

INVITATION TO BID

The City of Somerset Water Service extends an invitation to bid for the following chemicals for water treatment:

- **Liquid Aluminum Sulfate**
- **Lime Slurry 25%**
- **Hydrofluorosilic acid 23%**
- **Sodium Hypochlorite**
- **Powdered Activated Carbon**
- **Phosphate**
- **Citric Acid 50%**
- **Sodium Bisulfite 38% to 40%**
- **Morton Salt 99.99% Culinox**
- **Potassium Permanganate Cairox**

Sealed bids will be accepted until 10:00 AM (local time) May 16, 2023 at the City of Somerset Water Service, 306 E. Mt. Vernon Street, 42501, or at P.O. Box 989, Somerset, Ky. 42502.

Bids will be for Fiscal Year of July 1, 2023, through June 30, 2024.

Specifications may be picked up at the Water Treatment Plant at 5400 South Highway 27 or the City of Somerset Energy Center 306 E. Mt. Vernon St.

Somerset Water Service reserves the right to accept or reject any and/or all bids.

Bids will be opened and reviewed at 10:00 AM on May 16, 2023 at the City of Somerset Energy Center located at 306 E. Mt. Vernon St.
Allen Keck, Mayor
Somerset Water Service

**THIS IS A LIST OF CHEMICALS
THAT THE
CITY OF SOMERSET
SOMERSET WATER PLANT
WOULD LIKE YOUR PARTICIPATION IN**

**WHEN YOU RECEIVE THIS WOULD YOU PLEASE CONTACT ME BACK SO I
KNOW YOU HAVE RECEIVED THIS.**

Jon Hammond

EMAIL jhammond@cityofsomerset.com

PHONE # 606-305-2675

INVITATION TO BID

A SEALED BID OPENING FOR THE PURCHASE OF CHEMICALS LISTED, FOR A POTABLE WATER TREATMENT PLANT OF 16 M.G.D. WILL BE RECEIVED BY THE CITY OF SOMERSET WATER SERVICE, PO BOX 989 SOMERSET, KY 42502 or 306 E. MT. VERNON STREET, SOMERSET, KENTUCKY 42501.

SAID BID WILL BE OPENED AND REVIEWED AT THE SOMERSET ENERGY CENTER 306 E. MT. VERNON STREET, IN THE COUNCIL CHAMBERS AT 1000 HRS. OR 10:00 AM ON DATE MAY 16, 2023

SAID BID WILL BE FOR THE FISCAL YEAR OF JULY 1, 2023-- THROUGH --JUNE 30, 2024.

SAID BID ALONG WITH SPEC SHEETS FOR EACH CHEMICAL BID MUST BE SUBMITTED IN A SEALED ENVELOPE ENCLOSED IN AN ENVELOPE AND MARKED CHEMICAL BID OPENING AND ADDRESSED TO THE CITY OF SOMERSET WATER SERVICE PO BOX 989 SOMERSET, KENTUCKY 42502.

LIQUID ALUMINUM SULFATE

WE HAVE 3 STORAGE TANKS 12,500 GALLON CAPACITY EACH.

REQUIREMENTS:

1.
 - A. TOTAL AL 203 MINIMUM OF-----8.0%
 - B. WATER IN SOLUBLES MAXIMUM OF-----0.02%
 - C. WATER SOLUBLES IRON AS (FE2 O3), MAXIMUM OF-----0.35%
 - D. BAUME-----35.5 TO 36 @60F.
 - E. MATERIAL SHOULD COMPLY WITH SPEC. #B403-93 AWWA.
 - F. 4,000 GALLONS OR 45,000 LBS. BULK SHIPMENT. **0800--1200 HOURS (AM) DELIVERY.**
 - G. MATERIAL SAFETY DATA SHEET (MSDS) SUPPLIED WITH EACH ORDER.
 - H. **CERTIFICATE OF ANALYSIS SUPPLIED WITH EACH ORDER.**
 - I. **CHEMICAL WILL BE BID ON TOTAL WEIGHT, NOT % PURITY, A MINIMUM OF 8.0% MUST BE MAINTAINED.**
 - J. **BID MUST BE LISTED ON THE BID TABULATION SHEET THAT IS PROVIDED-- WITH A FIRM PRICE OF ONE (1) YEAR.**
 - K. **BID MUST BE EXPRESSED AS COST PER DRY TON.**

