditions:

See attached.

Construction of such proposed facilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, RSMo, and regulation promulgated thereunder, or this permit may be revoked by the Department of Natural Resources (department).

As the department does not examine structural features of design or the efficiency of mechanical equipment, the issuance of this permit does not include approval of these features.

A representative of the department may inspect the work covered by this permit during construction. Issuance of a permit to operate by the department will be contingent on the work substantially adhering to the approved plans and specifications.

This permit applies only to the construction of water pollution control components; it does not apply to other environmentally regulated areas.

September 5, 2024
Effective Date

September 4, 2026
Expiration Date


John Hoke, Director, Water Protection Program

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

Improvements to an existing 5.0 MGD wastewater treatment facility. Approximately 2,081 lineal feet of 10 inch DR-25 PVC and HDPE force main to replace existing force main; a new influent pump station to replace the existing station, with three 25 HP pumps, two pumps operating have a capacity of 3,560 gpm; a new headworks building with new equipment to replace old components; two fine band screens with washer/compactors, two stacked tray grit removal units with dewaterer/classifiers; a secondary pump station with a total of seven 25 HP pumps, this is a new feature to the facility, three pumps directed to existing contact stabilization plant, 2 pumps operating have a capacity of 3,230 gpm, and four pumps directed to existing oxidation ditch plant, 3 pumps operating have a capacity of 5,460 gpm; a 2,500 kW emergency generator, two ultrasonic flow meters located after the new headworks. Together with all the necessary appurtenances to make a complete and usable wastewater treatment system to treat the waste from a population equivalent of 30,000 with an average daily discharge of 5.0 million gallons. The design flow will remain the same and the existing outfall will remain. Discharge is to St. Johns Ditch in Sec. 29, T26N, R14E, Scott County.

II. COST ANALYSIS FOR COMPLIANCE

Pursuant to Section 644.145, RSMo, when issuing permits under this chapter that incorporate a new requirement for discharges from publicly owned combined or separate sanitary or storm sewer systems or publicly owned treatment works, or when enforcing provisions of this chapter or the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq., pertaining to any portion of a publicly owned combined or separate sanitary or storm sewer system or [publicly owned] treatment works, the Department of Natural Resources shall make a “finding of affordability” on the costs to be incurred and the impact of any rate changes on ratepayers upon which to base such permits and decisions, to the extent allowable under this chapter and the Federal Water Pollution Control Act. This process is completed through a cost analysis for compliance. Permits that do not include new requirements may be deemed affordable.

The department is not required to determine Cost Analysis for Compliance because the permit contains no new conditions or requirements that convey a new cost to the facility.

III. CONSTRUCTION PERMIT CONDITIONS

The permittee is authorized to construct subject to the following conditions:

1. This construction permit does not authorize discharge.

2. All construction shall be consistent with plans and specifications signed and sealed by Richard Cochran, Jr., P.E., with Waters Engineering, Inc., and as described in this permit.
3. The department must be contacted in writing prior to making any changes to the plans and specifications that would directly or indirectly have an impact on the capacity, flow, system layout, or reliability of the proposed wastewater treatment facilities or any design parameter that is addressed by 10 CSR 20-8, in accordance with 10 CSR 20-8.110(11).
4. State and federal law does not permit bypassing of raw wastewater, therefore steps must be taken to ensure that raw wastewater does not discharge during construction. If a sanitary sewer overflow or bypass occurs, report the appropriate information to the department's Southeast Regional Office per 10 CSR 20-7.015(9)(G).
5. In addition to the requirements for a construction permit, 10 CSR 20-6.200 requires land disturbance activities of one acre or more to obtain a Missouri state operating permit to discharge stormwater. The permit requires best management practices sufficient to control runoff and sedimentation to protect waters of the state. Land disturbance permits will only be obtained by means of the department's ePermitting system available online at <https://dnr.mo.gov/data-e-services/missouri-gateway-environmental-management-mogem>. See <https://dnr.mo.gov/data-e-services/water/electronic-permitting-epermitting> for more information.
6. A United States Army Corps of Engineers (USACE) Clean Water Act Section 404 Department of the Army permit and a Section 401 Water Quality Certification issued by the department may be required for the activities described in this permit. This permit is not valid until these requirements are satisfied or notification is provided that no Section 404 permit is required by the USACE. You must contact your local USACE district since they determine what waters are jurisdictional and which permitting requirements may apply. You may call the department's Water Protection Program, Operating Permits Section at 573-522-4502 for more information. See <https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/section-401-water-quality> for more information.
7. In accordance with 10 CSR 20-6.010(12), a closure plan shall be submitted to the department's Southeast Regional Office for review and approval of any permitted wastewater treatment system being replaced. The closure plan must meet the requirements outlined in Standard Conditions Part III of the Missouri State Operating Permit No. MO-0035009. Closure shall not commence until the submitted closure plan is approved by the department.
8. All construction must adhere to applicable 10 CSR 20-8 (Chapter 8) requirements listed below.
 - Electrical equipment. Electrical equipment shall be provided with the following requirements:
 - 10 CSR 20-8.130 (3) (B) 2. A. Electrical equipment must comply with 10 CSR 20-8.140(7)(B);

