

Agenda Item No. _____

Date: May 12, 2021

Subject: Ratification and Confirmation -
Emergency Declaration for Emergency
WWTP UV Disinfection System Bulb Replacement

Late Materials

FROM: Mark A. Freiberger, PE, Director of Public Works

RECOMMENDED ACTION:

Move to ratify and confirmation of an emergency order to replace the WWTP UV Disinfection System modules with the original equipment manufacturer TrojanUV supplied modules.

ISSUE:

Shall Council ratify an emergency order to replace the WWTP UV Disinfection System modules with the original equipment manufacturer TrojanUV supplied modules?

BACKGROUND / SUMMARY INFORMATION:

Several years back, the WWTP staff recommended replacement of the original equipment manufacturer Trojan Ultraviolet Disinfection System modules with a third party supplier at half the cost of the proprietary Trojan modules. This has proven problematic, as the third party modules have significantly operational lower lifespan (1,000 hr to 1,500 hr warranty) than the Trojan modules (12,000 hr). In addition, recent replacement modules are not producing consistent or acceptable levels of disinfection without operating all three UV assemblies simultaneously. The system is designed to operate with one assembly operating in normal mode, the second module for higher flow, and the third as backup. Even with all modules operating the system struggles with meeting minimum disinfection levels. The present third party supplier has proven non-responsive in attempting to resolve this issue. See the attached Sole Source Declaration and accompanying 5/11/2021 email from Casey Sousa, WWTP Operator, for additional details and justification.

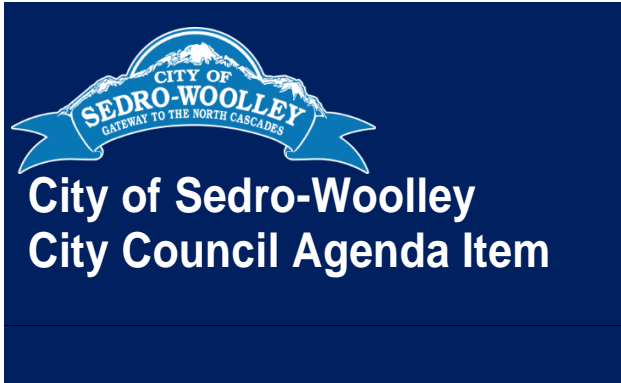
The Public Works Director has declared an Emergency for this project under RCW 39.04.280 and Chapter 2.40 SWMC. The city solicited a quotation from TrojanUV for replacement modules for the entire system. This will be a Sole Source purchase as described in the attached Sole Source Declaration. The cost for the replacement modules and accessories is \$31,136.87.

FISCAL IMPACT, IF APPROPRIATE:

The work will be funded by the Sewer Account 401 BARS Code 535.50.348.050 Maintenance of General Equipment. The annual budget for bulb replacement is \$9,500. However, the Maintenance line includes \$70,000 for overall Plant/Pump Station Parts and Replacement, so the overall budget should be adequate for this purchase.

ATTACHMENTS:

1. Sole Source Declaration with attachments



Agenda Item No. _____

Date: May 12, 2021

Subject: Ratification and Confirmation -
Sole Source Declaration
WWTP UV Disinfection System Bulb Replacement

Late Materials

FROM: Mark A. Freiberger, PE, Director of Public Works

RECOMMENDED ACTION:

Approve Resolution 1069-21 authorizing Mark Freiberger, Public Works Director, to issue the attached Purchase Order 2021-PO-05 for replacement of the WWTP UV Disinfection System modules with the original equipment manufacturer TrojanUV of London, Ontario, Canada supplied modules in the amount of \$31,136.87 including sales tax as per Quotation 123833 dated 5/10/2021

ISSUE:

Should council move to approve Resolution 1069-21 authorizing Mark Freiberger, Public Works Director, to issue the attached Purchase Order 2021-PO-05 for replacement of the WWTP UV Disinfection System modules with the original equipment manufacturer TrojanUV of London, Ontario, Canada supplied modules in the amount of \$31,136.87 including sales tax as per Quotation 123833 dated 5/10/2021?

