STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

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

City of Bloomfield Bloomfield WWTF Depot Road Bloomfield, MO 63852

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.

March 27, 2020 Effective Date

January 10, 2022 Modification Date

March 26, 2023

Expiration Date

Chris Wieberg, Director, Water Protection Program

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

Bloomfield is proposing to construct a treatment facility by modifying their existing treatment plant. The existing cell #1 will be converted into the landfill leachate pretreatment cell, with a capacity of approximately 34 million gallons. The existing cell #2 will be modified into 4 cells with diffused aeration, baffles, and a cover added, with each cell providing between 4 to 7 days of detention time. A nitrification reactor follows with 6.15 hours of detention time will be added to help achieve ammonia effluent limits. This is followed by UV disinfection to meet final *E. Coli* effluent limits. A 150 kw diesel generator will also be installed. The design average flow will remain at 299,000 gpd.

A closure plan for the existing Lagoon Cell #3 has been submitted to the Southeast Regional Office. As part of the lagoon cell closure and construction of the treatment plant, some sludge will be removed from the facility.

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.

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 sealeded by Smith & Co. Engineers 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. 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 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- 0050326. Closure shall not commence until the submitted closure plan is approved by the Department. Form J *Request for Termination of a State Operating Permit*, shall be submitted to the Water Protection Program for termination of any existing Missouri state operating permit, once closure is completed in accordance with the approved closure plan.
- 10. All construction must adhere to applicable 10 CSR 20-8 (Chapter 8) requirements listed below.

- 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 rightof-way at all times. 10 CSR 20-8.140 (2) (D)
- The alarm shall be activated in cases of high water levels. 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 (4) (D) and 10 CSR 20-8.140 (7) (C)
- 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 twentyfour (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)
- 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)
 - 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)
- 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)

- 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)
- 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.
- If no flow equalization is provided for a batch discharger, the UV dosage shall be based on the peak batch flow. 10 CSR 20-8.190 (5) (A) 2.
- 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.
- The UV system shall deliver a minimum UV dosage of thirty thousand microwatt seconds per centimeters squared (30,000 μ W s/cm²). 10 CSR 20-8.190 (5) (A) 4.
- 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.
- Lagoon berms shall be constructed of relatively impervious material and compacted to at least ninety-five percent (95%) maximum dry density test method to form a stable structure. 10 CSR 20-200(4)(A)1.
- The minimum berm width shall be eight feet (8') to permit access of maintenance vehicles. 10 CSR 20-200(4)(A)2.
- Minimum freeboard shall be two feet (2'). 10 CSR 20-200(4)(A)3.
- 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.
- Synthetic seals thickness may vary due to liner material but the liner thickness shall be no less than two-hundredths inch (.02") or twenty (20) mil and be the appropriate material to perform under existing conditions. 10 CSR 20-200(4)(C)3.
- Seep collars shall be provided on drainpipes where they pass through the lagoon seal. 10 CSR 20-200(4)(C)4.
- The minimum berm width shall be eight feet (8') to permit access of maintenance vehicles. 10 CSR 20-8.200 (4) (A) 2.
- Unlined corrugated metal pipe shall not be used for influent lines due to corrosion problems. 10 CSR 20-8.200 (4) (D) 1.

- A manhole shall be installed with its invert at least six inches (6") above the maximum operating level of the lagoon, prior to the entrance into the primary cell, and provide sufficient hydraulic head without surcharging the manhole. 10 CSR 20-8.200 (4) (D) 2.
- The influent line(s) shall be located along the bottom of the lagoon so that the top of the pipe is just below the average elevation of the lagoon seal; however, there shall be an adequate seal below the pipe. 10 CSR 20-8.200 (4) (D) 3.
- Polishing Reactors. The process shall—
 - Provide a minimum hydraulic retention time of three (3) hours; 10 CSR 20-8.210 (2) (A) 1.
 - Be based on actual reactor influent characteristics; 10 CSR 20-8.210 (2)
 (A) 2.
 - Include cold weather provisions, such as heaters, insulated covers, installation of temperature controlled enclosures for above-ground components to prevent freezing and to ensure ammonia removal; 10 CSR 20-8.210 (2) (A) 6. and
 - Provide a blower malfunction alarm able to notify the operator of alarm activations through audio-visual means. 10 CSR 20-8.210 (2) (A) 7.
- 11. Upon completion of construction:
 - **A.** The City of Bloomfield will become the continuing authority for operation and maintenance of these facilities;
 - **B.** Submit an electronic copy of the as builts if the project was not constructed in accordance with previously submitted plans and specifications; and
 - **C.** Submit the enclosed form Statement of Work Completed to the Department in accordance with 10 CSR 20-6.010(5)(N) with a request to issue the operating permit modification.

