

# EVOQUA WATER TECHNOLOGIES

## Maintenance Report

### EVSS Scrubber

Customer Name: Lexington, KY.  
 Date: 6/4/20  
 Project #: \_\_\_\_\_

Location Name: Town Branch *CHLORINE & SO2*  
 Location Address: 301 Jimmie Campbell  
 Location City, ST, Zip: Lexington, KY. 40504  
 TEL: \_\_\_\_\_  
 FAX: \_\_\_\_\_

Maintenance By: Lynn R. Decker  
 Test Time ---Start: 7am  
 Test Time ---End: 8:30am  
 Net Run Time: 1.5 hours

Contact: Tiffany Rank  
 Cell: 859-327-9993  
 E-Mail: \_\_\_\_\_  
 Contact: \_\_\_\_\_  
 Cell: \_\_\_\_\_

SYSTEM INSPECTION	OK/Not Ok	COMMENTS
Cl2 Detector Operation	OK	
Fan Operation		no blower
Recirculation Pump #1 Operation	OK	
Recirculation Pump #2 Operation		N/A
Caustic Recirculation Pressure	OK	35 psi
Caustic concentration (%)	OK	
Elapsed Time Meter (Pump #1 motor)		N/A
Elapsed Time Meter (Pump #2 motor)		N/A
Elapsed Time Meter (fan motor)		N/A
System Appearance	OK	GOOD
Inches of Solids in Sump	OK	NONE

RECIRCULATION PUMPS #1	OK/Not Ok	COMMENTS
Check coupling and set screws	OK	
Grease shaft support bearing	OK	
Seal Water		psig                      gpm
Grease motor bearings	OK	
Check amp draw - Stage 1	N/A	Motor FLA: _____

RECIRCULATION PUMPS #2	OK/Not Ok	COMMENTS
Check coupling and set screws		
Grease shaft support bearing		
Seal Water		psig                      gpm
Grease motor bearings		
Check amp draw - Stage 1		Motor FLA: _____

FAN	OK/Not Ok	COMMENTS
Check belt tension (adjust if needed)		
Check belt wear		
Check shaft bearing set screws		
Grease shaft bearings		
Grease motor bearings		
Check amp draw		Motor FLA: _____

**OTHER COMMENTS:**  
 3 inch 4 bolt flange leaking on bottom of tank / 3 inch 4 bolt flange on discharge side of pump leaking / all flange gaskets top of the tank are leaking / the leaks are not that bad , but they gaskets do need to be replaced  
 There is a good maintenance plan at the site.

BUILT DATE

September 14, 2020

Tiffany Rank, P.E.  
Plant Engineering Manager  
Lexington-Fayette Urban County Government  
Division of Water Quality  
Town Branch WTP  
West Hickman WWTP  
301 Jimmie Campbell Drive  
Lexington, KY 40504  
Office: (859) 425-2406  
Cell: (859) 327-9993  
Email: [tiffanyr@lexingtonky.gov](mailto:tiffanyr@lexingtonky.gov)

**RE: ACID WASH CHLORINE EMERGENCY VAPOR SCRUBBER SERVICE  
TOWN BRANCH WTP  
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT (LFUCG)  
Evoqua AM Quote No. 2020-410521**

Dear Tiffany,

Evoqua Water Technologies would like to provide the following quotation to acid wash the Emergency Vapor Scrubber System (EVSS) at Town Branch WTP. The following is a proposal for caustic disposal and cleaning services for your chlorine scrubber system as well as equipment repair.

**EVSS SERVICE AND INSPECTION:**

Regular service, pro-active maintenance, and adjustments of critical operating parameters increase equipment efficiency, reduce chemical usage, and result in better odor control. Fouled packing and equipment wear can impede an EVSS scrubber in performing as designed. If packing within scrubbers becomes fouled, and spent Caustic builds up on the sump floor, the EVSS scrubber becomes inefficient and unable to clear and breakdown the Chlorine Gas. The abrasive and corrosive nature of the scrubbing chemistry requires replacement of parts prone to damage, as well as gaskets replaced due to dry rot. The Caustic breaks down and also becomes diminished in its capacity to scrub. Parts and services to bring the system to a fully functioning tool for Lexington are listed below.

**SCOPE OF SERVICES:**

A description of the proposed Acid Wash service is described below:

- 1) The scrubber is drained of its liquid contents (Caustic). Disposed of by the customer.
- 2) The interior is rinsed with water.
- 3) The sump is filled with water and muriatic acid.
- 4) Recirculation pumps are turned on to allow the acidic solution to clean the internal components for 5-8 hours.
- 5) A complete visual inspection of the scrubber system will be performed.
- 6) Acidic solution is drained. Disposed of by the customer.
- 7) A rinse with water is performed.
- 8) The scrubber is returned to original operating conditions with fresh 20% Caustic.



A description of the proposed equipment repairs is described below:

- 1) All flange and lid gasket replacements
- 2) Replacement seals as needed

#### **West Hickman Requirements**

Evoqua requests the following items be handled by the Lexington personnel:

- Disposal of spent acidic solution if solution cannot be returned to gravity wastewater.
- Dispose of spent Caustic solution – pH adjustment may be needed.
- Access to water supply for cleaning.

#### **Notes:**

1. Evoqua shall supply the acid required to complete the acid wash.
2. Additional costs may be incurred if circulation pumps are not operating correctly upon Evoqua's arrival.

#### **PRICING:**

Evoqua Water Technologies shall deliver this service to the Town Branch WTP for **\$ 24,354.50**.

The existing Terms and Conditions are considered part of this proposal and shall prevail. This quote will remain in effect for ninety (90) days from the date of this proposal. These prices do not include any applicable taxes.

Thank you for choosing Evoqua Water Technologies for your odor and disinfection control needs. It is of utmost importance to assure your emergency scrubber systems are working properly and ready to provide reliable protection against chlorine gas leaks.

If you have any questions or need additional information, please contact me at (502) 480-6704 or [Kenneth.Lowery@evoqua.com](mailto:Kenneth.Lowery@evoqua.com)

Sincerely,

**Evoqua Water Technologies LLC**

*Kenneth Lowery*

Kenneth Lowery  
Technical Sales Representative



**RE: ACID WASH CHLORINE EMERGENCY VAPOR SCRUBBER SERVICE  
TOWN BRANCH WTP  
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT (LFUCG)  
Evoqua AM Quote No. 2020-410521**

Evoqua will process your order when we receive acceptance of this proposal, by signing below and returning to [MSAftermarket@evoqua.com](mailto:MSAftermarket@evoqua.com) or fax to: (941) 359-7985.

Company Name: \_\_\_\_\_

This \_\_\_\_ day of \_\_\_\_\_ Month \_\_\_\_\_ Year

By: \_\_\_\_\_

Title: \_\_\_\_\_

P.O.Number \_\_\_\_\_