BACKGROUND / SUMMARY INFORMATION:

See the attached 5/11/2021 email from Casey Sousa, WWTP Operator, for details and justification for this Sole Source declaration.

FISCAL IMPACT, IF APPROPRIATE:

The work will be funded by the Sewer Account 401 BARS Code 535.50.348.050 Maintenance of General Equipment. The annual budget for bulb replacement is \$9,500. However, the Maintenance line includes \$70,000 for overall Plant/Pump Station Parts and Replacement, so the overall budget should be adequate for this purchase.

ATTACHMENTS:

1. Resolution 1069-21
2. Email dated 5/11/2021 from Casey Sousa, WWTP Operator II
3. Purchase Order 2021-PO-05

Resolution No. 1069-21

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SEDRO-WOOLLEY, WASHINGTON, WAIVING COMPETITIVE BIDDING REQUIREMENTS FOR THE PURCHASE OF REPLACEMENT OF ULTRAVIOLET DISINFECTION SYSTEM MODULES AS MANUFACTURED BY TROJANUV, FOR THE PURPOSE OF REPLACING UNDERFUNCTIONING EQUIPMENT USED BY THE WASTEWATER TREATMENT PLANT.

WHEREAS, in Smith v. Seattle, 192 Wn.2d 64, 72 P.2d 588 (1937), the Washington Supreme Court held that cities have the right to specify a particular brand of article for purchase by public contract, even where such article is held in a monopoly by a single supplier; and

WHEREAS, the Sedro-Woolley Wastewater Treatment Department has requested that the City Council authorize the purchase of original equipment manufacturer replacement UV Modules as manufactured by TrojanUV, to replace the existing third party UV modules used as part of the Wastewater Treatment Plant disinfection system; and

WHEREAS, the existing UV Disinfection System modules, manufactured by a third party supplier, as installed in the Wastewater Treatment Plant disinfection system, are not functioning to treatment standards required by the City's NPDES Wastewater Treatment Permit and requires replacement, and

WHEREAS, there is only one source of supply for the original equipment manufacturer replacement parts for this equipment; and

WHEREAS, RCW 35.23.352(9), as amended by chapter 120, laws of 1987, authorizes the City Council to waive competitive bidding requirements for purchasing when the purchase is clearly and legitimately limited to a single source of supply in the near vicinity

NOW, THEREFORE THE CITY COUNCIL OF THE CITY OF SEDRO-WOOLLEY, WASHINGTON, HEREBY RESOLVES AS FOLLOWS:

Section 1. Based upon the preceding legislative findings, the City Council hereby declares that the purchase of the TrojanUV replacement modules is clearly and legitimately limited to a single source of supply and that the sole source of supply is TrojanUV of London, Ontario, Canada.

Section 2. Based upon the preceding legislative findings, the competitive bidding requirements for the City of Sedro-Woolley are hereby waived and the Sedro-Woolley Wastewater Department is authorized to purchase original equipment manufacturer replacement modules as manufactured by TrojanUV.

Section 3. This resolution shall take effect immediately upon passage.

RESOLVED this 12th day of May, 2021 and signed in authentication of its passage this 13th day of May, 2021.

MAYOR

ATTEST:

FINANCE DIRECTOR

APPROVED AS TO FORM:

CITY ATTORNEY

From: Casey Sousa
Sent: Tuesday, May 11, 2021 9:39 AM
To: Mark Freiberger
Cc: Kevin Wynn
Subject: Sewer Plant UV System
Attachments: TrojanUV Genuine Lamp Parts Quote 123833.pdf; Lamp Limited Warranty UV3 UV3PTP-2007V2.pdf

Hello Mark,

Here is the information on our Trojan UV system, the issues we have been experiencing. We are asking this get presented and approved as soon as possible. I have included why we need to have council approve us to have Trojan brand products as the sole source for our UV system parts.