HFS

HYDROFLUOSILICIC ACID

WE HAVE 1 STORAGE TANK CAPABLE OF HOLDING 6,500 GALLONS.

2.
 - A. % H2 SIF6 RANGE 23--26 % TYPICAL 25% GUARANTEED 23%
 - B. HEAVY METALS AS (PB) MAXIMUM-----0.02%
 - C. 4,000 GALLONS OR 45,000 LBS. BULK SHIPMENT, **0800---1200 HOURS (AM) DELIVERY.**
 - D. MATERIAL SAFETY DATA SHEETS (MSDS) SUPPLIED WITH ORDER.
 - E. **CERTIFICATE OF ANALYSIS SUPPLIED WITH EACH ORDER.**
 - F. **CHEMICAL WILL BE BID ON TOTAL WEIGHT, NOT % PURITY, A MINIMUM OF 23--26% MUST BE MAINTAINED.**
 - G. **BID MUST BE LISTED ON THE BID TABULATION SHEET THAT IS PROVIDED--WITH A FIRM PRICE OF ONE (1) YEAR.**
 - H. **BID MUST BE EXPRESSED AS COST PER WET TON.**

3.

P.A.C.

POWDERED ACTIVATED CARBON

REQUIREMENTS

WE ARE RECEIVING P.A.C. IN BULK FORM. WE HAVE A 30 TON SILO FOR STORAGE. TO BE FILLED BY PNEUMATIC TRUCK.

WE WILL NEED BID FOR BULK, ALSO BRAND AND SPECIFICATIONS FOR THE BRAND BID MUST BE ATTACHED TO BID. THIS BID FOR BULK ONLY.

PRODUCT MUST BE WOOD BASED AND PREFERRABLY ALREADY APPROVED FOR USE WITH ZEEWEED 1000 MEMBRANES

- A. WATER IN SOLUBLES RETAINED ON A 325 MESH SCREEN WILL BE LESS THAN 10%.
- B. MATERIAL SHALL BE IN BULK.
- C. MATERIAL SHALL MEET AWWA STANDARDS B600-78 FOR TREATMENT OF POTABLE WATER.
- D. PHENOL VALUE (PPM)-----18+/- 2.

E. MODIFIED PHENOL VALUE-----1.8--2.28.

F. IODINE NUMBER MINIMUM OF-----550.

G. **TRUCK MUST HAVE CAPABILITY TO FILL SILO.**

H. **0800 — 1200 HOURS (AM) DELIVERY.**

I. **BID MUST BE LISTED ON THE BID TABULATION SHEET THAT IS PROVIDED--WITH A FIRM PRICE OF ONE (1) YEAR.**

J. **BID MUST BE EXPRESSED AS COST PER DRY TON.**

4. PHOSPHATE

WE ARE USING LIQUID PHOSPHATE.

WE HAVE TWO TANKS CAPABLE OF HOLDING 3,166 GALLONS EACH.

WE WILL NEED BID FOR BULK PREFERABLY VERUS 2575 ONLY.

