STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

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

The Honorable Jerry Potterfield Mayor of Monroe City 109 2nd Street, Monroe City, MO 63456

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.

February 25, 2021 Effective Date

Edward B. Galbraith, Director, Division of Environmental Quality

February 24, 2023

Expiration Date

Chris Wieberg, Director, Water Protection Program

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

Installation of an activated sludge wastewater treatment facility to replace an existing aging treatment facility. Facility will be two stage sequencing aeration activated sludge with biological nutrient removal; includes disinfection and sludge dewatering. Nearly all the components will be new; the existing outfall will remain in use.

Wet weather peak flow equalization basin; influent lift station with 4 pumps, each with a capacity of 600 gpm; mechanical screening; activated sludge treatment consisting of two treatment trains, four distinct treatment basins including a shared fermenter tank, a shared selector basin (bio-p anaerobic tank), aeration tank first stage, and aeration tank second stage; one clarifier for each train, one sludge digester for each train; followed by ultraviolet disinfection. Also includes sludge dewatering screw press, aeration blowers, laboratory, emergency generator and non-potable service water.

A closure plan will need to be submitted to the Northeast Regional Office for review and approval prior to any closure activities.

This project will also include general site work appropriate to the scope and purpose of the project, and all necessary appurtenances to make a complete and usable wastewater treatment facility. Demolition of existing facilities to mostly take place after new facility is operating. All sludge will be removed from existing sludge holding basins and disposed off site. Design flow of facility will remain at 800,000 GPD and the outfall will remain at the existing location. Discharge is to a Tributary to Sharpsburg Branch in Section 13, T56N, R08W, Monroe 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 Mark Bross, P.E., Klinger & Associates, P.C. 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 Northeast Regional Office per 10 CSR 20-7.015(9)(G).
- 5. The wastewater treatment facility shall be located above the twenty-five (25)-year flood level.
- 6. The wastewater facility structures, electrical equipment, and mechanical equipment shall be protected from physical damage by not less than the one hundred- (100-) year flood elevation per 10 CSR 20-8.140(2)(B). The minimum distance between wastewater treatment facilities and all potable water sources shall be at least three hundred feet (300') per 10 CSR 20-8.140(2)(C)1.
- 7. In addition to the requirements for a construction permit, 10 CSR 20-6.200 requires land disturbance activities of 1 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 <u>dnr.mo.gov/env/wpp/epermit/help.htm</u>. See <u>dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm</u> for more information.
- 8. A United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) issued by the Department or permit waiver may be required for the activities described in this permit. This permit is not valid until these requirements are satisfied. If construction activity will disturb any land below the ordinary high water mark of jurisdictional waters of the U.S. then a 404/401 will be required. Since the COE makes determinations on what is jurisdictional, you must contact the COE to determine permitting requirements. You may call the Department's Water Protection Program at 573-751-1300 for more information. See <u>dnr.mo.gov/env/wpp/401/</u> for more information.

- 9. In accordance with 10 CSR 20-6.010(12), a full closure plan shall be submitted to the Department's Northeast 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-0055379. Closure shall not commence until the submitted closure plan is approved by the Department.
- 10. All construction must adhere to applicable 10 CSR 20-8 (Chapter 8) requirements listed below.

10 CSR 20-8.130 Pumping Stations.

- 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 one hundred-(100-) year flood elevation. 10 CSR 20-8.140(2)(B). 10 CSR 20-8.130 (2) (A)
- The distance between wastewater pumping stations and all potable water sources shall be at least fifty feet (50') in accordance with 10 CSR 23-3.010(1)(B). 10 CSR 20-8.130 (2) (D)
- Dry wells, including their superstructure, shall be completely separated from the wet well with gas tight common walls. 10 CSR 20-8.130 (3) (A) 1.
- Suitable and safe means of access to dry wells and to wet wells shall be provided to persons wearing self-contained breathing apparatus. 10 CSR 20-8.130 (3) (A) 2.
- Electrical equipment. Electrical equipment shall be provided with the following requirements:
 - 0 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)
- Valves shall not be located in the wet well unless integral to a pump or its housing. 10 CSR 20-8.130 (3) (D)

- 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)
- 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 twenty-four inches by thirty-six inches (24" x 36") 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 (2') per second. 10 CSR 20-8.130 (8) (A)