The city typically bids out for our bulbs once a year to replace 1 complete bank. We have 3 banks total. This allows us to keep cost down and keeps new bulbs in the system on a 3-year rotation. One new bank should give us 3 years' life on each set of bulbs before replacement. Unfortunately, we have been experiencing issues with bulbs not properly disinfecting, burning out extremely fast and needing replaced, or burning out/frying components of the system. We have recently in the last few years had to run all 3 UV banks continuously 24/7, 365 days a year. This is an extreme cost from electrical to the sewer department, the city and the citizens. This all shows me we have a low life expectancy on the UV bulbs in use currently and they are not properly disinfecting. If we cannot properly treat the waste water, we will violate Department of Ecology permits as we'll as pollute the water ways. I will address a few issues below with details to support our need to have an emergency authorization to get the new parts ordered and be able to give us Sole Source for Trojan parts.

- 1.) Energy Cost/Use - One of the issue is that we are using an absorbent amount of energy. Our system is meant to run one bank of bulbs during low flows, 2 banks during high flows with a 3rd for back up or in case of failure. Currently to meet the requirements of the Department of Ecology we must run all 3 banks of bulbs continuously. If we do not, we have found our Fecal Coliform Count is Extremely high and on the verge of falling out of permit. We have been cleaning and maintaining the system 3 times a week and sometimes more costing our crew and the city time and money. Again this is all needed to keep our plant in compliance. If we base our energy use on averages the system is designed to use .7 KW/Hr. per Module. There are 13 modules per bank and 3 banks in the system. Currently we have to run all 3 banks on 24 hrs. a day 7 days a week. That is an average of 79,716 KW/Year for 1 bank. That would bring our current usage to 239,148 KW/Year. If we were to use all Trojan parts and get the system back to operations as designed, we would save over 105,269 KW/Year. Putting our new average usage at 133,879 KW/Year. I believe this savings alone would justify switching to Trojan bulbs. The money saved an electrical would hopefully offset the extra cost of the more expensive Trojan brand Bulbs and parts.
- 2.) Possible fines – With our UV disinfection it is one of the most, if not the most important part of the waste water treatment process. With the current bulbs and distributors that are available to send for bid, we are in a struggle to keep the final effluent within permit specs. If we violate permit it will cost the operators, the city and citizens money and department of ecology could fine and possibly enforce federal jail time charges as punishment depending on the severity of the violation. Violation of the department of ecology permit is not an acceptable outcome or an option for our city. This is a main reason we need reliable bulbs and equipment so we can continue to maintain a high quality effluent and do our job properly as operators for the City.
- 3.) Warranty – All other bulb brands have either a 1000hr or 1500hr warranty whereas Trojan comes with a 3-year warranty or 12,000 hrs. If we go with Trojan, all bulbs are covered cost wise 100% for any failures the entire 3 years' life we currently have on our bulbs. (Attached is a copy of the warranty.)
- 4.) Maintenance – Our operators are spending hours a week cleaning and performing maintenance on the system that typically would be done on a monthly rotation. This take operators away from other important task and

procedures in and around the waste water plant. Using Trojan brand would allow us to have longer life on our parts and bulbs and save cost on maintenance. With our operators free to do more this will all around allow us as a crew to do our best job for the city and produce and high quality effluent.

I truly hope we can get EMERGENCY AUTHORIZATION as soon as possible so I can place the order for new parts for our system and get it back to producing a great quality effluent. Please let me know if you or the council would like any other information. I have attached a quote from Trojan for our complete system rebuild in order to get us back to normal operational function. There is a 3-4 week lead time on lamp orders so again it is imperative to get this emergency approval asap.

Thank you very much for all you do, and we at the sewer department appreciate the hard work and time you put forward in helping us do the best job we can for the City of Sedro-Woolley.

