## STATE OF MISSOURI DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



### GENERAL PERMIT for SEWER EXTENSION CONSTRUCTION

The Missouri Department of N	atural Resources hereby issues a permit to:
Construction Permit ID: Title of Project: Owner: Address:	MOGSE0567 NE Outfall Sewer Replacement Ph II The City of Perryville 215 N West St. Perryville, MO 63775
	eneral site work appropriate to the scope and purpose of the project and will include all the necessary lete and usable collection system. The construction of this project will be in the vicinity of the county ng Permit ID below:
County:	Receiving Permit ID:
for the construction of (descri	ed construction project):
30-inch high performance p the city, by replacing the ex Project is in the vicinity of t Main Street in Perryville, P WWTF, MO-0051144. Jeft	lacement- Phase III -Construction of approximately 2,271.9 lf of 24-inch and 878 lf of plypropylene (HPPP) gravity sewer lines with approximately 18 manholes to serve sting gravity sewer lines.  The area between the School Street Lift Station near Old St. Marys Road and North rry County and discharges to an existing system to be treated at Perryville SE Layton, Public Works Director, with the City of Perryville signed the application are City of Perryville is the owner and continuing authority.
RSMo, and regulation promul As the Department does not ex- permit does not include appro-	facilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, ated thereunder, or this permit may be revoked by the Department of Natural Resources (Department) amine structural features of design or the efficiency of mechanical equipment, the issuance of this al of these features.  construction of water pollution control components; it does not apply to other environmentally
June 22, 2023 Issue Date	John Hoke, Director Water Protection Program
January 02, 2025 Expiration Date	

#### **APPLICABILITY**

- 1. This permit authorizes the construction of gravity sewer extensions, force mains, and lift stations. Non-earthen flow equalization storage basins at lift stations and inline storage, which flows back into the lift station or collection system, are also included.
- 2. A site specific sewer extension construction permit may be required by the Department due to compliance and enforcement actions.
- 3. Projects located within an Approved Sewer Program as noted in the operating permit of the receiving wastewater treatment facility are not required to obtain a construction permit from the Department of Natural Resources (Department).
- 4. This permit does not apply to:
  - A. Earthen storage basins;
  - B. Exempt projects unless requested by the applicant or required by enforcement.

#### **PREREQUISITES:**

- 1. The General Sewer Extension Construction Permit application, appropriate fee, and documentation in accordance with 10 CSR 20-6.010(5)(G).
- 2. The plans and specifications each signed and sealed by a professional engineer registered in the State of Missouri in accordance with 10 CSR 20-8 and 10 CSR 20-6.010.
- 3. The Design Certification form or Engineering Report or Summary of Design signed and sealed by a professional engineer registered in the State of Missouri certifying the design of the system was prepared in accordance with 10 CSR 20-6 and 10 CSR 20-8.
- 4. A statement from the continuing authority, as defined in 10 CSR 20-6.010, accepting the wastewater for treatment and indicating the permitted treatment facility has the available capacity.
- 5. A statement from the continuing authority, as defined in 10 CSR 20-6.010, accepting the responsibility for operation and maintenance of these facilities.

#### **PERMIT CONDITIONS:**

- 1. This permit authorizes the activities and scope of work detailed in the plans and specifications submitted with the request.
- 2. The construction must be in accordance with the final plans and specifications approved by the Department.
- 3. 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 regional office per 10 CSR 20-7.015(9)(E)2., or through the Online Bypass/SSO Reporting system found at https://dnr.mo.gov/eservices.htm under Water Protection.