10 CSR 20-8.140 Wastewater Treatment Facilities

- 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 one hundred- (100-) year flood elevation. 10 CSR 20-8.140 (2) (B)
- Unless another distance is determined by the Missouri Geological Survey or by the department's Public Drinking Water Branch, the minimum distance between wastewater treatment facilities and all potable water sources shall be at least three hundred feet (300'). 10 CSR 20-8.140 (2) (C) 1.
- Facilities shall be readily accessible by authorized personnel from a public right–ofway at all times. 10 CSR 20-8.140 (2) (D)
- The alarm shall be activated in cases of high water levels. Follow the provisions in subsection (7)(C) of this rule for alarm systems. 10 CSR 20-8.140 (4) (D)
- The outfall shall be so constructed and protected against the effects of flood water, ice, or other hazards as to reasonably ensure its structural stability and freedom from stoppage. 10 CSR 20-8.140 (6) (A)
- All sampling points shall be designed so that a representative and discrete twenty-four (24) hour automatic composite sample or grab sample of the effluent discharge can be obtained at a point after the final treatment process and before discharge to or mixing with the receiving waters. 10 CSR 20-8.140 (6) (B)
- All outfalls shall be posted with a permanent sign indicating the outfall number (i.e., Outfall #001). 10 CSR 20-8.140 (6) (C)

- 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.
- Disinfection and dechlorination, when used, shall be provided during all power outages. 10 CSR 20-8.140 (7) (A) 2.
- 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.
- 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.
- A means of flow measurement shall be provided at all wastewater treatment facilities. 10 CSR 20-8.140 (7) (E)
- Effluent twenty-four (24) hour composite automatic sampling equipment shall be provided at all mechanical wastewater treatment facilities and at other facilities where necessary under provisions of the operating permit. 10 CSR 20-8.140 (7) (F)
- 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 (4') 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 twelve (12) complete air changes per hour. Where continuous ventilation would cause excessive heat loss, provide intermittent ventilation of at least thirty (30) complete air changes per hour when facility personnel enter the area. Base air change demands on one hundred percent (100%) 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 (2) 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)

- The materials utilized for storage, piping, valves, pumping, metering, and splash guards, etc., for chemical handling, shall be specially selected considering the physical and chemical characteristics of each hazardous or corrosive chemical. 10 CSR 20-8.140 (9) (A) 1.
- Secondary containment storage areas contain the stored volume of chemical until it can be safely transferred to alternate storage or released to the wastewater treatment plant at controlled rates that will not damage the facilities, inhibit the treatment processes, or contribute to stream pollution. Secondary containment shall be designed as follows:
 - A minimum volume of one hundred twenty-five percent (125%) of the volume of the largest storage container located within the containment area plus the space occupied by any other tanks located within the containment area when not protected from precipitation; 10 CSR 20-8.140 (9) (A) 2. A.
 - A minimum volume of one hundred ten percent (110%) of the volume of the largest storage container located within the containment area plus the space occupied by any other tanks located within the containment area when protected from precipitation; 10 CSR 20-8.140 (9) (A) 2. B.
 - Walls and floors of the secondary containment structure constructed of suitable material that is compatible with the specifications of the product being stored. 10 CSR 20-8.140 (9) (A) 2. C.
- All pumps or feeders for hazardous or corrosive chemicals shall have guards that will effectively prevent spray of chemicals into space occupied by facility personnel. 10 CSR 20-8.140 (9) (A) 3.
- Piping, labeling, and coupling guard locations. 10 CSR 20-8.140 (9) (A) 4.
- All piping containing or transporting corrosive or hazardous chemicals shall be identified with labels every ten feet (10') and with at least two (2) labels in each room, closet, or pipe chase. 10 CSR 20-8.140 (9) (A) 4. A.
- All connections (flanged or other type), except those adjacent to storage or feeder areas, shall have guards that will direct any leakage away from space occupied by facility personnel. 10 CSR 20-8.140 (9) (A) 4. B.
- Facilities shall be provided for automatic shutdown of pumps and sounding of alarms when failure occurs in a pressurized chemical discharge line. 10 CSR 20-8.140 (9) (A) 5.
- Dust collection equipment shall be provided to protect facility personnel from dusts injurious to the lungs or skin and to prevent polymer dust from settling on walkways that become slick when wet. 10 CSR 20-8.140 (9) (A) 6.
- The following shall be provided to fulfill the particular needs of each chemical housing facility:
 - Provide storage for a minimum of thirty (30) days' supply, unless local suppliers and conditions indicate that such storage can be reduced without limiting the supply; 10 CSR 20-8.140 (9) (B) 1.
 - Construct the chemical storage room of fire and corrosion resistant material; 10 CSR 20-8.140 (9) (B) 2.

