

Destructive technology test on Per- and polyfluoroalkyl substances (PFAS) concentrate

Questions and answers

Q1. Will Minnesota Pollution Control Agency (MPCA) provide baseline data for all project parameters on the concentrate representatively split-sampled and sent to successful technology provider grant applicants to establish a common benchmark, and to help defray your overall program costs, as well as minimized sampling consumption of available sample matrix (concentrate)?

A1. All chemistries/water quality parameters are the responsibility of the applicant to assess. Split samples may be collected by the MPCA for quality control.

Q2. If so, is it possible to receive this data prior to the grant deadline or MPCA's sample volume is depleted?

A2. Data collected as part of this Request for Proposal (RFP) for quality control is not currently planned on a set schedule, however, any quality control sample analytical data collected will be shared with selected recipients when available. The turnaround time on PFAS analytical from state contracted labs would not be available by the time the RFP closes but would be provided when available.

Q3. What is the timing for the work to be performed? Availability of sample concentrate? Expected final report timing?

A3. Please see the RFP and application documents for details regarding the RFP schedule and reporting expectations.

Q4. Our treatment equipment for bench-scale treatability study work requires a minimum of seven (7) gallons, our engineering-scale system works on ISO tote or larger volumes, and our full-scale commercial unit has processed 1,000 and 2,000 pounds of granular activated carbon (GAC) directly with GAC absorbers. We have completed many bench and engineering-scale studies over the past several years on spent GAC and liquid concentrates. We've found the need for analytical testing often requires a couple gallons (for liquids), at minimum to satisfy laboratory sample volumes for various parameters over the course of initial, interim, and final sampling and analytical treatability programs. Would it be possible to receive 10 gallons (2 x 5-gallon buckets) of the FF concentrate for our work?

A4. The volume of concentrate may be dependent on the number of applicants selected for receipt of the concentrate. The selected applicants will be notified of greater volumes available at the time of recipient selection, expected to be mid-May.

Q5. Does MPCA wish to specify a lab and negotiated contract for analysis of both the speciated and other total PFAS analysis?

A5. No, the lab, method and Quality Control (QC) procedures selected for the testing should be in accordance with that referenced in the RFP, at a minimum (see Project Information section of the Application and QC procedures at <https://www.pca.state.mn.us/sites/default/files/p-eao2-28.pdf>).

Q6. Will MPCA provide analysis of the foam or is that the responsibility of the grantee?

A6. No, selected applicants are responsible for the analytical procedures and costs (see Section 3.0 Project costs of the RFP).

Q7. With the backlog on PFAS analytical procedures, participants may not provide a final report for several months, please confirm this is included in the expectations as they pertain to the final reporting.

A7. Delays related to laboratory backlog may be taken into consideration in acceptance of the final report, however, delays in reporting may be reflected in the ability to consider the results as part of the 3M Settlement Feasibility Study.

Q8. What is the next step for a technology that successfully demonstrates destruction of the PFAS laden foam?

A8. The summary will be used in reports and to disseminate information on the outcomes and environmental benefits of the destructive test project (see Section 7.0 Executive summary of the RFP).

Q9. Can MPCA quantify the amount of remediation required at scale?

A9. Not at this time. Results should be estimated for at-scale systems per unit (e.g. \$/lbs, gpd, etc.) Is it drinking water, soil, biosolids, etc.? Media is PFAS-containing foam concentrate liquid only.

Q10. Will the information produced by the grant be used to develop destruction solutions for PFAS impacted materials other than foam generated from surface and groundwater?

A10. Information provided in the Final Report should be informative to the concentrate only at this time, however, fundamental cross-over capacity for destruction of PFAS in other media may be considered as applicable. This information should be provided in the PFAS Destruction Technology Description information (see Project Information section of the Application).