Casey J. Sousa

*City of Sedro-Woolley
WWTP Operator*

Office: 360 856 1100 ext: 3007

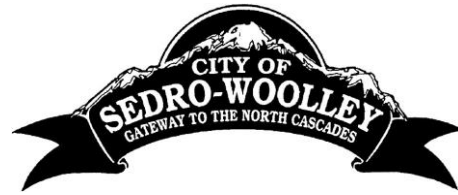
Cell: 360 391 7490

Fax: 360 856 5269

csousa@ci.sedro-woolley.wa.us

City of Sedro-Woolley

325 Metcalf Street
 Sedro-Woolley, WA 98284
 Phone (360) 855-0771 Fax (360) 855-0707



The following number must appear on all related correspondence, shipping papers, and invoices:

PURCHASE ORDER

P.O. NUMBER: 2021-PO-05

VENDOR:

TrojanUV
 Mike D'Oria
 3020 Gore Road
 London, Ontario, Canada
 Tel: 800-294-2150
 Fax: 800-291-0205

SHIP TO:

Kevin Wynn
 City of Sedro-Woolley
 401 Alexander Street
 Sedro-Woolley, WA 98284
 Tel: (360) 661-6473
 Fax: (360) 855-0771

P.O. DATE	REQUISITIONER	SHIPPED VIA	F.O.B. POINT	TERMS
4/19/2021	Leo Jacobs			NET 30

QTY	UNIT	DESCRIPTION	UNIT PRICE	TOTAL
1	LS	TrojanUV Modules and Lamps per Quote 123833, Dated 05/10/2021 (Attached for Reference)		\$27,597.57
			SUBTOTAL	\$27,597.57
			DISCOUNT	0.00
			SHIPPING & HANDLING	\$1,100.00
			.085 SALES TAX	\$2,439.30
			OTHER	N/A
			TOTAL	\$31,136.87

- Please send two copies of your invoice. 548.50.48.050.401 \$31,136.87
- Enter this order in accordance with the prices, terms, delivery method, and specifications listed above.
- Please notify us immediately if you are unable to ship as specified.
- Send all correspondence to:

Accounts Payable
City of Sedro-Woolley
325 Metcalf Street
Sedro-Woolley, WA 98284
Phone (360) 855-1661 Fax (360) 855-0707

Authorized by _____

Date _____



QUOTE

A division of Trojan Technologies Group ULC
 3020 GORE ROAD
 LONDON, ONTARIO, CANADA N5V 4T7
 T 519.457.3400 F 519.457.3030 www.trojanuv.com

Original

QUOTE FOR: CITY OF SEDRO-WOOLLEY
 720 MURDOCK ST.,
 SEDRO-WOOLLEY, WA
 98284
 UNITED STATES

SHIP TO: SEDRO-WOOLLEY WWTP
 ATTN: DEBBIE ALLEN
 401 ALEXANDER ST.,
 PH: 360-856-1100
 SEDRO-WOOLLEY, WA
 98284
 UNITED STATES

FOR CUSTOMER SERVICE, CONTACT MIKE D'ORIA
 VOICE - 1-800-294-2150
 FAX - 1-800-291-0205
 EMAIL - southernus@trojanuv.com

FORWARD AGENT:
CUSTOMER #: 827500
QUOTE #: 123833
QUOTE DATE: 05-10-2021
REFERENCE: CASEY SOUSA PJ#450164
LOB: W97 AFTERMARKET PARTS

We thank you for your inquiry.

QTY	UNIT	ITEM	PRICE	UNIT	AMOUNT
39.00	EA	915345-008 KIT, UV3 8L MODULE LEG UPGRADE	118.97	EA	4639.83
78.00	EA	331014-002 LAMP SLEEVE KIT, 64" PTP/3B4PK	294.33	EA	22957.74
1.00	EA	FREIGHT FREIGHT & HANDLING	1100.00	EA	1100.00

GOODS	COSTS	TOTAL TAX	TOTAL USD
27597.57	1100.00	2439.30	31136.87

DELIVERY TERMS: NO URGENCY FOR DELIVERY

PAYMENT TERMS:

FREIGHT MAY BE ADDED TO THE TOTAL OF THIS QUOTE ONLY IF REQUESTED.

SUBJECT TO SALES TAX, WHERE APPLICABLE. Tax to be included if not tax exempt.