- Equip doors with panic hardware. To prevent unauthorized access, doors lock but do not need a key to exit the locked room using the panic hardware; 10 CSR 20-8.140 (9) (B) 3.
- Provide chemical storage areas with drains, sumps, finished water plumbing, and the hose bibs and hoses necessary to clean up spills and to wash equipment; 10 CSR 20-8.140 (9) (B) 4.
- Construct chemical storage area floors and walls of material that is suitable to the chemicals being stored and that is capable of being cleaned; 10 CSR 20-8.140 (9) (B) 5.
- Install floor surfaces to be smooth, chemical resistant, slip resistant, and well drained with three inches per ten feet (3"/10') minimum slope; 10 CSR 20-8.140 (9) (B) 6.
- Provide adequate lighting; 10 CSR 20-8.140 (9) (B) 7.
- Comply with the NEC recommendation for lighting and electrical equipment based on the chemicals stored. 10 CSR 20-8.140 (9) (B) 8.
- Store chemical containers in a cool, dry, and well-ventilated area; 10 CSR 20-8.140 (9) (B) 9.
- Design vents from feeders, storage facilities, and equipment exhaust to discharge to the outside atmosphere above grade and remote from air intakes; 10 CSR 20-8.140 (9) (B) 10.
- Locate storage area for chemical containers out of direct sunlight; 10 CSR 20-8.140 (9) (B) 11.
- Maintain storage temperatures in accordance with relevant Material Safety Data Sheets (MSDS). 10 CSR 20-8.140 (9) (B) 12.
- Control humidity as necessary when storing dry chemicals; 10 CSR 20-8.140 (9) (B) 13.
- Design the storage area with designated areas for "full" and "empty" chemical containers; 10 CSR 20-8.140 (9) (B) 14.
- Provide storage rooms housing flammable chemicals with an automatic sprinkler system designed for four tenths gallons per minute per square foot (0.4 gpm/ft²) and a minimum duration of twenty (20) minutes; 10 CSR 20-8.140 (9) (B) 15.
- Store incompatible chemicals separately to ensure the safety of facility personnel and the wastewater treatment system. Store any two (2) chemicals that can react to form a toxic gas in separate housing facilities; 10 CSR 20-8.140 (9) (B) 16.
- Design and isolate areas intended for storage and handling of chlorine and sulfur dioxide and other hazardous gases. 10 CSR 20-8.140 (9) (B) 17.
- Design an isolated fireproof storage area and explosion proof electrical outlets, lights, and motors for all powdered activated carbon storage and handling areas in accordance with federal, state, and local requirements; 10 CSR 20-8.140 (9) (B) 18.
- Vent acid storage tanks to the outside atmosphere, but not through vents in common with day tanks; 10 CSR 20-8.140 (9) (B) 19.
- Keep concentrated acid solutions or dry powder in closed, acid-resistant shipping containers or storage units; 10 CSR 20-8.140 (9) (B) 20.
- Pump concentrated liquid acids in undiluted form from the original container to the point of treatment or to a covered storage tank. Do not handle in open vessels. 10 CSR 20-8.140 (9) (B) 21.

- The following shall be provided, where applicable, for the design of chemical handling:
 - Make provisions for measuring quantities of chemicals used for treatment or to prepare feed solutions over the range of design application rates; 10 CSR 20-8.140 (9) (C) 1.
 - Select storage tanks, piping, and equipment for liquid chemicals specific to the chemicals; 10 CSR 20-8.140 (9) (C) 2.
 - Install all liquid chemical mixing and feed installations on corrosion resistant pedestals; 10 CSR 20-8.140 (9) (C) 3.
 - Provide sufficient capacity of solution storage or day tanks feeding directly for twenty-four- (24-) hour operation at design average flow; 10 CSR 20-8.140 (9) (C) 4.
 - Provide a minimum of two (2) chemical feeders for continuous operability.
 Provide a standby unit or combination of units of sufficient capacity to replace the largest unit out-of-service; 10 CSR 20-8.140 (9) (C) 5.
 - o Chemical feeders shall—
 - Be designed with chemical feed equipment to meet the maximum dosage requirements for the design average flow conditions; 10 CSR 20-8.140 (9) (C) 6. A.
 - Be able to supply, at all times, the necessary amounts of chemicals at an accurate rate throughout the range of feed; 10 CSR 20-8.140 (9) (C) 6. B.
 - Provide proportioning of chemical feed to the rate of flow where the flow rate is not constant; 10 CSR 20-8.140 (9) (C) 6. C.
 - Be designed to be readily accessible for servicing, repair, and observation; 10 CSR 20-8.140 (9) (C) 6. D.
 - Protect the entire feeder system against freezing; 10 CSR 20-8.140
 (9) (C) 6. E.
 - Be located adjacent to points of application to minimize length of feed lines; 10 CSR 20-8.140 (9) (C) 6. F.
 - Provide for both automatic and manual operation for chemical feed control systems; 10 CSR 20-8.140 (9) (C) 6. G.
 - Utilize automatic chemical dose or residual analyzers, and where provided, include alarms for critical values and recording charts; 10 CSR 20-8.140 (9) (C) 6. H.
 - Provide screens and valves on the chemical feed pump suction lines; 10 CSR 20-8.140 (9) (C) 6. I.
 - Provide an air break or anti-siphon device where the chemical solution enters the water stream; 10 CSR 20-8.140 (9) (C) 6. J.
 - Dry chemical feed system shall—
 - Be equipped with a dissolver capable of providing a minimum retention period of five (5) minutes at the maximum feed rate; 10 CSR 20-8.140 (9) (C) 7. A.
 - Be equipped with two (2) solution vessels and transfer piping for polyelectrolyte feed installations; 10 CSR 20-8.140 (9) (C) 7. B.
 - Have an eductor funnel or other appropriate arrangement for wetting the polymer during the preparation of the stock feed solution on the makeup tanks; 10 CSR 20-8.140 (9) (C) 7. C.

