



*City of Arts & Innovation*

# City Council Memorandum

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**TO: HONORABLE MAYOR AND CITY COUNCIL                      DATE: JULY 2, 2024**

**FROM: PUBLIC WORKS DEPARTMENT                                      WARDS: ALL**

**SUBJECT: APPROVE THE PURCHASE OF ONE (1) DECANTER CENTRIFUGE UNIT MODEL CS26 – 4EV 2PH COMPLETE WITH AUTOMATIC HYDRAULIC BACKDRIVE AND ONE (1) DECANTER CENTRIFUGE PANEL UPGRADE FOR EXISTING CENTRIFUGE MODEL CS21 – 4HC FROM CENTRISYS - CNP OF KENOSHA, WISCONSIN, FOR A TOTAL AMOUNT OF \$949,100.00, AS AUTHORIZED UNDER PURCHASING RESOLUTION 24101, SECTION 404 (UTILITIES EXCEPTION)**

**ISSUE:**

Approve the purchase of one (1) Decanter Centrifuge unit Model CS26 – 4EV 2PH with Automatic Hydraulic Backdrive and one (1) Decanter Centrifuge Panel Upgrade for existing Centrifuge Model CS21 – 4HC from Centrisys-CNP. of Kenosha, Wisconsin, for a total amount of \$949,100.

**RECOMMENDATION:**

That the City Council approve the purchase of one (1) Decanter Centrifuge unit Model CS26 – 4EV 2PH with Automatic Hydraulic Backdrive and one (1) Decanter Centrifuge Panel Upgrade for existing Centrifuge Model CS21 – 4HC from Centrisys-CNP of Kenosha, Wisconsin, for a total amount of \$949,100 as authorized under Purchasing Resolution 24101 Section 404 (Utilities Exception).

**BACKGROUND:**

The Riverside Water Quality Control Plant (RWQCP) treats wastewater generated within the City of Riverside and the communities of Edgemont, Highgrove, Jurupa, and Rubidoux. The RWQCP has a wastewater treatment capacity of approximately 52 Million Gallons per Day (MGD).

The solids handling facilities include thickening, digestion, and dewatering processes, whereas liquid handling facilities include preliminary, primary, secondary, and tertiary treatment processes. The solids handling facilities at RWQCP comprises of one centrifuge, two screw presses, and two belt presses for dewatering of digested sludge. The centrifuge yields a sludge concentration of 25% solids, which translates to a drier and lighter sludge, when compared with the screw presses and belt presses that are producing 19% and 14% sludge solids, respectively. Furthermore, the belt presses and screw presses are less reliable and require constant maintenance. As a result, the RWQCP operates the centrifuge as the primary dewatering unit, which equates to cheaper

trucking and disposal costs. The belt presses and screw presses satisfy the requirement of 100% redundancy as emergency standby.

On December 19, 2023, the City Council awarded RFP No. 2222 for Biogas Upgrade and Digestate Management Facilities to Anaergia Services, LLC a Delaware limited liability company (LLC) doing business as Riverside Bioenergy Facility, LLC, a Delaware LLC. The City Council also approved the Lease and Energy Services Agreement with Riverside Bioenergy Facility, LLC a Delaware LLC, to accept and treat solid waste, particularly food waste, to improve anaerobic digestion at the RWQCP, to address regulatory challenges on climate, waste disposal, and biosolids management, and to maximize the potential of the RWQCP.

Due to the anticipated higher solid contents from the acceptance of solid waste, the RWQCP proposes to purchase a new centrifuge with higher capacity than the existing one. This new unit will be the main operating component to handle the current treatment plus the projected solid waste. The existing unit will provide the required redundancy and backup during maintenance periods without jeopardizing the operational efficiency of the RWQCP.

### **DISCUSSION:**

The existing centrifuge was installed in 2006 and has consistently produced disposable sludge with higher solids content. Due to operational familiarity of the existing Centrisys centrifuge and interchangeability of spare parts, the RWQCP prefers to purchase a second centrifuge from the same manufacturer with a higher processing capacity.

