MANAGEMENT SERVICES DEPARTMENT
PURCHASING DIVISION
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ADDENDUM #1
November 9, 2022

TO:	**ALL Pre-Qualified Vendors**
PROJECT:	**Term Contract for Belt Press Polymer**
BID REFERENCE #:	**88500-002.0**
BID DUE DATE:	**November 22, 2022 by 3:30 p.m.**

The purpose of this addendum is to clarify and/or modify the Specifications for this project. All work affected is subject to all applicable terms and conditions of the Bidding and Contract Documents.

1. **REVISED:** ***Please see Attachment A*** – Revised SECTION II - BID AND AWARD – Pages 2 **PLEASE USE THE ATTACHED REVISED BID & AWARD PAGES WHEN SUBMITTING BIDS FOR THIS PROJECT.**

2. **ADDITION:** ***Please see Attachment B*** – Copies of Test Trials

Bidders shall address questions regarding the specifications to Jim Cornell, Wastewater Division Manager at cornellj@kalamazoocity.org.

The Addendum can be viewed and downloaded from the City's website at https://www.kalamazoocity.org/bidopportunities.

In order for a bid to be responsive, this signed addendum must be returned with your bid. If you have already submitted your bid, acknowledge receipt and acceptance of this addendum by signing in the place provided and returning it to the undersigned and it shall be incorporated in your bid. Mark envelope – Sealed Bid – *Term Contract for Belt Press Polymer* 88500-002.0 and due date.

Sincerely,

Michelle Emig
Purchasing Division Manager

c: Jim Cornell, Public Services

FIRM: _____ SIGNED: _____

NAME: _____ DATE: _____
(Type or Print)

Addendum #1

Attachment A

Revised SECTION II - BID AND AWARD – Pages 2

Term Contract for
BELT PRESS POLYMER

Bid Reference #: 88500-002.0

REVISED

SECTION II
BID AND AWARD

The undersigned having become thoroughly familiar with and understanding all of the bid/contract documents incorporated herein, agrees to provide belt press polymer as specified herein:

Polymer for both Primary and Secondary Sludge

			YEAR ONE PRICING		YEAR TWO PRICING	
	Primary/Secondary Sludge Polymer	Est. Qty. in lbs (*)	UNIT PRICE/LB	EXTENDED PRICING	UNIT PRICE/LB	EXTENDED PRICING
A	**Polydyne CE2430**	813,037 lb/ yr	$	$	$	$
B	**Aquamark 2504**	838,444 lb/ yr				
C	**Solenis 260FL**	660,593 lb/ yr				
D	**Solenis Zetag 8816**	660,593 lb/ yr				
E	**Polydyine CE2431**	736,815 lb/ yr				
	GRAND TOTALS			$		$

OPTIONAL:
Provide polymer in totes:

			YEAR ONE PRICING		YEAR TWO PRICING	
	Primary/Secondary Sludge Polymer - TOTES	Number of Totes	UNIT PRICE/EA	EXTENDED PRICING	UNIT PRICE/EA	EXTENDED PRICING
A	**Polydyne CE2430**		$	$	$	$
B	**Aquamark 2504**					
C	**Solenis 260FL**					
D	**Solenis Zetag 8816**					
E	**Polydyine CE2431**					
	GRAND TOTALS			$		$

Guaranteed delivery within 3 - 5 working days after receipt of order. Three to five working days would be the responsible and preferred period.

Contact person for order releases shall be:

Name: _____ **Phone: _____**

Estimated dry tons per year 20,403 tons (May-Sept 2022)
Secondary sludge dry tons per year 12,127 tons (May-Sept 2022) approx. 59.4% of 20,403 tons.
Primary sludge dry tons per year 8,276 tons (May-Sept 2022) approx. 40.6% of 20,403 tons.

May-Sept 2022 values were used due to loadings increases realized by the expansion of Graphic Packaging expansion during that period.

(*) Pounds of polymer per year based on trial spread sheet data.

Are you bidding price per gallon instead of price per pound? _____ per gal _____ per lb.

If bidding price per gallon, provide gallons per year estimate for your product:

_____

Addendum #1

Attachment B

TEST TRIAL SPREADSHEETS

Term Contract for
BELT PRESS POLYMER

Bid Reference #: 88500-002.0

Aquamark Polymer Trial

		Sludge Characteristics			Centrifuge Parameters						Lab Data
Sample Time	Product	Primary %	Secondary %	Sludge Density %	Feed Pump Speed SP (%)	lbs Active Polymer per Ton Solids (lbs)	P1 Setpoint	Hyraulic Pressure Actual	ΔN Setpoint	Differential Speed (rpm)	% Solids (Lab)
9:15 AM	2504	45%	55%	4.5%	55%	26	100	101	1.5	1.8	21.93%
9:45 AM	2504	45%	55%	4.5%	55%	26	100	91	1.5	1.5	20.61%
10:15 AM	2504	45%	55%	4.5%	55%	26	100	99	1.5	1.8	21.38%
10:50 AM	2504	45%	55%	4.5%	55%	26	100	97	2.1	2.1	20.80%
11:50 AM	2504	45%	55%	4.5%	55%	29	100	85	1.5	1.5	20.43%
12:20 PM	2504	45%	55%	4.5%	55%	32	100	101	1.5	1.9	21.95%
12:40 PM	2504	45%	55%	4.5%	55%	33	100	107	1.5	2.6	23.08%
1:10 PM	2504	45%	55%	4.5%	65%	33	100	109	1.5	2.6	22.73%
1:40 PM	2504	45%	55%	4.5%	45%	33	100	100	1.5	1.5	22.25%
2:00 PM	2504	45%	55%	4.5%	55%	33	100	104	1.5	1.8	22.46%

