



CITY OF SOUTH PORTLAND WATER RESOURCE PROTECTION

Invitation to Bid

POLYMER

Sealed bids for furnishing the City of South Portland with its requirements of secondary activated sludge dewatering polymer on an as needed basis as specified below and in the attached proposal will be received by the City Purchasing Agent, 25 Cottage Road, South Portland, Maine up until 10:00 A.M., Friday, March 31st 2018 at which time they will be publicly opened and read aloud. Proposals received after that date and time will not be considered. Digital submissions are not acceptable.

Bids shall be submitted on the attached form in sealed envelopes plainly marked "Bid #44-18 Polymer" and shall be addressed to the Purchasing Agent at the above address.

The term of the contract resulting from this bid shall be for two years beginning upon the first order placed by the City and extending from 2 years from that date. By mutual consent of the City and the contractor, it may be extended for a year, up to a total of three years, at the same prices, terms, and conditions. Contract quantities will be determined by actual conditions at the waste water treatment plant. The CITY OF SOUTH PORTLAND expects to dewater approximately 1200 dry tons of secondary waste activated sludge per year throughout the life of the contract.

Delivery to be made upon receipt of purchase order and must be completed between the hours of 7:00 am - 3:00 pm. Delivery shall be in 270-gallon plastic totes. Notification of delivery must be made 24 hours prior, so the CITY OF SOUTH PORTLAND can arrange for proper offloading equipment. Price on item inclusive is to be F.O.B., Water Resource Protection, 111 Waterman Drive, South Portland, Maine 04106.

Questions regarding the supplies specifications may be directed to Sean Castles, Chief Operator or Paul Collins at 207-767-7675.

Prices quoted shall be fixed for the entire period of award. All bidders should quote net prices, therefore, exclusive of all State and Federal Taxes.

Since prompt delivery is required, delivery time as well as price may be made a factor in determining the award of this bid.

Bidders understand and agree that the quantities listed in the proposal are estimates only of annual usage. It is also understood and agreed that the successful bidder(s) shall supply the actual quantities ordered for delivery during the term of the contract, whether more or less than the estimated amounts.

In the event that the successful bidder(s) to whom this bid has been awarded should fail to supply the City of South Portland's requirements promptly and according to the specifications and prices

of this bid, the City reserves the right to cancel any outstanding orders and the award to this bidder and purchase the item(s) elsewhere. If, during the life of the contract, the product will not produce results within ten percent (10%) of the performance standard established during the trials; meaning that if cake solids /and or polymer dosing rates change such that when they are entered into the dewatering evaluation formula, the resultant total polymer cost shall not exceed the value calculated as part of the bid process by more than 10%, the CITY OF SOUTH PORTLAND reserves the right to cancel the award of bid and purchase the item elsewhere.

The polymer will not impact the performance of the CITY OF SOUTH PORTLAND's wastewater treatment plant, if it does, the CITY OF SOUTH PORTLAND reserves the right to cancel the award of bid and purchase the item elsewhere.

It is the custom of the City of South Portland to pay its bills within 20 to 30 days following delivery of and receipt of bills for all items covered by the purchase order. In submitting bids under attached specifications bidders should take into consideration all discounts, both trade and time, allowed in accordance with the above payment policy. All bidders should quote net prices, therefore, exclusive of all State and Federal Taxes.

The City of South Portland, Maine reserves the right to waive all informalities in bids, to accept any bid or any portion thereof, or to reject any or all bids should it be deemed in its best interest to do so. Except as otherwise required by law or as specifically provided to the contrary herein, the award of this bid shall be governed by the City's purchasing ordinance.

Colleen C. Selberg
Purchasing Agent

Mailing address: P.O. Box 9422, South Portland, ME 04116-942
Telephone: (207) 767-3201 Fax: (207) 767-7620

SPECIFICATIONS

Only those polymers that have been qualified by the CITY OF SOUTH PORTLAND will be considered.

