

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

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

Robert Goeltz, P.E.
Senior Project Engineer
Missouri American Water Company
727 Craig Road
St. Louis, MO 63141

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.

October 10, 2018
Effective Date


Edward B. Galbraith, Director, Division of Environmental Quality

October 9, 2020
Expiration Date


Chris Wieberg, Director, Water Protection Program

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

Modification to an existing extended aeration wastewater treatment facility by the addition of a clarifier, conversion of the existing clarifier to aeration volume, piping rearrangements, and all the necessary appurtenances to make the facilities complete and usable to treat the effluent from an existing residential subdivision, with a design average daily discharge of 11,200 gallons. The effluent pipe and outfall location will remain unchanged. This facility discharges to a Tributary to Turkey Creek, Callaway County, Missouri.

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 complete a cost analysis for compliance because the facility is not a combined or separate sanitary sewer system for a publically-owned treatment works.

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 in accordance with the plans and specifications submitted by Bartlett and West on July 26, 2018.

3. The Department must be contacted in writing prior to making any changes to the approved 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(8).
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)(E)2.
5. 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 dnr.mo.gov/env/wpp/epermit/help.htm. See dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm for more information.
6. 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 dnr.mo.gov/env/wpp/401/ for more information.
7. Upon completion of construction:
 - A. Submit an electronic copy of the as built 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)(D).

IV. REVIEW SUMMARY

1. CONSTRUCTION PURPOSE

Improvements are being made at the owner's discretion to improve reliability and performance of the treatment facility.

2. FACILITY DESCRIPTION

The existing treatment facility is an extended aeration treatment plant consisting of an aeration tank, hopper bottom clarifier, tablet chlorination, chlorine contact tank, tablet dechlorination, and sludge holding tank; aeration is provided by motors and blowers.

The project will add a new clarifier and convert the existing clarifier into additional activated sludge aeration volume. Project will rearrange piping and tablet dispensers of the chlorination/dechlorination components. Project also replaces the manually cleaned bar screen with same.

The MAWC, Summit View Drive WWTF is located at the end of Summit Drive, Holts Summit, Callaway County, Missouri. The facility has a design average flow of 11,200 gpd and a design organic population equivalent of 140. The facility discharges to a Tributary to Turkey Creek, Callaway County. UTM location, zone 15, X=574886, Y=4274050.

3. COMPLIANCE PARAMETERS

The compliance parameters are those found in General Permit MOGD00240, Table A-3, with an expiration date of June 30, 2019.

4. REVIEW of MAJOR TREATMENT DESIGN CRITERIA

The new clarifier will have a surface dimension of 7 feet by 14 feet, the effluent weir will extend the length of one 7 foot wall. There will be two settling hoppers with air lift sludge returns. The overall depth is approximately 12 feet. The surface overflow rate is approximately 140 gallons/sq. ft. with the area upstream of the influent baffle excluded. The detention volume, including only the upper 1/3 of the hoppers, is approximately 600 cubic feet which exceeds nine hours at design flow.

The flow in the chlorine contact tank will be reversed to accommodate yard piping arrangements. The contact time will remain nearly the same, sufficient to provide 15 minutes of contact at peak flows.

5. OPERATING PERMIT

These construction activities do not require a modification to the operating permit. There is also no change to the facility description as a result of the improvements.

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

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RECEIVED

JUL 26 2018



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM

**APPLICATION FOR CONSTRUCTION PERMIT –
WASTEWATER FACILITY**

Water Protection Program

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
FEE RECEIVED \$1000.00	CHECK NO. 1700048390
DATE RECEIVED 7-26-18	

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APPLICATION OVERVIEW

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

PART A – BASIC INFORMATION

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

- 1.1 Is this a Federal/State funded project? YES N/A Funding Agency: _____ Project #: _____
- 1.2 Is this an application for an agrichemical? YES (See instructions.) N/A
- 1.3 Has the Missouri Department of Natural Resources approved the proposed project's antidegradation review?
 YES Date of Approval: N/A; not expanding flow
- 1.4 Has the department approved the proposed project's facility plan*?
 YES Date of Approval: included NO N/A (If Not Applicable, complete No. 1.5.)
- 1.5 [Complete only if answered Not Applicable on No. 1.4] Is a copy of the engineering report* for wastewater treatment facilities with a design flow less than 22,500 gpd included with this application?
 YES NO
- 1.6 Is a copy of the appropriate plans* and specifications* included with this application?
 YES Denote which form is submitted: Hard copy Electronic copy (See instructions.) NO
- 1.7 Is a summary of design* included with this application? YES NO
- 1.8 Is a general operating permit applicable?
 YES Submit the appropriate operating permit application to the Regional Office at least 60 days prior to operation.
 NO Enclose the appropriate operating permit application and fee submittal. Denote which form: B B2
- 1.9 Is the facility currently under enforcement with the department or the Environmental Protection Agency? YES NO
- 1.10 Is the appropriate fee included with this application? YES NO (See instructions for appropriate fee.)

