The Water Environment Federation (WEF) is inviting proposals for the provision of automatic samplers, automatic sampler training, and automatic sampler troubleshooting to small wastewater utilities as part of our activities under our Cooperative Agreement with the US Centers for Disease Control and Prevention (CDC).

Background

During the current COVID-19 pandemic, wastewater-based disease surveillance has emerged as a tool for understanding COVID-19 infection trends in communities independent of healthcare-seeking behavior and clinical testing resources. Participation in wastewater surveillance to date, however, has skewed toward larger, well-resourced utilities. These resources include but are not limited to continuous in-situ monitors and automatic samplers.

Automatic samplers (also known as composite samplers or peristaltic samplers and hereinafter referred to as “autosamplers”) can collect up to 24 distinct samples before they must be restocked with empty bottles. They can be programmed to collect samples at specific time intervals or at specific flow rates. Autosamplers facilitate collection of representative wastewater samples for disease surveillance, but also can enable improved understanding of organic, solids, and nutrient loadings to wastewater treatment facilities. By providing new autosamplers to at least 225 small utilities, this project aims to increase participation in wastewater surveillance by smaller, rural, and tribal communities and, therefore, expand access to this effective public health surveillance tool.

Small utilities will apply to receive an autosampler as part of this program and will indicate their preference for either a full-size, refrigerated sampler that can be used to collect a sample where power is available (such as in a pumping station or at the influent to a treatment facility) or portable, compact autosampler that could be deployed in locations without available power (such as a manhole). In addition, utilities selecting a refrigerated sampler may opt for either a standard model or a model suitable for operation in cold ambient temperatures, as described for Task 1 below. While at least 225 utilities will be supplied with an autosampler as part of this program, the total number of participating utilities (and therefore autosamplers provided) may exceed 225 depending on demand and available budget. Through this request, WEF is soliciting proposals from contractors for the provision of autosampler packages, and training and troubleshooting related to their use.
Scope of Work

The contractor will perform three tasks: (1) autosampler supply; (2) autosampler training; and (3) autosampler troubleshooting, as described below.

Task 1. Autosampler Supply

The contractor will supply a minimum of 225 programmable autosampler packages, each package to be complete with all appurtenances required for sustained collection of 24-hour, uniform time (not flow-paced) composite wastewater samples. Items to be provided by the contractor in each autosampler package will include:

1. One of three types of autosampler units, depending on the preference of the participating utility: either (a) refrigerated autosampler suitable for operation in ambient temperatures from 0 to 45°C (hereinafter referred to as a “standard refrigerated autosampler”; (b) refrigerated autosampler suitable for operation in ambient temperatures from -30 to 45°C (hereinafter referred to as a “cold-weather refrigerated autosampler”); or (c) portable autosampler suitable for deployment in an 18-inch manhole. The breakdown of demand for standard refrigerated vs. cold-weather refrigerated vs. portable autosamplers will not be known until utilities are enrolled in the program. Utility enrollment is expected to begin in December 2021.
2. For all autosamplers: A peristaltic sampling pump capable of at least 20 feet of lift.
3. For all autosamplers: A single-bottle configuration and a total of three plastic bottles (one primary and two spares) for use with the autosamplers, each with a minimum capacity of 9 liters.
4. For all autosamplers: A weighted strainer for installation at the end of the sample/suction tubing that is in the wastewater flow.
5. For all autosamplers: A full-container shutoff.
6. For standard or cold-weather refrigerated autosamplers: A power supply.
7. For portable autosamplers: A battery charger assembly and two batteries.
8. For portable autosamplers: A configuration that allows the addition of ice around the sample bottle or in the autosampler base to keep the composited sample cool during collection.
9. For all autosamplers: Programming capabilities that allow wastewater to be collected at intervals as close as 10 minutes and provide for purging of sample/suction tubing between sampling events.
10. For all autosamplers: Extra peristaltic pump head tubing (enough for two pump head tubing changes), pump discharge tubing (10 ft minimum), sample/suction tubing (100 ft minimum), and a tube cutter or other tool for cutting the pump, discharge, and sample/suction tubing to the appropriate lengths.
11. For all autosamplers: A warranty that the autosamplers, under normal use and service, will be free from defects in materials and workmanship for at least 12 months after delivery and, if not, that the autosampler will be replaced.

