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

Dennis Kallash, Member
Lincoln County Sewer and Water, LLC
360 E. Cherry Street
Troy, MO 63379

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.
CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

Proposed construction activities consist of installing new tablet feeders and a precast concrete chlorine contact chamber for chlorination and dechlorination to meet *E. Coli* and total residual chlorine (TRC) effluent limitations.

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 consistent with plans and specifications signed and sealed by the Scheer Design Group, LLC 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 St. Louis Regional Office per 10 CSR 20-7.015(9)(G).
5. 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).

6. 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.

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

8. All construction must adhere to applicable 10 CSR 20-8 (Chapter 8) requirements listed below.

   • Contact period for Chlorine Disinfection. A minimum contact period of fifteen (15) minutes at design peak hourly flow or maximum rate of pumpage shall be provided after thorough mixing. 10 CSR 20-8.190 (3) (A)

   • Alarm System for chlorination and dechlorination systems. The applicant shall conform to 10 CSR 20-8.140(7)(C) and be responsible for specifying what the alarm requirements are necessary to assure consistent disinfection in compliance with the applicable bacteria limits and the disinfection residual limit in the effluent. 10 CSR 20-8.190 (3) (C)

   • Solid dechlorination systems shall not be located in the chlorine contact tank. 10 CSR 20-8.190 (4) (B) 1.

   • Contact time. A minimum of thirty (30) seconds for mixing and contact time of dechlorination systems shall be provided at the design peak hourly flow or maximum rate of pumpage. 10 CSR 20-8.190 (4) (B) 2.

9. Upon completion of construction:

   A. The Lincoln County Sewer and Water LLC 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;

C. Submit the eDMR permit Holder and Certifier Registration, Form--MO 780-2204 to comply with your operating permit; and

D. Submit the enclosed form Statement of Work Completed to the Department in accordance with 10 CSR 20-6.010(5)(N) and request the draft operating permit (MO-0122971) be issued. The permit was placed on public notice on July 10, 2020.

IV. REVIEW SUMMARY

1. CONSTRUCTION PURPOSE

Proposed construction activities consist of installing new tablet feeders and a precast concrete chlorine contact chamber for chlorination and dechlorination to meet *E. Coli* effluent limitations as required by the Missouri State Operating Permit MO-0122971 issued December 1, 2018.

2. FACILITY DESCRIPTION

The existing wastewater treatment plant is comprised of a flow equalization, extended aeration, aerobic sludge digester. The sludge is land applied or removed by a contract hauler. The purpose of this project is to construct a new chlorination/dechlorination disinfection system to meet the *E. Coli* limits in its current operating permit.

The Bennington WWTF is located at Bennington Drive, Tory, in Lincoln County, Missouri. The facility has a design average flow of 24,000 gpd and serves a hydraulic population equivalent of approximately 282 people.

3. COMPLIANCE PARAMETERS

The proposed project is required to meet final effluent E. coli limits of 1030 colonies per 100 mL weekly average and 206 colonies per 100 mL monthly average as established in Operating Permit MO-0122971 and meet final effluent TRC limits of 8 (130 ML) µg/L weekly average and monthly average as established in draft Operating Permit MO-0122971 public noticed on July 10, 2020.

The limits following the completion of construction will be applicable to the facility:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Monthly average limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Residual Chlorine</td>
<td>µg/L</td>
<td>8 (130 ML)</td>
</tr>
<tr>
<td><em>E. Coli</em></td>
<td>#/100mL</td>
<td>206</td>
</tr>
</tbody>
</table>
4. REVIEW of MAJOR TREATMENT DESIGN CRITERIA

The facility proposed to modify an existing wastewater treatment plant by the installation of a chlorinator (Norweco tablet feeder Model IT 2000S) and a dechlorinator (Norweco tablet feeder Model IT 2000S), a contact chamber, and all the necessary appurtenances to make the facilities complete and usable to treat the waste from a population equivalent of 282.

The Design flow for this facility is 24,000 GPD with a peak hourly flow of 96,000 GPD based on a peaking factor of 4. The facility will use 1,000 gallon baffled basin (8.5’x5.0’x5.8’) as its chlorine contact tank. Sizes of chlorinator, contact tank and dechlorinator are able to treat its hourly peak design flow. Both chlorinator and dechlorinator will be installed outside of the contact tank.

5. OPERATING PERMIT

Operating permit MO-0122971 will require a modification to reflect the construction activities. The modified operating permit of the Bennington WWTF, MO-0122971, was successfully public noticed from July 10, 2020 to August 9, 2020 to add TRC limits. 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.

