



### AGENDA ITEM EXECUTIVE SUMMARY

Agenda Item:	Wastewater Plant Polymer Purchase		
Presenter & Title:	Bob VanGyseghem, Superintendent of Water & Wastewater		
Date:	April 20, 2020		
<b>Please Check Appropriate Box:</b>			
	Committee of the Whole Meeting		Special Committee of the Whole Meeting
X	City Council Meeting		Special City Council Meeting
	Public Hearing		Other -
Associated Strategic Plan Goal/Objective: EMS-II			
Estimated Cost: \$ 75,000	Budgeted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Other Funding? <input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>Executive Summary:</b>			
<p>The Wastewater Treatment Plant utilizes polymer to aid in the thickening and dewatering of its processed sludge. Due to a price increase of the previous polymer vendor in 2018, staff evaluated an alternative polymer based upon effectiveness, feed rates and cost per pound of sludge processed. Solenis provided a higher quality (more active) polymer that required less volume of polymer solution to be utilized with greater sludge feed rates, which reduced the overall cost of polymer per pound of sludge. Reduced polymer volume also equates to less product handling by staff. A 40% reduction results in 50 to 60 less drums received per year. (each drum of polymer weights 450 lbs.) Staff is recommending entering into an agreement with <u>Midwest Chemical &amp; Equipment</u> for the purchase of “Solenis – Praestol K144L” polymer at \$1.42 per pound, delivered for the period of May 1, 2020 thru April 30, 2021.</p>			
<b>Attachments: (please list)</b>			
<ul style="list-style-type: none"> <li>• Resolution</li> <li>• Purchase Agreement</li> <li>• Analysis</li> </ul>			
<b>Voting Requirements:</b>			
<p><i>This motion requires <u>  7  </u> affirmative votes for passage.</i></p> <p><i>The Mayor may vote on three occasions: (a) when the vote of the aldermen or trustees has resulted in a tie; (b) when one half of the aldermen or trustees elected have voted in favor of an ordinance, resolution, or motion even though there is no tie votes; or (c) when a vote greater than a majority of the corporate authorities is required by state statute or local ordinance to adopt an ordinance, resolution, or motion.</i></p>			
<b>Recommendation / Suggested Action: (how item should be listed on agenda)</b>			
<p>Recommend approval of a Resolution waiving competitive bidding and authorizing the purchase of Solenis – Praestol K144L polymer from Midwest Chemical &amp; Equipment at a cost of \$1.42 per pound throughout Fiscal Year 2021 not-to-exceed the budgeted amount of \$75,000.</p>			

**RESOLUTION NO. 2020-32**  
**RESOLUTION AUTHORIZING EXECUTION OF**  
**Purchase of Polymer for Wastewater Treatment Plant**

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**BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GENEVA, KANE COUNTY, ILLINOIS**, as follows:

**SECTION 1:** That the City Administrator is hereby authorized to execute, on behalf of the City of Geneva, a Purchase Agreement with Midwest Chemical & Equipment, for polymer to be used at the Wastewater Treatment Plant.

**SECTION 2:** This Resolution shall become effective from and after its passage as in accordance with law.

**PASSED** by the City Council of the City of Geneva, Kane County, Illinois, this \_\_\_\_ day of \_\_\_\_\_, 2020

**AYES: \_\_ NAYS: \_\_ ABSENT: \_\_ ABSTAINING: \_\_ HOLDING OFFICE: \_\_**

Approved by me this \_\_\_\_ day of \_\_\_\_\_, 2020.

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
City Clerk

April 13, 2020

To: City of Geneva, IL

Attn: Dan Dobnick

Quote: Praestol K144L – May 1, 2020 through April 30, 2021 Pricing

On behalf of Solenis and myself, I would like to propose the following pricing on your polymer requirement. Pricing and terms as follows:

Product: Praestol K144L

Pricing: \$1.42 per lb (delivered price)

Guarantee: 100% supply, quality and service at all times

Terms: Net 30 days

Ordering: David Olson @ (920)615-2288 or [djolson@midwestce.com](mailto:djolson@midwestce.com)

Thank you for your continued business.

Sincerely,

Andrew Rossetti  
Authorized Solenis Sales Agent

<b>Polydyne</b>		<b>Solenis</b>	
Clarifloc NW-193		Praestol K144L	
	<b>\$1.15</b> <i>per pound polymer</i>		<b>\$1.42</b> <i>per pound polymer</i>
Increase 2018			
<b>\$8,319.26</b>	2.02 %TS	2.09 %TS	Feed Sludge
	0.135 %TS	0.142 %TS	DH2O Centrate
	23.32 %TS	23.42 %TS	Biosolids [Cake]
	93.2 %	93.2 %	Capture Rate
	111.0 GPM	116.8 GPM	Sludge Feed Rate
	68.37 Lbs/Hr	38.41 Lbs/Hr	<b>Polymer Feed Rate</b>
	8.36 GPH	5.23 GPH	
	93.5 Gallons	160.1 Gallons	Sludge per pound Polymer
	14.7 Lbs	27.6 Lbs	
	<b>\$0.078</b>	vs	<b>\$0.051</b> Cost per pound Sludge
\$63,780.96	Estimated Annual*	\$41,812.00	57.8 Reduction in number of drums received per year
		*based upon production of 406.8 DT/Year	
\$11,902.50	TWAS**	\$14,697.00	**based upon 23 drums per Year -- Not Evaluated at th is time...