



STAFF REPORT – CITY COUNCIL MEETING

TO: Honorable Mayor and City Council Members

FROM: Emily Sinkhorn, Director of Environmental Services

PREPARER: Emily Sinkhorn, Director of Environmental Services

DATE: May 21, 2025

TITLE: **Award an Annual Contract to Newterra in the Amount of \$75,600 for Fiscal Year 2025/26 for Quarterly Maintenance of Aerators in the Arcata Wastewater Treatment Plant Oxidation Ponds; and Authorize the City Manager to Execute Current and Future Contracts.**

RECOMMENDATION:

It is recommended that the Council:

- 1) Award a contract to Newterra Corporation Inc. in the amount of \$75,600 for the 2025/26 fiscal year for quarterly maintenance of aerators in the Arcata Wastewater Treatment Plant Oxidation Ponds;
- 2) Authorize the City Manager to award this contract in future fiscal years; and
- 3) Authorize the City Manager to execute all applicable documents.

INTRODUCTION:

As part of the Wastewater Treatment Plant Upgrade project, the City has recently acquired several pieces of high value equipment, including new aerators in the Oxidation Ponds, that requires strict adherence to preventative maintenance schedules to maintain the warranty. Current maintenance and operations staff provide maintenance on existing and new treatment equipment but have limited capacity to keep pace with the required maintenance workload for all equipment. This service agreement will ensure that prescribed preventive maintenance is performed on high value equipment (aerators) and the warranty preserved.

The service contract will provide quarterly full-service with on-site maintenance on twenty-four Triton aerators. Two Newterra field service technicians will be on-site for up to twenty-four hours for each quarterly service. The work will be spread across three days and will include all necessary preventative maintenance tasks as listed in the aerator (Triton) manual.

BACKGROUND:

Aerators in the oxidation ponds are dual purpose. The primary purpose of the aerators is to add oxygen to facilitate aerobic biological processes in the oxidation ponds. The addition of oxygen optimizes the pond treatment system to remove biological oxygen demand (BOD) efficiently and convert ammonia-nitrogen to nitrate-nitrogen, in a process known as nitrification. The secondary purpose of the aerators is to provide a degree of disturbance to the layer of accumulated material that

has settled in the oxidation ponds overtime. By resuspending this material, it is put back into the water column for additional treatment and movement through the treatment process.

The predesign report for the Arcata Wastewater Treatment Facility Upgrade Project includes a study “Performance Expected and Operational Requirements for the Arcata, CA Wastewater Treatment Facility” (Middlebrooks, 2016). The study provides analysis of data that shows that with the installation of aerators in the oxidation ponds and diligent operation, the treatment plant can produce an effluent ammonia concentration in the range of 4-6 mg/L and meet BOD, total suspended solids (TSS), and pH effluent limitations. Taking this into consideration, Phase I of the Arcata Wastewater Treatment Facility Upgrade Project included installation of 16 aerators in Oxidation Pond 2. Other recommendations from the 2016 study, notably, replacement of eight aerators in Oxidation Pond 1, installation of a baffle wall in Oxidation Pond 2, and improved flow control between the two oxidation ponds have also been implemented.

Final ammonia limitations in the city’s National Pollutant Discharge Elimination System (NPDES) permit will be applied upon completion of the future Phase II Arcata Wastewater Treatment Facility Upgrade Project. Aerator installation is designed to optimize ammonia treatment in the oxidation ponds and inform the Phase II design on the degree of additional ammonia treatment needed to meet final effluent ammonia limitations.

It is recommended that the Council award the maintenance contract to Newterra, the manufacturer of the installed aerators, as a contract with the manufacturer of this unique equipment will be more efficient and cost-effective than a third-party not as closely familiar with the equipment. Given this situation, staff recommend that it is in the public interest to award a sole-source contract for aerator maintenance.

BUDGET/FISCAL IMPACT:

The budget for this maintenance contract is within the budget allocation in the 2024/25 Fiscal Year and is proposed as a budget allocation for the 2025/26 fiscal year to continue the maintenance work.

Account Number	Amount	Account Name
662-60-67-51770	\$75,600	Wastewater Fund, Other Professional Services

RECOMMENDED COUNCIL ACTION:

Motion to 1) award a contract to Newterra Corporation Inc. in the amount of \$75,600 for the 2025/26 fiscal year for quarterly maintenance of aerators in the Arcata Wastewater Treatment Plant Oxidation Ponds; 2) authorize the City Manager to award this contract in future fiscal years; and 3) authorize the City Manager to execute all applicable documents. Consent Calendar vote.

ATTACHMENTS:

- A. Quote from Newterra (PDF)