REQUIREMENTS:

A. PRODUCT SHALL BE COUPON TESTED FOR 90 DAYS, BEFORE SAID BID DATE OF JULY 1, 2022 ON A COUPON RACK SUPPLIED BY SAID BIDDER, AND MAINTAINED BY SAID BIDDER

B. PRODUCT SHALL BE A GRANULAR MIXTURE CONTAINING NO METALS AND SHALL BE A MINIMUM OF 83% TOTAL PHOSPHATE BY WEIGHT

C. PRODUCT SHALL BE A BLEND OF POTASSIUM AND SODIUM ORTHO/PHOSPHATE SALTS. THE ACTIVE INGREDIENTS WILL BE WITHIN A RATIO OF 4:1 TO 5:1 POLY TO ORTHO BY WEIGHT. THE MATERIAL SHALL BE READILY SOLUBLE IN TAP WATER A CONCENTRATION OF 2 (TWO) POUNDS PER GALLON. **HOT WATER WILL NOT BE PROVIDED FOR MAKE-UP OF THE SOLUTION TO BE FED.**

D. THE PHOSPHATES IN THESE SPECIFICATIONS SHALL CONTAIN NO SOLUBLE MINERALS OR ORGANIC SUBSTANCE IN QUANTITIES CAPABLE OF PRODUCING A DELETERIOUS OR INJURIOUS EFFECT UPON THE HEALTH OF THOSE CONSUMING WATER THAT HAS BEEN PROPERLY TREATED WITH THE PHOSPHATE.

E. THE SUCCESSFUL BIDDER MUST MAINTAIN CORROSION RATES EQUAL TO OR BETTER THAN OUR PRESENT PROGRAM. COLD-ROLL MILD STEEL COUPONS MEASURING MILS/YEAR (MPY) CORROSION WILL BE USED. THE COUPONS WILL BE INSTALLED IN BY-PASS RACKS IN THE DISTRIBUTION SYSTEM.

F. A MINIMUM OF FOUR CORROSION TEST FROM THE COUPON RACK, WILL BE REQUIRED DURING THE YEAR, ONE EACH QUARTER.

G. COUPONS AND RACKS ARE TO BE FURNISHED TO SOMERSET WATER SERVICE AT NO COST AND WILL BECOME THE PROPERTY OF SOMERSET WATER SERVICE.

H. TECHNICAL ON-SITE ASSISTANCE WILL BE PROVIDED AT A MINIMUM OF ONE DAY PER MONTH DURING THE START-UP PHASE OR ON AS NEEDED BASIS THEREAFTER.

I. A PRODUCT TECHNICAL PAGE, EPA, NSF STANDARD 60 APPROVAL, AND MSDS IS TO BE PROVIDED WITH THE BID.

J. **PRODUCT TO BE BID BY COST PER MILLION GALLONS, TREATED WITH PARTS PER MILLION FEED RATE STATED. AN ANNUAL COST FIGURE WILL BE PROJECTED BASED ON AN AVERAGE OF 16.0 MGD. BOTH FIGURES OF COST WILL BE SHOWN ON THE BID.**

K. **BID MUST BE LISTED ON THE BID TABULATION SHEET THAT IS PROVIDED--WITH A FIRM PRICE OF ONE (1) YEAR.**

L. **BID MUST BE EXPRESSED AS COST PER POUND (CPP).**

THE MEMBRANE FILTERS ARE IN SERVICE AND AT THIS TIME WE ARE NOT FEEDING ANY POLYMERS.

5. CITRIC ACID 50% SOLUTION

- A. SHALL BE SHIPPED IN A 3200 GALLON TOTE TANK.
- B. SHALL BE CITRIC ACID TECHNICAL GRADE 49% TO 51% BY WEIGHT.
- C. SPECIFIC GRAVITY @ 68 DEG. F 1.240-1.256
- D. IRON, PPM LESS THAN 2 PPM
- H. **0800 — 1200 HOURS (AM) DELIVERY.**
- I. **BID MUST BE LISTED ON THE BID TABULATION SHEET THAT IS PROVIDED--WITH A FIRM PRICE OF ONE (1) YEAR.**
- J. **BID MUST BE EXPRESSED AS COST PER LB.**