IV. REVIEW SUMMARY

1. CONSTRUCTION PURPOSE

Construction is to meet final effluent limits for ammonia and *E. Coli* that become effective March 1, 2023. Construction does not address the schedule of compliance for metals and other parameters that become effective March 1, 2025.

2. FACILITY DESCRIPTION

The Bloomfield WWTF is located on Depot Road, Bloomfield, in Stoddard County, Missouri. The facility has a design average flow of 299,000 gpd and serves a hydraulic population equivalent of approximately 2,600 people. The existing system is a three cell lagoon with sludge retained in the lagoon.

3. <u>COMPLIANCE PARAMETERS</u>

The proposed project is required to meet final effluent limits for ammonia and *E. Coli* as established in the February 2020 permit renewal. With construction, the facility will no longer qualify for equivalent to secondary limits for BOD and TSS and will have to meet the secondary effluent limits. The limits following the completion of construction will be applicable to the facility:

Parameter	Units	Monthly average limit		
BOD ₅	mg/L	30		
BOD-Percent Removal	%	85		
Total Suspended Solids	mg/L	30		
TSS-Percent Removal	%	85		
Ammonia as N-summer	mg/L	1.3		
Ammonia as N-winter	mg/L	2.8		
pH	SU	6.5-9.0		
E. Coli	#/100mL	206		

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

The current design guides, 10 CSR 20-8, do not contain design parameters for this configuration of technology.

Existing major components which will remain in use include the following:

- The facility's design average flow will remain at 299,000 gpd.
- Lagoon Cell No. 1 –Lagoon Cell No. 1 is non-aerated and has a surface area of 13.23 acres and a wastewater volume of 34,482,202 gallons. This cell has 2 ft of freeboard, 4 ft of operating depth, and 2 ft of sludge depth, and a clay liner. This cell will be utilized as the pretreatment cell for the landfill leachate that is brought in. Flow will enter the treatment cell through the 12 inch gate valve.
- Sludge will be retained in the lagoon.

Construction will cover the following items:

- Influent Pump Station- Construction of a duplex influent pump station for domestic wastewater to enter the treatment plant with each 10 HP pump capable of operating at 850 gpm at 21 feet of TDH.
- Grinder pump station- Construction of a duplex pump station with each 0.5 HP pump capable of operating at 110 gpm at 20 feet of TDH.
- North pump station- Construction of a duplex pump station with each 10 HP pump capable of operating at 150 gpm at 30 feet of TDH.
- The existing lagoon cell no. 2 will be divided into 4 cells, lined with 60 mil HDPE liner, which meets the minimum requirements of 20 mil HDPE in 10 CSR 20-200(4)(C)3. A hydraulic baffle will be installed between cells 1, 2 and 3.
 - Cell No. 1 will be 90 ft by 207 ft by 12 ft deep, which provides capacity of 1,672,344 gallons, providing 5.6 days of detention at design flow. This cell will have high rate diffusers.

- Cell No. 2 will be 80 ft by 207 ft by 12 ft deep which provides capacity of 1,486,528 gallons, providing 5.0 days of detention at design flow. This cell will have low rate diffusers.
- Cell No. 3 will be 77 ft by 207 ft by 12 ft deep which provides capacity of 1,430,784 gallons, providing 4.78 days of detention at design flow. This cell will have a modular cover with low rate diffusers.
- Cell No. 4 will be 114 ft by 207 ft by 12 ft deep which provides capacity of 2,118,303 gallons, providing 7.0 days of detention at design flow. This cell will have a modular cover with low rate diffusers.
- Polishing Reactor provide nitrification and will be 64 ft by 16 ft by 10 ft deep, with a detention time of 6.15 hours, which exceeds the minimum requirement of 3 hours in 10 CSR 20-8.210 (2) (A) 1.
 - The polishing reactor media is designed with a surface area of 68 ft^2 per 1ft³ of media with a minimum 95% void to volume ratio.
- Aeration by means of two blowers each capable of supplying 1,044 scfm with 60 HP motors.
- Disinfection Disinfection is the process of removal, deactivation, or killing or pathogenic microorganisms.
 - Open Channel Ultraviolet (UV) An open channel, gravity flow, low pressure high intensity UV disinfection system capable of treating a peak flow of 600,000 gpd while delivering a minimum UV intensity of 30 mJ/cm² with an expected ultraviolet transmissivity of 55% or greater.
 - The single channel UV system consists of two banks with 2 modules per bank and 4 lamps per module.
 - The disinfected effluent will flow through the V-notch weir flow measurement equipment and to Outfall No. 001.
- Emergency Power A 150 kW standby diesel generator and automatic transfer switch will be provided to operate the treatment facility in event of power failure.