- Utilize corrosive resistant equipment located in the wet well; 10 CSR 20-8.130 (3) (B) 2. B.
- Provide a watertight seal and separate strain relief for all flexible cable; 10 CSR 20-8.130(3) (B) 2. C.
- Install a fused disconnect switch located above ground for the main power feed for all pumping stations. 10 CSR 20-8.130 (3) (B) 2. D.
- When such equipment is exposed to weather, it shall comply with the requirements of weather proof equipment; enclosure NEMA 4; NEMA 4X where necessary; and *NEMA Standard 250-2014*, published December 15, 2014. 10 CSR 20-8.130 (3) (B) 2. E.
- Install lightning and surge protection systems; 10 CSR 20-8.130 (3) (B) 2. F.
- Install a one hundred ten volt (110 V) power receptacle inside the control panel located outdoors to facilitate maintenance; 10 CSR 20-8.130 (3) (B) 2. G.
- Provide Ground Fault Circuit Interruption (GFCI) protection for all outdoor receptacles. 10 CSR 20-8.130 (3) (B) 2. H.
- Water level controls must be accessible without entering the wet well. 10 CSR 20-8.130 (3) (C)
- Covered wet wells shall have provisions for air displacement to the atmosphere, such as an inverted and screened “j” tube or other means. 10 CSR 20-8.130 (3) (E)
- There shall be no physical connection between any potable water supply and a wastewater pumping station, which under any conditions, might cause contamination of the potable water supply. If a potable water supply is brought to the station, no piping or other connections shall exist in any part of the wastewater treatment facility that might cause the contamination of a potable water supply. 10 CSR 20-8.130 (3) (G)
 - Where a potable water supply is to be used for any purpose in a wastewater treatment facility other than direct connections, a break tank, pressure pump, and pressure tank or a reduced pressure backflow preventer consistent with the department’s Public Drinking Water Branch shall be provided. 10 CSR 20-8.140 (7) (D) 3. A.
 - For indirect connections, a sign shall be permanently posted at every hose bib, faucet, hydrant, or sill cock located on the water system beyond the break tank or backflow preventer to indicate that the water is not safe for drinking. 10 CSR 20-8.140 (7) (D) 3. B.
 - Where a separate non-potable water supply is to be provided, a break tank will not be necessary, but all system outlets shall be posted with a permanent sign indicating the water is not safe for drinking. 10 CSR 20-8.140 (7) (D) 4.
- Facilities shall be readily accessible by authorized personnel from a public right-of-way at all times. 10 CSR 20-8.140 (2) (D). 10 CSR 20-8.130 (2) (B).
- Submersible pump stations shall meet the applicable requirements under section (3) of this rule, except as modified in this section. 10 CSR 20-8.130 (5)

- Pump Removal. Submersible pumps shall be readily removable and replaceable without personnel entering, dewatering, or disconnecting any piping in the wet well. 10 CSR 20-8.130 (5) (A)
- 10 CSR 20-8.130 (5) (B) Valve Chamber and Valves. Valves required under subsection (3)(D) of this rule shall be located in a separate valve chamber.
- A minimum access hatch dimensions of 24 inches by 36 inches shall be provided. 10 CSR 20-8.130 (5) (B) 1.
- Alarm systems with an uninterrupted power source shall be provided for pumping stations. 10 CSR 20-8.130 (6).
- Force main system shall be designed to withstand all pressures (including water hammer and associated cyclic reversal of stresses), and maintain a velocity of at least two feet per second. 10 CSR 20-8.130 (8) (A)
- Flood protection shall apply to new construction and to existing facilities undergoing major modification. The wastewater facility structures, electrical equipment, and mechanical equipment shall be protected from physical damage by not less than the 100- year flood elevation. 10 CSR 20-8.140 (2) (B)
- Facilities shall be readily accessible by authorized personnel from a public right-of-way at all times. 10 CSR 20-8.140 (2) (D)
- All wastewater treatment facilities shall be provided with an alternate source of electric power or pumping capability to allow continuity of operation during power failures. 10 CSR 20-8.140 (7) (A) 1.
- Electrical systems and components in raw wastewater or in enclosed or partially enclosed spaces where hazardous concentrations of flammable gases or vapors that are normally present, shall comply with the NFPA 70 *National Electric Code (NEC)* (2017 Edition), as approved and published August 24, 2016, requirements for Class I, Division 1, Group D locations. 10 CSR 20-8.140 (7) (B)
- An audiovisual alarm or a more advanced alert system, with a self-contained power supply, capable of monitoring the condition of equipment whose failure could result in a violation of the operating permit, shall be provided for all wastewater treatment facilities. 10 CSR 20-8.140 (7) (C)
- No piping or other connections shall exist in any part of the wastewater treatment facility that might cause the contamination of a potable water supply. 10 CSR 20-8.140 (7) (D) 1.
- Where a potable water supply is to be used for any purpose in a wastewater treatment facility other than direct connections, a break tank, pressure pump, and pressure tank or a reduced pressure backflow preventer consistent with the department's Public Drinking Water Branch shall be provided. 10 CSR 20-8.140 (7) (D) 3. A.

