



# ARKANSAS

## ENERGY & ENVIRONMENT

August 19, 2020

David Meints  
Project Manager/Engineer  
McClelland Consulting Engineers, Inc.  
1580 E. Stearns St  
Fayetteville, AR 72703

Re: Cave Springs Wastewater Treatment System  
No-Discharge Permit Number 4893-WR-3, AFIN 04-01642

Dear Mr. Meints:

Thank you for reaching out this week to discuss alternatives for wastewater disposal for the City of Cave Springs. On our call the following alternatives were discussed:

### Expansion of Drip Irrigation Fields

The city currently operates a permitted treatment system and disposes the partially treated effluent through a drip irrigation system. It is our understanding that this alternative for Cave Springs would expand the current system which is within the 100-year flood plain. The location and potential expansion of treatment systems in a 100-year flood plain is inconsistent with Ten State Standards 51.2 adopted in APC&EC Rule 6.202(G). Additionally, drip irrigation systems typically do not employ nutrient removal processes. Considering the site location and drainage sequence through the Illinois River watershed, this presents additional permitting and regulatory hurdles with regard to the Memorandum of Agreement between the States of Arkansas and Oklahoma concerning the Illinois River Basin.

### Direct Discharge

Streams in this area have been determined to have the potential to be losing streams. As such, if a direct discharge is pursued, at a minimum, an NPDES permit would include limits based on Arkansas Pollution Control & Ecology Commission (APC&EC) Rule 6.301, [https://www.adeq.state.ar.us/regs/files/reg06\\_final\\_150918.pdf](https://www.adeq.state.ar.us/regs/files/reg06_final_150918.pdf). More specifically,

### **Division of Environmental Quality**

5301 Northshore Drive, North Little Rock, AR 72118-5137  
[adeq.state.ar.us](http://adeq.state.ar.us)

<b>Pollutant</b>	<b>Monthly Average</b>	<b>7-day average</b>
CBOD <sub>5</sub>	10 mg/L	15 mg/L
TSS	15 mg/L	23 mg/L
Fecal Coliform Bacteria	200 colonies / 100 millimeters	400 colonies/100 millimeters
Nitrate plus nitrite nitrogen	10 mg/L (maximum not to exceed)	
Ammonia and DO	Stream specific limitations (based on stream modeling)	
Total Phosphorus	0.2 mg/L *	0.3 mg/L

\*MOA with Oklahoma

### Regionalization – Connections to Other Facilities

The Northwest Arkansas Conservation Authority (NACA) has developed long-term plans which take into consideration regional community growth and corresponding facility expansions to accommodate needs for wastewater management. Based on the planning efforts already performed and that will continue to be evaluated in support of future phases, DEQ supports a regionalized approach which utilizes the existing and expanding NACA wastewater treatment facility.

If questions you have any additional questions or concerns, please contact Bryan Leamons, P.E. at (501) 683-5406 or email at [leamons@adeq.state.ar.us](mailto:leamons@adeq.state.ar.us).

Sincerely,



Robert E. Blanz, Ph.D., P.E.  
Associate Director, Office of Water Quality, Division of Environmental Quality  
5301 Northshore Drive, Little Rock, AR, 72118

cc: [dmeints@mce.us.com](mailto:dmeints@mce.us.com)