#### **PERMIT CONDITIONS: (continued)**

- 4. Protection of drinking water supplies must meet the requirements of 10 CSR 23-3.010.
  - A. There shall be no physical connections between a public or private potable water supply system and a sewer, or appurtenance thereto, which would permit the passage of any wastewater or polluted water into the potable supply.
  - B. Sewers shall be laid at least fifty feet (50') in a horizontal direction from any existing or proposed public water supply well or other water supply sources or structures.
- 5. Manholes shall be located with the top access at or above grade level.
- 6. In addition to the requirements for a construction permit, see 10 CSR 20-6.200 for land disturbance requirements 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 <a href="https://www.dnr.mo.gov/env/wpp/epermit/help.htm">www.dnr.mo.gov/env/wpp/epermit/help.htm</a>.

See <u>www.dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm</u> for more information.

7. 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 www.dnr.mo.gov/env/wpp/401/ for more information.

- 8. If this project eliminates a wastewater treatment facility under the jurisdiction of the Department, then a full closure plan shall be submitted with a Facility Closure Request Form, Form MO 780-2512 to the Department's appropriate regional office for review and approval. In accordance with 10 CSR 20-6.010(12), the closure plan must meet the requirements outlined in Standard Conditions Part III, of the Missouri State Operating Permit. Closure shall not commence until the submitted closure plan is approved by the Department.
- 9. If this project is part of a project to resolve an enforcement action or is receiving funding from the Department, submit a statement of work complete following the completion of construction

# MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM APPLICATION FOR CONSTRUCTION PERMIT —

## A SEWER EXTENSION

FOR DEP	ARTMENT USE ONLY
APP NO.	CP NO.
FEE RECEIVED	CHECK NO.
DATE RECEIVED	

<b>6</b>				DATE RECEIVED	
NOTE ► Please Read the accompanying i	nstructio	ns before completing t	his form		
1.0 APPLICATION INFORMATION (Note – considered incomplete and returned.)	If any of th	e questions in this section	on are answ	ered NO, this applic	ation may be
1.1 Is this a Federal/State funded project?	YES	✓ N/A Funding Age	ency:	Pro	oject #:
1.2 Has the Department of Natural Resource  ✓ YES Date of Appre			s engineerin	g report*?	□ N/A
1.3 Is a copy of the appropriate plans* and s	pecificatio	ns* included with this ap	oplication?	✓ YES □ NO	
If the project is using standard specificat	ions, nam	e of community:			
1.4 Is a summary of design* included with th	is applicat	tion? YES NO	О		
1.5 Is the appropriate fee or JetPay confirma     See Section 7.0	ation includ	ded with this application	? 🗹 YES	□NO	
* Must be affixed with a Missouri registered p	rofessiona	al engineer's seal, signa	ture and dat	e	
2.0 PROJECT INFORMATION					
2.1 NAME OF PROJECT  Northeast Outfall Sewer Replacement - Phase	e III				
ADDRESS	CITY		STATE	ZIP CODE	COUNTY
Main Street	Perryville	)	МО	63775	PERRY
2.2 Legal Description: 1/4, 3/	4,	1/4, Sec. 18 U.4.4 846 + U.4.4, ZIZP		, R 11E	
2.3 Project Components (check all that apply	·):				
☑ Gravity sewers ☐ Pumping station	is 🗌 Fo	orce mains	tive sewer s	ystem  Other (I	Describe below.)
2.4 PROJECT DESCRIPTION INSTALLATION OF APPROXIMATELY 3,180	OLF OF	30" AND 24" PIPE AND	MANHOLES	S GRAVITY SEWER	INTERCEPTOR
FROM SCHOOL STREET LIFT STATION TO			WANTOLL	O O O O O O O O O O O O O O O O O O O	TINTEROLI TOR
2.5 DESIGN INFORMATION	_				
A. Population or number of lots to be served	by this ex	tension: SEE ENGINEE	RING REP	ORT	
B. Estimated flow to be contributed by this ea	xtension:	Design Average Flow:	gpd	Design Peak Hour	ly Flow: gph
C. Industrial Wastes: Type:	Flo	w: gpd			
D. Receiving Sewer: Size: inches Capacity: gpm					
E. Does this project (check all that apply):					
☑ Connect to an existing treatment plant [	Resolve	e enforcement issue	Eliminate o	r consolidate an exis	sting treatment plant
F. Estimated number of onsite systems being	g removed	i:			
G: Estimated costs associated with piping: \$		Estimated costs a	associated w	vith lift station(s): \$	
3.0 PROJECT OWNER					
NAME		TELEPHONE NUMBER WITH A	REA CODE	EMAIL ADDRESS	
THE CITY OF PERRYVILLE	CITY	(573) 547-2594	STATE	N/A ZIP CODE	
215 N. WEST ST.	PERRYV	/ILLE	MO	63775	
CHARTER NUMBER (SECRETARY OF STATE) or REGISTERED					

