



Public Works Department
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MEMORANDUM

TO: Mayor and Councilmembers

FROM: Kelly Jones, Director of Public Works

SUBJECT: TCEQ MCL Notice of Violation

DATE: June 28, 2017

The City of Mineral Wells and the P.P.C.M.W.D. No.1 have spent time and money on the optimization of the water treatment process. In the early 1990's, the first disinfection by-product rule was established for the formation of trihalomethanes (THMs). This is a combination of organic matter and chlorine. The treatment for these trihalomethanes was to pretreat raw water with chlorine dioxide. This was to oxidize the organic compounds before the addition of treatment chemicals. The DBP1 rule was to base a running average of all sample test sites combined under .08 mg/L. The DBP2 rule went into effect in 2002 where the running average was changed to individual sites. The running average on two of our sites exceeded the 0.08 mg/L rule, therefore the TCEQ has issued a Notice of Violation to the City of Mineral Wells, which is requiring us to issue a Public Notice to all water customers (see attached). The reason for the high average on these two sample sites was mainly due to insufficient flushing of the water distribution system, however, the highest test result that affected our average was from September 2016 when our pre-sedimentation reservoir was low and the pumpage of fresh water into the pre-sedimentation reservoir did not have time to settle. The organic matter could not all be oxidized by the chlorine dioxide. Also, the addition of the free ammonia ratio was not changed to reflect the additional organic compounds. After this high sample was noted, the plant changed to the appropriate ratio but did not follow through with proper flushing of the water distribution system. We have changed our procedure and after the last two samples our numbers were lower, however the running yearly average exceeded the 0.08 mg/L rule by 0.003 mg/L, which initiated the recent TCEQ Notice of Violation. Upon receipt of the TCEQ Notice of Violation, the City has contacted the TCEQ assistance program and their advice was to keep our water moving in our distribution system, either by usage or by flushing on a regular basis. We also contacted the engineering firm of HDR and they sent an engineer to the water plant on Wednesday, June 28, 2017. They went through the water treatment process and compiled information, but have not sent any recommendation yet. The City has optimized the treatment process and is on a more stringent flushing program. We will continue to move forward with new procedures and make every effort to insure acceptable test results.