6. SODIUM BISULFITE 38% TO 40% SOLUTION

- A. SHALL BE SHIPPED IN 3400 GALLON TOTE.
- B. SHALL BE SODIUM BISULFITE Na HS03 ASSAY 38% TO 42 %
- C. Ph 3.8 to 5.0
- D. SPECIFIC GRAVITY # 20 DEG. C 1.31 - 1.38
- H. **0800 — 1200 HOURS (AM) DELIVERY.**
- I. **BID MUST BE LISTED ON THE BID TABULATION SHEET THAT IS PROVIDED--WITH A FIRM PRICE OF ONE (1) YEAR.**
- J. **BID MUST BE EXPRESSED AS COST PER LB.**

7. CALCIUM HYDROXIDE SLURRY CURRENTLY USING 25% SOLUTION

- A. CALCIUM HYDROXIDE % BY WEIGHT 30.0 MIN AQUEOUS SUSPENSION.
- B. INERT INGREDIENTS % BY WEIGHT 70.0 MAX.
- C. Ph OF SATURATED SOLUTION 12.4 @ 25C
- D. PARTICLE SIZE, MEAN AND MAXIMUM 22/96 MICRONS
- E. APPEARANCE AND COLOR WHITE SUSPENSION AND ODORLESS
- F. SOLUTION IN WATER 0.1gm/100gms
- G. SPECIFIS GRAVITY 1.17-1.19 g/ml
- H. MUST MEET ANSI/NSF STANDARD 60 CERTIFIED AND AWWA STANDARDS AND APPROVED FOR POTABLE WATER
- I. RECEIVED IN 45,000 LB. TRUCK LOADS
- J. **0800 — 1200 HOURS (AM) DELIVERY.**
- K. **BID MUST BE LISTED ON THE BID TABULATION SHEET THAT IS PROVIDED--WITH A FIRM PRICE OF ONE (1) YEAR.**
- L. **BID MUST BE EXPRESSED AS COST PER LIQUID LB.**

8. MORTON SALT

- A. 99.99 % CULINOX _____ \geq 99.95
- B. SULFATE (%) _____ \leq 0.03
- C. Ca/Mg AS Ca (ppm) _____ \leq 60
- D. MOISTURE (SURFACE) (%) _____ \leq 0.1
- E. WATER INSOLUBLES (ppm) _____ \leq 100
- F. COPPER (ppm) _____ \leq 0.3
- G. FREE IRON (ppm) _____ \leq 0.7
- H. Arsenic (ppm) _____ \leq 1.0
- I. HEAVY METALS AS LEAD (ppm) _____ 2.0
- J. SALT TANK HAS 42 TON CAPACITY
- K. **0800 — 1200 HOURS (AM) DELIVERY.**

L. **BID MUST BE LISTED ON THE BID TABULATION SHEET THAT IS PROVIDED--WITH A FIRM PRICE OF ONE (1) YEAR.**

M. **BID MUST BE EXPRESSED AS COST PER DRY TON**

9. SODIUM HYPOCHLORITE

THIS IS AN ALTERNATIVE TO WHAT WE MAKE ON SIGHT IN CASE OF EMERGENCY

WE HAVE ONE TANK CAPABLE OF HOLDING 6,500 GALLONS

- A. SODIUM HYPOCHLORIE 12.5% -----12.5% MINIMUM
- B. AVILABLE CHLORINE % BY WEIGHT -----12.0% MINIMUM
- C. AVILABLE CHLORINE % TRADE -----14.5% MINIMUM
- D. SPECIFIC GRAVITY @ 77 DEG.F. -----1.198-1.238
- E. SAFETY DATA SHEETS MUST BE SUPPLIED WITH EACH ORDER.
- F. 2,000 GALLON -4,500 GALLON BULK SHIPMENTS -AS NEEDED.
- H. BID MUST BE EXPRESSED AS PER GALLON DELIVERED.
- I. BID MUST BE FIRM FOR 1 YEAR.