Due to challenges in finding spare parts for the existing centrifuge control panel, a new replacement control panel is required for efficient functioning of the existing centrifuge.

The Public Works Wastewater Division requires compatibility to ensure uniform operation, maintenance, and replacement. The City's Purchasing Resolution 24101 Exceptions allows the City to procure certain supplies, equipment, and materials through Informal Procurement or Negotiated Procurement. The centrifuge is considered an essential unit of the Dewatering process, which is one of the items listed as qualified for Informal Procurement or Negotiated Procurement.

Under Purchasing Resolution No, 24101, Section 404 (Utilities Exception) allows for the exception to competitive procurement "The Water, Electric and Sewer Utilities have a need for compatibility within their respective systems for uniform operation, maintenance and replacement, and this need can be met by procuring certain supplies, equipment, and materials supplies through Informal Procurement or Negotiated Procurement." Section 404 proceeds to list supplies, equipment and materials that qualify for this exception and this list includes "Dewatering Equipment, Parts and Repairs."

The Purchasing Manager concurs that the recommended action complies with Purchasing Resolution No. 24101, Section 404 (Utilities Exception).

### **STRATEGIC PLAN ALIGNMENT:**

This item contributes to **Strategic Priority 6 – Infrastructure, Mobility and Connectivity** and **Goal No. 6.2 – Maintain, protect, and improve assets and infrastructure within the City's built environment to ensure and enhance reliability, resiliency, sustainability, and facilitate connectivity.**

Furthermore, this project aligns with each of the Cross-Cutting Threads as follows:

1. **Community Trust** – Riverside is transparent and makes decisions based on sound policy, inclusive community engagement, involvement of City Boards & Commissions, and timely and reliable information. Activities and actions by the City serve the public interest, benefit the City’s diverse populations, and result in greater public good. The proposed improvements are part of a significant endeavor to improve the solids dewatering process and to accommodate future growth. The new centrifuge will operate at a higher capacity, producing drier and lighter sludge. This equates to less trucking to dispose the sludge, thus improving the quality of life for residents in the service area due to reduced number of truck loads.
2. **Equity** – Riverside is supportive of the City’s racial, ethnic, religious, sexual orientation, identity, geographic, and other attributes of diversity and is committed to advancing the fairness of treatment, recognition of rights, and equitable distribution of services to ensure every member of the community has equal access to share the benefits of community progress. The Project will improve the operational efficiency of the sewer wastewater treatment facility and provide a higher degree of service reliability for residents in the service area.
3. **Fiscal Responsibility** – Riverside is a prudent steward of public funds and ensures responsible management of the City’s financial resources while providing quality public services to all. The proposed Project improvements will lower the sludge hauling and disposal costs, thereby providing significant cost savings for the City.
4. **Innovation** – Riverside is inventive and timely in meeting the community’s changing needs and prepares for the future through collaborative partnerships and adaptive processes. This project provides an improved solution to address the efficiency challenges and accommodates future growth to handle solids at the RWQCP.
5. **Sustainability & Resiliency** – Riverside is committed to meeting the needs of the present without compromising the needs of the future and ensuring the City’s capacity to persevere, adapt and grow during good and difficult times alike. The proposed improvements will reduce the hauling costs of the biosolids due to drier and lighter content of the disposable solids.

**FISCAL IMPACT:**

The total fiscal impact of this action is \$949,100. Sufficient funds are budgeted and available in Sewer Fund, Sewer System-Sewer Projects, Rehab of the Biosolids Equipment account number 9917823-440301 for this purchase.

Prepared by:	Thuy Nguyen, Principal Engineer
Approved by:	Gilbert Hernandez, Public Works Director
Certified as to availability of funds:	Kristie Thomas, Finance Director/Assistant Chief Financial Officer
Approved by:	Kris Martinez, Assistant City Manager
Approved as to form:	Phaedra A. Norton, City Attorney

Attachment: Centrisys CNP cost proposal