

Commission:
C.E. Dougan
John Barnwell
J.W. Floyd
Jim Williamson
Todd Young



Attorney
Paul Gant
Treasurer
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“Providing Water, Sewer, and Sanitation Services”
2806 Bryan Road / P.O. Drawer 1269
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Van Buren Municipal Utilities

May 21, 2014

Mr. Kevin Suel
Water Division, Enforcement Analyst
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

Re: Consent Administrative Order LIS 13-088
Van Buren Municipal Utilities
City of Van Buren, Arkansas

Dear Mr. Suel:

In accordance with Article 18 under ORDER AND AGREEMENT in our current Consent Administrative Order (CAO) dated July 25, 2013, the Van Buren Municipal Utilities (VBMU) respectfully requests a six (6) month extension of the compliance schedule. Several issues beyond our control have caused delays in the scheduling and completion of all the required tasks in the CAO. VBMU has pursued a number of measures to minimize delays in completion of the CAO timetable, and a summary of our efforts to date are included below. I have also enclosed a memorandum from Hawkins-Weir Engineers detailing the task items that have been completed to date to meet the CAO requirements and Final Report in regards to the Corrective Action Plan for the Main Plant (AR0021482).

Van Buren North Plant – Water Effects Ratio (WER)

In March 2013, VBMU submitted work plans to ADEQ for conducting WER studies for zinc and copper at the Van Buren North WWTP. Following approval of the work plans by ADEQ in May 2013, VBMU commenced sampling and testing procedures for the WER studies. Copper testing has been completed, and a report on the copper WER has been drafted. We currently expect the zinc sampling and testing to be completed in June 2014 with the drafting of the WER for zinc to follow.

Van Buren Main Plant & Van Buren North Plant – Sewer System Evaluation Study (SSES)

The development of an SSES for Van Buren has proven to be the most difficult of the CAO requirements because Van Buren did not already possess a collection system hydraulic model. Consequently, all inspection and modeling data necessary to define the mitigation plan for Sanitary Sewer Overflows (SSOs) has been developed from scratch over the last twelve (12) months. The enclosed Hawkins-Weir memorandum outlines the work that VBMU has accomplished during this period. It should be noted that task items for survey and location of collection system manholes and the installation of flow monitoring equipment commenced in May 2013, prior to the execution of the CAO.

We have determined that the survey and evaluation of 1,900 manholes (minimum) out of approximately 2,600 manholes in the Van Buren collection system is necessary for the development of an accurate sewer model. These manholes represent all but the most recent construction (last 20 years) within the Van Buren system, and they are the most likely to experience inflow and infiltration issues. Obtaining modeling parameters has required approximately 12 months of effort in gathering and evaluating data from manhole inspection data, sewer smoke testing results, and closed-circuit television (CCTV) inspection videos by our staff and consultants.

In addition to the complicated SSES development schedule, VBMU also experienced delays caused by weather and the delivery of certain inspection documentation by our inspection contractor. VBMU issued a notice to proceed on September 3, 2013 for smoke testing and CCTV inspection within the collection system with emphasis on older segments and those areas of known clay tile sewer construction. The five (5) month inspection project was originally scheduled for completion by January 30, 2014 so that development of the collection system model could commence. The delivery of the final inspection report was delayed until April 1 because of winter weather and the contractor's scheduling problems. The Van Buren Municipal Utilities Commission granted an additional 37 contract days due to delays during the inspection project caused by abnormal winter weather. The Commission also assessed the contractor liquidated damages of \$7,000 for an additional 28-day delay in delivering the final inspection report. These delays have hampered our ability to calibrate the collection system model, which is crucial to the development of plans for the rehabilitation, repair and replacement of deficiencies in the collection system.

Van Buren – Capacity, Management, Operation, and Maintenance Program (CMOM)

In June 2013, Van Buren staff began work on the proposed CMOM program. The most significant CMOM milestone met to date has been the complete development of Design Standards, Construction Specifications, and Construction Details to guide in the future design and construction of infrastructure improvements to the sanitary sewage collection system. We have solicited public comments and expect to publish this

Mr. Kevin Suel
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approximately 184-page document by the end of May 2014. A copy of these documents will be included in the CMOM report.

Although we have completed a large percentage of the CMOM program report to date, the CAO requires that we evaluate the collection system and its ability to convey base and peak weather flows. The capacity of the existing collection system and development of a list of system improvements for the CMOM program cannot be completed until the hydraulic model is completed under the SSES task (see above). The model may also be useful to identify sewer segments for operation and maintenance (O&M) activities, particularly sewers suspected of experiencing peak or surcharged flow.

At this point, we cannot define the estimated costs of sewer improvements until all of the collection system deficiencies have been identified and prioritized by means of the model analyses. In an attempt to minimize the impact of the modeling delays on completion of the SSES and CMOM, we have already completed an evaluation of all sanitary sewage pump stations in Van Buren and have prepared cost estimates for Capital and O&M improvements for inclusion in the report.

Based on the preceding discussion, the Van Buren Municipal Utilities respectfully requests a six (6) month extension of our CAO schedule with the following interim milestone dates:

- November 12, 2014 Submit a draft copy of the CMOM report, including the SSES report, to the Van Buren Municipal Commission for review and approval
- January 21, 2015 Submit the CMOM report, including the SSES report, to the Arkansas Department of Environmental Quality for review and approval

We trust that this is satisfactory for your consideration of our request for an extension to our current CAO schedule. If you have any questions, or require additional information, please do not hesitate to contact me.

