STATE OF MISSOURI DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



GENERAL PERMIT for SEWER EXTENSION CONSTRUCTION

| The Missouri Department of N | tural Resources hereby issues a permit to: |
|--|---|
| | MOGC00652 Oldenburg Industrial Park Lift Station City of Washington 405 Jefferson Street WASHINGTON, MO 63090 neral site work appropriate to the scope and purpose of the project and will include all the necessary ete and usable collection system. The construction of this project will be in the vicinity of the county |
| County: Franklin | Receiving Permit ID: MO0025810 |
| for the construction of (describ | d construction project): |
| with 16 manholes, 3,251 lf station but initially with onl TDH, and a 200 kW station Project is in the vicinity of existing system to be treated | Instruction of approximately 2,915 lf of 8-inch to 15-inch SDR-35 PVC gravity sewer 8-inch SDR-21 PVC force mains with cleanouts and air release valves, one triplex lift two pumps, each 35-hp pump capable of operating at 564 gpm at 137.43 feet of enerator to initially serve Lot 1 with a design average flow of 4,800 gpd. Wy 100 and Vossbrink Dr. in Washington, Franklin County, and discharges to an at the Washington WWTP, MO-0025810. Sal Maniaci, Community and Economic are city of Washington signed the application. |
| RSMo, and regulation promul As the Department does not expermit 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 mine structural features of design or the efficiency of mechanical equipment, the issuance of this 1 of these features. Construction of water pollution control components; it does not apply to other environmentally |
| September 29, 2023 Issue Date | John Hoke, Director Water Protection Program |
| September 28, 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. The Missouri Department of Natural Resources may require a site-specific sewer extension construction permit due to compliance and enforcement actions in accordance with 10 CSR 20-6.010(13)(C).
- 3. This permit does not apply to:
 - A. Earthen storage basins;
 - B. Exempt projects in accordance with 10 CSR 20-6.010(1)(B), 10 CSR 20-6.010(5)(B), and RSMo 644.051 unless requested by the applicant or required by enforcement.

PREREQUISITES:

- 1. The Sewer Extension Construction Permit application, appropriate fee, and documentation in accordance with 10 CSR 20-6.010(5)(G).
- 2. Submit the Sewer Extension Construction Permit application at least sixty (60) days in advance of the start of construction in accordance with 10 CSR 20-6.010(5)(F).
- 3. Submit an electronic copy of the construction permit application and documents to DNR.WPPEngineerSection@dnr.mo.gov in accordance with 10 CSR 20-6.010(5)(G)3.
- 4. The plans and specifications, each signed, sealed, and dated by a professional engineer registered in the State of Missouri in accordance with 10 CSR 20-8 and 10 CSR 20-6.010.
- 5. The Design Certification form, Engineering Report, or Summary of Design, signed, sealed, and dated by a professional engineer registered in the State of Missouri, certifying the design of the system is in accordance with 10 CSR 20-6 and 10 CSR 20-8.
- 6. 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.
- 7. A statement from the continuing authority, as defined in 10 CSR 20-6.010, accepting responsibility for the 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 received by the Department. Revisions that affect capacity, flow, or system layout must be approved by the Department prior to construction.

PERMIT CONDITIONS: (continued)

- 3. If construction will incorporate minor changes from previously submitted plans and specifications (i.e., changes that do not affect the capacity, flow, or system layout), submit an electronic copy of the as-built plans and specifications in accordance with 10 CSR 20-8.110(11).
- 4. State and Federal Law does not permit bypassing of raw wastewater; therefore, the applicant must take steps 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) or through the Online Bypass/SSO Reporting service on the Missouri Gateway for Environmental Management (MoGEM) portal found at https://dnr.mo.gov/data-e-services/missouri-gateway-environmental-management-mogem.

See https://dnr.mo.gov/document-search/missouri-gateway-environmental-management-mogem-frequently-asked-questions-pub2988/pub2988 for more information.

- 5. Protection of drinking water supplies must meet the requirements of 10 CSR 20-8.120(5).
 - A. There shall be no physical connections between a public or private potable water supply system and a sewer or appurtenance that would permit the passage of any wastewater or polluted water into the potable supply.
 - B. Lay sewers at least 50 feet (50') in a horizontal direction from any existing or proposed public water supply well or other water supply sources or structures.
- 6. Position manholes so that the top access is at or above grade level.
- 7. 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. Applicants shall obtain land disturbance permits through the Department's ePermitting system, available online at <a href="https://dnr.mo.gov/data-e-services/water/electronic-permitting-ep

See https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/stormwater/construction-land-disturbance for more information.