- For indirect connections, a sign shall be permanently posted at every hose bib, faucet, hydrant, or sill cock located on the water system beyond the break tank or backflow preventer to indicate that the water is not safe for drinking. 10 CSR 20-8.140 (7) (D) 3. B.
- Isolate all wastewater treatment components installed in a building where other equipment or offices are located from the rest of the building by an air-tight partition, provide separate outside entrances, and provide separate and independent fresh air supply. 10 CSR 20-8.140 (7) (G)
- Adequate provisions shall be made to effectively protect facility personnel and visitors from hazards. The following shall be provided to fulfill the particular needs of each wastewater treatment facility:
 - Fencing. Enclose the facility site with a fence designed to discourage the entrance of unauthorized persons and animals; 10 CSR 20-8.140 (8) (A)
 - Gratings over appropriate areas of treatment units where access for maintenance is necessary; 10 CSR 20-8.140 (8) (B)
 - First aid equipment; 10 CSR 20-8.140 (8) (C)
 - Posted “No Smoking” signs in hazardous areas; 10 CSR 20-8.140 (8) (D)
 - Appropriate personal protective equipment (PPE); 10 CSR 20-8.140 (8) (E)
 - Portable blower and hose sufficient to ventilate accessed confined spaces; 10 CSR 20-8.140 (8) (F)
 - 10 CSR 20-8.140 (8) (G) Portable lighting equipment complying with NEC requirements. See subsection (7)(B) of this rule;
 - 10 CSR 20-8.140 (8) (H) Gas detectors listed and labeled for use in NEC Class I, Division 1, Group D locations. See subsection (7)(B) of this rule;
 - Appropriately-placed warning signs for slippery areas, non-potable water fixtures (see subparagraph (7)(D)3.B. of this rule), low head clearance areas, open service manholes, hazardous chemical storage areas, flammable fuel storage areas, high noise areas, etc.; 10 CSR 20-8.140 (8) (I)
 - Ventilation shall include the following:
 - Isolate all pumping stations and wastewater treatment components installed in a building where other equipment or offices are located from the rest of the building by an air-tight partition, provide separate outside entrances, and provide separate and independent fresh air supply; 10 CSR 20-8.140 (8) (J) 1.
 - Force fresh air into enclosed screening device areas or open pits more than four feet deep. 10 CSR 20-8.140 (8) (J) 2.
 - Dampers are not to be used on exhaust or fresh air ducts. Avoid the use of fine screens or other obstructions on exhaust or fresh air ducts to prevent clogging; 10 CSR 20-8.140 (8) (J) 3.
 - Where continuous ventilation is needed (e.g., housed facilities), provide at least 12 complete air changes per hour. Where continuous ventilation would cause excessive heat loss, provide intermittent ventilation of at least 30 complete air changes per hour when facility personnel enter the area. Base air change demands on 100 percent fresh air; 10 CSR 20-8.140 (8) (J) 4.

- Electrical controls. Mark and conveniently locate switches for operation of ventilation equipment outside of the wet well or building. Interconnect all intermittently operated ventilation equipment with the respective wet well, dry well, or building lighting system. The manual lighting/ventilation switch is expected to override the automatic controls. For a two speed ventilation system with automatic switch over where gas detection equipment is installed, increase the ventilation rate automatically in response to the detection of hazardous concentrations of gases or vapors; 10 CSR 20-8.140 (8) (J) 5.
- Fabricate the fan wheel from non-sparking material. Provide automatic heating and dehumidification equipment in all dry wells and buildings. 10 CSR 20-8.140 (8) (J) 6.
- Explosion-proof electrical equipment, non-sparking tools, gas detectors, and similar devices, in work areas where hazardous conditions may exist, such as digester vaults and other locations where potentially explosive atmospheres of flammable gas or vapor with air may accumulate. 10 CSR 20-8.140 (8) (K)
- Provisions for local lockout/tagout on stop motor controls and other devices; 10 CSR 20-8.140 (8) (L)
- Provisions for an arc flash hazard analysis and determination of the flash protection boundary distance and type of PPE to reduce exposure to major electrical hazards shall be in accordance with NFPA 70E *Standard for Electrical Safety in the Workplace* (2018 Edition), as approved and published August 21, 2017. 10 CSR 20-8.140 (8) (M)
- All wastewater treatment facilities must have a screening device, comminutor, or septic tank for the purpose of removing debris and nuisance materials from the influent wastewater. 10 CSR 20-8.150 (2)
- Provisions shall be made for isolating or removing screening devices from their location for servicing. 10 CSR 20-8.150 (4) (A) 2.
- Mechanically cleaned screen channels shall be protected by guard railings and deck gratings. 10 CSR 20-8.150 (4) (A) 3. A. (II).
- Mechanical screening equipment shall have adequate removal enclosures to protect facility personnel against accidental contact with moving parts and to prevent dripping in multi-level installations. 10 CSR 20-8.150 (4) (A) 3. B. (I)
- A positive means of locking out each mechanical screening device shall be provided. 10 CSR 20-8.150 (4) (A) 3. B. (II)
- An emergency stop button with an automatic reverse function shall be located in close proximity to the mechanical screening device. 10 CSR 20-8.150 (4) (A) 3. B. (III)

- Electrical systems and components in raw wastewater or in enclosed or partially enclosed spaces where hazardous concentrations of flammable gases or vapors that are normally present, shall comply with the NFPA 70 *National Electric Code (NEC)* (2017 Edition), as approved and published August 24, 2016, requirements for Class I, Division 1, Group D locations. 10 CSR 20-8.140 (7) (B)
- Where two (2) or more mechanically cleaned bar screens are used, the design shall provide for taking the largest unit out-of-service without sacrificing the capability to handle the average design flow. Where only one mechanically cleaned screen is used, it shall be sized to handle the design peak instantaneous flow. 10 CSR 20-8.150 (4) (B)
- Grit removal facilities are required for wastewater treatment facilities that utilize membrane bioreactors for secondary treatment; utilize anaerobic digestion; receive wastewater from combined sewers; or receive wastewater from collection systems that receive substantial amounts of grit. 10 CSR 20-8.150 (6)

9. Upon completion of construction:

- A. The Sikeston Board of Municipal Utilities will become the continuing authority for operation and maintenance of these facilities;
- B. Submit an electronic copy of the as built if the project was not constructed in accordance with previously submitted plans and specifications; and
- C. Submit the Statement of Work Completed form to the department in accordance with 10 CSR 20-6.010(5)(N) (<https://dnr.mo.gov/document-search/wastewater-construction-statement-work-completed-mo-780-2155>) and request the operating permit modification be issued.