4.0 CONTINUING AUTHORITY: A continuing authority is a company, business, entity, or person(s) that will be legally responsible for ensuring compliance with the permit requirements and provide continuous stable oversight of the permitted facility or activity. The Continuing authority should be a relatively permanent entity responsible for the ongoing operation, maintenance and modernization, when needed, of the permitted facility or activity. 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 Clean Water Commission Chapter 6. A continuing authority's name must be listed exactly as it appears on the Missouri Secretary of Chatc's (SoS's) webpage: Missouri Secretary of State, unless the continuing authority is an individual(s), government entity, or otherwise not required to register with the SoS. TELEPHONE NUMBER WITH AREA CODE EMAIL ADDRESS (573) 547-2594 N/A THE CITY OF PERRYVILLE ADDRESS CITY STATE ZIP CODE 215 N. WEST ST. **PERRYVILLE** MO 63775 CHARTER NUMBER (SECRETARY OF STATE) 4.1 Has appropriate continuing authority acceptance been provided as follows: A letter from the continuing authority accepting responsibility for continued maintenance of the sewer (if the continuing authority is different than the original owner of the construction), or a properly executed "Continuing Authority and Receiving Wastewater Treatment Facility Acceptance" Form 780-2584. YES ☐ NO □N/A 5.0 ENGINEER EMAIL ADDRESS ENGINEER NAME / COMPANY NAME TELEPHONE NUMBER WITH AREA CODE TIMOTHY J. BAER/BAER ENGINEERING, LLC TBAER@BAERENGINEERING.COM (573) 547-2310 STATE ZIP CODE 313 N. JACKSON ST. **PERRYVILLE** MO 63775 **6.0 RECEIVING WASTEWATER TREATMENT FACILITY** TELEPHONE NUMBER WITH AREA CODE EMAIL ADDRESS PERRYVILLE WASTEWATER TREATMENT PLANT (573) 547-2394 N/A REMAINING CAPACITY (GPD) MISSOURI STATE OPERATING PERMIT # COUNTY PERRY MO-0051144 800,000 6.1 If different from the owner, has a letter been provided from the receiving treatment facility demonstrating that they agree to accept the expanded flow or has a properly executed Continuing Authority and Receiving Wastewater Treatment Facility Acceptance MO 780-2584 form been provided? ☐ YES ☐ NO ☑ N/A 6.2 A letter from the receiving wastewater treatment facility, if different than the continuing authority, is included with this application. ☐ YES ☐ NO ☑ N/A 6.3 If the receiving treatment plant or continuing authority is regulated by the Public Service Commission (PSC) for sewer activities, a N/A Certificate of Convenience and Necessity has been received? Yes - Date: OPTIONAL QUESTIONS REGARDING MILITARY SERVICE Have you or an immediate family member ever served in the ☐ No ☐ Yes U.S. Armed Forces? If yes, would you like information about military-related services ☐ No ☐ Yes in Missouri? 7.0 Application Fee Check Number 12445 ☐ JetPay Confirmation Number 8.0 PROJECT OWNER: I certify under penalty of law this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. PROJECT OWNER SIGNATURE PRINTED WAME DATE 5-5-23 JEFF LAYTON TITLE OR CORPORATE POSITION TELEPHONE NUMBER WITH AREA CODE EMAIL ADDRESS PUBLIC WORKS DIRECTOR (573) 547-2594 jefflayton@cityofperryville.com Mail completed copy to: Submit completed electronic copy to: MISSOURI DEPARTMENT OF NATURAL RESOURCES Missouri Department of Natural Resources WATER PROTECTION PROGRAM at DNR.WPPEngineerSection@dnr.mo.gov PO BOX 176 JEFFERSON CITY, MO 65102-0176