5. <u>OPERATING PERMIT</u>

Operating permit MO-0050326 will require a modification to reflect the construction activities. The renewal permit for Bloomfield WWTF was successfully public noticed from December 20, 2019 to January 21, 2020 with no comments received. The renewal detailed the final ammonia, *E. Coli* effluent limits along with the schedule of compliance for the metals.

A modified Bloomfield permit will be public noticed to reflect the change in BOD and TSS as the facility with the proposed construction will no longer qualify for equivalent to secondary effluent limits. The modified operating permit will remove the ammonia and E. Coli schedules of compliance, along with update the facility description and update the BOD and TSS effluent limits and percent removal to reflect the secondary effluent limits of a monthly average of 30 mg/L and a percent removal of 85%. The public notice of the modification is expected to take place April 2020.

6. CONSTRUCTION PERMIT MODIFICATION

This construction permit is being modified upon the request of the facility owner to extend the construction permit schedule. The construction permit will now expire on March 26, 2023.

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: <u>https://ahc.mo.gov</u>

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.

Leasue Meyers, EI Engineering Section leasue.meyers@dnr.mo.gov

Cindy LePage, P.E. Engineering Section cindy.lepage@dnr.mo.gov



	AP32144
Image: Solution of the second construction o	EIVED FOR DEPARTMENT USE ONLY 2 2019 FEE RECEIVED CHECK NO. FEE RECEIVED CHECK NO. FEE RECEIVED
APPLICATION OVERVIEW	
The Application for Construction Permit – Wastewater Treatment Facility form has to of Part A and B. All applicants must complete Part A. Part B should be complete wastewater or propose land application for wastewater treatment. Please read the completing this form. Submittal of an incomplete application may result in the	been developed in a modular format and consists ed for applicants who currently land-apply accompanying instructions before e application being returned
PART A - BASIC INFORMATION	e application being returned.
1.0 APPLICATION INFORMATION (Note – If any of the questions in this section a considered incomplete and returned.)	are answered NO, this application may be
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 pro □ YES Date of Approval: □ □ YES □	ject'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 wa application? ✓ YES □ NO □ Exempt because 	stewater treatment facilities included with this
1.5 Is a copy of the appropriate plans* and specifications* included with this applica ☑ YES Denote which form is submitted: ☑ Hard copy ☑ Electronic copy (S	ation? See instructions.)
1.6 Is a summary of design* included with this application? ZYES INO	, <u> </u>
 1.7 Has the appropriate operating permit application (A, B, or B2) been submitted to YES Date of submittal: YES Date of submittal: Image: Appropriate operating permit application and fee submittal. Image: Appropriate operating permit application application and fee submittal. Image: Appropriate operating permit application application and fee submittal. Image: Appropriate operating permit application application	o the department? Denote which form: ☐ A ☐ B ☑ B2 t requires revision to permit limitation such as ual chlorine limits, please share a draft copy prior
1.8 Is the facility currently under enforcement with the department or the Environme	ental Protection Agency?
1.9 Is the appropriate fee or JetPay confirmation included with this application? See Section 7.0	
* Must be affixed with a Missouri registered professional engineer's seal, signature a	and date.
2.1 NAME OF PROJECT	2.2 ESTIMATED PROJECT CONSTRUCTION COST
Bloomfield Wastewater Treatment Facility	\$ 3,500,000
2.3 PROJECT DESCRIPTION The proposed project will upgrade the existing lagoon facility by converting the existir proposed project will also include the installation of an nitrification reactor and ultravio	ng Cell #2 into a new lagoon with aeration. The olet disinfection.
2.4 SLUDGE HANDLING, USE AND DISPOSAL DESCRIPTION	
Stored within lagoon	
A. Current population: 1993 : Design population: 2600	
B. Actual Flow: <u>177k</u> gpd; Design Average Flow: <u>299k</u> gpd; Actual Peak Daily Flow: <u>400k</u> gpd; Design Maximum Daily Flow: <u>400k</u> gp	d; Design Wet Weather Event:
2.6 ADDITIONAL INFORMATION	
2 /00-2109 (02-19)	Page 1 of 3

