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April 30, 2017

Jeffrey A. Cummins, Director
Division of Enforcement
Department for Environmental Protection
300 Sower Boulevard
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Chief, NPDES Permitting & Enforcement Branch
Municipal & Industrial Enforcement Section
U.S. EPA Region 4
Atlanta Federal Center
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Chief, Environmental Enforcement Section
Environmental and Natural Resources Division
U.S. Department of Justice
Post Office Box 7611
Washington, DC 20044-7611

Subject: Quarterly Report 45 - Addendum
Civil Action No. 3:08-cv-00608-CRS

Attention Director and Chiefs:

Please find attached an addendum to our Quarterly Report, prepared in accordance with Paragraph 29 of our Amended Consent Decree. This report is for the period October 1, 2016 – December 31, 2016, pertaining to Consent Decree compliance activities.

On page 12, Figure 1.4 Morris Forman WQTC – Plant Flows and Associated CSO Activations – December 2016 showed a negative spike in secondary flow that was not addressed in the text. When the Final Effluent Pump Station (FEPS) is not in service, secondary flow is a direct measurement from the effluent flume. When FEPS is in service, the flow is calculated. On December 20, 2016, there was a power failure that impacted the Oxygen Generation Area and the flow reporting for secondary effluent from 10:11 PM through 10:52 PM. During this time, FEPS was in service, and the power outage appears to have corrupted the flow calculation so that secondary effluent flow was reported as a negative value.

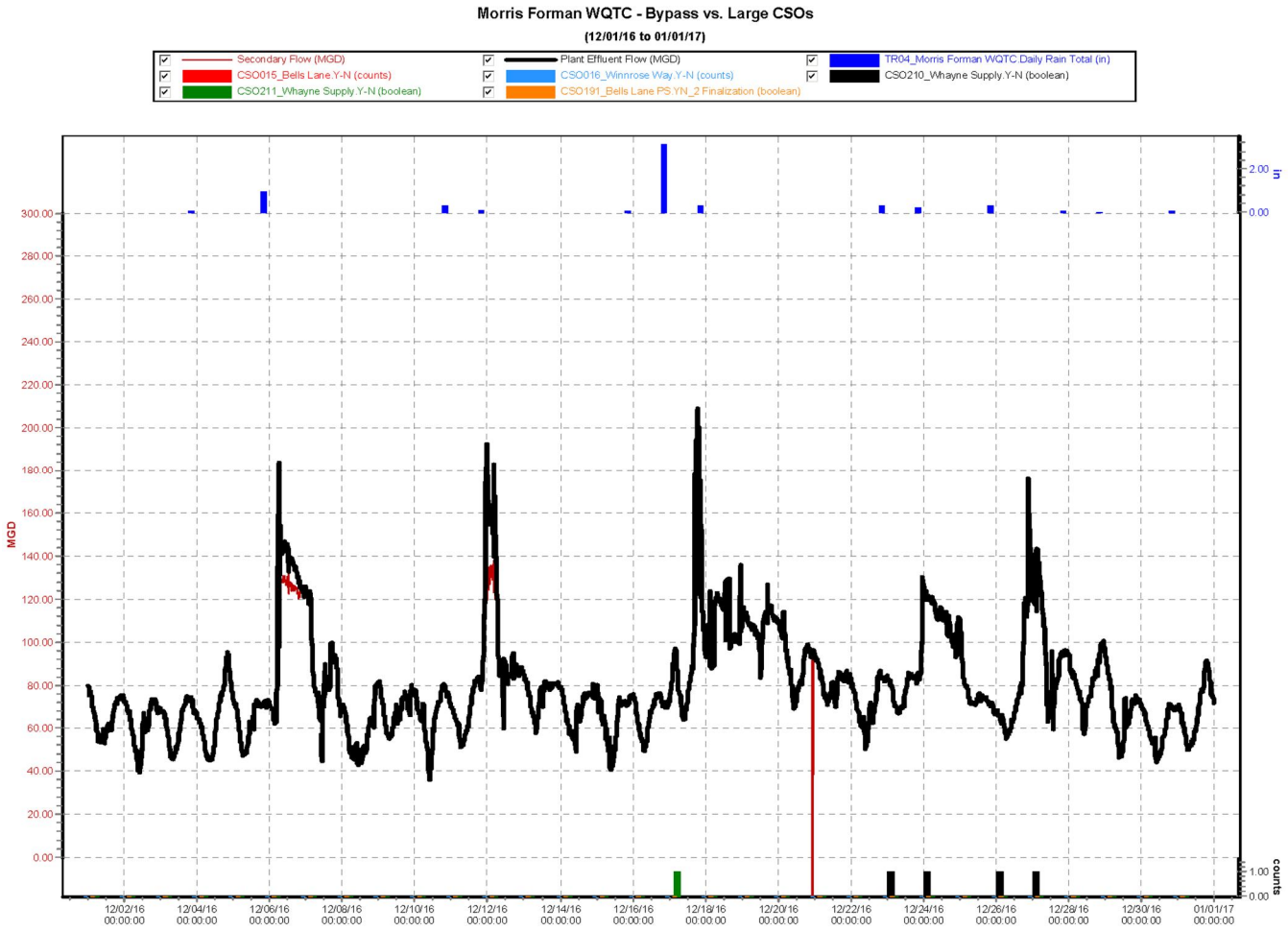
I certify under penalty of law that this document and all attachments were prepared under our direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have questions or need additional information, please contact me at (502) 540-6136.

Sincerely,

Angela Akridge, PE
Louisville MSD Chief Engineer

cc: James A. Parrott
Paula Purifoy
File



Morris Forman WQTC Performance

Figures 1.2 through 1.4 located at the end of this section illustrate performance in maximizing flow during wet weather to the Morris Forman WQTC. The top of the chart shows rainfall in inches per day. The middle part of the chart shows Morris Forman WQTC effluent flow and secondary treatment flow. The difference between these is the secondary bypass flow. The bottom of the chart shows days with a CSO activation at the five CSOs in the vicinity of the Morris Forman WQTC (CSOs 015, 016, 191, 210, and 211). Note that the flow meter downstream from CSO211 is known to be affected by backwater effects of the Ohio River and the ultrasonic signal is sometimes blocked by mist and condensation when air and sewage temperatures are significantly different. Therefore, CSO activations at CSO211 are keyed to water levels upstream and downstream of the inflatable dam in the Main Diversion Structure. The other CSO activations are tied to flow measurement downstream of the respective CSO. At times, “blips” representing very small volumes of overflow are indicated by flow meters even though an overflow cannot be verified by level measurements or other indicators. These blips are not reported as overflows, but are noted in the CSO monitoring data reported in Appendix B. There are occasions in which a communications failure with telemetry has led to short-term gaps in the data, as illustrated by the negative spike in secondary flow shown on December 20, 2016, when a

power failure occurred that impacted the Oxygen Generation Area and the flow reporting for secondary effluent. When the Final Effluent Pump Station (FEPS) is not in service, secondary flow is a direct measurement from the effluent flume. When FEPS is in service, the flow is calculated. During this time, FEPS was in service, and the power outage appears to have corrupted the flow calculation from 10:11 PM through 10:52 PM so that secondary effluent flow was reported as a negative value. In addition, indications of rainfall and CSO activations are shown on the day they happened, but are not aligned with the exact time, so the effluent flow graph (which is tied to actual time) may show peaks that are offset from the indicated rain or CSO events by as much as 24 hours, as illustrated by the CSO event shown on October 1, 2016 that was caused by a rain event that began on September 28, 2016 and ended September 30, 2016.