

June 12, 2022

Monty Ledbetter
Utility Director
City of Hot Springs

Re: CAO LIS No. 22-007
NPDES Permit No. AR0033880
4,938,125 gallons discharged from January 9 through May 25, 2022

Dear Mr. Ledbetter:

As you know, Consent Administrative Order LIS No. 22-007 (“CAO”) requires the City of Hot Springs (“City”) to address sewer overflows into Gulpha Creek and to implement the Communication Plan, dated July 23, 2021, the Water Quality Assessment Plan (“WQAP”) dated August 16, 2021, and the Standard Operating Procedure (“SOP”) for Manhole 1750 Sanitary Sewer Overflow, dated August 16, 2021. I believe the sampling and communication plans required by the CAO were designed to enable the City to gather data so the public can be properly informed when the water is potentially unsafe for human contact due to sewer overflows from Manhole 1750 into Gulpha Creek and Spencer Bay. There have been numerous overflows since the City agreed to enter the CAO. Unfortunately, the City is not fully implementing the sampling plan as set out in the WQAP and SOP and the City does not seem to be issuing CodeRed alerts regarding bacterial contamination as required under the Communication Plan, the SOP, and CAO LIS No, 22-007.

The WQAP and SOP for Manhole 1750 require samples to be collected at Sites 1, 2, and 3 upon “validation that a spill is entering Gulpha Creek.” According to the SOP, if the *E.coli* results for Sample Site 1 exceed 126 cfu/100 ml, then a second series of tests are to be conducted at Sample Sites 2, 3, 4, and 5 until two consecutive tests for *E. coli* are equal to or less than 126

cfu/100 ml. Site 3 is just downstream of Manhole 1750, and Sites 4 and 5 are the distantly located sampling points in Lake Catherine's Spencer Bay.

Regarding public notification, if the *E. coli* results exceed 126 cfu/100 ml, then the City is to post signs advising the public that water quality may be unsafe and issue a CodeRed alert to notify people living next to the water that a no swimming advisory has been issued for the Gulpha Creek/Spencer Bay area due to a sewer overflow. The recent overflows occurring in May just before the Memorial Day week-end demonstrate how the City has failed to meet both the requirements of the CAO and the goal of informing the public of potential health hazards that may be posed by sewer overflows impacting Gulpha Creek and Spencer Bay.

The City reported three separate overflow events occurring on May 21- 22, May 22 – 23, and May 25. A combined total of 724, 250 gallons of untreated sewage was reported to have been released into Gulpha Creek from Manhole 1750 over that four-day period. Although the overflows began on May 21, it appears that no water quality sampling was conducted for the May 21- 22 overflow. No samples were collected until three days later on Tuesday, May 24, in response to the overflow reported as occurring on May 22 - 23. Those samples confirmed *E. coli* levels exceeding 126 cfu/100 ml at Sites 1, 2, and 3. The results were available to the City on May 26, the Thursday before Memorial Day week-end.

Another sampling event for the May 25 overflow occurred on May 26. Samples were again collected at Sites 1, 2, and 3 only. Again, elevated *E. coli* levels were confirmed at all three sites. The second set of sample results were available to the City on May 27, the Friday before the Memorial Day week-end. Despite twice confirming elevated bacterial levels that exceeded the health-based standard before the Memorial Day week-end, no CodeRed alerts appear to have been issued or signs posted. And no follow-up samples at Sites 4 and 5 (in the main part of

Spencer Bay) were collected until May 31, the day **after** Memorial Day, which was also *ten days after* the sewer overflows began and six days after the release of almost three-quarter of a million gallons of untreated wastewater into Gulpha Creek had stopped. Even though the City twice confirmed water contamination at Sites 1, 2, and 3 before the busy Memorial Day week-end, it does not appear that the City took any action to alert the public about potentially unsafe conditions for human contact due to sewer overflows as required by the SOP and CAO, nor did the City undertake timely follow-up sampling at Sites 4 and 5.

A table listing the dates overflows began and water samples were collected as available through DEQ’s website for March, April, and May are provided below. ¹

Overflow Begins	Initial Sample Collected	1st Follow-Up	2 nd Follow-Up	3 rd Follow-Up
March 22	March 24	March 25	March 28	
March 30	March 31	April 4	April 6	April 14
April 13	None	None	None	
April 16	April 17	None	None	
April 20	April 21	April 26	May 4	
May 5	May 6	May 9	May 10	
May 21	None	None	None	
May 23	May 24	None	June 3	June 7
May 25	May 26	May 31	June 3	June 7

We are in the primary contact season, and the City should implement the public notifications as set out in the SOP. But also, the City’s sampling efforts should be scheduled to timely secure water quality data that will provide accurate information about whether it is safe or unsafe for human contact in Gulpha Creek and Lake Catherine’s Spencer Bay. It is important to point out that the City can conduct sampling promptly when it chooses to do so, as evidenced by the reports for the overflows occurring on March 22 – 23 and May 5 – 6. For the March 22 – 23

¹ The information provided in the table listing overflow and sampling dates beginning in March 2022 is based on the reports posted on DEQ’s PDS for NPDES Permit No. 0088330.

overflow, sampling occurred on March 24, March 25, and March 28. For the May 5 - 6 overflow, sampling occurred on May 6, May 9, and May 10. Unfortunately, for the majority of overflows occurring in March, April, and May, the City was not similarly responsive.