- Provide adequate mixing by means of a large diameter, low-speed mixer; 10 CSR 20-8.140 (9) (C) 7. D.
- Make provisions to measure the dry chemical volumetrically or gravimetrically; 10 CSR 20-8.140 (9) (C) 7. E.
- Completely enclose chemicals and prevent emission of dust; 10 CSR 20-8.140 (9) (C) 7. F.
- Provide for uniform strength of solution consistent with the nature of the chemical solution for solution tank dosing; 10 CSR 20-8.140 (9) (C) 8.
- Use solution feed pumps to feed chemical slurries that are not diaphragm or piston type positive displacement types; 10 CSR 20-8.140 (9) (C) 9.
- Provide continuous agitation to maintain slurries in suspension; 10 CSR 20-8.140 (9) (C) 10.
- Provide a minimum of two (2) flocculation tanks or channels having a combined detention period of twenty to thirty (20 30) minutes. Provide independent controls for each tank or channel; 10 CSR 20-8.140 (9) (C) 11.
- Insulate pipelines carrying soda ash at concentrations greater than twenty percent (20%) solution to prevent crystallization; 10 CSR 20-8.140 (9) (C) 12.
- Prohibit bagging soda ash in a damp or humid place. 10 CSR 20-8.140 (9) (C) 13.
- The following chemical safety items shall be provided in addition to the safety provisions in section (8) of this rule:
 - Appropriate personal protective equipment (PPE). 10 CSR 20-8.140 (9) (D) 1.
 - Eye wash fountains and safety showers utilizing potable water shall be provided in the laboratory and on each level or work location involving hazardous or corrosive chemical storage, mixing (or slaking), pumping, metering, or transportation unloading. The design of eye wash fountains and safety showers shall include the following:
 - Eye wash fountains with water of moderate temperature, fifty degrees to ninety degrees Fahrenheit (50°–90°F), suitable to provide fifteen to thirty (15–30) minutes of continuous irrigation of the eyes; 10 CSR 20-8.140 (9) (D) 2. A.
 - Emergency showers capable of discharging twenty gallons per minute (20 gpm) of water of moderate temperature, fifty degrees to ninety degrees Fahrenheit (50°–90°F), and at pressures of thirty to fifty pounds per square inch (30–50 psi); 10 CSR 20-8.140 (9) (D) 2. B.
 - Eye wash fountains and emergency showers located no more than twenty-five feet (25') from points of hazardous chemical exposure; 10 CSR 20-8.140 (9) (D) 2. C.
 - Eye wash fountains and showers that are to be fully operable during all weather conditions; 10 CSR 20-8.140 (9) (D) 2. D.
 - Warning signs requiring use of goggles shall be located near chemical stations, pumps, and other points of frequent hazard. 10 CSR 20-8.140 (9) (D) 3.
- The identification and hazard warning data included on chemical shipping containers, when received, shall appear on all containers (regardless of size or type) used to store, carry, or use a hazardous substance. 10 CSR 20-8.140 (9) (E)

10 CSR 20-8.150 Preliminary Treatment.

- 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)
- All screening devices and screening storage areas shall be protected from freezing. 10 CSR 20-8.150 (4) (A) 1.
- Provisions shall be made for isolating or removing screening devices from their location for servicing. 10 CSR 20-8.150 (4) (A) 2.
- Manually cleaned screen channels shall be protected by guard railings and deck gratings with adequate provisions for removal or opening to facilitate raking. 10 CSR 20-8.150 (4) (A) 3. A. (I)
- 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)

10 CSR 20-8.160 Settling.

- Effective flow splitting devices and control appurtenances (*e.g.* gates and splitter boxes) shall be provided to permit proper proportioning of flow and solids loading to each settling unit, throughout the expected range of flows. 10 CSR 20-8.160 (2) (B)
- Overflow weirs shall be readily adjustable over the life of the structure to correct for differential settlement of the tank. 10 CSR 20-8.160 (3) (C) 1.
- Walls of settling tanks shall extend at least six inches (6") above the surrounding ground surface and shall provide not less than twelve inches (12") of freeboard. 10 CSR 20-8.160 (3) (E)
- Safety features shall appropriately include machinery covers, life lines, handrails on all stairways and walkways, and slip resistant surfaces. For additional safety follow the provisions listed in 10 CSR 20-8.140(8). 10 CSR 20-8.160 (5) (A)
- The design shall provide for convenient and safe access to routine maintenance items such as gear boxes, scum removal mechanism, baffles, weirs, inlet stilling baffle areas, and effluent channels. 10 CSR 20-8.160 (5) (B)
- For electrical equipment, fixtures, and controls in enclosed settling basins and scum tanks, where hazardous concentrations of flammable gases or vapors may accumulate, follow the provisions in 10 CSR 20-8.140(7)(B). The fixtures and controls shall be conveniently located and safely accessible for operation and maintenance. 10 CSR 20-8.160 (5) (C)