8. Entities applying for funding under 10 CSR 20-4, "Grants and Loans" will need to comply with those requirements in addition to the requirements of 10 CSR 20-8.

PERMIT CONDITIONS: (continued)

9. The Department may require a United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) or a permit waiver for the activities described in this permit. If construction activity will disturb any land below the ordinary high water mark of Jurisdictional Waters of the U.S., then a 404/401 is required. Fulfillment of these requirements is necessary before the permit is considered valid. Since the COE makes determinations on what is jurisdictional, you must contact the COE to determine permitting requirements. You may call the Department's Operating Permits Section at 573-522-4502 for more information.

See https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/section-401-water-quality for more information.

- 10. If this project eliminates a wastewater treatment facility under the jurisdiction of the Department, then the applicant shall submit a full closure plan 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 Department approves the submitted closure plan.
- 11. If this project is part of a project to resolve an enforcement action or is receiving funding from the Department, submit a <u>statement of work complete</u> following the completion of construction.
- 12. Applicants may submit, prior to the expiration date of this permit, a written request that additional time is needed in accordance with 10 CSR 20-6.010(5)(H)3.

MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM APPLICATION FOR CONSTRUCTION PERMIT – SEWER EXTENSION

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

| NOTE ► Please Read the accompanying instructions before completing this form | | | | | | |
|--|--|--|--|--|--|--|
| 1.0 APPLICATION INFORMATION (Note – If any of the questions in this section are answered NO, this application may be considered incomplete and returned.) | | | | | | |
| 1.1 Is this a Federal/State funded project? ☑ YES ☐ N/A Funding Agency: EDA Project #: 123803 | | | | | | |
| 1.2 Has the Department of Natural Resources approved the proposed project's engineering report*? ☐ YES Date of Approval: ☐ NO ☑ N/A | | | | | | |
| 1.3 Is a copy of the appropriate plans* and specifications* included with this application? | | | | | | |
| If the project is using standard specifications, name of community: | | | | | | |
| 1.4 Is a summary of design* included with this application? ✓ YES □ NO | | | | | | |
| 1.5 Is the appropriate fee or JetPay confirmation included with this application? ✓ YES □ NO See Section 7.0 | | | | | | |
| * Must be affixed with a Missouri registered professional engineer's seal, signature and date. | | | | | | |
| 2.0 PROJECT INFORMATION 2.1 NAME OF PROJECT | | | | | | |
| Oldenburg Industrial Park - Lift Station/Sanitary Sewer Extension/Gravity Sewer Extension | | | | | | |
| ADDRESS CITY STATE ZIP CODE COUNTY | | | | | | |
| Highway 100 Washington MO 63090 Franklin 2.2 Legal Description: ¼, ¼, ½, Sec. 18 , T 44N , R 1W | | | | | | |
| 2.2 Legal Description: ¼, ¼, Sec. 18 , T 44N , R 1W | | | | | | |
| 2.3 Project Components (check all that apply): ☑ Gravity sewers ☑ Pumping stations ☑ Force mains ☐ Alternative sewer system ☐ Other (Describe below.) | | | | | | |
| 2,4 PROJECT DESCRIPTION | | | | | | |
| The Oldenburg Industrial Subdivision is a 110-acre industrial subdivision located on the south side of Highway 100 in Washington, MO. The sanitary sewer design will include installation of a lift station to service the entire Oldenburg Subdivision, approximately 3,300 lineal feet of 8-inch sanitary sewer force main, and approximately 2,700 lineal feet of 8-inch and 12-inch gravity force main to serve Lot 1 of the development initially and then future lots. | | | | | | |
| 2.5 DESIGN INFORMATION A. Population or number of lots to be served by this extension: 4 Lots ranging in size from 12-26 acres each. | | | | | | |
| B. Estimated flow to be contributed by this extension: Design Average Flow: 254,574 gpd Design Peak Hourly Flow: 58,740 gph | | | | | | |
| C. Industrial Wastes: Type: Flow: gpd | | | | | | |
| D. Receiving Sewer: Size: 8 inches Capacity: 632 gpm | | | | | | |
| E. Does this project (check all that apply): | | | | | | |
| ☑ Connect to an existing treatment plant ☐ Resolve enforcement issue ☐ Eliminate or consolidate an existing treatment plant | | | | | | |
| F. Estimated number of onsite systems being removed: | | | | | | |
| G: Estimated costs associated with piping: \$ 500,000 Estimated costs associated with lift station(s): \$ 506,550 | | | | | | |
| 3.0 PROJECT OWNER | | | | | | |
| TELEPHONE NUMBER WITH AREA CODE EMAIL ADDRESS Smaniaci@washmo.gov | | | | | | |
| ADDRESS CITY STATE ZIP CODE | | | | | | |
| 405 Jefferson Street Washington MO 63090 | | | | | | |

