



APPOMATTOX RIVER WATER AUTHORITY
21300 Chesdin Road
Petersburg, VA 23803



SOUTH CENTRAL WASTEWATER AUTHORITY
900 Magazine Road
Petersburg, VA 23803

**ADVERTISEMENT FOR BIDS
APPOMATTOX RIVER WATER AUTHORITY
&
SOUTH CENTRAL WASTEWATER AUTHORITY**

BID INVITATION NO: 24-0111 **Addenda 1**

DATE: December 6, 2023

The following inquiry was received related to the Appomattox River Water Authority and South Central Wastewater Authority 2024 Chemical Bid.

- For item #3 Liquid Lime, please confirm if price requested is per dry or liquid ton.

The price for the 30% Liquid Lime Suspension should be for Wet Tons. An updated bid form sheet is included with this Addenda.

James C. Gordon
Assistant Executive Director
APPOMATTOX RIVER WATER AUTHORITY / SOUTH CENTRAL WASTEWATER AUTHORITY

APPOMATTOX RIVER WATER AUTHORITY & SOUTH CENTRAL WASTEWATER AUTHORITY
21300 CHESDIN ROAD
S. CHESTERFIELD, VIRGINIA 23803

PHONE: (804) 590-1145

2024 CHEMICAL BID

DUE: 2:00 P.M. JANUARY 11, 2024

PRODUCT: DESCRIPTION & SPECIFICATION	Delivery Location & Estimated Use/Year	Minimum Order	2024 Bid Price (per ton)	NSF or UL certified? Yes or No	Exception - If any please state
1 BLENDED PHOSPHATE (70-75%/25-30% Ortho/Poly) - LIQUID	ARWA only				
SPECIFICATION: Attached	300 Wet Tons				
CLOSED TRUCK WITH UNLOADING FACILITY		22 Tons			
2 HYDRATED LIME - BULK (see note 2 below)	ARWA only				
CURRENT EFFECTIVE AWWA SPEC. B202	100 tons				
68% MINIMUM AVAILABLE CaO - 32 lbs/cu ft density +/- 2 lbs					
CLOSED TRUCK WITH UNLOADING FACILITY		22 Tons			
3 30% Ca(OH)₂ LIQUID LIME SUSPENSION (see note 2 below)	ARWA only				
CURRENT EFFECTIVE AWWA SPEC. B202	125 Wet tons				
SPECIFICATION : Attached					
CLOSED TRUCK WITH UNLOADING FACILITY		22 Tons			
4 QUICK LIME - BULK	SCWWA only				
Award to be based on price and acceptability of lime to stabilize sludge					
Alternate 1 (see specification) or;	760 tons	25 Tons			
Alternate 2 (see specification) or;	760 tons	25 Tons			
Alternate 3 (see specification)	760 tons	25 Tons			
5 HYDROFLUOROSILICIC ACID - LIQUID	ARWA only				
CURRENT EFFECTIVE AWWA SPEC. B703	175 Wet Tons				
H2SIF6 23% MIN.					
CLOSED TRUCK WITH UNLOADING FACILITY		22 Tons			
6 SODIUM HYPOCHLORITE - LIQUID (Notes #10 and #12)	ARWA / SCWWA				
CURRENT AWWA SPEC: B300: 12.5% NaOCl solution	2500 / 850 Wet Tons				
Closed Truck With Pressure or Pumped Feed					
Fill Station Equipped With 2" Male Kamlock Adaptor		22 Tons			
7 ALUMINUM SULFATE - LIQUID (Note #10)	ARWA / SCWWA				
CURRENT EFFECTIVE AWWA SPEC: B403	5050 / 600 Wet Tons				
CLOSED TRUCK WITH UNLOADING FACILITY					
PRICE BASIS: 8.3% Al ₂ O ₃		22 Tons			
8 SODIUM HYDROXIDE-LIQUID CAUSTIC SODA (Note #10)	ARWA / SCWWA				
CURRENT EFFECTIVE AWWA SPEC: B501: 50% - FOOD GRADE	1200 / 200 Wet Tons				
CLOSED TRUCK WITH UNLOADING FACILITY		22 Tons			
9 AMMONIA - LIQUID - 19%	ARWA only				
CURRENT EFFECTIVE AWWA SPEC: B306	300 Wet Tons				
CLOSED TRUCK WITH UNLOADING FACILITY					
PRICE BASIS: 19% AMMONIA		22 Tons			
10 SODIUM HYDROXIDE-LIQUID CAUSTIC SODA	ARWA only				
CURRENT EFFECTIVE AWWA SPEC: B501: 32% - FOOD GRADE	650 Wet Tons				
CLOSED TRUCK WITH UNLOADING FACILITY		22 Tons			
11 HYDROCHLORIC ACID- LIQUID- 15% Strength	ARWA only				
ANSI/NSF 60 CERTIFIED FOR USE AS A DRINKING WATER ADDITIVE	200 Wet Tons	22 Tons			
12 EMULSION POLYMER - Thickening	SCWWA only				
specification based on Bench Testing	6 Wet Tons	250-300 gal Totes		NA	
13 EMULSION POLYMER - Dewatering	SCWWA only				
specification based on Bench Testing	30 Wet Tons	250-300 gal Totes		NA	
14 SODIUM BI-SULFITE	SCWWA only				
38% NAHSO in water	400 Wet Tons	22 tons			

NOTES / INSTRUCTIONS FOR BIDDERS:

- 1** All bids are for chemicals ordered on or after February 1, 2024 and through January 31, 2025.