10 CSR 20-8.170 Solids Handling and Disposal.

- Piping galleries shall be ventilated in accordance with paragraph (4)(C)4. of this rule. 10 CSR 20-8.170 (4) (C) 2.
- Electrical fixtures, equipment, and controls. Electrical fixtures, equipment, and controls shall comply with the National Electrical Manufacturers Association (NEMA) 4X enclosure rating where necessary; *NEMA Standard 250-2014*, published December 15, 2014. This standard shall hereby be incorporated by reference into this rule, as published by National Electrical Manufacturers Association, 1300 North 17th Street, Arlington, VA 22209. This rule does not incorporate any subsequent amendments or additions. Electrical equipment, fixtures, and controls, in places enclosing and adjacent to anaerobic digestive appurtenances where hazardous gases are included. 10 CSR 20-8.170 (4) (C) 3.
- Water supplies using indirect connections shall comply with 10 CSR 20-8.140(7)(D). 10 CSR 20-8.170 (4) (D)
- Aerobic Solids Digestion High Level Emergency Overflow. An unvalved emergency overflow shall be provided that will convey digester overflow to the treatment plant headworks, the aeration process, or to another liquid sludge storage facility and that has an alarm for high level conditions. 10 CSR 20-8.170 (5)
- For solids pumping systems, audio-visual alarms shall be provided in accordance with 10 CSR 20-8.140(7)(C) for:
 - Pump failure; 10 CSR 20-8.170 (6) (A)
 - Pressure loss; 10 CSR 20-8.170 (6) (B) and
 - High pressure. 10 CSR 20-8.170 (6) (C)
- Belt presses and conveyors shall be provided with emergency shutoff controls along the entire length of the belt presses and conveyors that will:
 - Stop the press in an emergency; 10 CSR 20-8.170 (7) (A) 1. and
 - Trigger an audible alarm. 10 CSR 20-8.170 (7) (A) 2.
- Alarm systems shall be provided for sludge dewatering processes to notify the operator(s) of conditions that could result in process equipment failure or damage, threaten operator safety, or a solids spill or overflow condition. 10 CSR 20-8.170 (7) (B)

10 CSR 20-8.190 Disinfection.

- Emergency Power. Disinfection and dechlorination processes, when used, shall be provided during all power outages. 10 CSR 20-8.190 (2) (A)
- The UV dosage shall be based on the design peak hourly flow, maximum rate of pumpage, or peak batch flow. 10 CSR 20-8.190 (5) (A) 1.
- The UV system shall deliver the target dosage based on equipment derating factors and, if needed, have the UV equipment manufacturer verify that the scale up or scale down factor utilized in the design is appropriate for the specific application under consideration. 10 CSR 20-8.190 (5) (A) 3.
- Open channel UV systems. The combination of the total number of banks shall be capable of treating the design peak hourly flow, maximum rate of pumpage, or peak batch flow. 10 CSR 20-8.190 (5) (B) 1.
- The UV system must continuously monitor and display at the UV system control panel the following minimum conditions:

- The relative intensity of each bank or closed vessel system; 10 CSR 20-8.190 (5) (C) 1. A.
- The operational status and condition of each bank or closed vessel system; 10 CSR 20-8.190 (5) (C) 1. B.
- The ON/OFF status of each lamp in the system; 10 CSR 20-8.190 (5) (C) 1. C. and
- The total number of operating hours of each bank or each closed vessel system. 10 CSR 20-8.190 (5) (C) 1. D.
- The UV system shall include an alarm system. Alarm systems shall comply with 10 CSR 20-8.140(7)(C). 10 CSR 20-8.190 (5) (C) 2.

10 CSR 20-8.200 Wastewater Treatment Lagoons and Wastewater Irrigation Alternatives.

- The minimum berm width shall be eight feet (8') to permit access of maintenance vehicles. 10 CSR 20-8.200 (4) (A) 2.
- The lagoon shall be sealed to ensure that seepage loss is as low as possible and has a design permeability not exceeding 1.0 x 10-7 cm/sec. 10 CSR 20-200(4)(C)1.
- The minimum thickness of the compacted clay liner must be twelve inches (12"). For permeability coefficients greater than $1.0 \times 10-7$ cm/sec or for heads over five feet (5') such as an aerated lagoon system, the following formula shall be used to determine minimum seal thickness, Equation 200-1 per 10 CSR 20-200(4)(C)2.:

Equation 200-1

$$t = \frac{H \times K}{5.4 \times 10^{-7 \text{ cm/sec}}}$$

where:

K = the permeability coefficient of the soil in question;

H = the head of water in the lagoon; and

t = the thickness of the soil seal.