= Highlighted Cells Signify A Change In An Operating Parameter

Polymer Tested at three common Centrifuge Feed Pump Speed Setpoint percentages (45%, 55%, 65%)

Centrifuge Parameter: "Lbs Active Polymer per Ton Solids (lbs)" assumes polymer is 100% active for calculation

Polydyne Polymer Trial

		Sludge Characteristics			Centrifuge Parameters						Lab Data
Sample Time	Product	Primary %	Secondary %	Sludge Density %	Feed Pump Speed SP (%)	lbs Active Polymer per Ton Solids (lbs)	P1 Setpoint	Hyraulic Pressure Actual	ΔN Setpoint	Differential Speed (rpm)	% Solids (Lab)
9:00 AM	CE-2431	45%	55%	4.5%	55	26	102	104	2.2	2.3	22.00%
9:30 AM	CE-2431	45%	55%	4.5%	55	26	100	99	2.4	2.5	20.96%
10:00 AM	CE-2431	45%	55%	4.5%	65	26	100	88	2.4	2.4	21.02%
10:30 AM	CE-2431	45%	55%	4.5%	45	26	100	88	2.4	2.4	19.54%
Switching Products											
11:30 AM	CE-2430	45%	55%	4.5%	55	28	100	102	2.2	2.4	21.65%
12:00 PM	CE-2430	45%	55%	4.5%	55	29	100	86	2.2	2.2	21.17%
12:30 PM	CE-2430	45%	55%	4.5%	65	32	100	105	2.2	3.1	22.63%
1:00 PM	CE-2430	45%	55%	4.5%	45	32	100	103	2.2	2.4	24.39%
1:30 PM	CE-2430	45%	55%	4.5%	55	32	100	101	2.2	2.6	23.93%
2:00 PM	CE-2430	45%	55%	4.5%	55	30	100	103	2.2	2.5	23.33%

= Highlighted Cells Signify A Change In An Operating Parameter

Polymer Tested at three common Centrifuge Feed Pump Speed Setpoint percentages (45%, 55%, 65%)
Centrifuge Parameter: "Lbs Active Polymer per Ton Solids (lbs)" assumes polymer is 100% active for calculation

Polydyne Rep did not like how CE-2431 was performing. Wanted to focus soley on Product CE-2430

Solenis Polymer Trial

		Sludge Characteristics			Centrifuge Parameters						Lab Data
Sample Time	Product	Primary %	Secondary %	Sludge Density %	Feed Pump Speed SP (%)	lbs Active Polymer per Ton Solids (lbs)	P1 Setpoint	Hyraulic Pressure Actual	ΔN Setpoint	Differential Speed (rpm)	% Solids (LAB)
8:30	260 FL	45%	55%	4.5%	55	26	100	106	2.4	3.0	22.38
9:00	260 FL	45%	55%	4.5%	55	26	100	106	2.4	3.0	23.70
9:30	260 FL	45%	55%	4.5%	65	26	100	105	2.4	3.3	23.26
10:00	260 FL	45%	55%	4.5%	55	26	100	104	2.6	3.0	23.45
10:30	260 FL	45%	55%	4.5%	55	26	100	107	2.2	2.8	22.99
11:00	260 FL	45%	55%	4.5%	55	24	100	102	2.4	2.8	23.98
11:20	260 FL	45%	55%	4.5%	55	24	100	106	2.2	2.7	23.32
11:40	260 FL	45%	55%	4.5%	45	24	100	103	2.4	2.5	22.79
12:10	260 FL	45%	55%	4.5%	45	24	100	104	2.4	2.5	23.08
Swapping Products											
13:00	Zetag 8816	45%	55%	4.5%	65	26	100	106	2.4	3.5	23.51
13:20	Zetag 8816	45%	55%	4.5%	55	26	100	104	2.4	2.8	23.14
13:35	Zetag 8816	45%	55%	4.5%	55	24	100	102	2.2	2.8	22.71
13:50	Zetag 8816	45%	55%	4.5%	55	22	100	106	2.2	2.7	22.78
14:05	Zetag 8816	45%	55%	4.5%	45	22	100	102	2.2	2.3	23.28

= Highlighted Cells Signify A Change In An Operating Parameter

Polymer Tested at three common Centrifuge Feed Pump Speed Setpoint percentages (45%, 55%, 65%)
Centrifuge Parameter: "Lbs Active Polymer per Ton Solids (lbs)" assumes polymer is 100% active for calculation