

## MEMORANDUM

**DATE:** August 18, 2025

**TO:** Polymer Vendors

**FROM:** Four Rivers Sanitation Authority Plant Operations Department

**RE:** Formalized Polymer Trials – August 18 – September 19, 2025

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Four Rivers Sanitation Authority (Authority, FRSA) has developed the following polymer trial criteria and design to assure uniformity and consistency. Formal polymer trials will be conducted from August 18, 2025, to September 19, 2025. To schedule a formal trial, contact Dan Pollard at 815-543-1456. Criteria and design of the trials include the following:

- Each vendor will have up to two days to qualify two polymer product(s); 7:00AM through 2:00PM.
- Each vendor will fine tune centrifuge operations prior to the trial interval and then notify the operator when they are ready to start their trial. All operational adjustments will be made by the operator only.
- Operators will conclude the trial at the end of two-hour testing interval. Totes will be weighed prior to initiating the trial and again at the conclusion of the testing process, with weights recorded to measure the pounds of polymer used during the test.
- During the trial, vendor requested adjustments to the process will not be allowed.
- All vendors have been allowed by FRSA to onsite pretest their products prior to these trials. Therefore, all vendors should have a reasonable idea what operating parameters are available to them for optimizing their products. Operators will be instructed to make any adjustments requested by the vendor. Operators will not make recommendations to achieve optimum polymer performance.
- Vendors may use their own equipment, such as a solids balance, for process control, but vendors should be aware that any instrument used is for process control only. All samples, calculations and performance results will be based on the samples collected by the operator and analyzed by the Authority's laboratory. Vendors may obtain split samples from the operator's sample to obtain analysis at their own lab or an independent lab. Sample results obtained from the Authority's laboratory are the "official results" that will be used in all calculations used in the bid process.

- Operating parameters standardized and constant for all vendors include: 100gpm feed sludge to the centrifuge throughout the duration of the trial, storage tank mixers will remain off throughout test, ferric chloride is currently added to the digesters for H<sub>2</sub>S control and will remain on during the trials, additional ferric chloride feed to the centrifuge to enhance polymer performance by any vendor during the duration of the trial will not be allowed.
- Qualifying polymers must maintain a composite centrate TSS of no more than 700 mg/L and cake solids of no less than 21% throughout the trial. A disposal surcharge will be included in the calculation. The disposal surcharge is calculated as  $(\$28.56/\% \text{ cake solids})100 - \$95.20$ .
- Once the vendor notifies the operator that he is prepared to begin the trial, sampling protocol will be as follows:
  - Aliquots will be taken of feed sludge, centrate and cake solids
  - The aforementioned aliquots will be taken at test initiation and the one-hour mark of the testing and then again at the completion of the testing run.
  - Samples will be taken to Four Rivers Sanitation Authority's onsite lab for testing and analysis at the conclusion of the testing.
- Every effort will be made by Authority staff to purge all remnants of alternative tested products from the Authority's polymer handling equipment, lines and centrifuge prior to the arrival of the vendor representatives. For this reason, vendors who do not plan on being onsite at the 7:00AM trial start time should contact Dan Pollard at 1-815-543-1456 to let him know the following information:
  - Polymer feed rate
  - Polymer injection point
  - Centrifuge bowl speed (scroll delta)
  - Control pressure (P1)
  - Alpha rate of scroll
- In no event will any trial be allowed to begin after 12:00PM (noon)