



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

APR 18 2014

Bill Crawford
Owner
Trinity Mobile Home Park
4303 Hwy 61
Bloomsdale, MO 63627

RE: AP# 17768, Chlorination and Dechlorination – Trinity Mobile Home Park, MO-0092118,
Construction Permit No. CP0001629

Dear Mr. Crawford:

The Missouri Department of Natural Resources' (Department) Water Protection Program has reviewed the plans and specifications submitted by Fribis Engineering, Inc. for Trinity Mobile Home Park. Please find enclosed Construction Permit No. CP0001629.

This permit will terminate 12 months from the date of issuance. In accordance with 10 CSR 20-6.010(4)(G), the Department may grant an extension only one time. If you believe that an extension is necessary, you must submit a request and a justification in writing for the extension at least 30 days prior to the permit expiration date.

This construction permit does not supersede any requirements of the operating permit or enforcement actions. Nothing in this permit removes any obligations to comply with county or other local ordinances or restrictions.

If you were adversely affected by this decision, you may appeal to have the matter heard by the Administrative Hearing Commission. To appeal, you must file a petition with the Administrative Hearing Commission 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 Administrative Hearing Commission.

If you have any questions concerning this matter, please contact Andrew Appelbaum, of the Water Protection Program, at (314) 416-2062 or Missouri Department of Natural Resources, P.O. Box 176, Jefferson City, MO 65102-0176.

Thank you for your efforts to help ensure clean water in Missouri.

Sincerely,

WATER PROTECTION PROGRAM



Refaat N. Mefrakis, P.E.
Engineering Section Chief

RHM:aii

Enclosures

c: Fribis Engineering, Inc.
Southeast Regional Office
Ms. Brittne Brauner, Water Protection Program

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

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

Bill Crawford Trinity Mobile Home Park 4303 Hwy 61 Bloomsdale, MO 63627
--

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.

April 18, 2014
Effective Date

April 17, 2015
Expiration Date

Sara Parker Pauley, Director, Department of Natural Resources

Director of Staff, Clean Water Commission or Designee

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

Modification to an existing sewage treatment facility by the addition of a tablet chlorinator, a chlorine contact tank with an effective volume of approximately 450 gallons, a tablet dechlorinator, and all the necessary appurtenances to make the facilities complete and usable to treat the effluent from an existing one cell lagoon with an average daily discharge of 4,000 gallons. This facility discharges to a Tributary to S. Fork Isle Du Bois Creek, Ste. Genevieve County.

II. FINDING OF AFFORDABILITY

The Finding of Affordability is not applicable. The permittee is not a combined or separate sanitary sewer system or a publicly 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 Fribis Engineering, Inc. on February 24, 2014.
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 Southeast Regional Office per 10 CSR 20-7.015(9)(E)2.
5. This Construction Permit is invalid for projects required to comply with the requirements contained in 10 CSR 20-4, "Grants and Loans"
6. Protection of drinking water supplies shall be in accordance with 10 CSR 20-8.120(10). "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. No water pipe shall pass through or come in contact with any part of a sewer manhole."
 - A. Sewers in relation to water works structures shall meet the requirements of 10 CSR 23-3.010 with respect to minimum distances from public water supply wells or other water supply sources and structures.

- B.** Sewer mains shall be laid at least ten feet horizontally from any existing or proposed water main. The distances shall be measured edge-to-edge. In cases where it is not practical to maintain a ten foot separation, the Department may allow a deviation on a case-by-case basis, if supported by data from the design engineer. Such a deviation may allow installation of the sewer closer to a water main, provided that the water main is in a separate trench or on an undisturbed earth shelf located on either side of the sewer and at an elevation so the bottom of the water main is at least 18 inches above the top of the sewer. If it is impossible to obtain proper horizontal and vertical separation as described above for sewers, the sewer must be constructed of slip-on or mechanical joint pipe or continuously encased and be pressure tested to 150 pounds per square inch to assure water tightness.
- C.** Manholes should be located at least ten feet horizontally from any existing or proposed water main.
- D.** Sewers crossing water mains shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade. When it is impossible to obtain proper vertical separation as stipulated above, one of the following methods must be specified:
- a. The sewer shall be designed and constructed equal to the water pipe and shall be pressure tested to assure water tightness prior to backfilling; or
 - b. Either the water main or sewer line may be continuously encased or enclosed in a watertight carrier pipe which extends ten feet on both sides of the crossing, measured perpendicular to the water main. The carrier pipe shall be of materials approved by the Department for use in water main construction.
7. In addition to the requirements for a construction permit, 10 CSR 20-6.200 requires land disturbance activities of one 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 www.dnr.mo.gov/env/wpp/epermit/help.htm. See www.dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm 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 www.dnr.mo.gov/env/wpp/401/ for more information.

