

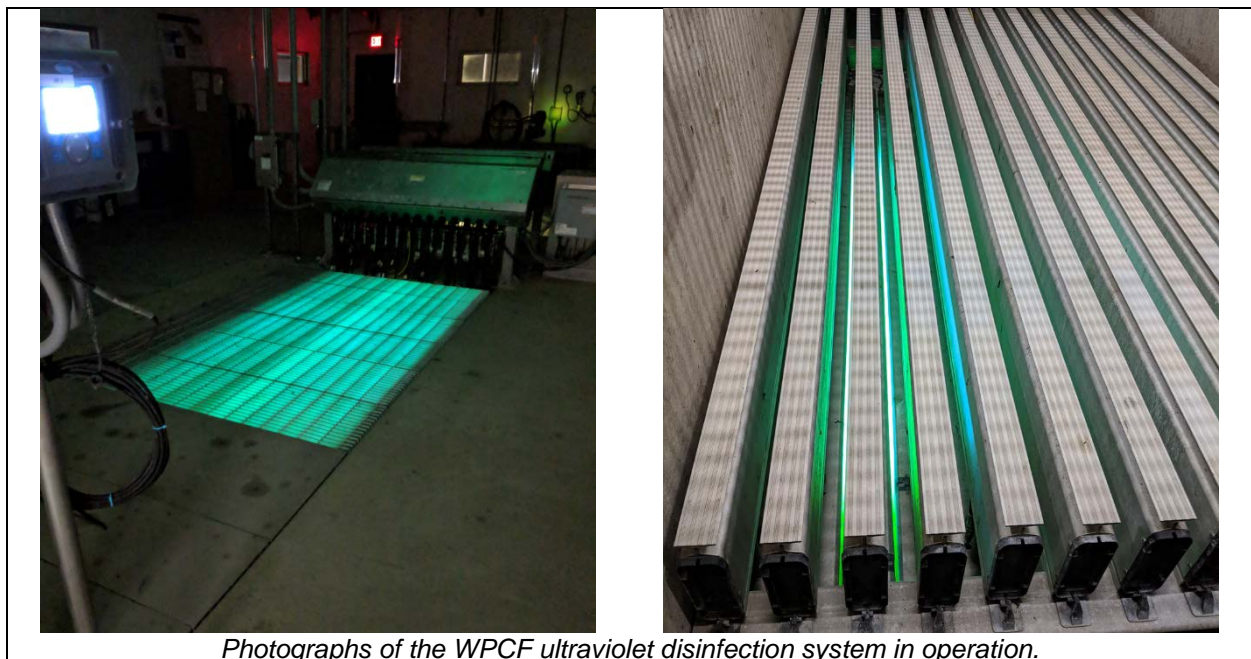
COUNCIL ACTION FORM

SUBJECT: PROCUREMENT OF UV BULBS AT WATER POLLUTION CONTROL FACILITY

BACKGROUND:

In 2011, the discharge permit for the Water Pollution Control Facility (WPCF) was modified to require disinfection of the treated water prior to release back into the environment. The WPCF utilizes an ultraviolet (UV) disinfection technology. UV disinfection is critical to the treatment process and is the primary mechanism for the inactivation/destruction of pathogenic organisms to prevent the spread of waterborne diseases to downstream users.

The effectiveness of a UV disinfection system depends significantly on the intensity of UV radiation. The primary factor affecting the intensity is the age of the bulbs. As bulbs age, the light intensity drops off, reducing the efficiency of the disinfection process. The manufacturer recommends that bulbs be replaced every two years. To split the cost between fiscal years, staff recommends replacing half of the bulbs each year.



Photographs of the WPCF ultraviolet disinfection system in operation.

In the past, staff has purchased replacement bulbs from an aftermarket manufacturer. The bulbs performed poorly which led to difficulties with operation of the system. Moving forward, staff is recommending the purchase of replacement bulbs manufactured by TrojanUV, the original manufacturer of the UV system. W&PC staff worked with the

Purchasing Division to ensure this sole source purchase complies with the adopted Purchasing Policies.

