



Legislation Text

File #: 18-0818, **Version:** 1

Item:

Sole Source Service Contract With Source Technologies for Pump Station Odor Control

Date of BOCC Meeting: June 11, 2018

Request for Board Action:

The Board is requested to authorize the County Manager to enter into a service contract with Source Technologies for the operation and maintenance of the STX and hydrogen peroxide odor control system for Slater Road, Stirrup Iron, and Page Point wastewater pump stations for fiscal year 2019 in the amount of \$128,370.50.

Background:

Historically Durham County has used a combination of calcium nitrate tetrahydrate and calcium ammonium nitrate to minimize the generation of hydrogen sulfide gases produced by bacteria in the sewer system. To further decrease total effluent nitrogen at the Triangle Wastewater Treatment Plant (TWWTP), staff investigated several technologies to eliminate intentional introduction of nitrate compounds into the wastewater.

In December of 2017, TWWTP staff completed a pilot program with Source Technologies to demonstrate the effectiveness of STX and hydrogen peroxide to control hydrogen sulfide generation. STX is a catalyst manufactured by Advanced Oxidation Technology. The initial results of the pilot study indicated STX and hydrogen peroxide would be able to provide an equal amount of protection against sulfide generation when compared to the calcium nitrate solutions (study attached). In addition, STX and hydrogen peroxide do not introduce any additional nitrate or ammonia into the collection system that must be removed at the TWWTP.

The STX and Hydrogen Peroxide System is comparable in cost to calcium nitrate. The cost of the Source Technologies system is approximately \$0.100 per gallon of wastewater treated compared with the cost of calcium nitrate of approximately \$0.095 per gallon of wastewater treated. However, Source Technologies provides all equipment and operates the chemical feed system, thus freeing up Durham County staff for other operations and tasks.

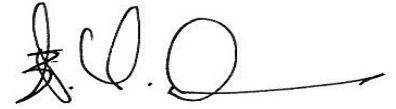
Source Technologies LLC is a sole source provider of Advanced Oxidation Technology's products in the state of North Carolina, thus this service was not advertised. The sole source letter is attached for reference.

Alignment With Strategic Plan: This action is in accordance with Durham County Strategic Plan Goal 4: Environmental Stewardship and Community Prosperity, as STX and hydrogen peroxide will provide odor and corrosion control within the wastewater collection system resulting in an increase in the useful life of pump stations and gravity sewer lines, thus minimizing the risk of system failures due to corrosion.

Resource Persons: Jay Gibson PE, General Manager; Kyle Manning PE, Senior Project Manager and Greg Johnson, Utility Superintendent

County Manager's Recommendation: The County Manager recommends the Board authorize the County

Manager to enter into a service contract with Source Technologies for the operation and maintenance of the STX and hydrogen peroxide odor control system for Slater Road, Stirrup Iron, and Page Point wastewater pump stations for fiscal year 2019 in the amount of \$128,370.50.

A handwritten signature in black ink, appearing to read "J. C. O.", followed by a horizontal line extending to the right.

County Manager: _____