| 4.0 CONTINUING AUTHORITY: A continuin for ensuring compliance with the permit required Continuing authority should be a relatively permitted by the permittee to sample or operate a analytical laboratory. To access the regulator water Commission Chapter 6. A continuing a (SoS's) webpage: Missouri Secretary of State required to register with the SoS. | irements a ermanent e vity. A con and mainta ry requiren authority's | and provide entity respon- tinuing auth ain the systement regard name must | continuous s nsible for the nority is not, l em for a defir ing continuir be listed ex | stable overs e ongoing op nowever, an ned time pen ng authority, actly as it ap | right of the permitted facility or activity. The peration, maintenance and modernization, in entity or individual that is contractually riod, such as a certified operator or 10 CSR 20-6.010(2), please visit Clean opears on the Missouri Secretary of State's ual(s), government entity, or otherwise not | |
|---|---|--|---|--|--|--|
| NAME City of Washington - Sal Maniaci | | 636-390-1 | LEPHONE NUMBER WITH AREA CODE | | EMAIL ADDRESS smaniaci@washmo.gov | |
| ADDRESS | CITY | | - | STATE | ZIP CODE | |
| 405 Jefferson Street | Washing | iton | | МО | 63090 | |
| CHARTER NUMBER (SECRETARY OF STATE) N00054585 | | | | | | |
| 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 NA | | | | | | |
| 5.0 ENGINEER ENGINEER NAME / COMPANY NAME | | T TELEBRONE | NUMBER WITH A | DEA CODE | EMAIL ADDRESS | |
| Elliott Reed, P.E./Cochran | | 636-584-0 | | REA CODE | ereed@cochraneng.com | |
| ADDRESS 530A East Independence Drive | Union | | | STATE MO | ZIP CODE 63084 | |
| 6.0 RECEIVING WASTEWATER TREATME | | ITY | | TWIO | 10001 | |
| NAME Washington WWTP | | TELEPHONE NUMBER WITH AREA CODE | | | email address smaniaci@washmo.gov | |
| MISSOURI STATE OPERATING PERMIT # | | 636-390-1000 COUNTY | | | REMAINING CAPACITY (GPD) | |
| MO-0025810 | 1.1 | Franklin | | | 1.6 MGD | |
| 6.1 If different from the owner, has a letter be accept the expanded flow or has a properly of MO 780-2584 form been provided? | executed 0 | Continuing A | Authority and | I Receiving | Wastewater Treatment Facility Acceptance | |
| 6.2 A letter from the receiving wastewater tre ☐ YES ☐ NO ☑ N/A | | | | | | |
| 6.3 If the receiving treatment plant or continu Certificate of Convenience and Necessity ha | s been rec | ceived? | ted by the P Yes – Date | | e Commission (PSC) for sewer activities, a ☐ No ☑ N/A | |
| OPTIONAL QUESTIONS REGARDING MIL | | | | | | |
| Have you or an immediate family member ever served in t U.S. Armed Forces? | | | | 'es | ☑ No | |
| If yes, would you like information about military-related senin Missouri? | | | | 'es | ☑ No | |
| 7.0 Application Fee | | | | | | |
| Check Number Check #46985 | | | | Confirmatio | | |
| 8.0 PROJECT OWNER: I certify under penal supervision in accordance with a system des submitted. Based on my inquiry of the persor gathering the information, the information sul aware there are significant penalties for subniviolations. PROJECT OWNER SIGNATURE | igned to a n or person omitted is, | ssure qualif ns who man to the best | ied personne age the syst of my knowl | el properly g tem, or thos edge and be | gather and evaluate the information e persons directly responsible for elief, true, accurate and complete. I am | |
| Sel Mars | | | | | | |
| PRINTED MAME | | | | | DATE S/20/02 | |
| Sal Maniaci TITLE OR CORPORATE POSITION TELEPHONE NI | | | | REA CODE | EMAIL ADDRESS | |
| | | | 000 smaniaci@washmo.gov | | smaniaci@washmo.gov | |
| Mail completed copy to: | | | | Submit (| completed electronic conv to: | |
| MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM PO BOX 176 JEFFERSON CITY MO 65102-0176 | | | Submit completed electronic copy to: Missouri Department of Natural Resources at DNR.WPPEngineerSection@dnr.mo.gov | | | |