IV. REVIEW SUMMARY

1. CONSTRUCTION PURPOSE

The proposed project is the first phase of a multi-phase project. This phase involves replacement of the headworks, which is at the end of its useful life and has become only partially effective at preliminary treatment. A future project will focus on improvements to the biological treatment systems.

2. FACILITY DESCRIPTION

The existing Sikeston WWTP consists of an influent pump station, comminutors, grit removal, an oxidation ditch, two contact stabilization plants, four final clarifiers, UV

disinfection, and cascade post aeration. Sludge is processed with a gravity belt thickener and stored in a sludge holding basin with floating cover; biosolids are land applied.

Construction is to update facility equipment. Including new force main into the plant, new influent lift station, new headworks building with new fine screens, new grit removal units, new intermediate lift station that splits flow to the contact stabilization plants and the oxidation ditch. Two new flow meters; emergency standby generator. The design flow and outfall location remain unchanged.

The following components will need to be properly closed: existing influent pump station; existing headworks building; existing abandoned primary clarifier. Approval of a closure plan is required prior to closure activities.

The Sikeston WWTP is located at 860 South Ingram Road, Sikeston, in Scott County, Missouri. The facility has a design average flow of 5.0 MGD and serves an organic population equivalent of approximately 30,000 people.

3. COMPLIANCE PARAMETERS

The proposed project is for improvements to the headworks of the treatment plant. While the improvements will significantly improve operation and effectiveness of the treatment plant there are no changes to compliance parameters.

4. REVIEW of MAJOR TREATMENT DESIGN CRITERIA

- Currently influent enters the facility through three force mains and also through a 24-inch gravity sewer, the gravity flow is pumped through an influent pump station, joins the other force main and goes to headworks which includes comminutors and grit removal units, flow is then split between an oxidation ditch plant and two contact stabilization plants, each followed by final clarifiers, all flow then recombines and passes through UV disinfection. Sludge is processed with a gravity belt thickener, held in a storage basin with a floating cover, then biosolids are land applied. Facility has a design flow of 5.0 MGD.
- This construction permit covers improvements to include new 10-inch force main entering the facility, replacement of the influent pump station, replacement of the headworks, including a fine screening system and a grit removal system; an intermediate lift station; two new flow meters, and an emergency generator. Design flow and outfall location to remain unchanged.
 - Future improvements are anticipated for rehabilitation of the biological treatment and sludge handling systems.

Construction will cover the following items:

- Approximately 2,081 lineal feet of 10-inch DR-25 PVC and HDPE force main to replace existing force main from existing County Line lift station; to join existing 14-inch force main inside the treatment facility.
- Replace and relocate influent pump station, three 25 HP pumps controlled by variable frequency drives; two pumps together will operate up to 3,560 gpm at 28 feet of TDH; influent pump station pumps all raw wastewater that enters the treatment plant by gravity flow. Flow is delivered to the headworks through a combined 18-inch force main.
- Screening – Installation of screening devices removes nuisance inorganic materials from raw wastewater.
 - Mechanical Fine Screen – Two mechanically cleaned fine screens in dual channels, consisting of in-channel band screens with 6 mm perforations (HUBER Band Screen). Each screening device shall be capable of treating a peak flow of 12.4 MGD. The addition of a second mechanically cleaned fine screen provides redundancy and improved screening of inorganic materials. The addition of a washer/compactor and screenings conveyor will mitigate the increased volume of screenings captured by washing, dewatering, and compacting the screenings prior to disposal. The screening structures are followed by grit removal.
- Grit Removal – Installation of grit removal facilities, removes grit and inert inorganics from raw wastewater. Grit removal prevents downstream abrasion and wear on mechanical components and accumulation at the bottom of basins or channels.
 - Multi-Tray Grit Separator – A stacked tray mechanical grit removal system is proposed to handle a peak flow of 12.4 MGD. The tray diameter is 9 ft., there are 7 conical trays per unit for a total effective surface area of approximately 400 sf per unit. The grit concentrator will have a capacity of 21.5 gpm/sf. Two units provided, each unit has a peak capacity of 12.4 MGD.
 - Grit Classifier – Installation of two grit classifier/concentration units. Maximum flow capacity of 200 gpm (0.288 MGD). The addition of grit slurry dewatering escalators with a 6-inch wide belts to transport grit from the classifier to the disposal unit.

- An intermediate pump station following the headworks to pump flow to the two separate biological treatment trains.
 - Three 25 HP pumps controlled by variable frequency drives; two pumps together will operate up to 3,230 gpm at 34.4 feet of TDH; flow goes through 18-inch force mains to the contact stabilization plants.
 - Four 25 HP pumps controlled by variable frequency drives; three pumps together will operate up to 5,460 gpm at 38.3 feet of TDH; flow goes through 20-inch force mains to the oxidation ditch plant.
- Process water will be converted from a recycled effluent service water system to a system that utilizes potable water from the City water supply. Watts Series 909, 4-inch, reduced pressure zone backflow preventer assembly to be installed to isolate the process water from the potable water source.
- Flow Measurement – Installation of accurate flow measurement devices will give the treatment facility a means of improved data analysis. Project includes installation of two new flow meters following headworks.
 - Two fixed rectangular weirs along with two ultrasonic flow sensors to measure wastewater flow exiting the headworks. There is a separate channel for each grit removal unit. After the flow meters the flow recombines and continues to the intermediate pump station.
- Emergency Power – A 2,500 kW standby diesel generator and automatic transfer switches will be provided to operate the treatment facility in event of power failure.

5. OPERATING PERMIT

Operating permit MO-0035009 will require a modification to reflect the construction activities. The modified Sikeston WWTP, MO-0035009, will be public noticed to reflect changes to the facility description.

