

# MEMORANDUM

March 30, 2012

**TO:** Board of Mayor and Aldermen

**FROM:** Eric S. Stuckey, City Administrator

Russell Truell, Assistant City Administrator / CFO

Mark Hilty, Water Management Director Brian Wilcox, Purchasing Manager

**SUBJECT:** Report of emergency purchase order from John Bouchard & Sons Co. of Nashville, TN in the

total amount of \$43,049.95 for the removal, rebuild and reinstallation of one (1) Sumitomo aerator gearbox for oxidation ditch no. 3 at the Water Reclamation Facility of the Water

Management Department (not separately budgeted for fiscal year 2012; Contract No. 2012-0031)

### **Purpose**

The purpose of this memorandum is to report the emergency purchase order from John Bouchard & Sons Co. of Nashville, TN in the total amount of \$43,049.95 for the removal, rebuild and reinstallation of one (1) Sumitomo aerator gearbox for oxidation ditch no. 3 at the Water Reclamation Facility.

#### **Background**

One of the aerator gearboxes for oxidation ditch no. 3 is in critical need of a rebuild. Rebuild will include new bearings, seals, gaskets, and paint. This piece of equipment is currently out of service due to its deteriorated condition. The gear box in question is driven by a 150-horsepower motor and together they aerate the mixed liquor in the oxidation ditch to help maintain a dissolved oxygen level of 1 mg/L. At present the City is able to maintain the 1 mg/L dissolved oxygen with the remaining operating aerators on ditch no. 3 because of the relatively low temperatures. During the warmer summer months, biological activity in the oxidation ditches increases and requires more energy to maintain the 1 mg/L of dissolved oxygen. It is critical that this unit is repaired as soon as possible due to the approaching warmer weather. Rebuilding this unit on site is not possible.

Cost for the rebuild itself is \$30,433.95. Due to the excessive weight of this unit, removal and reinstallation will require the use of a crane (\$6,308.00 for labor and equipment for the removal and install, each). This brings the total cost of the rebuild to \$43,049.95. Additional cost may be required if any gears or housing needs to be replaced. Lead time to remove, rebuild and reinstall the unit is 6 to 8 weeks.

#### **Financial Impact**

While this is not a budgeted item, staff has identified budgeted projects that are lower priority and could be delayed.

## **Options**

In addition to having the aerator gearbox rebuilt, staff has explored and priced the option of replacing the aerator gearbox with a new one. Quotes to purchase a new aerator gearbox have ranged from \$65,216.00 to \$72,933.38, including removal of the old and installation of the new. In addition, the lead time to receive and install a new gearbox is 35 to 38 weeks, a duration that is unacceptable at this time of year.

#### Recommendation

Given the need to authorize the replacement (rebuild) of aerator as quickly as possible due to the impact to the City's wastewater treatment operation, the City Administrator has approved this emergency purchase and is bringing the item to the Board at the closest scheduled meeting of the Board of Mayor and Aldermen.