MO 780-1632 (10-22)

| SEW appli | ER EXTENSION D | PESIGN CERTIFICATION: Answer all questions yes or N/A. Answer N/A only if the question is of the proposed sewer extension. | clearly | not |
|------------------|---------------------------------|--|---------|-----|
| | REGULATION | | YES | N/A |
| 1, | 8.110(3)(A) | Is the design flow based on actual flow data for an existing system? | V | |
| 2. | 8.110(3)(B) | Are average design flows, peak hourly flows and I&I contributions for new systems calculated? | V | |
| 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? | V | |
| 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? | V | П |
| 8. | 8.120(3)(B) | Is deflection testing specified to ensure no pipe exceeds a deflection of 5% of the inside diameter? | V | |
| 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? | V | |
| 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"? | V | |
| 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"? | V | |
| 12. | 8.120(4)(E) | Are the manholes watertight, constructed and installed in accordance with the manufacturer's recommendations and procedures? | V | |
| 13. | 8.120(4)(F) | Do the specifications include a requirement for inspection and testing for manholes? | V | |
| 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? | V | |
| 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? | V | |
| 10.0 | PRESSURE SEWE | ERS, 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"? | V | |
| 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? | V | |
| 20. | 8.125(5)(C) | Do service line pipes have a minimum diameter of 1.25"? | | V |
| 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? | П | V |
| 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? | Ø | |
| 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? | 7 | |

| 11.0 | PUMP 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"? | | | | V | | |
| 30. | 8.130(2)(A) 8.140(2)(B) | Is the pump station designed to withstand the 100-year flood? | | | V | | | |
| 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 is 1,500 gpd or more provided? | , are there at least 2 pum | nps or pneumatic ejectors | V | | | |
| 33 | 8.130(3)(D) | Are valves located outside wet well un | less integral to a pump or | r its housing? | V | | | |
| 34. | 8.130(3)(F) 8.140(8)(J) | Do wet and dry wells have separate ve | entilation systems? | | V | | | |
| 35. | 8.130(3)(G) | Does all potable water brought to pum | p stations comply with 8. | 140(7)(D)? | V | | | |
| 36. | 8.130(6) | Is an alarm system provided with unint | errupted power? | | | | | |
| 37. | 8.130(7)(A) | Is there 2 hours retention of the peak in retention of the peak hourly flow for a contract of the peak hourly flow flow flow flow flow flow flow flow | | | V | | | |
| 38. | 8.130(7)(B) | Are there independent utility substation and operating the pump station at its ra | ns provided for emergend | | | V | | |
| 39. | 8.130(8)(A) | Is the force main velocity of ≥ 2 ft/s ma | intained? | | V | | | |
| 40. | 8.130 | Are there complete operation instruction emergency procedures, maintenance in necessary? | | | V | | | |
| 12.0 | | MP AND SUBMERSIBLE PUMP STAT | ION CHECKLIST | | | | | |
| | REGULATION | | | | YES | N/A | | |
| 41. | 8.130(4) | Are the suction lift pumps of the self pr | | | | V | | |
| 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? | | | | V | | |
| 43. | 8.130(4)(B) | Are there dual vacuum pumps capable | of removing air from the | suction lift pump? | П | V | | |
| 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 | SEWER EXTENSI | ON CHECKLIST CERTIFICATION ST | | | | | | |
| pumps sewer | ual grinder stations A standby gener collection system a | s will not be provided for this project. No ator will be provided at the site for emergand not a STEP or STEG system. | on-clog submersible pump gency power during an or of Misson 8/28/2023 ELLIOTT R. REED NUMBER PE2006002845 | os will be used for the lift stati | on not s | uction avity | | |
| Name | Elliott Reed P.E. | | | | | | | |
| City: l | City: Union State: MO ZIP Code: 63084 | | | ZIP Code: 63084 | | | | |
| Telep | hone Number with | Area Code: 636-584-0540 | Email:ereed@cochra | neng.com | | | | |
| //O 780-16 | O 780-1632 (10-22) | | | | | | | |