



AGENDA MEMORANDUM

Action Item for the City Council Meeting June 29, 2021

DATE: June 29, 2021

TO: Peter Zaroni, City Manager

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Purchase of Two Spencer Blowers for the Utilities Department

CAPTION

Resolution authorizing the purchase of two wastewater aeration blowers from the Spencer Turbine Company of Windsor, Connecticut for the Utilities Department to be placed at the Oso Water Reclamation Plant and the Allison Wastewater Treatment Plant, in the amount of \$191,461.00 with FY 2021 funding available in the Wastewater Fund.

SUMMARY:

The aeration blowers will be used in the wastewater treatment process at Oso Water Reclamation Plant (WRP) and Allison Wastewater Treatment Plant (WWTP).

BACKGROUND AND FINDINGS:

Blowers play an essential role in the wastewater treatment process by providing oxygen for aeration and to keep the solids suspended, which enhances the biological breakdown of the solids to increase treatment efficiency and decrease the disposal requirements.

The Oso WRP typically runs 11 of 13 blowers to support daily operations that treat roughly 50% of the City's wastewater. All 13 blowers are used when flows are high. The blowers were provided by two vendors: Gardner Denver Nash, LLC, and the Spencer Turbine Company. The blowers were installed 1978-1984 and have exceeded their useful service life. It takes 11 blowers to meet the typical oxygen requirements of the treatment process at Oso WRP, and plant staff struggle to keep pace with the frequency and urgency of repairs. The on-going CIP project, Oso WRP Process Upgrade, will ultimately replace all the blowers, but that project is not expected to be complete for another four years.

In April, two blowers at Oso WRP were damaged due to power surges, which unfortunately occurred during a period of high flows when all 13 blowers were in use. The loss of these blowers resulted in deficient oxygen levels within the treatment process, which led to excessive solids throughout the plant, and consequently caused high solids and foam to be discharged in the effluent water. One of the damaged blowers that needs to be replaced is a Gardner blower, and the second is a Spencer blower.

The Allison WWTP runs four blowers that were installed in 1984 and have reached their service life. The blowers will be replaced during the current CIP project that will complete in 2023. One Spencer blower is needed as a spare and can be used at Oso WRP if needed.

This purchase contract is necessary to provide two aeration blowers: one for Oso WRP and one for Allison WWTP.

PROCUREMENT DETAIL:

This is a sole source purchase. The Spencer Turbine Company is the sole provider of Spencer blowers, including parts and service.

ALTERNATIVES:

An alternative would be to not purchase these spare blowers and operate the equipment to failure, which can result in public health and safety issues.

FISCAL IMPACT:

The fiscal impact for the Wastewater Fund in FY2021 is \$191,461.00.

Funding Detail:

Fund:	4200	Wastewater
Organization/Activity:	33110	Oso Wastewater Treatment Plant
Mission Element:	064	Treat wastewater
Project # (CIP Only):	N/A	
Accounts:	550040	Other equipment
Fund:	4200	Wastewater
Organization/Activity:	33130	Allison Wastewater Treatment Plant
Mission Element:	064	Treat wastewater
Project # (CIP Only):	N/A	
Accounts:	550040	Other equipment

RECOMMENDATION:

Staff recommends approval of the purchase of two spare blowers from Spencer Turbine Company as presented.

LIST OF SUPPORTING DOCUMENTS:

Resolution
Price Sheet