9. Upon completion of construction;
 - A. Submit the enclosed form Statement of Work Completed to the Department in accordance with 10 CSR 20-6.010(5)(D);
 - B. Submit an electronic copy of the as built if the project was not constructed in accordance with previously submitted plans and specifications; and
 - C. Submit a Form B - Application for an Operating Permit for Domestic or Municipal Wastewater ($\leq 100,000$ gallons per day) along with the modification fee of \$25.00 (modification fees will change after 1-1-2015).

IV. REVIEW SUMMARY

1. AMMONIA

The Water Protection Program is providing this notice to inform permittees that EPA's published ammonia criteria for aquatic life protection is lower than the current Missouri criteria. The department has initiated stakeholder discussions on this topic and at this time, there is no firm target date for starting the rulemaking to adopt new standards. More information can be found at <http://dnr.mo.gov/pubs/pub2481.pdf>.

The scope of the current project is to provide seasonal disinfection to the effluent in order to meet e-coli limitations. There is currently a Schedule of Compliance in Missouri State Operating Permit to meet ammonia limits by July 1, 2017. Future enactment of the stricter ammonia limits is communicated in the Public Notice fact sheet addendum for modification of the Operating Permit prepared for this construction permit action.

2. CONSTRUCTION PURPOSE

Missouri State Operating Permit, MO-0092118 issued July 1, 2013, requires compliance with whole body contact recreation (B), e-coli limitations. E-coli limitations are effective April 1, through October 31. E-coli limits will be met by providing chlorination and dechlorination.

This facility is currently under enforcement review for failure to comply with a previous schedule of compliance to meet Fecal Coliform limitations. The previous Missouri State Operating Permit, MO-0092118 issued December 7, 2007, required compliance with Fecal Coliform limitations (installation of disinfection equipment) prior to October 18, 2011.

3. FACILITY DESCRIPTION

The existing treatment facility is a one cell lagoon. The design flow stated in the Operating Permit is 4,000 GPD. The facility will be modified with the addition of chlorination and dechlorination.

4. COMPLIANCE PARAMETERS

Missouri State Operating Permit, MO-0092118 issued July 1, 2013, requires compliance with whole body contact recreation (B), e-coli limitations. E-coli limitations are effective April 1, through October 31. E-Coli limits will be met by providing chlorination. The e-coli limits are: monthly average of 206 colonies/100 ml; daily maximum of 1030 colonies/100 ml. In addition, dechlorination will enable the effluent to be in compliance with Total Residual Chlorine limits of 0.008 mg/L, monthly average; and 0.017 mg/L, daily maximum.

5. REVIEW of MAJOR TREATMENT DESIGN CRITERIA

Chlorination and dechlorination will be provided by Norweco IT 2000 tablet dispensers; this unit has a capacity to serve design flows of 20,000 gpd. The precast chlorine contact tank has an actual effective volume of approximately 450 gallons. The design flow of the facility is 4000 gpd; for design purposes a peak factor of 4 was assumed. At peak flow the 450 gallon contact tank would provide 40 minutes of contact time. The minimum required contact time is 15 minutes.

6. OPERATING PERMIT MODIFICATION

Operating permit MO-0092118 will require a modification to reflect the construction activities. Upon construction completion submit a modification fee of \$25.00 and Form B - Application for an Operating Permit for Domestic or Municipal Wastewater ($\leq 100,000$ gallons per day). A Public Notice of permit pending for modification of Missouri State Operating Permit, MO-0092118, has been or will be issued to reflect the modified facilities and to include an effluent limitation for Total Residual Chlorine.