Due to the large quantity of bulbs, staff has worked with the vendor to receive a price quote in the amount of \$50,746.26 for materials and \$500 for shipping, for a total price of \$51,246.26. Staff has budgeted \$125,500 for equipment repair items in the FY 2020/21 WPCF operations budget.

ALTERNATIVES:

1. A. Approve a waiver of the City's purchasing policy requirement for competitive bidding, thereby allowing sole source procurement of OEM bulbs for the UV disinfection system at the Water Pollution Control Facility.

B. Approve the award of the sole source procurement of bulbs from MC² of Des Moines, Iowa in the amount of \$51,246.26.
2. Direct staff to solicit quotations for replacement bulbs from an aftermarket manufacturer(s). Based on recent experience, staff believes that using non-OEM bulbs could jeopardize the performance of the disinfection system.
3. Do not authorize the procurement of replacement UV bulbs from any source at this time. Failure to replace the bulbs will eventually result in a violation of the WPCF's discharge permit and an increase in bacterial levels in the South Skunk River.

CITY MANAGER'S RECOMMENDED ACTION:

As ultraviolet bulbs age, the light intensity drops off, reducing the efficiency of the disinfection process. Proper maintenance of the UV system, including timely replacement of the bulbs, helps protect water quality in the South Skunk River and ensures continued permit compliance. Because of recent experience with poor performance of bulbs purchased from aftermarket manufacturers, staff is recommending replacement bulbs be procured from the original equipment manufacturer. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as described above.



QUOTATION

4280 E 14th Street
Des Moines, IA 50313 USA
Telephone: (800) 383-7867 / FAX (515) 265-8079
www.mc2h2o.com

QUOTE NUMBER: 0006937
QUOTE DATE: 1/11/2021
EXPIRE DATE: 3/30/2021

SALESPERSON: MARCI WHITAKER
CUSTOMER NO: 2327423
QUOTED BY: JRF
JOYCE

QUOTED TO:
CITY OF AMES
PO BOX 811
515 CLARK AVE
AMES, IA 50010

JOB LOCATION:
CITY OF AMES
PO BOX 811
515 CLARK AVE
AMES, IA 50010

CONFIRM TO:
TYLER VERMEER

*** QUOTE ORDER - DO NOT PAY***

CUSTOMER P.O.	SHIP VIA	F.O.B.	TERMS
TYLER VERMEER	BESTWAY	ORIGIN	Net 30 Days

ITEM NUMBER	UNIT	ORDERED	SHIPPED	BACK ORDER	PRICE	AMOUNT
WE ARE PLEASED TO OFFER THE FOLLOWING QUOTATION FOR SPECIAL PRICING TROJAN UV PARTS						
794447-ORD	EACH	110.00	0.00	0.00	303.00	33,330.00
			TROJAN LAMP, GA64T6HE ANGLE BASE (RED CERAMIC END)			
316136-004	EACH	3.00	0.00	0.00	514.60	1,543.80
			TROJAN SLEEVE, QTZ UV3+ 28X25X1950 (4 PK)			
917341-100	EACH	12.00	0.00	0.00	810.15	9,721.80
			TROJAN BALLAST KIT			
327122	EACH	230.00	0.00	0.00	25.67	5,904.10
			TROJAN SEAL KIT			
316144P	EACH	1.00	0.00	0.00	2.06	2.06
			TROJAN ORING, SLEEVE SEAL (PKG OF 10)			
005066	EACH	2.00	0.00	0.00	15.73	31.46
			TROJAN FOOD GRADE GREASE (1 TUBE FOR 15 MODULES)			
901507	EACH	1.00	0.00	0.00	213.04	213.04
			TROJAN ACTICLEAN GEL CASE (4X4 LITRE BOTTLES)			

ESTIMATED LEAD TIME IS 2 TO 4 WEEKS ARO.
THE PRICING ON THIS QUOTE DOES NOT INCLUDE FREIGHT.
joycef@electricpump.com

THANK YOU, JOYCE FROHWEIN

All return goods must have written approval from MC2, Inc. before returning. Credit will not be issued without written approval and if applicable there will be a Restock Fee.

Net Order:	50,746.26
Less Discount:	0.00
Freight:	0.00
Sales Tax:	0.00
Order Total	50,746.26

ABOVE PRICING EFFECTIVE FOR 30 DAYS