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: https://ahc.mo.gov

Lei Hou, P.E.
Engineering Section
lei.hou@dnr.mo.gov
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: _____  ☑ N/A

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 wastewater treatment facilities included with this application? ☐ YES ☑ NO ☑ Exempt because Addition of disinfection to existing system

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 and fee submittal. Denote which form: ☑ A ☑ B ☐ B2  ☑ N/A. However, in the event the department believes that my operating permit requires revision to permit limitation such as changing equivalent to secondary limits to secondary limits or adding total residual chlorine limits, please share a draft copy prior to public notice? ☐ YES ☐ NO

1.8 Is the facility currently under enforcement with the department or the Environmental Protection Agency? ☑ YES ☐ NO

1.9 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
Disinfection system for Bennington WWTF

2.2 ESTIMATED PROJECT CONSTRUCTION COST
$ 12,000

2.3 PROJECT DESCRIPTION
Addition of two tablet feeders and a chlorine contact chamber to provide disinfection to the WWTF effluent prior to discharge.

2.4 SLUDGE HANDLING, USE AND DISPOSAL DESCRIPTION
contract hauler

2.5 DESIGN INFORMATION
A. Current population: _____  Design population: 282

B. Actual Flow: 3600 gpd;  Design Average Flow: 3 k gpd;  Actual Peak Daily Flow: _____ gpd;  Design Maximum Daily Flow: 24 k gpd;  Design Wet Weather Event: _____

2.6 ADDITIONAL INFORMATION
A. Is a topographic map attached? ☑ YES ☐ NO

B. Is a process flow diagram attached? ☑ YES ☐ NO

MO 780-2186 (02-19)
3.0 WASTEWATER TREATMENT FACILITY

<table>
<thead>
<tr>
<th>NAME</th>
<th>TELEPHONE NUMBER WITH AREA CODE</th>
<th>E-MAIL ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bennington WWTF</td>
<td>(636) 528-6180</td>
<td></td>
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<table>
<thead>
<tr>
<th>ADDRESS (PHYSICAL)</th>
<th>CITY</th>
<th>STATE</th>
<th>ZIP CODE</th>
<th>COUNTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bennington Dr. 0.03 Mi. S. of inter. Bennington</td>
<td>Troy</td>
<td>MO</td>
<td>63379</td>
<td>Lincoln</td>
</tr>
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Wastewater Treatment Facility: Mo-0122971 (Outfall 1 Of 1)

3.1 Legal Description: ¼, ¼, ¼, ¼ Sec. 32, T 49N, R 1W  
(Use additional pages if construction of more than one outfall is proposed.)

3.2 UTM Coordinates Easting (X): 669351 Northing (Y): 4315909  
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

3.3 Name of receiving streams: Tributary to Spring Creek

4.0 PROJECT OWNER

<table>
<thead>
<tr>
<th>NAME</th>
<th>TELEPHONE NUMBER WITH AREA CODE</th>
<th>E-MAIL ADDRESS</th>
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</thead>
<tbody>
<tr>
<td>Lincoln County Sewer and Water LLC</td>
<td>(636) 528-6180</td>
<td></td>
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<tr>
<td>360 E. Cherry St.</td>
<td>Troy</td>
<td>MO</td>
<td>63379</td>
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5.0 CONTINUING AUTHORITY: A continuing authority is a company, business, entity or person(s) that will be operating the facility and/or ensuring compliance with the permit requirements.

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5.1 A letter from the continuing authority, if different than the owner, is included with this application.  
☐ YES ☐ NO ☑ 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?  
☐ YES ☑ 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?  
☐ YES ☑ 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?  
☐ YES ☑ 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?  
☐ YES ☑ NO

D. Is a copy of the Missouri Secretary of State's nonprofit corporation certificate included with this application?  
☐ YES ☑ NO

6.0 ENGINEER

<table>
<thead>
<tr>
<th>ENGINEER NAME / COMPANY NAME</th>
<th>TELEPHONE NUMBER WITH AREA CODE</th>
<th>E-MAIL ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kirby Scheer / Scheer Design Group, LLC</td>
<td>573 459-2611</td>
<td><a href="mailto:kirbs@idnet.com">kirbs@idnet.com</a></td>
</tr>
</tbody>
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<th>ZIP CODE</th>
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<tbody>
<tr>
<td>8584 HWY YY</td>
<td>New Haven</td>
<td>MO</td>
<td>63068</td>
</tr>
</tbody>
</table>

7.0 APPLICATION FEE

☐ CHECK NUMBER ☐ JETPAY CONFIRMATION NUMBER

8.0 PROJECT OWNER: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that 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 that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowingly violations.

PROJECT OWNER'S SIGNATURE

PRINTED NAME  
Lincoln County Sewer & Water LLC

TITLE OR CORPORATE POSITION  
MEMBER

E-MAIL ADDRESS  
636-528-6180

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.