- An emergency spillway shall be provided. 10 CSR 20-8.200 (4) (A) 4. An emergency spillway must have the ability for a representative sample to be collected if a discharge occurs. 10 CSR 20-8.200
- 11. Upon completion of construction:
 - A. Submit an electronic copy of the as builts if the project was not constructed in accordance with previously submitted plans and specifications; and
 - B. Submit the enclosed form Statement of Work Completed to the Department in accordance with 10 CSR 20-6.010(5)(N) When the facility applies for their next operating permit renewal, they will be expected to include an updated facility description on their application.

IV. REVIEW SUMMARY

1. CONSTRUCTION PURPOSE

Replace existing treatment facility with a modern facility with ability to meet current and future effluent limits. Also removes stormwater (wet weather) holding tanks and associated Outfall #002 which is the subject of the current standing Abatement Order on Consent No. 2020-1626 (AOC) executed and signed in 2020. Construction will satisfy requirements of the AOC.

2. FACILITY DESCRIPTION

The Monroe City WWTF is located at 109 2nd Street, Monroe City, in Monroe County, Missouri. The existing facility is an activated sludge treatment facility with wet weather overflow holding tanks. The facility has a design average flow of 0.8 MGD with a design population equivalent of approximately 8,000. The new facility will include wet –weather flow equalization basin, an advanced activated sludge system; Aeromod, Sequox – Biological Nutrient Removal Process System; ultraviolet disinfection, and mechanical sludge dewatering. Design flow and outfall location remain the same.

3. <u>COMPLIANCE PARAMETERS</u>

The existing facility will normally meet secondary effluent limits, but it has violated permit limits 23 times in the past 5 years. Exceedances were: ammonia (2x), zinc (7x), copper (12x), chromium VI (2x), and was below the pH range (3x). The facility has the potential to bypass and does not have disinfection. The new facility will be more effective, reliable, and efficient; effluent limits are not changing due to the construction.

Disinfection is being added. This will satisfy the current schedule of compliance and enable the effluent to comply with final *E. coli* limits. Final limits for *E. coli* will become effective upon issuance of the modified operating permit at the completion of construction. Final *E. coli* limits are 206 colonies/100 ml during the recreation season.

4. <u>REVIEW of MAJOR TREATMENT DESIGN CRITERIA</u>

The design flow of the existing facility is 800,000 gpd, with a design population equivalent of 8,000. The design flow of the new facility will remain the same. Project removes wet weather overflow tanks and satisfies the VCA with complete elimination of outfalls with partial treatment (Outfall # 002). The design sustainable peak, flow through, capacity of the plant is 2.16 MGD. The flow equalization basin is situated prior to the lift station with the capacity to hold back 1.03 million gallons; this will further supplement the peak capacity of the facility. The peak hourly flow rate is 2.69 MGD. The existing outfall will be used and will remain in the same location.

New Facilities

- Flow equalization. Open air basin with a top dimension of 140 feet by 204 feet, and depth of 10 feet. Total volume of approximately 1.26 million gallons. Effective volume of approximately 1.03 million gallons considering 2 feet of water in bottom of basin and spillway with a 0.5 foot depth. Located prior to influent lift station; flows in excess of peak treatment capacity will enter equalization basin. Flow will be returned to the influent piping when treatment capacity is available. Basin to be earthen construction with compacted clay seal and protected with turf. There is an alternate bid for lining the basin with concrete. Basin has emergency spillway.
- Influent Lift Station Construction of an influent pump station with four 12 HP submersible pumps, each capable of operating at 600 gpm at 32 feet of TDH. Three pumps operating simultaneously can pump approximately 1,800 gpm. Discharge piping is 6-inch ductile iron pipe. The common force main header pipe is approximately 19 feet of 12 inch ductile iron pipe into the screening structure.
- Screening Installation of screening devices removes nuisance inorganic materials from raw wastewater.
 - Mechanical Screen One mechanically cleaned screen with a perforated rotary basket with 0.125 inch openings. The screening device is capable of treating a design average flow of 0.8 MGD and a peak hourly flow of 2.664 MGD. A washer/compactor and screenings conveyor will mitigate the screenings captured by washing, dewatering, and compacting the screenings prior to disposal. A manually cleaned coarse bar screen in the dual channel with a clear bar spacings of 1.5-inch and positioned at an angle of 45 degrees from the horizontal to allow for manual raking of the screen. The addition of a manually cleaned coarse bar screen provides redundancy and a means of unit isolation for the mechanically cleaned screen. The screening structure is followed by a parshall flume with ultrasonic depth measurement and includes continuous monitoring and recording to serve as influent flow measurement.
- Activated Sludge Treatment. A two stage sequencing aeration activated sludge arrangement with biological phosphorous removal and denitrification. Process is an Aeromod, Sequox- Biological Nutrient Removal Process System Design. Four separate basins with aeration strategically sequenced on and off to achieve optimal treatment. Flow follows in order through the four basins then into a clarifier. Facility to have two treatment trains.
- Fermenter tank. Shared by both trains, flow enters from the screen, approximate volume of 30,000 gallons, 0.9 hours of detention at design flow. This tank also receives return activated sludge from clarifiers. Minimal aeration provided.
- Anaeroebic tank (aka selector tank); biological phosphorous treatment. Also shared by both trains, approximate volume of 61,000 gallons, 1.8 hrs. of detention at design flow. Ability to provide minimal aeration if needed.
- First stage aeration tank. One tank for each train, approximate volume of 187,000 gallons each, 11.2 hours of detention at design flow. Aeration to be sequentially applied

