



THE CITY OF KEY WEST

EXECUTIVE SUMMARY

Date: January 31, 2023

To: Patti McLauchlin, City Manager

From: Kelly Crowe, P.E., Utilities Director

Cc: Christina Bernaldi, Finance Director
Todd Stoughton, Assistant City Manager

Subject: Approve a Purchase Order to Trojan Technologies in the Amount of \$555,300.00 Per Section 2-797(4)(b) of the Code of Ordinances to Provide an Ultraviolet Disinfection System (UVDS) to Replace the Existing System at the Richard A. Heyman Wastewater Treatment Plant

Action Statement

Approve a purchase order to Trojan Technologies in the amount of \$555,300.00 to provide an Ultraviolet Disinfection System (UVDS) per Section 2-797(4)(b) of the Code of Ordinances to replace the existing system at the Richard A. Heyman Wastewater Treatment Plant. Authorize any necessary budget transfers.

Background

The City of Key West (City) owns the Richard A. Heyman Wastewater Treatment Plant (WWTP) on Fleming Key as well as the sanitary sewer collection system throughout the City of Key West. The City contracts with Operations Management International, Inc. (OMI) for the operations and maintenance of the sanitary sewer system and WWTP.

The WWTP facility is operated under Wastewater Permit No. FLA147222 and ultimately discharges to two (2) Class V underground injection wells permitted through FDEP under permit numbers 327710-001-UO/5W and 327710-002-UO/5W that discharges to Class G-III ground water. Through these permits, the City and OMI are responsible for compliance with the permit requirements. FDEP is the administrative agency in the State of Florida having jurisdiction to administer and enforce the provisions of Chapter 403, "Environmental Control", Florida Statutes (F.S.) and the rules authorized in Title 62, "Department of Environmental Protection", Florida Administrative Code (F.A.C.). FDEP has jurisdiction over the matters addressed in the Order.

Prior to discharging to the Class V injection wells, the effluent undergoes UV disinfection to ensure

the effluent is treated to be within the limits prescribed in the permit. The existing UVDS was installed in 2006 and is nearing the end of its useful life. During higher flow events, the existing system has experienced several instances where it has failed to meet permit imposed effluent limitations. The failures to meet the permit imposed effluent limitations have resulted in violations in which FDEP has issued Consent Order OGC No. 21-0581 (Order) to enforce corrective actions.

Per Section 5(A) of the Order, the City was required to identify interim and long-term recommendations for operating the UVDS to meet the permit imposed effluent limitations. OMI has been working to implement the interim measures identified in the report; however, it is apparent that since the UVDS is near the end of its useful life, the long-term recommendation of replacement system is the best option and should be addressed as soon as possible.

The existing system is a Trojan Technologies (Trojan) system and has performed well for over fifteen (15) years. Staff proposes to replace the existing system with a new Trojan system. Procuring a Trojan system specifically is important for the following reasons:

1. OMI staff is familiar with the system, obtaining replacement parts and maintaining the system.
2. The new system can replace the existing system in-kind. It does not require a retrofit of the existing enclosure.
3. In the interest of time, Trojan can begin preparing shop drawings for review by staff once a purchase order is issued. Replacing the system as soon as possible is in the best interest of the City and will keep us in compliance with the Order.

The purchase is only for the system at this time. Developing shop drawings, review, approval and fabrication will take up to 34 weeks. Given the long lead time for the equipment, staff plans on procuring a contractor separately at a later date for the installation of the system.

Purpose and Justification

Per Section 2-797 (4)(b) of the Code of Ordinances, “If in the opinion of the city manager exceptional circumstances exist to exempt a purchase from the competitive bid requirements of this subdivision for the *best interests of the city*, the city manager shall place a resolution before the city commission for approval of such exemption”.

Replacing the UVDS system as soon as possible is in the best interest of the City since this is a time sensitive priority project. Including fabrication, delivery of the UVDS could up to eight (8) months after issuance of a purchase order. OMI staff is constantly maintaining the existing system to ensure compliance with the permit to the extent practicable.

The existing system is near the end of its useful life and replacement is a long-term strategy to be in compliance with the Order and ensure near shore water quality is protected by being within the permit imposed effluent limitations.

Strategic Plan: Environmental Protection, Priority 4; Goal 3; Action 6; Upgrade & Maintain systems as per DEP compliance program, as it relates to the Richard A. Heyman Environmental Pollution Control Facility and proper maintenance of that facility.

Financial

The cost of the system is \$555,300 per the quote from Trojan. The UVDS system is budgeted in the amount of \$300,000 in Account 401-3503-535-6500 (Collection System/Renewal and Replacement). Additional funds in the amount of \$260,000 will be repurposed from the Pump Station “R” project (Account 401-3503-535-6500) to the UVDS project. The following is a summary of the proposed budget transfer:

Project	Account	Current Budget	Increase/Decrease	Proposed
UVDS System	401-3503-535-6500	\$300,000	+\$260,000	\$560,000
Pump Station “R”	401-3503-535-6500	\$500,000	-\$260,000	\$240,000

After the transfer, the Pump Station “R” project will have \$240,000 available for design which is sufficient for that project. Construction funds for Pump Station “R” will not be needed until FY 23/24.

Recommendation

Staff recommends approving a purchase order to Trojan Technologies in the amount of \$555,300.00 to provide an Ultraviolet Disinfection System (UVDS) per Section 2-797(4)(b) of the Code of Ordinances to replace the existing system at the Richard A. Heyman Wastewater Treatment Plant and authorize any necessary budget transfers.