In order for polymers to become qualified, the following procedures must be followed:

1. Vendor will be allowed to perform bench testing between Monday, March 5th – Friday, March 16th, 2018 between hours (7:30 am -3:00 pm, M-F). Bench testing must be scheduled with Sean Castles at (207) 767-7675 ext. 7574, during above dates. Vendors will be responsible for all bench test set-up, documentation and clean-up and will not interfere with the daily lab operation.
2. The vendor will be allowed to submit only two trial products during the final trial phase.
3. The vendor must submit a Material Safety Data Sheet (MSDS) prior to use, on any product to be used in the trial.
4. The vendor is responsible for all material costs involved in the bench trials. The CITY OF SOUTH PORTLAND will pay reasonable costs of any polymer supplied during the trial testing not to exceed \$2.00/lb.
5. The vendor is responsible for any and all polymer transportation costs, and unused polymer, container, disposal costs resulting from the bench testing and, or trials.
6. The CITY OF SOUTH PORTLAND's existing dewatering polymer storage and batching system is capable of handling **emulsion** polymers only.
7. A minimum qualifying filtrate percent capture is 90%. Any polymer not obtaining these results will not be considered.
8. CITY OF SOUTH PORTLAND employees will perform BFP trial sampling, testing and press operation only.
9. The CITY OF SOUTH PORTLAND reserves the right to disqualify any polymer during the trials or anytime thereafter if it is determined that the product poses a safety or health hazard; if the polymer causes the sludge to exhibit unacceptable slurring, application or press operational characteristics; if the polymer poses an odor problem either at the plant site or at any sludge utilization site. These determinations will be made at the sole discretion of CITY OF SOUTH PORTLAND personnel.

Polymer evaluation formula

Each polymer product will be evaluated based upon dewatered cake dryness, percent recovery (solid capture) and dosage amount. A recommended dosage set point shall be recommended by the polymer vendor. 5 discrete polymer dose points (using and bracketing the recommended dosage) will be established at the test feed rate for a minimum of 30 minutes at each set point. Set points will be a least .5 pound (active)/DT apart in terms of polymer dosage. The vendor will establish the starting polymer dose point, but only CITY OF SOUTH PORTLAND personnel will adjust the polymer dose. Flow data will be gathered on feed and polymer dose at each of the five incremental points. Feed and cake samples will be collected at each point. Cake samples will be collected from the discharge end of each belt press. Filtrate samples will be collected from the gravity section drain discharge. Feed samples will be collected from the feed sample port.

All samples will be analyzed for percent totals solids by the CITY OF SOUTH PORTLAND. Dosing points in the sample set which meet established minimums (90% capture, 17% cake solid) will be considered a qualifying point. A product will qualify for consideration if at least three (3) consecutive qualifying points are obtained during the trial. Averages of cake total solids, solids capture and dosage data for the three (3) qualifying points (in terms of cake total solids) will be used in the bid evaluation formula. After a polymer has been qualified, the following polymer evaluation formula will be utilized by the CITY OF SOUTH PORTLAND to assist in determining the award of bid.

Analytical results for each qualifying trial run at 700 dry pounds per hour (plus or minus 10%) will be calculated as follows. The polymer dosage which results in the lowest overall cost (TOTAL POLYMER COSTS) will be used for bid evaluation purposes.

The polymer evaluation formula consists of the following:

1. Polymer dosing cost factor

$$(1200 \text{ DT/YR}) * (X) * (P) = \underline{\hspace{10em}}$$

2. Sludge disposal cost factor

$$[(1200 \text{ DT/YR}) / (A \text{ t}/100)] - [(1200 \text{ DT/YR}) / (A \text{ c}/100)] * \$67.22/\text{WT} = \underline{\hspace{10em}}$$

$$\text{TOTAL POLYMER COST } (1+2) = \underline{\hspace{10em}}$$

Where: X = Polymer Dosage lbs. per dry ton

Y = Solids recovery in percent

P = Polymer Price per Bid \$/LB

A t = Total Cake Solids for trial polymer in percent

A c = Total Cake Solids for control polymer in percent

PROPOSAL

The UNDERSIGNED hereby proposes to furnish POLYMER to the City of South Portland, Maine in accordance with the attached Invitation to Bid, the following specifications, and at the following prices and delivery times:

Polymer, to be delivered in 270 gallon plastic totes.
Estimated Annual Use: 30,000 lbs.

Price Per lb. \$ _____

Make & Product # _____

Delivery Time: _____

Signed: _____
(Corporation, Firm or Company)

By: _____
(Officer, Authorized Individual or Owner)

Title: _____

Mailing
Address: _____

Zip Code _____ Date: _____

Telephone: _____ Fax: _____

E-Mail: _____

Note: Bids must bear the handwritten signature of a duly authorized member or employee of the organization making the bid.