MO 780-1632 (10-22)

9.0 SE	WER EXTENSION	N CHECKLIST		
		ESIGN CERTIFICATION: Answer all questions yes or N/A. Answer N/A only if the question is of the proposed sewer extension.	clearly r	not
	REGULATION		YES	N/A
1.	8.110(3)(A)	Is the design flow based on actual flow data for an existing system?	<b>V</b>	
2.	8.110(3)(B)	Are average design flows, peak hourly flows and I&I contributions for new systems calculated?	7	
3.	8.110(9)(B)	Is there a detailed plan showing tributary area, boundaries, pertinent elevations, topography, existing and proposed facilities?	V	
4.	8.120(2)	Does the sewer exclude water from roofs, streets, groundwater from foundation drains and combined wastewater?	V	
5.	8.120(3)(A)	Is the pipe installation, embedment and backfill designed to prevent damage to the pipe and its joints?	1	
6.	8.120(3) (A)1	Is all sewer pipe constructed with a slope to obtain mean velocities of not less than 2 feet per second?	V	
7.	8.120(3)(A)2	Is the pipe covered with at least 36" of soil or sufficiently insulated to prevent freezing?	$\checkmark$	
8.	8.120(3)(B)	Is deflection testing specified to ensure no pipe exceeds a deflection of 5% of the inside diameter?	$\sqrt{}$	
9.	8.120(4)(A)	Are manholes located at the end of each line, at all changes in grade, size or alignment and at all intersections?	<u> </u>	
10.	8.120(4)(C)	Are manholes at least 42 inches in diameter with a clear opening of 22 inches on sewer line larger than 8"?	Z	
11.	8.120(4)(C)	Where cleanouts are used at the end of a lateral instead of a manhole, they are a minimum diameter of 8 inches or larger and equal to the diameter for pipes < 8"?		<b>√</b>
12.	8.120(4)(E)	Are the manholes watertight, constructed and installed in accordance with the manufacturer's recommendations and procedures?	$\checkmark$	
13.	8.120(4)(F)	Do the specifications include a requirement for inspection and testing for manholes?	<b>√</b>	
14.	8.120(5)(A)	Is the sewer free from physical connections to a potable water supply system and no water pipes come in contact with a sewer manhole?	<b>V</b>	
15.	8.120(5)(B)	Are sewers and manholes located at least 50 feet horizontally from any existing or proposed water supply well, sources, structures?	<b></b>	
10.0 P	RESSURE SEWE	RS, GRINDER PUMP, STEP AND STEG SEWER CHECKLIST		
	REGULATION		YES	N/A
16.	8.125(5)(A)1.	Does the cleaning velocity of ≥ 2 ft/s happen more than once per day?		V
17.	8.125(5)(A)2.	Is the diameter of the pressure sewer main pipe at least 1.5"?		<b>√</b>
18.	8.125(5)(B)	Are appurtenances compatible with the piping system?		V
19.	8.125(5)(B)2.	Are isolation valves located: upstream of major pipe intersections; both sides of stream, bridge and RR crossings; at terminal end of system?		<b>V</b>
20.	8.125(5)(C)	Do service line pipes have a minimum diameter of 1.25"?		$\checkmark$
21.	8.125(5)(D)1.A	Do simplex grinder pump stations service only a single equivalent dwelling unit (EDU)? i.e. 1 residence – 1 grinder pumpt.		V
22.	8.125(5)(D)1.B	Are multiple unit pump stations owned, operated and maintained by an approved continuing authority?		V
23.	8.125(5)(D)3.	Is there at least 70 gallons of storage in the grinder pump unit?		<b>√</b>
24.	8.125(5)(D)4.	Do grinder pump stations have shutoff valves, check valves and anti-siphon valves (where siphoning could occur) that are accessible from the ground surface?		V
25.	8.125(5)(D)7., 8.130(3)(B)2.	Are units serviceable and replaceable under wet conditions without electrical hazard and is electrical equipment suitable for hazardous locations (National Electrical Code, Class I, Group D, Division 1 location)?		V
26.	8.125(5)(D)8., 8.125(2)(F)6.	Are provisions in place to avoid interruption of service due to mechanical or power failure by providing standby power, storage capacity, or interconnection with another disposal system?		<b>V</b>
27.	8.125(6)(D)	In a STEP system is at least one septic tank (1,000 gallons or more) provided for each EDU with 20% of tank volume dedicatied to freeboard and ventillation?		V
28.	8.125(6)(F)	Are duplex pumps provided for the design flow of 1,500 gallons or greater?		V