3.0 WASTEWATER TREATMENT FACILIT	Y		12.11				
NAME Bloomfield Wastowater Treatment Facility	TELEPHONE NUMBER WITH ARE		REA CODE	E-MAIL ADDRESS			
ADDRESS (PHYSICAL)	CITY	573-568-3464	STATE	710 0005	0000		
Depot Road	Bloomfie	d	MO	63825	Stoddard		
Wastewater Treatment Facility: Mo- 005032	6 (Outfall	001 Of 001)					
3.1 Legal Description: <u>14, SE 14</u> (Use additional pages if construction of more	, <u>NW</u> 1/ than one ou	4, Sec. <u>14</u> , T <u>26N</u> tfall is proposed.)	<u>, R 6E</u>	_			
3.2 UTM Coordinates Easting (X): 772554 For Universal Transverse Mercator (UTM), Zo	Northing	(Y): <u>4088589</u> referenced to North Ame	rican Datum 19	983 (NAD83)			
3.3 Name of receiving streams: Unnam	ed tributar	y to Lick Creek Ditch					
4.0 PROJECT OWNER							
City of Bloomfield		573-568-3464		E-MAIL ADDRESS			
ADDRESS PO Box 350	CITY Bloomfiel	d STATE ZIPC		ZIP CODE 63825	ZIP CODE 63825		
5.0 CONTINUING AUTHORITY: A continuir	ng authorit	y is a company, busine	ss. entity or p	person(s) that will b	e operating the facility		
and/or ensuring compliance with the permit re	equiremen	IS.			e operating ine isolity		
Same		TELEPHONE NUMBER WITH A	REA CODE	E-MAIL ADDRESS			
ADDRESS	СПҮ		STATE	ZIP CODE			
	_						
5.1 A letter from the continuing authority, if d	ifferent that	n the owner, is include	d with this ap	plication.	S 🔲 NO 🔽 N/A		
A. Is a copy of the certificate of convenience	and neces	OURI PUBLIC SERVICE COMMIS	SION REGULATE				
53 COMPLETE THE FOLLOWING IF THE CONTINUING AUTHOR	DITY IS A DOOL		ipplication :				
A. Is a copy of the as-filed restrictions and co	venants in	cluded with this applica	ation? 🗆 V				
B. Is a copy of the as-filed warranty deed, qu	itclaim dee	ed or other legal instrum	nent which tra	ansfers ownership	of the land for the		
wastewater treatment facility to the associa	ation inclue	ded with this application	? YES	□ NO			
C. Is a copy of the as-filed legal instrument (t	ypically the	e plat) that provides the	association	with valid easemen	its for all sewers		
D. Is a copy of the Missouri Secretary of State	e's nonpro	fit corporation certificat	e included wi	th this application?			
6.0 ENGINEER					Cardena and		
ENGINEER NAME / COMPANY NAME		TELEPHONE NUMBER WITH AREA CODE		E-MAIL ADDRESS			
Gregory Bell / Smith and Company		573-785-9621		gregb@shsmithco.com			
901 Vine Street	Poplar Blu	ff	STATE	ZIP CODE 63901			
7.0 APPLICATION FEE				05501			
		JETPAY CONFIRMATION NUMB	FR				
8.0 PROJECT OWNER: I certify under pena	Ity of law the	hat this document and a	all attachmen	ts were prepared u	nder my direction or		
supervision in accordance with a system desig	gned to as	sure that qualified perso	onnel properl	y gather and evaluation	ate the information		
gathering the information, the information sub-	or persons	who manage the syste	em, or those	persons directly res	sponsible for		
aware that there are significant penalties for si	ubmitting f	alse information, includ	ing the possi	bility of fine and im	prisonment for		
knowing violations.	and some		0	,			
Willian I. Onli	^						
PRINTED NAME				DATE 3-78-1	9		
TITLE OR CORPORATE POSITION		TELEPHONE NUMBER WITH AR	EA CODE	E-MAIL ADDRESS	4		
Mail completed copy to: MISSOURI	FPARTM		SOLIBOES				
WATER PROTECTION PROGRAM							
P.O. BOX 176 JEFFERSON CITY, MO 65102-0176							
		END OF PART A.					
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