Review Engineer: Andrew Appelbaum
Unit Chief Approval: Refaat Mefrakis
Date: 03/13/2014



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM
**APPLICATION FOR CONSTRUCTION PERMIT –
 WASTEWATER TREATMENT FACILITY**

CPO001029
 AP17768 C12924

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
FEE RECEIVED \$750.00	CHECK NO. 2337
DATE RECEIVED 2/24/14 SB	

APPLICATION OVERVIEW

The Application for Construction Permit – Wastewater Treatment Facility 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 Has the Missouri Department of Natural Resources approved the proposed project's antidegradation review?
 YES Date of Approval: _____
 Attached is the No Degradation Evaluation Conclusion of Antidegradation Review form
- 1.3 Has the department approved the proposed project's facility plan*?
 YES Date of Approval: _____ NO N/A (If Not Applicable, complete No. 1.4.)
- 1.4 [Complete only if answered Not Applicable on No. 1.3.] 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
- 1.5 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
- 1.6 Is a summary of design* included with this application? YES NO
- 1.7 Has the appropriate operating permit application (A, B, or B2) been submitted to the department?
 YES Date of submittal: _____
 Enclosed is the appropriate operating permit application submittal. Denote which form: A B B2
 N/A Please explain: _____
- 1.8 Is the facility currently under enforcement with the department or the Environmental Protection Agency? YES NO
- 1.9 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

Trinity Mobile Home Park

2.2 PROJECT DESCRIPTION

Addition of chlorinator, contact tank and dechlorinator to sewage treatment lagoon.

RECEIVED

2.3 SLUDGE HANDLING, USE AND DISPOSAL DESCRIPTION

None

FEB 24 2014

WATER PROTECTION PROGRAM

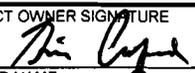
2.4 DESIGN INFORMATION

- A. Current population: 64; Design population: 80
- B. Actual Flow: 3370 gpd; Design Average Flow: 4000 gpd;
 Actual Peak Daily Flow: unknown gpd; Design Maximum Daily Flow: unknown gpd

2.5 ADDITIONAL INFORMATION

- A. Is a topographic map attached? YES NO
- B. Is a process flow diagram attached? YES NO

Mo 0092118

3.0 WASTEWATER TREATMENT FACILITY				
NAME Trinity Mobile Home Park		TELEPHONE NUMBER WITH AREA CODE 314-210-6421		E-MAIL ADDRESS
ADDRESS (PHYSICAL) 4303 Hwy. 61	CITY Bloomsdale	STATE MO	ZIP CODE 63627	COUNTY Ste. Genevieve
Wastewater Treatment Facility: Mo- 0092118 (Outfall 1 Of 1)				
3.1 Legal Description: <u>NW 1/4, NE 1/4, _____ 1/4, Sec. 29, T 39N, R 7E</u> (Use additional pages if construction of more than one outfall is proposed.)				
3.2 UTM Coordinates Easting (X): <u>738749.4</u> Northing (Y): <u>4216666.3</u> For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)				
3.3 Name of receiving streams: _____				
4.0 PROJECT OWNER				
NAME Bill and Amy Crawford		TELEPHONE NUMBER WITH AREA CODE (314) 210-6421		E-MAIL ADDRESS
ADDRESS 6659 Creekstone	CITY Barnhart	STATE MO	ZIP CODE 63012	
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 same as 4.0 above		TELEPHONE NUMBER WITH AREA CODE		E-MAIL ADDRESS
ADDRESS	CITY	STATE	ZIP CODE	
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 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 Gene Fribis/Fribis Engineering, Inc.		TELEPHONE NUMBER WITH AREA CODE (636) 464-3610		E-MAIL ADDRESS gfribis@fribis.com
ADDRESS 3520 Jeffco Boulevard	CITY Arnold	STATE MO	ZIP CODE 63010	
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 				
PRINTED NAME Bill Crawford			DATE 2/20/14	
TITLE OR CORPORATE POSITION owner		TELEPHONE NUMBER WITH AREA CODE 314-210-6421		E-MAIL ADDRESS ABCPROP@aol.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.				