



City of Nampa Public Works Business Item

TO:	Mayor and Council
FROM:	Jeff Barnes
NUMBER:	{{section.number}}-b
DATE:	November 4, 2024
SUBJECT:	Action Item: Authorize Mayor and Public Works Director to sign Task Order with Stantec for the Water Renewal Facility Digestion Complex Heating and Alternatives Evaluation in an amount not to exceed \$97,444.00. (Standard Template) (Approved in FY25 Budget; #25-8080-018)

Background Summary:

- The City of Nampa Water Renewal Facility (WRF) currently uses a Digestion Complex for the treatment of biosolids. This facility includes critical infrastructure for the WRF's processes:
 - 5 mesophilic digesters to digest both primary and secondary sludge from the facility
 - Heating system including boilers, hot water pumps, and other systems to maintain digester temperature which is critical to the process
 - Other critical systems include mixing pumps, piping, and heat exchangers for digester flow and heating
- The Digestion Complex expansion is identified in the Water Renewal Facility's Capital Improvement Plan (CIP) due to aging infrastructure, maintenance challenges, and increasing demand on the system
- This evaluation will provide the necessary information to WRF staff to expand the digester complex dependent on the selection of one of the evaluated alternatives

Reason for Project:

- The Digestion Complex Heating and Alternatives Evaluation will evaluate two alternative options for the future of the WRF's Digestion Complex

- Alternative 1 (Status Quo): This option would continue to use biosolid digesters to treat primary and secondary solids and would likely require expansion and/or rehabilitation of existing facilities
- Alternative 2 (Clean B): This option implements a chemical treatment system that will treat secondary solids without the need of a digester. This would eliminate approximately 50% of the sludge stream to the digester complex, reducing the overall capacity needed to digest sludge and reducing the heating needed to maintain digester temperature
- The alternatives have different heating and controls requirements that directly impact the design of a new or rehabilitated Digestion Complex. An alternative needs to be selected prior to design of a new or rehabilitated complex
- The WRF will fund a pilot to gather data on the Clean B system and its functionality at the Facility for this evaluation. Stantec will provide engineering support during the pilot test

Funding/Project Costs:

- Stantec's Scope of Work includes project management and digester complex alternative planning in an amount not to exceed \$97,444.00 (Exhibit A)
- This project was eligible for grant funding with the State of Idaho Department of Environmental Quality Leading Idaho Planning Grant
 - Grant funding will total \$48,722.00 (50% of the project)
- The remaining \$48,722.00 will be funded by the City's Water Renewal Facility Capital Improvements Plan's Boiler Project (Approved in FY25 budget)

Staff Recommendation:

- Public Works staff recommend authorizing Mayor and Public Works Director to sign a task order with Stantec for the Water Renewal Facility Digestion Complex Heating and Alternatives Evaluation in an amount not to exceed \$97,444.00

Attachments:

- Exhibit A: Digestion Complex Heating and Alternatives Evaluation – Scope of Services
- Exhibit B: State of Idaho Department of Environmental Quality Leading Idaho Planning Grant Acceptance and Agreement for Wastewater Facilities