



## City of Hallandale Beach City Commission Agenda Cover Memo

Meeting Date:	Item Type:		1 <sup>st</sup> Reading	2 <sup>nd</sup> Reading
6/3/2020	<input checked="" type="checkbox"/> Resolution	Ordinance Reading	N/A	N/A
File No.:	<input type="checkbox"/> Ordinance	Public Hearing	<input type="checkbox"/>	<input type="checkbox"/>
20-127	<input type="checkbox"/> Other	Advertising Required	<input type="checkbox"/>	<input type="checkbox"/>
		Quasi-Judicial:	<input type="checkbox"/>	<input type="checkbox"/>
Fiscal Impact (\$):	Account Balance (\$):	Funding Source:	Project Number :	
\$138,250.00	\$138,250.00	Utility Fund Water Production 3320W-565000	P1902	
Contract/P.O. Required	RFP/RFQ/Bid Number:	Sponsor Name:	Department:	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	RE-BID # FY 2018-2019-008-001	James Sylvain, P.E. Director	Public Works	
Strategic Plan Focus Areas:				
<input checked="" type="checkbox"/> Financial	<input checked="" type="checkbox"/> Organizational Capacity	<input checked="" type="checkbox"/> Infrastructure	<input type="checkbox"/> Development, Redevelopment and Economic Development	
Implementation Timeline				
Estimated Start Date: 7/20/2020   Estimated End Date: 10/20/2020				

### SHORT TITLE:

A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF HALLANDALE BEACH, FLORIDA AWARDDING RE-BID # FY 2018-2019-008-001 TO TLC DIVERSIFIED, INC. TO REMOVE AND REPLACE DEGASIFIER PACKING MEDIA IN AN AMOUNT NOT TO EXCEED \$138,250; AUTHORIZING THE CITY MANAGER TO NEGOTIATE AND EXECUTE ALL NECESSARY AGREEMENTS TO EFFECTUATE THE AWARD; AND PROVIDING AN EFFECTIVE DATE.

## **STAFF SUMMARY:**

### **Summary:**

This agenda item seeks City Commission authorization to contract with TLC Diversified, Inc., herein after referred to as TLC the lowest responsible bidder for the removal and replacement of the Degasifier Packing Media for an amount not to exceed \$138,250. (Exhibit 5)

### **Background:**

The degasifier packing media helps reduce and remove unwanted elements and gases in the pre-treated water after that water makes it through the nano filtration membrane. The degasifier packing media remove particles of metals such as iron and manganese that are too small to be caught in the nano filtration membrane. They also allow gases such as carbon dioxide, methane and hydrogen sulfide; and volatile substances such as phenol to escape/vaporize from the water. The water treatment plant's two (2) degasifier towers (Exhibit 3) have been working in an alternating mode since they were first commissioned back in 2008. The City's Plant Maintenance Mechanics have been regularly putting them through rigorous scheduled cleaning as a Preventive Maintenance (PM) measure. The PM schedule has kept them functioning properly longer than expected using the same media even in the harshest conditions.

On September 18, 2019, the City Commission approved a Resolution 2019-077 authorizing the replacement of the nano filtration membrane. This project is slated to start as soon as we get back to normal business and will take approximately three (3) months to be completed.

### **Current Situation:**

The replacement of the degasifier packing media will closely follow the replacement of the nano filtration membrane in order to have a comprehensive recommissioning of the water filtration system at the water plant. The existing degasifier packing media are past their useful life which is 8 to 10 years. They should have been replaced 4 years ago. However, staff managed to get more use out of them thanks to a rigorous PM schedule.

On August 15, 2019, RE-BID FY 2018-2019-008-001 (Exhibit 2) was advertised for the replacement of the degasifier packing media. TLC diversified, Inc. and Lawrence Lee Construction were the only two bidders for this project. See bid tabulation. (Exhibit 4)

Once approved by the City Commission, staff expects installation to commence within eight (8) weeks upon receipt of a purchase order and will be completed within 2 ½ months. However, this project will not start until the completion of the Nano Filtration Membrane Replacement.

### **Why Action is Necessary:**

Pursuant to Chapter 23, Section 23-4, Competitive Bidding Required, all purchases of and contracts for equipment, supplies and contractual services, when the estimated cost shall exceed \$50,000.00 shall be based on competitive bids. Furthermore, pursuant to Chapter 23, Section

23-6, Award of Contract, the City Manager, shall have the authority to recommend to the City Commission award of contracts.

**Cost Benefit Analysis:**

The City has the following the following options:

- 1) Invest in the replacement of Degasifier Packing Media at a cost of \$138,250 and have new, reliable units installed to provide improved water quality with regard to taste and smell to our residents.
- 2) Continue to use the existing units and save the \$138,250. This increases the risk of failure that when occurs will have to be addressed under emergency condition resulting in higher costs (\$200,000 or more), increased staff overtime, and substandard (smelly, unpleasant tasting) water to our residents.

Staff recommends in moving forward with option 1, as the Degasifier Packing Media is a critical component of the City's drinking water production process. As a preventative measure for health safety and effectiveness of operations, pursuing purchase of this product will ensure service reliability and service efficiency. Degasifier Packing Media removes volatile gasses from the water that passes through from the Reverse Osmosis (R.O.) Nanofiltration process. Additionally, the membrane of the R.O. process has deteriorated to the point of allowing Iron to pass through and accumulate in Degasifier Packing Unit. The described effect has caused the Degasifier Packing Media to become less efficient at removing volatile gases such as carbon dioxide, methane and hydrogen sulfide, that help to give us above EPA standard quality water. The Water Plant's Degasifier Packing Media is 10 years old and the typical life span of this media is 8 to 10 years, according to industry standards.

The membrane of the R.O. system that is directly before the Degasifier Packing Media is currently being replaced and staff believes it makes best business sense to replace the Degasifier Packing Media concurrently. If the choice were to not replace the Degasifier Packing Media at this time and it should suffer a greater loss of efficiency, the water quality as it relates to smell, taste and odor would deteriorate drastically. Changing the degasifier concurrently with the membrane section of the R.O., will improve operational efficiency as the R.O. system will benefit with new critical components to serve the water filtration process.

Additionally, getting the Degasifier Packing Media at a later time would require a substantial lead time, leaving the City in the situation of less than palatable water being distributed to our citizens for an extended period. Of all of the quotes received, the proposed vendor was the lowest by a minimum of \$75,000.00.

<b>PROPOSED ACTION:</b>
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Staff recommends that the City Commission approve the contractor, TLC Diversified, Inc., herein after referred to as TLC, in accordance with RE-BID # FY 2018-2019-008-001 (Exhibit 2), to remove and replace Degasifier Packing Media listed in Exhibit (5) in an amount not to exceed \$138,250.

<b>ATTACHMENT(S):</b>
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Exhibit 1 – Resolution

Exhibit 2 \_ RE-BID # FY 2018-2019-008-001

Exhibit 3 – City of Hallandale Beach Degasifier Twin Tower photo

Exhibit 4 \_ Bid Tabulations

Exhibit 5 – TLC Diversified, Inc. Proposal