GST# R105405385

THIS QUOTE EXPIRES: 06-09-2021

U.S. CUSTOMERS MUST PROVIDE SHIP TO'S FEDERAL I.D. #'s

FOR SHIPPING PURPOSES UPON RECEIPT OF A FORMAL PURCHASE ORDER.

SOLD:

SHIP:



November 23, 2007

Low Pressure Lamp Limited Warranty
TrojanUV3000™ & TrojanUV3000™PTP

Warranty Coverage: The following warranty applies to Trojan Technologies Low Pressure Lamps (the "Lamps") for the TrojanUV3000™ and the TrojanUV3000™PTP. The warranty is only valid with respect to a Lamp that is properly stored, handled and installed as specified in the Operation and Maintenance manual supplied with the system in which the Lamp is installed or as outlined in Product Bulletins. Without limiting the generality of the foregoing, any excess vibration or improper operation of a Lamp shall void this warranty. In addition, Trojan Technologies shall not be liable for any Lamp failure which results from UV equipment not being operated and maintained in strict accordance with the instructions set out in the Operation and Maintenance manual.

In order to process any Lamp warranty claim, Trojan Technologies requires the Customer to provide a copy of the operator's log, all maintenance records and a completed Warranty Claim Form (see attachment) within one (1) month of the lamp failure. Failure to meet these conditions will void the Lamp warranty.

Trojan Technologies also reserves the right to require the Customer to return a failed Lamp to Trojan Technologies' facilities for inspection. Failure to return the Lamp when requested shall void the warranty.

Period of Coverage: Where a Lamp has been stored, handled and installed as specified in the Operation and Maintenance manual or as outlined in Product Bulletins, and the relevant UV equipment has been operated and maintained in accordance with instructions specified in the Operation and Maintenance manual, and the Lamp fails within the first 12,000 hours of operation, Trojan Technologies shall provide the Customer with a replacement Lamp replacement free of charge.

Regardless of actual Lamp operating hours, the Lamp warranty is void if the date of Lamp failure occurs more than thirty-six (36) calendar months after the Lamp shipment date from Trojan Technologies.

Limitations: This limited warranty does not cover:

- Lamps that have greater than 4 On/Off cycles, on average per 24 hour period
- Lamps that have been used with parts not supplied or approved by Trojan Technologies
- Lamps that have been physically damaged or fail due to corrosion, exposure to contaminants (e.g. effluent), incorrect installation or operation,
- Costs related to removal, installation, or troubleshooting
- Damage caused by improper return packaging
- Taxes, duties or brokerage fees (if any)

The above warranty is the exclusive remedy for all claims based on a failure of or defect in a Lamp, whether the claim is based on contract (including fundamental breach), tort (including negligence), strict liability or otherwise. This warranty is in lieu of all other warranties whether written, oral, implied or statutory. Without limitation, no warranty of merchantability or of fitness for a particular purpose shall apply to a Lamp.

Trojan Technologies does not assume any liability for personal injury or property damage caused by use or misuse of a Lamp. Trojan Technologies shall not in any case be liable for special, incidental, indirect or consequential damages, even if it has been advised of the possibility thereof. Trojan Technologies' liability shall not, in any case, exceed the cost of replacement of a defective Lamp.

TROJAN UV™

Warranty Claim Form

Complete all applicable info

Check one:

Lamps

Ballasts/Drivers

Check one:

UV3000

UV4000

UVSonus

UV3000+

UV3000PTP

UVSigna

Site/Project Name: _____

Project/Serial #: _____

Part Number: _____

No.	Date of		Bank		Module or Array	Position	Bank Hours at Install	Bank Hours at Failure	Net Operating Hours	On/Off Cycles	Date Code and Serial Number
	Installation	Failure	#	Letter							
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											

Notes:

Completed By: _____

Phone #: _____

Fax #: _____

Email: _____

* Submit failures on warranty claim form monthly otherwise warranty claim may be void.

* Items that are damaged, show signs of corrosion, have been exposed to water, or were not handled, installed, or operated according to the O&M manual are not valid for warranty.