Task 2. Autosampler Training

The contractor will provide a user manual and “quick start” guide for each type of autosampler supplied, as well as training video(s) and live virtual training events. WEF will upload the user manuals, “quick start” guides, and video(s) to nwbe.org and make them available to the participating small utilities. Live virtual events will be organized and run by the contractor and participation should be limited to no more than 10 utilities per event to facilitate interaction and questions from participants. For 225 autosamplers, this would correspond to 23 live virtual training events at a minimum.
Topics to be covered by the contractor during the video(s) and live virtual training events will include:

- Health and safety considerations during autosampler use
- Initial autosampler assembly and setup
- Autosampler parts cleaning and regular maintenance
- Programming
- Sample tubing positioning best practices
- Replacement of pump head, pump discharge, and pump suction/sample tubing
- Quality assurance and quality control procedures to calibrate the pump and avoid cross contamination
- Troubleshooting common issues

The contractor will submit the user manuals, “quick start” guides, and training video(s) to WEF for review and approval before the files will be uploaded to nwbe.org. The contractor will perform a dry run of the virtual live training event for WEF staff before implementing the live virtual training events for the utilities.

All training materials and training events will be provided in English. Preference will be given to contractors who are able to provide training materials and training events in at least one other language (such as Spanish, Chinese, or Vietnamese) as well.

**Task 3. Autosampler Troubleshooting**

The contractor will provide troubleshooting support to each utility recipient of an autosampler package for at least three months from the date the utility representative attends a live virtual training event. The contractor will provide a phone number and email address that the participating utilities can use for questions and troubleshooting support, and utility questions and request for assistance will be answered via phone or email by the contractor within 48 hours.

The work of the selected contractor will be guided by WEF staff in coordination with, and with support from, the CDC.

**Period of Performance**

The period of performance of any contract resulting from the RFP is tentatively scheduled to begin on or about January 31, 2022 and end on or about August 31, 2022.

**Contractor Standards**

The contractor needs to meet the following standards to be considered for this project:

- Have adequate financial resources to perform the contract
- Be able to comply with the proposed performance schedule
- Have a satisfactory performance record
- Have a satisfactory record of integrity and business ethics
- Have a satisfactory health and safety record
- Have the necessary production and technical equipment and facilities to perform the contract

Although detailed financial documentation does not need to be included in the proposal submission, WEF reserves the right to request additional information to verify the proposer’s financial resources prior to contract award.
Proposal Requirements

Firms with an interest in this work should submit a proposal that includes the following:

- A description of the proposed autosampler packages (standard refrigerated, cold-weather refrigerated, and portable), including complete technical specifications/datasheet.
- Description of the warranty coverage for the autosamplers, and clarification on whether the warranty coverage varies by autosampler component.
- Description of how the proposer meets the required contractor standards, including number of years in the business of providing autosamplers for wastewater applications and the approximate number of each type of autosampler sold in the past three years.
- Description of proposed training materials and program with samples from previous training programs.
- Description of the training qualifications and experience of contractor, including resumes of key training personnel.
- Description of troubleshooting support to be made available to participating utilities experiencing problems with programming and other aspects of autosampler operation.
- Price for each autosampler package supply (including all items – 1.1 through 1.11 – listed for Task 1) and shipping, autosampler training (Task 2), and autosampler troubleshooting (Task 3), using the templates provided in Attachment 1.
- A copy of the standard contract used by the contractor for autosampler sales, including but not limited to the standard terms and conditions.

The proposal text should be no more than six (6) pages in length (not including autosampler datasheets, resumes of key training personnel, pricing tables, standard contract/terms and conditions, or other supporting information). The proposal should be submitted as a single pdf file, inclusive of the proposal text and all supporting information.

Proposal Evaluation Criteria

Proposals submitted by the deadline will be reviewed by an external Proposal Review Committee, comprised of wastewater utility, academic, and public health representatives. WEF staff, Board of Trustee members, and House of Delegate members will not be eligible to participate on the review committee.

