



**CITY COUNCIL MEETING  
STAFF REPORT**

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| <b>Meeting Date:</b> December 15, 2025   |  | <b>Subject: Resolution No. 3231</b><br>Authorizing Sole-Source Equipment Procurement for the Wastewater Treatment Plant Backup Ultraviolet Disinfection System Replacement Project (CIP No. 2109)<br><br><b>Staff Member:</b> Mike Nacrelli, PE, Senior Civil Engineer<br><br><b>Department:</b> Community Development |  |
| <b>Action Required</b>   |  | <b>Advisory Board/Commission Recommendation</b>  |  |
| <input checked="" type="checkbox"/> Motion<br><input type="checkbox"/> Public Hearing Date:<br><input type="checkbox"/> Ordinance 1 <sup>st</sup> Reading Date:<br><input type="checkbox"/> Ordinance 2 <sup>nd</sup> Reading Date:<br><input checked="" type="checkbox"/> Resolution<br><input type="checkbox"/> Information or Direction<br><input type="checkbox"/> Information Only<br><input type="checkbox"/> Council Direction<br><input type="checkbox"/> Consent Agenda |  | <input type="checkbox"/> Approval<br><input type="checkbox"/> Denial<br><input type="checkbox"/> None Forwarded<br><input checked="" type="checkbox"/> Not Applicable<br><br><b>Comments:</b> N/A  |  |
| <b>Staff Recommendation:</b> Staff recommends Council adopt Resolution No. 3231.   |  |  |  |
| <b>Recommended Language for Motion:</b> I move to adopt Resolution No. 3231.   |  |  |  |
| <b>Project / Issue Relates To:</b>   |  |  |  |
| <input type="checkbox"/> Council Goals/Priorities:   | <input checked="" type="checkbox"/> Adopted Master Plan(s):<br>WWTP Master Plan 2023 –<br>Project #7 | <input type="checkbox"/> Not Applicable  |  |

**ISSUE BEFORE COUNCIL:**

The project team will provide an update on the Wastewater Treatment Plant (WWTP) Backup Ultraviolet (UV) Disinfection System project (Project) and a City of Wilsonville resolution authorizing sole source procurement of UV disinfection equipment.

## **EXECUTIVE SUMMARY:**

This Project implements the replacement of the backup UV disinfection system at the WWTP identified in the 2023 Wastewater Treatment Plant Master Plan. The backup UV system (installed in 1993) has failed and is no longer supported by the vendor and therefore needs to be replaced. Replacing this failed backup system is critical to providing redundancy and reliability for the disinfection of treated wastewater effluent to protect public health and the environment.

A Preliminary Design Report (PDR) was completed in August 2024 to evaluate the most suitable options for replacing the backup UV system at the WWTP. After evaluating technical and cost information provided by three established vendors of UV systems, the PDR focused on two such systems with comparable performance criteria and life-cycle costs, ultimately recommending a Trojan system, due to lower anticipated long-term maintenance costs, avoids use of specialized equipment for UV bank removal, and easier (safer) maintenance access.

Staff recommends a sole-source procurement of the preferred UV disinfection system, in parallel with completion of the final design. Because these complex systems aren't readily interchangeable, the design must be completed with a preferred system in mind. A sole-source procurement of the UV disinfection system will simplify the final design while locking in the purchase price in advance of soliciting construction bids. With assistance from the design consultant, Brown and Caldwell, staff has negotiated the pricing, technical specifications, and contract terms with Trojan for purchase of the UV disinfection equipment. The purchase agreement with Trojan would ultimately be incorporated into the final bid documents and assigned to the construction contractor, who will be selected through a standard competitive bidding process.

A sole source procurement is allowed under Oregon public contracting laws if the City Council determines that at least one of four criteria outlined in ORS 279B.075(2) are met, based on written findings. In this case, the following criterion is met:

(2)(d) Other findings that support the conclusion that the goods or services are available from only one source.

Finding: The Preliminary Design Report completed in August 2024 (**Exhibit B**) recommended selection of the TrojanUVSigna system, due to several unique design features that make it the most suitable option for replacing the existing WWTP Backup UV System. Specifically, the TrojanUVSigna system:

- Is representative of latest-generation technology, has a longer future product lifetime, and is better suited for long-term operation at the WWTP.
- Has the lowest annual operating cost based on lower energy and maintenance costs.
- Places a lower maintenance burden on WWTP staff, given the automatic removal system for lifting UV banks from the channel, fewer lamps to replace, and a more advanced wiper system for UV lamp cleaning.
- Does not require installation of an additional jib crane and is therefore safer for the plant staff by eliminating the crane-based removal of UV banks.

If the City Council authorizes the sole source selection of Trojan Technologies to supply the replacement WWTP Backup UV System, the City must publish a notice for seven days prior to any contracting for such sole-sourced goods and services, pursuant to Oregon Administrative Rule 137-047-0275. Once the public notice period has ended, the purchase agreement with Trojan will be brought before City Council for consideration at a future meeting.

**EXPECTED RESULTS:**

The Project will provide system redundancy and capacity expansion for disinfection process at the City WWTP, to meet applicable discharge permit requirements for treatment of existing and future wastewater flows.

**TIMELINE:**

The equipment procurement process will be completed in early 2026. Final design of the Project is scheduled to be completed by August 2026, with construction anticipated for completion by September 2027.

**CURRENT YEAR BUDGET IMPACTS:**

Selection of the UV disinfection system vendor does not have budgetary impacts this current Fiscal Year. The cost for procurement of the UV disinfection system will be incorporated into the construction contract, which is budgeted as part of the City's five-year capital improvement plan.

**COMMUNITY INVOLVEMENT PROCESS:**

Staff will provide regular Project updates on the City web site, as the Project progresses.

**POTENTIAL IMPACTS OR BENEFIT TO THE COMMUNITY:**

Treated wastewater effluent disinfection is essential to protecting public health and the environment, in accordance with state and federal requirements. This Project will ensure adequate wastewater disinfection capacity now and into the future, serving anticipated growth through the year 2045.

**ALTERNATIVES:**

Instead of a sole-source equipment procurement, Council could direct staff to proceed with design assuming the preferred equipment and allow construction bidders to propose alternate systems that meet the design specifications. Staff does not recommend this approach, as post-bid design changes may be necessary to accommodate a different UV disinfection system, incurring additional design costs, delay in the construction schedule, and potentially increased maintenance costs, as documented in the PDR.

**CITY MANAGER COMMENT:**

N/A

**ATTACHMENTS:**

1. Resolution No. 3231
  - A. Findings for Sole-Source Procurement – WWTP Backup UV System Replacement (CIP 2109)
  - B. WWTP Backup UV System Replacement Preliminary Design Report (August 2024)