in approximate 2 hour intervals in a manner that maximizes treatment, particularly nitrification.

- Second stage aeration tank. One tank for each train, approximate volume of 182,000 gallons each, 10.9 hours of detention at design flow. Aeration to be sequentially applied in approximate 2 hour intervals in a manner that maximizes treatment, denitrification also achieved in this step.
- Secondary Clarifier two clarifiers, one for each train, rectangular dimension each with a surface area of 1,120 sf. Total surface area of 2240 square feet provides a settling rate of 1,200 gal/sq. ft. at a peak flow of 2.69 MGD. The overflow weir is equivalent of 212 feet; the peak overflow rate is approximately 12,700 gpd/lf at a peak flow of 2.69 MGD. The solids loading rate is approximately 34 lbs/day/sf at peak flow of 2.69 MGD. Design satisfies the requirements of depth, surface loading, solids loading and overflow rate found at 10 CSR 20-8160(3).
- Aeration Equipment. Two 150 HP positive displacement blowers, each with a capacity of 2,132 scfm. Gardner Denver Heliflow Model 624, Aerzen GM90S, or equal. Both course bubble and fine bubble diffusers to be used throughout the treatment plant.
- Aerobic Digesters. Two aerobic sludge digesters each with an approximate capacity of 16,700 cu. ft. Aeration provided by main blowers. Capacity to treat and hold sludge for a minimum of 30 days.
- Sludge Dewatering Screw Press. One screw press with a capacity to process 25 gpm of digested sludge at 1.2 % solids. Ability to produce 150 lb/hr of sludge cake at 18 % solids.
- Ultraviolet Disinfection. Flow that is discharged from the clarifiers will rejoin and pass through ultraviolet disinfection during the recreational season.
 - Open Channel Ultraviolet (UV) An open channel, gravity flow, low pressure high intensity UV disinfection system capable of treating a peak flow of 2.66 MGD while delivering a minimum UV intensity of 30 mJ/cm2 with an expected ultraviolet transmissivity of 65% or greater. The single open channel UV system consists of two banks in series with 3 modules per bank and 6 lamps per module. Total number of lamps in system is 36. Trojan UV3000Plus system or equal. The disinfected effluent will flow by gravity through flow measurement equipment and to Outfall No. 001.
- Flow Meter. Effluent flow meter to be located after UV system to consist of a 24 inch magnetic flow meter. Includes continuous monitoring and recording. ISO9000 or equal.
- Emergency Generator. Emergency Power A 500 kW, 600 amp, standby diesel generator and automatic transfer switch will be provided to operate the treatment facility in event of power failure.
- Non-Potable Wash Water System. Water drawn from the effluent pipe after disinfection. Includes extraction pump. Holding tank, and pump with ability to supply 100 gpm at 82 psi.
- Sludge Disposal. Sludge disposal will typically be at a landfill. However the City maintains the authority and ability to land apply sludge. There will not be permanent sludge holding structures for the sludge cake. All sludge will be handled in accordance with Standard Conditions Part III.

5. **OPERATING PERMIT**

Operating permit MO-0055379 will require a modification to reflect the construction activities. The modified Monroe City WWTP, MO-0055379, was placed on public notice to reflect the new facility on February 19, 2021. 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. The Operating Permit modification fee of \$200.00 will need to be paid at this time.