Proposals that include the elements described under “Proposal Requirements” will be scored according to the criteria in Table 1, for a maximum total possible score of 100 points. The highest scoring proposal will be selected for award. WEF reserves the right to make multiple awards. If multiple awards are made, then proposals will be selected in order from highest to lowest score.
Table 1. Proposal Evaluation Criteria

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Considerations</th>
<th>Maximum Points Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price Evaluation</td>
<td>Proposal with low price: 50 Proposals within 5% of low proposal: 40 Proposals within 10% of low proposal: 30 Proposals within 15% of low proposal: 20 Proposals within 20% of low proposal: 10</td>
<td>50</td>
</tr>
<tr>
<td>Past Performance Evaluation</td>
<td>Does the proposer meet the required contractor standards and have the capability to perform the scope of work? Will the contractor be able to do the work successfully within the proposed period of performance?</td>
<td>25</td>
</tr>
</tbody>
</table>
| Technical Evaluation       | Are the proposed autosampler packages complete, high-quality, and consistent with the requirements described for Task 1 under “Scope of Work”? Will the training approach enable efficient and complete transfer of the information needed for safe operation of the autosamplers by the utilities, and is it consistent with the requirements set forth in Task 2 of the “Scope of Work”? Will the proposed troubleshooting approach ensure sustainable operation of the autosamplers and is it consistent with the requirements set forth in Task 3 of the “Scope of Work”?
                                                                                                                                                                                                                   | 25                   |

Question Submittal Information

Proposers are invited to submit questions no later than 5:00 PM Eastern Standard Time on Wednesday November 10, 2021 to amehrotra@wef.org. WEF will hold a public webinar on Wednesday November 17, 2021 at noon Eastern Standard Time to answer questions submitted by proposers. Please sign up for the webinar at this link: https://www.eventbrite.com/e/199953555467. WEF cannot guarantee that questions received after 5:00 PM Eastern Standard Time on Wednesday November 10, 2021 will be answered during the webinar. An addendum to this RFP, if warranted based on the questions received, will be released on Wednesday November 24, 2021.

Proposal Submittal Information

Proposals should be submitted at https://wef.secure-platform.com/a/solicitations/152/home no later than 5:00 PM Eastern Standard Time on Wednesday, December 29, 2021. Proposals submitted by email will not be accepted.
### Pricing Template for Task 1: Autosampler Supply

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Refrigerated Autosampler Package</td>
<td>Each package</td>
<td></td>
</tr>
<tr>
<td>Shipping charges for standard refrigerated autosampler, each package, using standard ground shipping in the conterminous US</td>
<td>Total shipping charges for each autosampler package</td>
<td></td>
</tr>
<tr>
<td>Shipping charges for standard refrigerated autosampler, each package, using second-day delivery to Alaska or Hawaii</td>
<td>Total shipping charges for each autosampler package</td>
<td></td>
</tr>
<tr>
<td>Cold-Weather Refrigerated Autosampler Package</td>
<td>Each package</td>
<td></td>
</tr>
<tr>
<td>Shipping charges for cold-weather refrigerated autosampler, each package, using standard ground shipping in the conterminous US</td>
<td>Total shipping charges for each autosampler package</td>
<td></td>
</tr>
<tr>
<td>Shipping charges for cold-weather refrigerated autosampler, each package, using second-day delivery to Alaska or Hawaii</td>
<td>Total shipping charges for each autosampler package</td>
<td></td>
</tr>
<tr>
<td>Portable Autosampler Package</td>
<td>Each package</td>
<td></td>
</tr>
<tr>
<td>Shipping for portable autosampler, each package, using standard ground shipping in the conterminous US</td>
<td>Total shipping charges for each autosampler package</td>
<td></td>
</tr>
<tr>
<td>Shipping for portable autosampler, each package, using second-day delivery to Alaska or Hawaii</td>
<td>Total shipping charges for each autosampler package</td>
<td></td>
</tr>
</tbody>
</table>

### Pricing Template for Task 2: Autosampler Training

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Manual, “Quick Start” Guide, and Video(s)</td>
<td>All materials together</td>
<td></td>
</tr>
<tr>
<td>Virtual Trainings: 23 trainings minimum</td>
<td>Per 10 trainings</td>
<td></td>
</tr>
</tbody>
</table>

### Pricing Template for Task 3: Autosampler Troubleshooting

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Troubleshooting, three months</td>
<td>Per autosampler package</td>
<td></td>
</tr>
</tbody>
</table>