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January 17, 2022

Scott Adams  
Missouri Department of Natural Resources (MDNR)  
Water Protection Program  
P. O. Box 176  
Jefferson City, MO 65102-0176  
ATTN: NPDES Operating Permits/Permit Comments  
And by e-mail to [publicnoticenpdes@dnr.mo.gov](mailto:publicnoticenpdes@dnr.mo.gov)

RE: Draft Missouri State Operating Permit MO-0126624 BCRSD Brookfield Estates WWTP

Dear Mr. Adams:

The Sewer District has the following comments on the above --referenced permit at this time:

### **CHLORIDE COMMENT**

We appreciate the MDNR's effort to issue this revised permit. However, we believe that the compliance schedule for chloride should remain in the permit unchanged until October 31, 2035. This effluent limitation for chloride will be difficult if not impossible to meet such that it may need to be extended beyond October 31, 2035. The primary reason is that the BCRSD knows of no technology available to remove chloride at the measured concentrations to the final effluent limitations. The BCRSD will continue to search for a process capable of removing chloride in wastewater and if found will incorporate into this WWTP upgrade.

### ***E. coli.* COMMENT**

The draft permit makes *E. coli* an effluent limitation. The existing permit lists *E. coli* as an effluent limitation on November 1, 2035 with a monthly average of 206 and a weekly average of 1,030 expressed as a geometric mean during the recreation season. The draft permit lists *E. coli* as an effluent limitation with a daily maximum of 126 and no more than 10% of samples over the course of a calendar year exceeding the 126 daily maximum. This limit is applicable year-round. What is the regulatory basis for this limit?

### **LOSING STREAM COMMENT**

Further the permit states that the receiving stream has been designated as a losing stream. What methodology was used in for classifying this stream as a losing stream? Since the November 11, 2021 BCRSD comment letter on this matter, the MDNR has provided some information in regards to how this determination was made. However, it is still not clear what observations were made and where the observations were made. Without further clarity on this issue from the MDNR, the BCRSD believes that it is premature to classify this receiving stream as losing.

### **DESIGN POPULATION EQUIVALENT**

The draft permit states that the design population equivalent (PE) is 300 and the design flow is 30,000 gallons per day (gpd) which is 100 gpd per PE. The existing permit has a design PE of 140 and the design flow is 10,500 gpd which is 75 gpd per PE. We believe that 75 gpd per PE is more appropriate. Thus, the design PE in the draft permit should be 400, or some number between 300 and 400.

Currently, the operating permit for the Brookfield Estates plant has an actual flow of 4,300 gpd. Currently, the Brookfield Estates plant serves 26 single-family homes which is 165 gpd per home. At 3.7 PE per home that is 45 gpd per PE. We believe this data supports using 75 gpd per PE and using a design PE in the proposed permit of 400. Or, use 75 gpd per PE for the existing design flow of 10,500 gpd and 100 gpd per PE for the proposed increased design flow of 19,500 gpd for a design PE of 335.

I hope these comments are acceptable and I look forward to hearing from you in regards to this permit. Due to the complexity of this permit and the other issues raised herein, we believe it would be beneficial to meet to discuss this permit before it is finalized. Please let us know when you are available to meet to discuss these issues. Thank you for the opportunity to comment. If you have any questions, please call me at 573-443-2765.

Further, if there are any requirements that have not been met in providing comments on this permit, I would appreciate it if you would contact me immediately.

If you have any questions, please call me at 573-443-2765. Thank you for your cooperation in this matter.

Sincerely,  
BOONE COUNTY REGIONAL SEWER DISTRICT



Tom Ratermann  
General Manager

C: File  
Cailie Carlile, MDNR by e-mail only  
Brant Farris, MDNR by e-mail only  
Leasue Meyers, MDNR by e-mail only  
Jesse Stephens, Crockett Engineering by e-mail only  
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