

REQUEST FOR PROPOSAL TOWN OF EMMITSBURG WATER TREATMENT PLANT CLARIFIER

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I. SCOPE OF WORK

The Mayor and Commissioners of Emmitsburg, Maryland are requesting sealed bids from qualified contractors for the Town of Emmitsburg's Water Treatment Plant Clarifier.

The Emmitsburg Water System (MD0100010) serves an estimated population of 3,090 (US Census) Town residents and a total of 928 service connections. The current water treatment plant, located at 8585 Crystal Fountain Road, has been on-line since 2003 and consists of a 432,000 gallon per day treatment plant, a 500,000-gallon steel storage tank, and a 140,000-gallon glass-lined tank. The plant does not have a water clarifier. The Emmitsburg water system utilizes both surface and groundwater sources from Rainbow Lake and three wells (#3, #4, #5) in the Town's watershed. The primary source of raw water supply is Rainbow Lake, a 13-acre impoundment (33-million-gallons) located along Hampton Valley Road, approximately one mile west of the water treatment facility. The entire treatment system is gravity feed and has a capability of treating up to 600,000 gallons per day, if needed, but averages about 250,000 gallons per day. Once the water is treated, it is stored in the two tanks until distributed to Town.

The proposed water clarifier will improve raw water quality flowing into the plant, reduce damage to the plant's equipment, and reduce the millions of gallons of reservoir water wasted through backwashes. Over the past 17-years of running the plant there has been a consistent struggle to use Rainbow Lake as the primary source of raw water supply due to the reservoir's turbidity, algae growth and suspended solids, especially when the lake quantity is low. On average, the raw water entering the plant is about 2 to 4 NTUs and the plant was designed for raw water of 1NTU or below. The high turbidity causes the roughing filters to gain differential pressure and clog, which can only be rectified through additional backwashes. This allows dirt to continue through the system due to the pressure build up and ultimately overloads the water plant and causes premature wearing of equipment. Between 2016 and 2019 the plant has used an average of 1.04-million gallons per day for back washing, which is nearly 15% of the total daily flow. During warmer months (April through November) the Town has used as much as 1.7-million gallons of water, or 28% of the daily flow, on backwashing, which means about a quarter of the water that should be going to the storage tanks are being dumped instead used for drinking water for the public. Lower output reduces the amount of treated water in the storage tanks, which prevents staff from being able to adequately flush the lines as there are concerns with "draining" the storage tanks, thus resulting in sediment build up in the lines too. The organic compounds cause similar problems with the DE filters later in the treatment system which frequently need to be rebuilt or have harsher chemicals used to keep up with demand. A clarifier would remove organic compounds in the raw water, reduce water wasted and prevent unnecessary wear on the plant's equipment.

A pilot water clarifier was installed in the system in June 2006. The results of the study indicated a clarifier can remove 75% of the total particles and provide a 68% reduction in turbidity, which translates

to significantly less fouling, less backwashing and higher efficiency for the plant. At the time the Town did not pursue a clarifier as the Town wanted to see if other more cost effective control methods could be pursued. One such example is adding 2,500lbs of Green Clean Pro chemicals to the lake three times each year for several years. When this did not work another such attempt was the installation of an LG Sonic Algae and Biofilm Control system in 2017 that helps eliminate algae without chemicals by releasing low non-toxic frequencies to collapse gas vesicles in the algae cells; however, after 3-years of using the system turbidity numbers remain high. The Town has been told by numerous consultants the clarifier is the Town's most effective method for treating turbidity and particles in the raw water.

Sealed proposals are due by 4:00PM on February 28, 2024. Please see "Submittal Requirements" on how to submit your bid.

All bids must meet and/or exceed the requirements contained herein:

Questions? Contact Cathy Willets, Town Manager, at <u>cwillets@emmitsburgmd.gov</u> or Sabrina King, Town Clerk, at <u>sking@emmitsburgmd.gov</u>. The deadline for questions is 2pm. February 16, 2024.

II. SUBMITTAL REQUIREMENTS

Please submit at least five hard copies of your bid to Town of Emmitsburg, Attn: Town Manager, 300A South Seton Avenue Emmitsburg MD 21727. No email submittals will be accepted. Please note on bids, **"Water Treatment Plant Clarifier Bid, Do Not Open."** Contractors can either mail submittals, deliver submittals to the Town Office on the 2nd floor, or place submittals in the black drop box labeled "Town of Emmitsburg" at the rear of the Emmitsburg Community Center (300A South Seton Ave.). If a submittal receipt is requested, please email info@emmitsburgmd.gov or call 301-600-6300. At the minimum, all bids must include the following:

A.) Letter of Transmittal: The letter of transmittal must contain the following information:

- 1. Name, title, address, e-mail address, and telephone number of the person(s) whom correspondence should be directed regarding the bid and any questions.
- 2. Do any warranties come with the work?
- 3. What is your proposed start date and project timeline assuming bid approval on April 2, 2024?
- 4. Statement which indicates "proposal and cost schedule shall be valid and binding for ninety (90) days following proposal due date and will become part of the contract that is negotiated with the Town of Emmitsburg".

B.) Detailed cost statement:

Please list the cost of the project using the template below:

C.) References:

Please provide the name, phone number and email of at least two (2) client references for similar work completed within the past three (3) years. Please provide the organization's name, address, and email address of the person(s) at the reference who is most knowledgeable about the work performed.

D.) Proof of Insurance:

The successful proposer must have and maintain current worker's compensation insurance,

comprehensive general liability and automobile insurance for bodily injury, death or loss of or damage to property of third persons in the minimum amount of \$1,000,000 per occurrence with the Town of Emmitsburg as an additional name insured. Please list the policy number, insurance company, and expiration date with your bid.

III. PROPOSED TIMELINE

January 16, 2024	RFP available on the Town of Emmitsburg's website.
January 16, 2024	RFP published on eMaryland Marketplace.
January 16, 2024	RFP published on MML
February 28, 2024	DEADLINE: Bids due by 4:00 p.m.
April 1, 2024	Tentative: Bid review/approval by the Board of Commissioners.

IV. MISCELLANEOUS INFORMATION

- The Town of Emmitsburg reserves the right to accept or reject any and/or all bids and to waive any informalities or irregularities in the bidding process.
- The RFP creates no obligation on the part of the Town to award a contract or to compensate the proposer for any costs incurred during the proposal presentation, response, submission, presentation, or oral interviews (if requested/held). The Town reserves the right to award a contract based upon proposals received without further discussion or negotiation. Proposers should not rely upon the opportunity to alter their qualifications during discussions.
- The Town further reserves the right to make investigations as it deems necessary to determine the ability of proposers to furnish the required services, and proposers shall furnish all such information for this proposal as the Town may request.
- Proposers must specifically identify any portion of their submittals deemed to contain confidential or proprietary information.
- The Town of Emmitsburg does not discriminate based on race, color, national origin, sex, sexual orientation, religion, age and disability in employment or the provision of services.