10. POTASSIUM PERMANGANATE CAIROX

- A. MUST MEET AWWA STANDARD ANSI/AWWA B603
- B. MUST BE CERTIFIED BY NSF TO MEET NSF/ANSI STANDARD 60
- C. THE POTASSIUM PERMANGANATE CONTENT SHALL BE NO LESS THAN 97%.
- D. SHALL BE CAIROX TECHNICAL GRADE, FREE FLOWING, SHIPPED IN 330.70 LB. METAL DRUMS.
- E. THE POTASSIUM PERMANGANATE SHALL BE MANUFACTURED CARUS CHEMICAL CORPORATION.
- F. APPEARANCE - DARK PURPLE SOLID WITH A METALLIC LUSTER.
- G. ODOR - ODORLESS H. **0800 — 1200 HOURS (AM) DELIVERY.**

I. **BID MUST BE LISTED ON THE BID TABULATION SHEET THAT IS PROVIDED--WITH A FIRM PRICE OF ONE (1) YEAR.**

J. **BID MUST BE EXPRESSED AS COST PER ONE HUNDRED WEIGHT OR CWT.**

PRODUCT WILL BE BID F.O.B. SOMERSET WATER TREATMENT PLANT 5400 SOUTH HWY 27
SOMERSET, KENTUCKY 42501. WITH A FIRM PRICE OF ONE (1) YEAR.
SOMERSET WATER SERVICE RESERVES THE RIGHT TO ACCEPT OR REJECT ANY AND/OR
ALL BIDS.

**SOMERSET WATER SERVICE
TREATMENT PLANT
PO BOX 989
5400 SOUTH HWY 27
SOMERSET, KENTUCKY 42501**

Chemicals listed as total weight, used for 1 year

.
Aluminum Sulfate 48%-----1,878,000 lbs.
HFS 23%-----111,000 lbs.
Phosphate----- 14,800 lbs.
Powdered Activated Carbon----- 131,400 lbs.
Lime slurry-----1,057,000 lbs.
Sodium Bisulfite----- 53,600 lbs.
Citric Acid----- 11,071 lbs.
Salt-----329,000 lbs
Sodium Hypochlorite ----- 300,028 lbs.
Potassium Permanganate-----1500 lbs

**Jon Hammond
Plant Supervisor
Somerset Water Service
Treatment Plant
PO Box 989
Somerset, Kentucky 42502**

COMPANY NAME: _____

REPRESENTATIVE or CONTACT PERSON: _____

COMPANY ADDRESS: _____

PHONE NO. _____

FAX NO. _____

E-MAIL _____

BID SHEET

PLEASE LIST ALL BIDS ON THIS TABULATION BID SHEET

1. LIQUID ALUMINUM SULFATE:
BID MUST BE EXPRESSED AS COST PER DRY TON._____.

2. HFS - HYDROFLUOSILICIC ACID:
BID MUST BE EXPRESSED AS COST PER WET TON_____.

3. POWDERED ACTIVATED CARBON BULK LOADS
BID MUST BE EXPRESSED AS COST PER DRY TON._____.

4. PHOSPHATE:
BID MUST BE EXPRESSED AS COST PER POUND (CPP)_____.

5 CITRIC ACID50% SOLUTION
BID MUST BE EXPRESSED AS COST PER LB. _____.

6. SODIUM BISULFITE 38% TO 40% SOLUTION
BID MUST BE EXPRESSED AS COST PER LB._____.

7.CALCIUM HYDROXIDE SLURRY
BID MUST BE EXPRESSED AS COST PER LIQUID LB._____.

8. MORTON SALT
BID MUST BE EXPRESSED AS COST PER DRY TON _____.

9. SODIUM HYPOCHLORITE
BID MUST BE EXPRESSED AS PER GALLON DELIVERED_____.

10..POTASSIUM PERMANGONATE CAIROX
BID MUST BE EXPRESSED PER ONE HUNDRED WEIGHT OR CWT_____.

NOTE: FAILURE TO EXPRESS CHEMICAL COST AS IT IS LISTED, WILL RESULT IN DISQUALIFICATION OF THE BID.