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

APPLICATION FOR CONSTRUCTION PERMIT -SEI	CEIVED FOR DEPARTMENT USE ONLY APP NO. CP NO. CP NO. CP NO. CP NO. CP NO. CP NO. CP NO. CP NO.
APPLICATION OVERVIEW	0,00,00
The Application for Construction Permit – Wastewater Treatment Facility form I of Part A and B. All applicants must complete Part A. Part B should be com wastewater or propose land application for wastewater treatment. Please reac completing this form. Submittal of an incomplete application may result i	pleted for applicants who currently land-apply the accompanying instructions before
PART A - BASIC INFORMATION	
 APPLICATION INFORMATION (Note – If any of the questions in this sectors considered incomplete and returned.) 	ion are answered NO, this application may be
1.1 Is this a Federal/State funded project? 🛛 YES 🗌 N/A 🛛 Funding Age	ency: USDA Project #: 171091
1.2 Has the Missouri Department of Natural Resources approved the proposed ☐ YES Date of Approval:	I project's antidegradation review?
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 application? YES NO Exempt because 	r wastewater treatment facilities included with this
1.5 Is a copy of the appropriate plans* and specifications* included with this ap	
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 submitt YES Date of submittal: YES Date of submittal: Inclosed is the appropriate operating permit application and fee submitt N/A: However, In the event the department believes that my operating permit application and fee submit to secondary limits to secondary limits or adding total is to public notice? 	al. Denote which form:
1.8 Is the facility currently under enforcement with the department or the Enviro	onmental Protection Agency? 🛛 YES 🔲 NO
1.9 Is the appropriate fee or JetPay confirmation included with this application? See Section 7.0	ZYES NO
Must be affixed with a Missouri registered professional engineer's seal, signa	ture and date.
1 NAME OF PROJECT	2.2 ESTIMATED PROJECT CONSTRUCTION COST
Ionroe City WWTP Improvements	\$ 8,000,000
3 PROJECT DESCRIPTION Troject includes 1.2 million gallon flow equalization basin, new 0.8 MGD activate erobic basins, clarifiers, aerobic digestion, sludge dewatering, ultraviolet disinfe	ed sludge treatment facility with a peak of 2.2 MGD, ection.
4 SLUDGE HANDLING, USE AND DISPOSAL DESCRIPTION	
5 DESIGN INFORMATION	
A. Current population: <u>2820</u> ; Design population: <u>8000</u>	
3. Actual Flow: <u>0.4</u> gpd; Design Average Flow: <u>0.8</u> gpd; Actual Peak Daily Flow: <u>2.2</u> gpd; Design Maximum Daily Flow: <u>2.2</u>	_ gpd; Design Wet Weather Event: 2.2
A. Is a topographic map attached? ⊻ YES □ NO	
3. Is a process flow diagram attached? VES 🔲 NO	

3.0 WASTEWATER TREATMENT FACILI	ſY			71			
NAME TELEPHONE NUMBER WITH A							
Monroe City WWTP	573-735-4451		1	ghausdorf@peopleservice.com			
ADDRESS (PHYSICAL)	CITY Monroe City		STATE MO	ZIP CODE 63456	COUNTY Monroe		
Wastewater Treatment Facility: Mo- 0055379 (Outfall 001 Of 001)							
3.1 Legal Description: <u>SE</u> ¼, <u>NW</u> ¼, <u>SE</u> ¼, Sec. <u>13</u> , T <u>56N</u> , R <u>8W</u> (Use additional pages if construction of more than one outfall is proposed.)							
3.2 UTM Coordinates Easting (X): <u>608059</u> Northing (Y): <u>4389366</u> For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)							
3.3 Name of receiving streams: Tributary to Sharpsburg Branch							
4.0 PROJECT OWNER			251 0025	E-MAIL ADDRESS			
NAME Monroe City, Missouri		TELEPHONE NUMBER WITH AREA CODE 573-735-7010		cellison@monroecity.org			
ADDRESS	CITY	010-100-1010	STATE	ZIP CODE			
P.O. Box 67	Monroe (City	МО	63456			
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 I	equiremen	TELEPHONE NUMBER WITH AREA CODE		E-MAIL ADDRESS			
Monroe City, Missouri	573-735-7010			cellison@monroecity.org			
ADDRESS	CITY		STATE	ZIP CODE			
P.O. Box 67	Monroe (MO	63456			
5.1 A letter from the continuing authority, if different than the owner, is included with this application. YES NO VA							
A. Is a copy of the certificate of convenience and necessity included with this application? YES 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?							
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?							
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?							
D. Is a copy of the Missouri Secretary of State's nonprofit corporation certificate included with this application?							
6.0 ENGINEER							
ENGINEER NAME / COMPANY NAME		TELEPHONE NUMBER WITH AREA CODE		E-MAIL ADDRESS			
Mark C. Bross/Klingner & Associates PC	1	573-221-0020	07475	mcb@klingner.com			
ADDRESS 4510 Paris Gravel Road	CITY Hannibal		STATE MO	ZIP CODE 63401			
7.0 APPLICATION FEE							
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							
PRIMED NAME	'V			DATE			
JERRY L POHERAERD			9-17-2020				
TITLE OR CORPORATE POSITION TELEPHONE NUMBER WITH AREA CODE E-MAIL ADDRESS							
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. DEFER TO THE ADDI ICATION OVERVIEW TO DETERMINE WHETHER PART & NEEDS TO BE COMPLETE							
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHETHER PART B NEEDS TO BE COMPLETE.							

MO 780-2189 (02-19)

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