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

2.0 PROJECT INFORMATION

2.1 NAME OF PROJECT

Summit View Drive WWTF Improvements

2.2 PROJECT DESCRIPTION

The driver of the project is to improve operations of the Summit View Drive WWTF located in Callaway County, Missouri. Capacity upgrades are not being pursued. In general, the scope of this project is to convert the existing clarifier into an aeration basin, add a precast hoppers clarifier, and reverse flow in the existing chlorine contact tank to accommodate the new clarifier. The existing bar screen is also being replaced.

2.3 SLUDGE HANDLING, USE AND DISPOSAL DESCRIPTION

MAWC pumps waste sludge out of this facility and hauls it to Jefferson City WWTF for processing. No changes are proposed to the sludge handling process.

2.4 DESIGN INFORMATION

- A. Current population: _____; Design population: 140
- B. Actual Flow: 7,500 gpd; Design Average Flow: 11,200 gpd;
Actual Peak Daily Flow: N/A gpd; Design Maximum Daily Flow: N/A gpd;
Design Wet Weather Event: N/A

2.5 ADDITIONAL INFORMATION

- A. Is a topographic map attached? YES NO (see Form B)
- B. Is a process flow diagram attached? YES NO (see drawings)

2.6 ESTIMATED PROJECT CONSTRUCTION COST

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3.0 WASTEWATER TREATMENT FACILITY					
NAME Summit View Drive WWTF		TELEPHONE NUMBER WITH AREA CODE (866) 430-0820		EMAIL ADDRESS Robert.Goeltz@amwater.com	
ADDRESS (PHYSICAL) Summit View Drive		CITY Holts Summit	STATE MO	ZIP CODE 65043	COUNTY Callaway
Wastewater Treatment Facility: Mo- 0111864 (Outfall 001 Of 001)					
3.1 Legal Description: SE ¼, NE ¼, SW ¼, Sec. 2 , T 44N , R 11W (Use additional pages if construction of more than one outfall is proposed.)					
3.2 UTM Coordinates Easting (X): 574886 Northing (Y): 4274050 For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)					
3.3 Name of receiving streams: Unnamed tributary to Turkey Creek (U)					
4.0 PROJECT OWNER					
NAME Missouri American Water Company		TELEPHONE NUMBER WITH AREA CODE (314) 469-6050		EMAIL ADDRESS timothy.ganz@amwater.com	
ADDRESS 727 Craig Rd		CITY St. Louis	STATE MO	ZIP CODE 63141	
5.0 CONTINUING AUTHORITY: Permanent organization that will serve as the continuing authority for the operation, maintenance and modernization of the wastewater collection system.					
NAME Missouri American Water Company		TELEPHONE NUMBER WITH AREA CODE (314) 469-6050		EMAIL ADDRESS timothy.ganz@amwater.com	
ADDRESS 727 Craig Rd		CITY St. Louis	STATE MO	ZIP CODE 63141	
5.1 A letter from the continuing authority, if different than the owner, is included with this application. <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A					
5.2 COMPLETE THE FOLLOWING IF THE CONTINUING AUTHORITY IS A MISSOURI PUBLIC SERVICE COMMISSION REGULATED ENTITY.					
A. Is a copy of the certificate of convenience and necessity included with this application? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO					
5.3 COMPLETE THE FOLLOWING IF THE CONTINUING AUTHORITY IS A PROPERTY OWNERS ASSOCIATION.					
A. Is a copy of the as-filed restrictions and covenants included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO					
B. Is a copy of the as-filed warranty deed, quitclaim deed or other legal instrument which transfers ownership of the land for the wastewater treatment facility to the association included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO					
C. Is a copy of the as-filed legal instrument (typically the plat) that provides the association with valid easements for all sewers included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO					
D. Is a copy of the Missouri Secretary of State's nonprofit corporation certificate included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO					
6.0 ENGINEER					
ENGINEER NAME / COMPANY NAME Gary W. Davis, P.E. / Bartlett & West, Inc.		TELEPHONE NUMBER WITH AREA CODE (573) 659-6731		EMAIL ADDRESS gary.davis@bartwest.com	
ADDRESS 1719 Southridge Drive, Suite 100		CITY Jefferson City	STATE MO	ZIP CODE 65109	
7.0 PROJECT OWNER: I hereby certify that I am familiar with the information contained in this application and to the best of my knowledge and belief such information is true, complete, and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders, and decisions, subject to any legitimate appeal available to applicant under Missouri Clean Water Law. I also understand the issuance of the construction permit does not guarantee the proposed wastewater treatment will meet the required effluent limitations of the issued Missouri State Operating Permit for this facility.					
PROJECT OWNER SIGNATURE <i>Robert Goeltz</i>					
PRINTED NAME Robert Goeltz				DATE 7/19/18	
TITLE OR CORPORATE POSITION Senior Project Engineer		TELEPHONE NUMBER WITH AREA CODE 314-996-2308		EMAIL ADDRESS robert.goeltz@amwater.com	
Mail completed copy to: MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM P.O. BOX 176 JEFFERSON CITY, MO 65102-0176					
END OF PART A.					
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHETHER PART B NEEDS TO BE COMPLETE.					