Submit the Statement of Work Completed to the department in accordance with 10 CSR 20-6.010(5)(N) and request the operating permit modification be issued.

With your CP application, an operating permit modification was submitted for public notice to reflect the change in your operating permit. Your operating permit application for renewal will be due before your CP is expired. The modification action does not fulfill the renewal application obligation. A renewal application must be filed 180 days prior to the Operating Permit expiration date of September 30, 2025. Renewal Application is due by April 3, 2025. If you have questions on completing the renewal application, please contact the NPDES permitting section at 573-522-4502.

V. NOTICE OF RIGHT TO APPEAL

If you were adversely affected by this decision, you may be entitled to an appeal before the Administrative Hearing Commission (AHC) pursuant to Section 621.250 RSMo. To appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC. Any appeal should be directed to:

Administrative Hearing Commission
U.S. Post Office Building, Third Floor
131 West High Street, P.O. Box 1557
Jefferson City, MO 65102-1557
Phone: 573-751-2422
Fax: 573-751-5018
Website: <https://ahc.mo.gov>

Andrew Appelbaum, P.E.
Engineering Section
andy.appelbaum@dnr.mo.gov

APPENDIX Process Flow Diagram





MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM
**APPLICATION FOR CONSTRUCTION PERMIT –
 WASTEWATER TREATMENT FACILITY**

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
FEE RECEIVED	CHECK NO.
DATE RECEIVED	

APPLICATION OVERVIEW

The Application for Construction Permit – Wastewater Treatment Facility form has been developed in a modular format and consists of Part A and B. **All applicants must complete Part A.** Part B should be completed for applicants who currently land-apply wastewater or propose land application for wastewater treatment. **Please read the accompanying instructions before completing this form. Submittal of an incomplete application may result in the application being returned.**

PART A – BASIC INFORMATION

1.0 APPLICATION INFORMATION (Note – If any of the questions in this section are answered NO, this application may be considered incomplete and returned.)

- 1.1 Is this a Federal/State funded project? YES N/A Funding Agency: _____ Project #: _____
- 1.2 Has the Missouri Department of Natural Resources approved the proposed project's antidegradation review?
 YES Date of Approval: _____ N/A
- 1.3 Has the department approved the proposed project's facility plan*?
 YES Date of Approval: _____ NO (If No, complete No. 1.4.)
- 1.4 [Complete only if answered No on No. 1.3.] Is a copy of the facility plan* for wastewater treatment facilities included with this application?
 YES NO Exempt because _____
- 1.5 Is a copy of the appropriate plans* and specifications* included with this application?
 YES Denote which form is submitted: Hard copy Electronic copy (See instructions.) NO
- 1.6 Is a summary of design* included with this application? YES NO
- 1.7 Has the appropriate operating permit application (A, B, or B2) been submitted to the department?
 YES Date of submittal: _____
 Enclosed is the appropriate operating permit application and fee submittal. Denote which form: A B B2
 N/A: However, In the event the department believes that my operating permit requires revision to permit limitation such as changing equivalent to secondary limits to secondary limits or adding total residual chlorine limits, please share a draft copy prior to public notice? YES NO
- 1.8 Is the facility currently under enforcement with the department or the Environmental Protection Agency? YES NO
- 1.9 Is the appropriate fee or JetPay confirmation included with this application? YES NO
 See Section 7.0

* Must be affixed with a Missouri registered professional engineer's seal, signature and date.

2.0 PROJECT INFORMATION

2.1 NAME OF PROJECT	2.2 ESTIMATED PROJECT CONSTRUCTION COST \$
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2.3 PROJECT DESCRIPTION

2.4 SLUDGE HANDLING, USE AND DISPOSAL DESCRIPTION

2.5 DESIGN INFORMATION

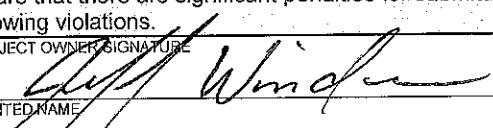
A. Current population: _____; Design population: _____

B. Actual Flow: _____ gpd; Design Average Flow: _____ gpd;
 Actual Peak Daily Flow: _____ gpd; Design Maximum Daily Flow: _____ gpd; Design Wet Weather Event: _____