Sincerely,


Steve Dufresne
Director of Utilities

SD/cnc

Enclosure: HWEI Memorandum dated May 20, 2014
 Main Plant (AR0021482) Follow up to Corrective Action Plan

cc: Hawkins-Weir Engineers, Inc.

MEMORANDUM

To: Steve Dufresne, Director of Utilities
Van Buren Municipal Utilities

From: Barry K. McCormick, P.E. *Barry K. McCormick*

Re: Van Buren Consent Administrative Order, LIS 13-088

HWEI Project No.: 2013000

Date: May 21, 2014 *SPD*

Per your request, we have developed the following chronological list of activities that Van Buren Municipal Utilities (VBMU) has accomplished toward addressing the requirements of the Consent Administrative Order (CAO) issued in 2013 by the Arkansas Department of Environmental Quality (ADEQ). Hawkins-Weir Engineers (HW) has assisted VBMU in these activities, most of which have occurred within the last twelve (12) months. However, it should be noted that some of these efforts were started before the effective date of Van Buren's Consent Administrative Order (CAO) on July 25, 2013.

Please note that for reference, the expenses incurred to date by the VBMU for these tasks are shown at the end of each task description. These expenses include engineering and survey services, equipment rentals (flow meters), construction costs, testing, inspection and evaluation services, and environmental subconsultant services.

September 2012 to March 2013: VBMU developed proposed water-effects ratio (WER) work plans for zinc and copper at the Van Buren North Plant WWTP. The final work plans were approved by ADEQ during the first week in May 2013.

May 2013 to Present: VBMU initiated the sampling and testing of plant effluent and receiving stream water for both the zinc and copper WERs. Sampling and testing for copper was completed in early 2014, and a WER report was drafted in March 2014. Sampling for zinc is expected to be completed in June 2014; however, issues with effluent toxicity at the North Plant WWTP may affect the completion of both copper and zinc WERs. (\$32,400)

May 2013 to April 2014: HW surveyed and located 1,850 existing manholes out of an estimated 2,600 manholes in the Van Buren collection system. This survey information has been used to create a geographic information system (GIS) map and set up the first computer model of the Van Buren sewage collection system. (\$196,900)

May to October 2013: VBMU contracted for the installation of twelve (12) temporary in-pipe flow meters in the gravity sewer system and twelve (12) pump monitors in sanitary sewage pump stations to monitor and record dry and wet weather flows for six (6) months. This flow



information is currently being used by HW to calibrate the new hydraulic computer model of the Van Buren collection system. (\$141,600)

June 2013 to Present: VBMU began the development of the CMOM program in June 2013 with assistance from HW. To date, draft CMOM report sections have been completed on the following: Introduction, Overview, Overflow Response Plan, and Communication Plan (October 2013); Legal Standing (November 2013); Organizational Structure, Information Management, Inventory Control, Operation and Maintenance Plans (February 2014). A complete set of Design Standards, Construction Specifications, and Construction Details has been developed and will be released to local contractors and developers in late May 2014. Work is currently underway on the remaining CMOM program sections. (\$98,900)

June 2013 to May 2014: HW inspected and evaluated 1,850 manholes including the condition of the structure, piping connections, and appurtenances. Staff from VBMU and HW also completed the inspection and evaluation of fifteen (15) sewage pump stations and one (1) sewage transfer station including an assessment of existing pumping capacities, structures, equipment, and controls. Preliminary costs have also been developed for capital improvements at each of the stations. (\$75,400)

August to September 2013: VBMU contracted for the construction of a dump station for the separation and disposal of debris from the sewage collection system. This dump station, designed by HW, was used during cleaning of the collection system sewers in preparation for closed circuit television (CCTV) inspections. (\$46,600)

September 2013 to April 2014: VBMU contracted for the smoke testing of 330,400 feet of existing sewers out of a total of approximately 675,000 feet of sanitary sewers within the Van Buren collection system. The work also included the subsequent inspection of 100,200 feet of existing sanitary sewers by CCTV cameras to identify the condition of the sewer piping. (\$368,400)

October 2013 to Present: VBMU initiated the creation of GIS mapping and the hydraulic model of the Van Buren collection system by HW. Development of the initial model network was completed in May 2014; and work is currently underway to calibrate the model based on the flow meter data collected in 2013, the evaluation results from the smoke testing and CCTV inspections, and the assessments of the existing sewage pump stations. This model will be used to identify a prioritized list of sewer system improvements and upgrades for Van Buren. (\$112,800)

End of Memo
BKM

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Mr. Kevin Suel
Water Division, Enforcement Analyst
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

Re: Consent Administrative Order LIS 13-088
Main Plant (AR0021482) Follow up to Corrective Action Plan
Submitted on August 12, 2013

Dear Sirs:

In accordance with Consent Administrative Order LIS 13-088, Paragraph 11.;

This letter serves as a final report in regards to the Corrective Action Plan for the Van Buren Municipal Utilities Main Plant effluent violations that occurred from October 31, 2009 through October 31, 2012.

In January 2013, operational changes were made at the Main Plant in an effort to determine if the plant exceedences were due to an unknown inhibitor in the influent, plant capability, or operational issues. No BOD5 exceedences have occurred at the plant since December 2012 and no NH3-N exceedences have occurred at the plant since October 2012. We believe that the plant should be able to maintain compliance as a result of the operational changes that have been made.

If you have any questions or require further information please contact me.

Sincerely,

Steve Dufresne
Director of Utilities

Cc: Correspondence file
Hawkins-Weir Engineers, Inc