BOZEMAN MT

Memorandum

REPORT TO: City Commission

FROM: Jon Kercher, Water Reclamation Facility Superintendent
Shawn Kohtz, Utilities Director

SUBJECT: Authorize the City Manager to sign a Professional Services Agreement with Jacobs for Engineering Services to Study the Phosphorous Removal Process in Place at the Water Reclamation Facility

MEETING DATE: January 28, 2025

AGENDA ITEM TYPE: Agreement - Vendor/Contract

RECOMMENDATION: Approve and authorize the City Manager to sign a Professional Services Agreement with Jacobs for engineering services to study the phosphorous removal process in place at the Water Reclamation Facility.

STRATEGIC PLAN: 7.3 Best Practices, Creativity & Foresight: Utilize best practices, innovative approaches, and constantly anticipate new directions and changes relevant to the governance of the City. Be also adaptable and flexible with an outward focus on the customer and an external understanding of the issues as others may see them.

BACKGROUND: Secondary treatment at the Water Reclamation Facility (WRF) utilizes enhanced biological phosphorus removal, which results in high concentrations of phosphate in the part of the WRF that processes solids. To address phosphate concerns, the WRF adds a 60% magnesium hydroxide slurry into the treatment process to sequester released phosphate as struvite. The struvite is retained in the solids and is ultimately disposed at the Logan landfill. The plant has been dosing magnesium since 2017, coinciding with treatment process upgrades at the WRF.

The cost of this magnesium addition has increased steadily over the last five years, and an evaluation of current performance, as well as future needs is warranted if the City is to continue maintaining current performance in a cost-effective way. This study will help us determine the most cost-effective strategy for managing phosphorus in the solids while maintaining WRF performance.

UNRESOLVED ISSUES: None

ALTERNATIVES: As Suggested by the Commission

FISCAL EFFECTS: The total cost for these professional services is $49,995. Funding has been

allocated in the FY25 Small Works budget for the Water Reclamation Facility.

Attachments:
Bozeman Phosphorus Short Form PSA Engineering_Final Jacobs Executed 1.10.25.pdf

Report compiled on: January 10, 2025