



# CITY OF HOT SPRINGS

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## Utilities Department

780 Adams Street  
Hot Springs, Arkansas 71901

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Leslie Allen-Daniel  
Enforcement Analyst  
Office of Water Quality  
Arkansas Department of Environmental Quality  
5301 Northshore Dr. NLR, AR 72118

The Davidson WWTP is currently under construction improvements for the headworks facility that includes new fine mechanical screens and grit removal equipment. Flow has been diverted to the flow equalization basin to allow for required concrete work to be completed for the new equipment. The flow from the equalization basin is subsequently pumped back into the primary clarifiers for continued treatment through the facility.

The water level in the flow equalization basin reached maximum capacity during periods of significant rainfall as noted on the submitted DMRs. A portion of the WWTP process was bypassed and routed to the UV disinfection basin and effluent metering prior to discharge. The unavoidable bypass was to prevent severe damage to the EQ basin levees.

The bypassed flow did not receive any preliminary screening or filtering prior to being diverted to the UV disinfection basin. UV disinfection is not effective when the effluent quality diminishes below the design standard of 65% ultraviolet transmittance (UVT).

The following measures have been implemented or are in the process of being implemented to prevent violations in the future.

The new fine mechanical screens were placed into service on Thursday, April 19, 2018 and the subsequent bypass operation to the EQ basin was discontinued. All influent flow is now being screened at the beginning of the treatment process. The return pumps at the EQ basin continue to lower the water level, thus providing detention capacity in the future. Approximately 25 million gallons of storage capacity has been regained in the EQ basin as of the morning of April 25<sup>th</sup>.

Additionally, the City of Hot Spring is proposing to add a cloth media disk filter to the plant operations at the Davidson WWTP. The disk filter would be used to provide a source of protection for the UV disinfection equipment during periods of increased flows while providing the needed disinfection requirement. The addition of the filter will not affect any discharge parameters within the NPDES permit. The City of Hot Springs is awaiting ADEQ preliminary approval prior to commencing the engineering design for the disk filter project.

Kind regards,

  
Monty Ledbetter  
Utilities Director