2.6 ADDITIONAL INFORMATION

A. Is a topographic map attached? YES NO

B. Is a process flow diagram attached? YES NO

3.0 WASTEWATER TREATMENT FACILITY				
NAME Sikeston Wastewater Treatment Plant		TELEPHONE NUMBER WITH AREA CODE 573-471-3328		E-MAIL ADDRESS
ADDRESS (PHYSICAL) 860 South Ingram Road		CITY Sikeston	STATE MO	ZIP CODE 63801
COUNTY Scott				
Wastewater Treatment Facility: Mo- 0035009 (Outfall 001 Of 1)				
3.1 Legal Description: <u>SE 1/4, NW 1/4, _____ 1/4, Sec. 29, T 26N, R 14E</u> (Use additional pages if construction of more than one outfall is proposed.)				
3.2 UTM Coordinates Easting (X): <u>806432</u> Northing (Y): <u>4085903</u> For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)				
3.3 Name of receiving streams: <u>St. Johns Ditch</u>				
4.0 PROJECT OWNER				
NAME Sikeston Board of Municipal Utilities		TELEPHONE NUMBER WITH AREA CODE 573-475-3328		E-MAIL ADDRESS jwinders@sbm.net
ADDRESS P.O. Box 370		CITY Sikeston	STATE MO	ZIP CODE 63801
5.0 CONTINUING AUTHORITY: A continuing authority is a company, business, entity or person(s) that will be operating the facility and/or ensuring compliance with the permit requirements.				
NAME Same as Owner		TELEPHONE NUMBER WITH AREA CODE		E-MAIL ADDRESS
ADDRESS		CITY	STATE	ZIP CODE
5.1 A letter from the continuing authority, if different than the owner, is included with this application. <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A				
5.2 COMPLETE THE FOLLOWING IF THE CONTINUING AUTHORITY IS A MISSOURI PUBLIC SERVICE COMMISSION REGULATED ENTITY.				
A. Is a copy of the certificate of convenience and necessity included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO				
5.3 COMPLETE THE FOLLOWING IF THE CONTINUING AUTHORITY IS A PROPERTY OWNERS ASSOCIATION.				
A. Is a copy of the as-filed restrictions and covenants included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO				
B. Is a copy of the as-filed warranty deed, quitclaim deed or other legal instrument which transfers ownership of the land for the wastewater treatment facility to the association included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO				
C. Is a copy of the as-filed legal instrument (typically the plat) that provides the association with valid easements for all sewers included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO				
D. Is a copy of the Missouri Secretary of State's nonprofit corporation certificate included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO				
6.0 ENGINEER				
ENGINEER NAME / COMPANY NAME Richard Cochran, Jr., P.E./Waters Engineering Inc		TELEPHONE NUMBER WITH AREA CODE 573-471-5680		E-MAIL ADDRESS rcochran@waterseng.com
ADDRESS P.O. Box 567		CITY Sikeston	STATE MO	ZIP CODE 63801
7.0 APPLICATION FEE				
<input checked="" type="checkbox"/> CHECK NUMBER <input type="checkbox"/> JETPAY CONFIRMATION NUMBER				
8.0 PROJECT OWNER: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.				
PROJECT OWNER SIGNATURE 				
PRINTED NAME Jeff Winders			DATE 03/01/24	
TITLE OR CORPORATE POSITION Operations Manager		TELEPHONE NUMBER WITH AREA CODE 573-471-3328		E-MAIL ADDRESS jwinders@sbm.net
Mail completed copy to: MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM P.O. BOX 176 JEFFERSON CITY, MO 65102-0176				
END OF PART A.				
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHETHER PART B NEEDS TO BE COMPLETE.				

PART B – LAND APPLICATION ONLY
(Submit only if the proposed construction project includes land application of wastewater.)

8.0 FACILITY INFORMATION

8.1 Type of wastewater to be irrigated: Domestic State/National Park Seasonal business
 Municipal Municipal with a pretreatment program or significant industrial users
 Other (explain) _____

8.2 Months when the business or enterprise will operate or generate wastewater:
 12 months per year Part of the year (list months): _____

8.3 This system is designed for:
 No-discharge.
 Partial irrigation when feasible and discharge rest of time.
 Irrigation during recreational season, April – October, and discharge during November – March.
 Other (explain) _____.

9.0 STORAGE BASINS

9.1 Number of storage basins: _____ (Use additional pages if greater than three basins.)

9.2 Type of basins: Steel Concrete Fiberglass Earthen Earthen with membrane liner

9.3 Storage basin dimensions at inside top of berm (feet). Report freeboard as feet from top of berm to emergency spillway or overflow pipe.
Basin #1: Length _____ Width _____ Depth _____ Freeboard _____ Depth _____ Safety _____ % Slope _____
Basin #2: Length _____ Width _____ Depth _____ Freeboard _____ Depth _____ Safety _____ % Slope _____
Basin #3: Length _____ Width _____ Depth _____ Freeboard _____ Depth _____ Safety _____ % Slope _____

9.4 Storage Basin operating levels (report as feet below emergency overflow level).
Basin #1: Maximum operating water level _____ ft Minimum operating water level _____ ft
Basin #2: Maximum operating water level _____ ft Minimum operating water level _____ ft
Basin #3: Maximum operating water level _____ ft Minimum operating water level _____ ft

9.5 Design depth of sludge in storage basins.
Basin #1: _____ ft Basin #2: _____ ft Basin #3: _____ ft

9.6 Existing sludge depth, if the basins are currently in operation.
Basin #1: _____ ft Basin #2: _____ ft Basin #3: _____ ft

9.7 Total design sludge storage: _____ dry tons and _____ cubic feet

10.0 LAND APPLICATION SYSTEM

10.1 Number of irrigation sites _____ Total Acres _____ Maximum % field slopes _____
Location: _____ ¼, _____ ¼, _____ ¼, _____ Sec. _____ T _____ R _____ County _____ Acres
Location: _____ ¼, _____ ¼, _____ ¼, _____ Sec. _____ T _____ R _____ County _____ Acres
Location: _____ ¼, _____ ¼, _____ ¼, _____ Sec. _____ T _____ R _____ County _____ Acres
(Use additional pages if greater than three irrigation sites.)

10.2 Type of vegetation: Grass hay Pasture Timber Row crops
 Other (describe) _____

10.3 Wastewater flow (dry weather) gallons per day: Average annual _____ Seasonal _____ Off-season _____

10.4 Land application rate (design flow including 1-in-10 year storm water flows):
Design: _____ inches/year _____ inches/hour _____ inches/day _____ inches/week
Actual: _____ inches/year _____ inches/hour _____ inches/day _____ inches/week

10.5 Total irrigation per year (gallons): Design: _____ gal Actual: _____ gal

10.6 Actual months used for irrigation (check all that apply):
 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

10.7 Land application rate is based on:
 Hydraulic Loading Other (describe) _____
 Nutrient Management Plan (N&P) If N&P is selected, is the plan included? YES NO

**INSTRUCTIONS FOR COMPLETING
APPLICATION FOR CONSTRUCTION PERMIT – WASTEWATER TREATMENT FACILITIES**

All blanks must be filled in when the application is submitted to the Missouri Department of Natural Resources. This includes the **required signature**.

