

STAFF REPORT

Date: October 23, 2024

To: Mayor and City Council

Through: Jackie Bryant, Interim City Manager

Subject: Staff Report (For Possible Action): Approval of an Amendment to the Contract with Nuvoda, LLC for rental of pilot testing equipment and limited technical support for the Truckee Meadows Water Reclamation Facility Mobile Organic Biofilm Pilot Project for an additional \$108,000 for a total contract amount not to exceed \$379,700 with Reno's share being \$260,588.11. (Sewer Fund)

From: Matt Smith, Senior Civil Engineer

Department: Utility Services

Summary:

The attached amendment with Nuvoda, LLC (Nuvoda) to increase the contract amount provides an additional 6-month rental of the Mobile Organic Biofilm (MOB) pilot screening/pumping skid, MOB aerobic granular sludge (AGS) media, and associated limited technical support for use at the Truckee Meadows Water Reclamation Facility (TMWRF), to further evaluate system performance during cold weather. Both Reno and Sparks City Councils approved the MOB Pilot Project at the TMWRF in June 2023 to evaluate the efficacy of the MOB aerobic granular sludge (AGS) system for enhanced treatment at TMWRF. Staff recommends Council approve Amendment #1 to the Contract with Nuvoda for rental of pilot testing equipment and limited technical support for the TMWRF MOB Pilot Project for an additional \$108,000 for a total contract amount not to exceed \$379,700 (Reno's share being \$260,588.11 from the Sewer Fund).

Table 1: Consent Review

Consent Review	Yes	No
1. Is this item an annual or standard item that comes before Council for regular approval?		X
2. Is this item an agreement required based on an item previously approved by Council?	X	
3. Is this item included in the current budget approved and adopted by Council?	X	
Other Considerations		
What percent of the total City budget does this item represent?	0.04%	

Alignment with Strategic Plan:

Fiscal Sustainability

Infrastructure, Climate Change, and Environmental Sustainability

Previous Council Action:

- June 7, 2023 – Council approved Staff Report: Approval of Consulting Agreement with Jacobs Engineering Group, Inc. for Consulting Services for the Truckee Meadows Water Reclamation Facility Mobile Organic Biofilm Pilot Project in the amount of \$197,246 with Reno’s share being \$135,369.93. (Sewer Fund)
- June 7, 2023 – Council approved Staff Report: Approval of Contract with Nuvoda, LLC for rental of pilot testing equipment and limited technical support for the Truckee Meadows Water Reclamation Facility Mobile Organic Biofilm Pilot Project in the amount of \$271,700 with Reno’s share being \$186,467.71. (Sewer Fund)
- June 7, 2023 – Council approved Staff Report: Approval of Agreement with University of Nevada, Reno for Investigation of Mobile Organic Biofilm Process at Pilot Scale and Modeling Simulations for the Truckee Meadows Water Reclamation Facility Mobile Organic Biofilm Pilot Project in the amount of \$149,612 with Reno’s share being \$102,678.72. (Sewer Fund)

Background:

The Cities of Reno and Sparks jointly own TMWRF, originally built in 1964. In 2020, Brown & Caldwell (B&C) prepared the TMWRF Facility Plan, which outlined future rehabilitation and expansion alternatives to meet TMWRF’s stringent discharge permit requirements. The Facility Plan recommended investigating changes to TMWRF’s current treatment process by switching to AGS.

Staff selected Nuvoda’s MOB technology for this pilot study due to its ability to be implemented in TMWRF’s existing tank infrastructure and its high performance in recent pilot studies. Nuvoda’s MOB technology also has the potential to extract more treatment capacity out of

TMWRF's existing infrastructure, provide a more robust and sustainable nitrogen removal process, and decrease operation and maintenance (O&M) costs through less chemical and electrical power requirements.

Discussion:

The original contract included the 12-month rental of the pilot scale equipment and limited technical support from Nuvoda to evaluate the efficacy of the new technology at TMWRF. The pilot scale treatment system is comprised of kenaf (MOB media), a media retention screen, pumps, tanks, and instrumentation/controls. TMWRF provided 4" hoses for connection to existing facilities. Staff scheduled the pilot for a full year so the treatment unit can experience seasonal weather variations, helpful in comparing pilot performance with the existing plant processes. The start-up and stabilization of the process took longer than anticipated; however, once stabilized, the MOB process has been providing positive results in both treatment capacity and process resiliency since the pilot has been operating. This amendment by increasing the contract amount extends the MOB Pilot Study through the Winter months to June 2025 to further evaluate the MOB system's ability to maintain performance through the colder weather.

Also on today's agenda for Council consideration as separate, but related items, are the Jacobs Engineering Group, Inc. Agreement Amendment for Pilot Assistance Services and the University of Nevada, Reno Agreement Amendment for the Investigation of Mobile Organic Biofilm Process at Pilot Scale and Modeling Simulations at TMWRF.

Financial Implications:

This project is approved in The City Council FY25 CIP and respective TMWRF Joint Coordinating Committee annual budget with available Sewer Funds. This agreement amendment would cost an additional \$108,000 and bring the total contract budget to \$379,700. The City of Reno will continue to administer the contract, and the City of Sparks will reimburse a portion of the costs through the current cost sharing agreement for TMWRF operations and maintenance. The City of Reno and the City of Sparks share the cost of this project as follows: 68.63% for Reno and 31.37% for Sparks, as shown in Table 1.

Table 2: Cost Sharing Between Reno and Sparks

Agreement	Fees	Reno Share	Sparks Share
Nuvoda Original Contract (Council Approved 6/7/23)	\$271,700	\$186,467.71	\$85,232.29
Amendment #1 (Today's Council Item)	\$108,000	\$74,120.40	\$40,294.80
Total	\$379,700	\$260,588.11	\$119,111.89
Percentages		68.63%	31.37%

Legal Implications:

The parties are bound by the terms of the agreement as prepared by the Office of the City Attorney.

Recommendation:

Staff recommends Council approval the amendment to the contract with Nuvoda, LLC for rental of pilot testing equipment and limited technical support for the TMWRF Mobile Organic Biofilm Pilot Project for an additional \$108,000 for the total contract amount not to exceed \$379,700 with Reno's share being \$260,588.11 (Sewer Fund) and authorize the Mayor to sign.

Proposed Motion:

I move to approve the staff recommendation.

Attachments:

- Area & Vicinity Map for TMWRF Mobile Organic Biofilm Pilot Project
- Amended Agreement with Nuvoda, LLC for the TMWRF Mobile Organic Biofilm Pilot Project