- 2** The Appomattox River Water Authority is in the process of constructing a liquid lime feeding facility that is expected to be up and running in the middle of calendar year 2024. The Authority expects to order hydrated lime for the first half of 2024 and liquid lime for the second half of 2024 through the contract term of January 31, 2025.

- 3** **All prices are firm for one year unless otherwise stated at the time of bid.**

- 4** NSF, UL or similar certification is required (unless otherwise noted). Bidder must state this in the column provided. A copy of the Certification must be sent after notification of award & prior to any ordering.

- 5** Safety data sheets are required of the successful bidder immediately upon receipt of bid award and must be received prior to any order being placed.

- 6** For safety/security the Authority will not accept loads without knowledge of the driver & supplier of the chemical. Suppliers will be responsible for furnishing the Authority the appropriate driver information prior to delivery. If the information is not on hand, the load may be rejected.

- 7** The Authority will not accept loads after business hours (8am to 4 pm, Monday- Friday) without advanced request and agreement.

- 8** Payment will be made within 30 days of receipt of invoice. If the successful bidder chooses to participate in our electronic payment program, and offers a discount for early payment, then payment will be made within 15 days of receipt of invoice. Indicate on the Proposal the discount offered for this payment schedule. Discounts will be used to determine the low bidder in the event of a tie.

- 9** Suppliers shall comply with all requirements of this contract for the period stated above or shall fully reimburse and repay the Authority all expenses which the Authority may incur in making good any such default including, but not limited to, re-bidding the contract, machine down-time, removal of product, and cleaning of equipment.

- 10** For indicated delivery location, successful bidder agrees to provide full truckloads of chemical at this price.
For ARWA indicated delivery location - 21300 Chesdin Rd., S. Chesterfield, VA 23803
For SCWWA indicated delivery location - 900 Magazine Rd., Petersburg, VA. 23803

- 11** Orders will be placed on an as needed basis. With the exception of Blended Phosphate, delivery will be required within 96 hours (4 working days) of verbal notice. All deliveries must meet the needs of the Authority.

- 12** By signing this bid form, bidder certifies that they have access to more than one source of Sodium Hypochlorite that can meet above specification and can provide an uninterrupted supply if one source is unable to meet the needs of either Authority.

COMPANY NAME: _____

SUBMITTED BY: _____

DATE: _____ PHONE NO.: _____

SUBMITTED BY: _____

SPECIFICATIONS

I. **Ortho/Poly Blended Phosphate Specification (ARWA Only)**

1. % Total Phosphate as PO₄ = 36%
2. Total Phosphate contain: 70-75% Ortho-Phosphate and 25-30% Polyphosphate
3. Weight approximately 11 lbs/gal
4. Capable of sequestering iron & manganese
5. Capable of corrosion inhibition
6. pH 4 - 6

II. **Liquid Lime Specification (ARWA Only)**

1. % Liquid Lime Suspension = 30% Ca(OH)₂
2. pH 12.4 - 12.6
3. 99.9% passing US #30 Mesh
4. 94% passing US #200 Mesh
5. Vendor shall provide particle size classification of hydrated lime used in the preparation of the product.

III. **Quicklime Specification (SCWWA Only)**

a) Chemical Properties

- 1) Total CaO (94.0% Minimum)
- 2) Available CaO (92.0% Minimum)
- 3) MgO (1.5% Maximum)

b) Percent Passing

Sizings	Alternate 1	Alternate 2	Alternate 3
#20 Mesh	95% +/- 5%	100% +/- 5%	70% +/- 5%
#50 Mesh	55% +/- 5%	68% +/- 5%	50% +/- 5%
#100 Mesh	20% +/- 5%	26% +/- 5%	22% +/- 5%
#200 Mesh	5% +/- 5%	12% +/- 5%	10% +/- 5%

- c) Reactivity (Temperature Rise) – Minimum 48°C rise in 3 minutes.
- d) Lime will be ordered in 25 ton loads (nominal).
- e) Feed will be pneumatic.

IV. **Emulsion Polymer Specification (SCWWA Only)**

a) The polymer is to be used for conditioning secondary wastewater treatment plant sludge for thickening by two 3.0 meter REX Gravity Belt Thickeners and de-watering thickened sludge, co-mingled with primary sludge, by two 2.0 meter REX Belt Filter Presses. It is the South Central Wastewater Authority's desire to use one polymer on both units. Alternative bids for individual unit polymers will be considered but is not preferred. Gravity Belt Thickener and Belt Filter Press specifications as well as minimum cake and capture rate requirements are listed below.

b) The Polymer shall provide the following thickening performance using the criteria listed below:

Solids Type	Thickening	Dewatering
Feed Concentration	0.4-1.0% by weight	3.0-4.0 percent by weight
Hydraulic Loading Rate (Max.)	600 GPM	120 GPM
Dry solids Loading Rate (Max.)	3000 pounds per hour	2400 pounds per hour
Thickened Solids Concentration (Min.)	4-6 percent by weight	20 percent by weight
Solids Capture Rate (Min.)	95 percent	95 percent

- c) Polymer suppliers should note that the following chemicals are used in the Wastewater Treatment process: Alum, Sodium Hydroxide (Caustic), Sodium Hypochlorite, and Sodium Bi-Sulfite.
- d) After the contract is awarded, the Polymer supplier shall be required to provide periodic confirmation that the Polymer dosage rate remains at or below his proposed dosage rates accepted under this contract. If Polymer does not perform to bid specifications after 90 days of award, contract will be terminated and alternate bids will be considered