To be precise, the City's sampling efforts can be divided into two categories. There is the initial sampling effort after an overflow is confirmed at Sites 1, 2, and 3 only and then the follow-up sampling, which includes samples collected at the more distant Sites 4 and 5 located in Spencer Bay of Lake Catherine. Although the City usually collects samples promptly after an overflow begins at Sites 1, 2, and 3, there appear to be problems with undertaking follow-up sampling that encompasses Sites 4 and 5 and continuing sampling until two consecutive tests for *E. coli* are equal to or less than 126 cfu/100ml. In reviewing the reports for Manhole 1750 for the last three months, the following issues with follow-up sampling were noted:

- The 2nd and last follow-up sampling for the overflow beginning on March 22 reported results of 307.6 cfu/100 ml at Site 3 on March 28. This value still exceeded the public health-based standard. The City failed to demonstrate two consecutive sampling events below the recommended 126 cfu/100 ml for the March 22 -23 overflow;
- The April 14 sampling was the 3rd and last follow-up for the overflow beginning on March 30. The April 14 samples, collected two weeks after the March 30 overflow began, reported *E. coli* levels at Sites 4 and 5 to be 1119.9 cfu/100 ml. These values far exceed the recommended 126 cfu/100ml, but there are no reports demonstrating any further sampling at Sites 4 and 5 for the March 30 – 31 overflow.

Despite the elevated *E. coli* levels reported in Lake Catherine at Sites 4 and 5 on April 14, the sampling reports indicate that these two sites were not resampled until April 26 (in response to the overflow occurring on April 20 – 21). This means, despite knowing

that *E. coli* levels in the lake were an order of magnitude higher than the health-based standard of 126 cfu/100 ml, the City appears to have done no further lake sampling for twelve days. Furthermore, the report on the April 26 sample for Site 5 confirmed that *E. coli* level still exceeded 126 cfu/100 ml;

- The elevated levels of *E. coli* reported on April 14 in Lake Catherine were probably the result of an overflow occurring on April 13. But no water quality sampling (either initial or follow-up sampling) appears to have been undertaken for the reported April 13 sewer overflow;
- Initial samples for the overflow beginning on April 20 were collected on April 21. Five days later, follow-up sampling conducted at Sites 2, 3, 4, and 5 showed one elevated *E. coli* level at Site 5. Then, on May 4, another eight days later *and 12 days after the overflow had ceased*, the City conducted the second follow-up sampling at Sites 2, 3, 4, and 5. Despite the unacceptably long lag time between the two follow up sampling events, the reported *E. coli* levels still exceeded the recommended 126 cfu/100 ml at Sites 2 and 3;
- No water quality sampling (either initial or follow-up sampling) appears to have been undertaken for the May 21-22 overflow;
- Despite initial testing for the May 23 – 24 overflow event confirming *E. coli* levels exceeding 126 cfu/100ml, there appears to have been no follow-up sampling at Sites 2, 3, 4, or 5 until June 3, which was ten days later.

We have experienced numerous sewer overflows in the first five months of this year discharging almost five million gallons of untreated sewage into Gulpha Creek via Manholes 1750 and 1754. I live within the affected area as outlined in the notification boundary shown on

Attachment A to the City's SOP for Manhole 1750 overflows. Although I receive CodeRed alerts regarding storms and flooding, to date, I have not received a single CodeRed alert when it is unsafe to swim due to bacterial contamination exceeding the recommended public health standard for *E. coli* of 126 cfu/100 ml. In order to inform the public of potential health threats which may be posed by the frequent sewer overflows into Gulpha Creek, please ensure that CodeRed alerts are issued as set forth in the Communication Plan, the SOP, and as required by CAO LIS No. 22-007. This is especially important now that we are in the primary contact season.

The goal of the sampling program should be to provide information which will help protect the public from potential hazards associated with sewer overflows into Gulpha Creek and Spencer Bay. But to meet that goal, sampling must be conducted as required in the SOP and in a timely manner. Going forward, please ensure that the City issues CodeRed alerts as outlined in the SOP and conducts sampling that will serve to timely inform the public when swimming is unsafe. Hopefully, as we enter the dryer summer months, the sewer overflows will stop.

Thank you for your attention to this matter, and please let me know if any changes are made to the public notification or sampling protocol.

Sincerely,



Ellen Carpenter