Note: Use the form Application for Construction Permit – Sewer Extension, MO 780-1632, if only collection system component(s) are to be constructed.

A land disturbance permit is required if construction will result in the disturbance of one or more acres of land. A land disturbance permit is available through the department's ePermitting system at dnr.mo.gov/env/wpp/epermit/help.htm. A permit fee in accordance with 10 CSR 20-6.011 is required.

After receiving a complete application, the Department enters the application information into the Missouri Clean Water Information System. You may search for the status of a construction permit online at dnr.mo.gov/mocwis_public/applicationInprocessSearch.do.

Part A – Basic Application Information

- 1.0 If the answer to any of the questions in this section is no, this application may be considered incomplete and returned to the applicant.
- 1.1 Check the appropriate box. If the project is funded with federal or state monies, supply the funding agency name and project number.
- 1.2 Check the appropriate box. Provide the date of department approval for the antidegradation report. Include a copy of the approved *Water Quality and Antidegradation Review* with this application. Not every construction project may require an antidegradation review. For more information, guidance documents and forms concerning antidegradation visit dnr.mo.gov/env/wpp/permits/antideg-implementation.htm.
- 1.3 Check the appropriate box and provide the date of department approval. Per 10 CSR 20-8.110(2), a facility plan must be submitted to the department prior to the submittal of a construction permit application. The department has developed a fact sheet to aid in the development of an approvable facility plan, Facility Plan Guidance for Wastewater Treatment Facilities, Fact Sheet--PUB2416.
- 1.4 Complete only if No. 1.3 is answered No. Check the appropriate box. Include the exemption reason from 10 CSR 20-6.010(4)(B).
- 1.5 Check the appropriate box. Provide a copy of the appropriate plans and specifications for department review when applying for a construction permit per 10 CSR 20-8.110 and 10 CSR 20-6.010. A Missouri registered professional engineering seal, signature and date is required on each sheet of the plans and the cover of the technical specifications. An electronic copy of the construction permit application and the information listed below in Portable Document Format (PDF) searchable format or department approved equivalent per 10 CSR 20-6.010(5)(G), along with one (1) paper copy for projects not seeking department funding or two (2) paper copies for projects seeking department funding under 10 CSR 20-4.
- 1.6 Check the appropriate box. A summary of design shall accompany the plans and specifications when applying for a construction permit per 10 CSR 20-6.010(5)(G) and 10 CSR 20-8.110(8). The department has developed a fact sheet to aid in the development of an acceptable summary of design. This document is available online at dnr.mo.gov/pubs/pub2417.htm.
- 1.7 Check the appropriate box if an operating permit modification is needed. Include the applicable operating permit application. New outfalls, discharges, projects converting to land application, or a lagoon upgrade require an operating permit modification application. Contact the Department for clarification. Projects that may not need an operating permit modification check the N/A box and indicate whether you want to review the draft prior to public notice should the Department determine a modification is required. The Department can modify your operating permit without an application for projects that are adding chlorine disinfection, constructing to meet current operating permit limits, or constructing to meet limits in a schedule of compliance.
 - Form A is available online at dnr.mo.gov/forms/780-1479-f.pdf.
 - Form B is available online at dnr.mo.gov/forms/780-1512-f.pdf.
 - Form B2 is available online at dnr.mo.gov/forms/780-1805-f.pdf.
- 1.8 Check the appropriate box. More information about the Compliance and Enforcement Water Protection Program is available online at dnr.mo.gov/env/wpp/enf/index.html.

- 1.9 Check the appropriate box. Include payment or payment confirmation for the fee with your application. See 10 CSR 20-6.011(2) and Wastewater Treatment Facility Permit Fees -- PUB2564.
- Note:** The department returns incomplete construction permit applications and related engineering documents and the application forfeits the fees. See 10 CSR 20-6.011(5)(A). The applicant forfeits the fees when the applicant withdraws construction applications. See 10 CSR 20-6.011(5)(B).
- 2.1 Provide the name of the proposed construction project.
- 2.2 Provide the estimated project construction cost. The estimated and final project construction cost will be useful to the department in conducting affordability analyses.
- 2.3 Briefly describe the construction project by providing the number and capacity of each new unit.
- 2.4 Briefly describe the method of sludge handling, use and disposal at the treatment facility.
- 2.5 Provide the project design information and when required in the units specified.
- A. Provide the current population and the design population to be served by the wastewater treatment facility.
- B. Provide the estimated design flow information in accordance with 10 CSR 20-8.110(3).
- 2.6 Provide the additional project information in accordance with 10 CSR 20-8.110(5).
- A. Attach a topographic map of the area extending at least one mile beyond the facility property boundaries. This map must show the outline of the facility and the following information. A topographic map is available online at dnr.mo.gov/internetmapviewer or from the Department of Natural Resources' Missouri Geological Survey in Rolla, Mo., at 573-368-2125. (Submittals of more than one map may be necessary to show the entire area.)
1. The area surrounding the wastewater treatment facility, including all unit processes.
 2. The major pipes or other structures through which wastewater enters the treatment facility and the pipes or other structures through which treated wastewater is discharged from the treatment facility. Include outfalls from bypass piping, if applicable.
 3. The actual point of discharge.
 4. Wells, springs, other surface water bodies and drinking water wells that are: 1) within ¼ mile of the property boundaries of the treatment facility and 2) listed in public record or otherwise known to the applicant.
 5. Any areas where biosolids produced by the treatment facility are treated, stored, or disposed.
 6. If the treatment facility receives waste classified as hazardous under the Resource Conservation and Recovery Act, or RCRA, by truck, rail, or special pipe, show on the map where hazardous waste enters the treatment works and where it is treated, stored or disposed.
 7. Outline any wastewater land application sites.
- B. Provide a process flow diagram with the influent and effluent design average flow and peak flow capabilities. Also, depict all of the treatment facility components and the corresponding hydraulic capacities of each component. In addition, include all recycle flows in the diagram. If land application is used, depict all irrigation equipment and application sites.
- 3.0 Complete the Wastewater Treatment Facility information. Include the Missouri State Operation Permit number, outfall number, physical location, and other appropriate contact information.
- 3.1 Provide the project legal description. The department's mapping system is available online at dnr.mo.gov/internetmapviewer.
- 3.2 A Global Positioning System, or GPS, is a satellite-based navigation system. The department prefers that a GPS receiver is used and the displayed coordinates submitted. If access to a GPS receiver is not available, use a mapping system to approximate the coordinates.
- 3.3 Provide the name of the receiving stream(s) to which the discharge is directed and any subsequent tributary until a continuous flowing stream is reached.
- 4.0 Complete Project Owner information. Include the legal name, address, phone number with area code and email address.
- 5.0 Complete Continuing Authority contact information. If same as the Project Owner, write "Same as above". A continuing authority is a company, business, entity or person(s) that will be operating the facility and/or ensuring compliance with the permit requirements. A continuing authority is not, however, an entity or individual that is contractually hired by the permittee to sample or operate and maintain the system for a defined time period, such as a certified operator or analytical laboratory. To access the regulatory requirement regarding continuing authority, 10 CSR 20-6.010(2), please visit <https://s1.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-6.pdf>. A continuing authority's name must be listed exactly as it appears on the Missouri Secretary of State's (SoS's) webpage: <https://bsd.sos.mo.gov/BusinessEntity/BESearch.aspx?SearchType=0>, unless the continuing