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11.01	UMP STATION C	HECKLIST					
	REGULATION					YES	N/A
29.	8.125(7)(C)	Is the minimum diameter sewer main pipe and service line of STEG sewer at least 4"?				1	
30.	8.130(2)(A) 8.140(2)(B)	Is the pump statio	oump station designed to withstand the 100-year flood?				$\sqrt{}$
31.	8.130(3)(A)	Is the dry well completely separate from the wet well and is a suitable and safe means of access provided to each?					V
32.	8.130(3)(B)	If the design flow provided?	If the design flow is 1,500 gpd or more, are there at least 2 pumps or pneumatic ejectors				V
33	8.130(3)(D)		d outside wet well unles	ss integral to a pump or	its housing?		<b>V</b>
34.	8.130(3)(F) 8.140(8)(J)	Do wet and dry w	ells have separate vent	tilation systems?			.V
35.	8.130(3)(G)	Does all potable v	vater brought to pump s	stations comply with 8.	140(7)(D)?		<u></u>
36.	8.130(6)	Is an alarm syster	n provided with uninter	rupted power?			<b>V</b>
37.	8.130(7)(A)			urly flow for a design flo	ow > 100,000 gpd or 4 hrs d?		[]
38.	8.130(7)(B)	Are there indepen		provided for emergence	y power capable of starting		V
39.	8.130(8)(A)		velocity of ≥ 2 ft/s main				$\sqrt{}$
40.	8.130				ons provided that include and spare parts that may be		<b>7</b>
12.0 S	UCTION LIFT PU		SIBLE PUMP STATIO	N CHECKLIST			-
	REGULATION					YES	N/A
41.	8.130(4)			ning or vacuum priming			<b>√</b>
42.	8.130(4)(A)	Is the combined total of dynamic suction lift at the "pump off" elevation and required net positive suction head at design operating conditions less than or equal to 22 feet?					
43.	8.130(4)(B)	Are there dual vac	cuum pumps capable o	f removing air from the	suction lift pump?		<b>V</b>
44.	8.130(5)(A)		Are submersible pumps readily removable and replaceable without personnel entering, or disconnecting any pipe in the wet well?				
13.0 S	EWER EXTENSION		CERTIFICATION STA	TEMENT		1	
1644.	LATERALS IN PF		ature and date:	CT.	OF MISSON HIMOTHA J. BAER NUMBER E-29398	SH GINEEP ST	
Name	TIMOTHY J. BAI	ER			MANAGERS OF		
Addre	ss: 313 N. JACKS	SON ST.					
City: F	PERRYVILLE		State: MO		ZIP Code: 63775	<u> </u>	
Telepl	none Number with	Area Code: (573) 5	547-2310	Email:TBAER@BAEI	RENGINEERING.COM		
L MO 780-16	32 (10-22)			1			