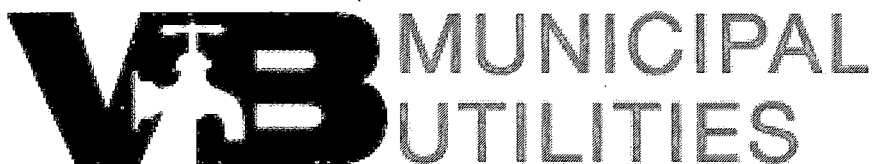


Commission:  
C.E. Dougan  
John Barnwell  
J.W. Floyd  
Jim Williamson  
Todd Young



"Providing Water, Sewer, and Sanitation Services"

2806 Bryan Road / P.O. Drawer 1269

Van Buren, Arkansas 72957

479-474-5067 / Fax 479-471-8969

City of Van Buren Municipal Utilities

Attorney  
Jacob Howell  
Engineer  
Larry Weir  
Secretary  
Kathy Geppert

January 23, 2017

Ms. Sandra Farmer  
Enforcement Analyst  
Water Division Enforcement Branch  
Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, AR 72118-5317

Re: Corrective Action Plan  
City of Van Buren Main (South) Wastewater Treatment Plant  
NPDES AR0021482, AFIN: 17-00062

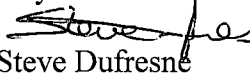
Dear Ms. Farmer:

In response to your request of December 13, 2016, please find the attached Corrective Action Plan for the Van Buren South WWTP.

If you have any questions please let me know.

Sincerely,

City of Van Buren Municipal Utilities

  
Steve Dufresne  
Director of Utilities

Cc: South Plant file  
James Dunn, VBMU Chief Plant Operator  
Barry McCormick, P.E., Hawkins-Weir Engineers Inc.

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January 17, 2017

Ms. Sandra J. Farmer  
Enforcement Analyst  
Water Division Enforcement Branch  
Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, AR 72118-5317

Re: Corrective Action Plan  
South Plant, Van Buren, Arkansas  
NPDES Permit No. AR0021482, AFIN: 17-00062  
HWEI Project No. 2013041

Dear Ms. Farmer:

On behalf of the Van Buren Municipal Utilities (VBMU), we are submitting this letter in response to your December 13, 2016 request for a Corrective Action Plan (CAP) to address ammonia nitrogen (NH<sub>3</sub>-N) violations at the Van Buren South Wastewater Treatment Plant (South Plant). As noted in the efforts described below, Hawkins-Weir Engineers has been assisting VBMU to actively identify and correct problems with the plant's ammonia removal process. Please note the following:

**January 4, 2013** – VBMU received a proposed Consent Administrative Order (CAO) from ADEQ that listed ten (10) ammonia nitrogen violations at the South Plant between October 2009 and October 2012. VBMU solicited assistance from Hawkins-Weir to develop testing protocols and commenced testing of influent and effluent at the plant in March 2013 in an attempt to identify the presence of nitrification inhibitors.

**August 12, 2013** – VBMU submitted a CAP to ADEQ, which summarized efforts to identify a cause of the ammonia violations.

**May 20, 2014** – VBMU submitted a final CAP report and advised ADEQ of anticipated compliance with ammonia effluent limits. At that time, there had been no ammonia exceedances at the South Plant since October 2012 (19 months).

**July & August 2015** – VBMU submitted Non-Compliance Reports of the first ammonia exceedances since October 2012 (33 months). Hawkins-Weir assisted VBMU in a further investigation of possible nitrification inhibitors and problems with the treatment processes.

**September 2015 to May 2016** – VBMU expanded testing of plant mixed liquor and began feeding lime to enhance alkalinity and promote better nitrification processes in the treatment lagoon. Spot repairs were performed on the baffle curtains and submerged aeration diffusers in the treatment lagoon, and VBMU contracted for an underwater inspection of the baffle curtains.



Ms. Sandra J. Farmer  
Page 2  
January 17, 2017

**June 2016** – VBMU received a report on the underwater inspection of all three (3) baffle curtains at the South Plant. The inspection report from JPS Industries of Bristol, NH (hardhat divers) identified a significant breach in the baffle curtain separating the aeration cell from the equalization cell in the lagoon. JPS Industries recommended a complete replacement of the baffle curtain system, and VBMU initiated an expedited project for the replacement of all three (3) baffle curtains. VBMU also initiated extensive repairs to the aeration diffusers, and entered into an annual inspection and maintenance contract with Aeration Works of Columbia, OH.

**May, July & August 2016** – VBMU submitted Non-Compliance Reports on ammonia exceedances, which an investigation attributed to the failed baffle curtain and problems with the submerged aeration diffusers.

**November 17, 2016** – All curtain baffle and aerator repairs were completed at the South Plant.

Since completion of the baffle curtain and aerator repairs, VBMU has continued weekly sampling and testing of the South Plant effluent to determine the effectiveness of the repairs. Although the South Plant permit does not include seasonal limits for ammonia nitrogen, the testing results have indicated that ammonia concentrations are within the critical monthly and 7-day average limits.

The Van Buren Municipal Utilities will continue to monitor ammonia levels throughout the winter and spring and evaluate additional process changes if necessary. Based on conversations during our January 10, 2017 conference call with ADEQ, Van Buren will advise you of any issues with ammonia levels at the South Plant prior to the start of critical permit limits in May.

We trust that this satisfactorily addresses your request for details of corrective actions completed to date. Based on the testing results since November, it is our opinion that VBMU has taken the necessary steps to make repairs and enhance the treatment efficiency at the South Plant in order to meet ammonia nitrogen permit limits. If you have any questions, please do not hesitate to call me.

Sincerely,

HAWKINS-WEIR ENGINEERS, INC.

A handwritten signature in black ink that reads "Barry K. McCormick". The signature is written in a cursive style with a large, prominent 'B' and 'M'.

Barry K. McCormick, P.E.

BKM/cnc

cc: Steve Dufresne, VBMU Director of Utilities  
C. Larry Weir, P.E., VBMU Commission Engineer

**VAN BUREN MUNICIPAL UTILITIES**

*Providing Water, Sewer and Solid Waste Services*

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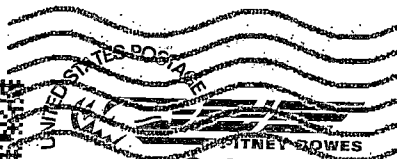


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JAN 23 2017

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Ms. Sandra Farmer  
Enforcement Analyst  
Water Division Enforcement Branch  
Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, AR 72118-5317

7211885317