authority is an individual(s), government, or otherwise not required to register with the SoS. See 10 CSR 20-6.010(2) for the regulatory requirement regarding continuing authority.

- 5.1 Check the appropriate box. Include a letter signed by the continuing authority (if not same as the project owner) stating they will “accept, operate and maintain” the wastewater treatment facility after successful construction. If the continuing authority will not accept and agree to operate and maintain the wastewater treatment facility, this application will be considered incomplete.
- 5.2 Complete if the continuing authority is a Missouri Public Service Commission, or PSC, regulated entity. See 10 CSR 20-6.010(2)(B)3 for more information. This information is not necessary for existing wastewater treatment facilities currently permitted with a PSC entity as owner and continuing authority.
- 5.3 Complete if the continuing authority is a property owners association. See 10 CSR 20-6.010(2)(B)5 for more information. This information is not necessary for existing wastewater treatment facilities currently permitted with the property owners association as owner and continuing authority.
- 6.0 Complete Engineer contact information.
- 7.0 Check the appropriate box and include check or confirmation number. Applicants can pay fees online by credit card or eCheck through a system called JetPay.
- Per Section 37.001, RSMo, a transaction fee will be included. The transaction fee is paid to the third party vendor JetPay, not the Department of Natural Resources.
 - Be sure to select the correct fee type and corresponding URL to ensure your payment is applied appropriately. If you are unsure what type of fee to pay, please contact the Water Protection Program’s Budget, Fees, and Grants Management Unit by phone at (573) 522-1485 for assistance.
 - Upon successful completion of your payment, JetPay provides a payment confirmation. Submit this form with a copy of the payment confirmation if requesting a new permit or a permit modification. For permit renewals of active permits, the Department will invoice fees annually in a separate request.
 - If you are unable to make your payment online, but want to pay with credit card, you may email your name, phone number, and invoice number, if applicable, WPPFEES@dnr.mo.gov. The Budget, Fees, and Grants Management Unit will contact you to assist with the credit card payment. **Please do not include your credit card information in the email.**
 - Applicants can find fee rates in 10 CSR 20-6.011 and Wastewater Treatment Facility Permit Fees -- PUB2564 (<https://dnr.mo.gov/pubs/pub2564.htm>).

WP 04 Construction Permits: <https://magic.collectorsolutions.com/magic-ui/payments/mo-natural-resources/592/>

- 8.0 The owner of the construction project must sign the application.

Part B – Land Application

Complete Part B only if the proposed construction project includes land application of wastewater from a treatment facility.

- 8.0 Provide the applicable Facility Information land application information. Check the appropriate boxes.
- 9.0 Provide the applicable Storage Basins information. Check the appropriate boxes.
- Freeboard – The depth from the top of the berm to the emergency spillway. Minimum depth • is one foot.
 - Safety Volume – The depth to contain the 25-year, 24-hour storm event. Minimum depth is • one foot.
 - Maximum Operating Water Level – The water level at the bottom of the safety volume. • Minimum depth is two feet below the top of the berm.
 - Minimum Operating Water Level – The water level above the bottom of the lagoon basin for • seal protection. Minimum depth is two feet and may be greater when additional treatment volume is included.
 - Total Depth is from the top of the berm to the bottom of the lagoon basin including freeboard. •
- 10.0 Provide the applicable Land Application System information. Check the appropriate boxes.
- 10.7 Check the appropriate box. If the land application rate is based on a Nutrient Management Plan, or N and P, include the plan with this application for department review.

Mail the completed form and applicable fee to the department.

If there are any questions concerning this form, please contact the Department of Natural Resources, Water Protection Program at 800-361-4827 or 573-751-1300 or visit dnr.mo.gov/env/wpp.