EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 02-01

☐ Other ☐ Amendment Number:

Contract Number	Contract Period	Title of Work Assignment/SF Site Name
EP-C-15-012	08/01/2015 To 07/31/2018 Base Option Period Number 2	Surveillance Response Systems

Contractor	Specify Section and paragraph of Contract SOW
CSRA LLC	2.2, 2.6, 2.11, 2.15, 2.17

Purpose:
- [X] Work Assignment
- [ ] Work Assignment Amendment
- [ ] Work Plan Approval
- [ ] Work Assignment Close-Out
- [ ] Incremental Funding

Period of Performance: From 08/01/2017 To 07/31/2018

Comments:
In accordance with clause B.1. immediate start is authorized for this work assignment beginning on August 1, 2017. If the work plan is not approved within 35 calendar days after receipt of the work plan, the contractor shall stop work.

☐ Superfund — Accounting and Appropriations Data — [X] Non-Superfund

Note: To report additional accounting and appropriations date use EPA Form 1900-69A.

SFO (*Max 2*) ☐

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

	Cost/Fee:	LOE:
Contract Period: 08/01/2015 To 07/31/2018		0
This Action:	12,458	
Total:	12,458	

Work Plan / Cost Estimate Approvals

	Cost/Fee	LOE:
Contractor WP Dated:		
Cumulative Approved:		

Work Assignment Manager Name: Steve Allgeier	(Signature)	(Date)	Branch/Mail Code: Phone Number: 513-569-7131 FAX Number:
Project Officer Name: Nancy Parrotta	(Signature)	(Date)	Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:
Other Agency Official Name	(Signature)	(Date)	Branch/Mail Code: Phone Number: FAX Number:
Contracting Official Name: Donna Reinhart	(Signature)	(Date)	Branch/Mail Code: Phone Number: 513-487-2114 FAX Number:

Digitally signed by DONNA REINHART
DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=DONNA REINHART, dnQualifier=0000010546
Date: 2017.07.10 10:32:37 -04'00'

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WORK ASSIGNMENT
PERFORMANCE WORK STATEMENT (PWS)

Contract No: EP-C-15-012

Work Assignment: WA-02-01

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LOE: 12,458 hours

Period of Performance: August 1, 2017 to July 31, 2018

Title: Surveillance and Response Systems

PWS Sections: 2.2, 2.6, 2.11, 2.15, 2.17

I. PURPOSE:

The purpose of this work assignment (WA) is to increase the knowledge base for Water Quality Surveillance and Response Systems (SRS) for drinking water utilities, and to use this knowledge to promote the voluntary adoption of practices relating to SRS deployment. This goal will be achieved through the development of guidance, tools, and other products that disseminate information to the Water Sector gained through the Water Security Initiative (WSI) pilots, research, and other sources.

To achieve this purpose the contractor shall support EPA in the development of products that enable the Water Sector to implement SRS. In general the work falls into three main areas: 1) product development, 2) outreach and training, and 3) SRS implementation projects. Under product development, the contractor shall support EPA in the development of guidance, tools, and other materials that can be used by the Water Sector to implement SRS. These products will be made available through the Water Quality Surveillance and Response (WQSR) Microsite. Under outreach and training, the contractor shall support EPA in the development of outreach materials such as factsheets, videos, informational materials, and other products that serve to increase awareness of SRS practices in the Water Sector. The contractor shall also develop high quality training materials including presentations and webinars, and shall facilitate in-person training events. Under implementation projects, the contractor shall support EPA in the implementation of projects to develop SRS capabilities at specific utilities. These implementation projects will provide an opportunity to test EPA tools and guidance, develop case studies for successful SRS implementation, and develop utility ambassadors for the SRS program.

The intended audience for the products developed under this WA is the Water Sector, including: drinking water utilities, wastewater utilities, laboratories, response partners, and technical assistance providers.

This project supports programmatic needs related to our national all hazards and homeland security responsibilities by improving the ability of drinking water systems to detect and respond to unusual water quality conditions in source water and distribution systems.

Other partners and external offices or agencies which should be coordinated with include: Department of Homeland Security (DHS), Centers for Disease Control and Prevention (CDC), Office of Ground Water and Drinking Water, Standards and Risk Management Division (OGWDW-SRMD), Office of Ground Water and Drinking Water, Drinking Water Protection Division (OGWDW-DWPD), American Water Works Associations (AWWA), and Association of State Drinking Water Administrators (ASDWA).

This work assignment supports the mission of the Water Security Division (WSD) as described in the Water Security Strategy framework, which relates resources, activities, outputs, audience, short- and long- term outcomes to the WSD pillars of Prevention, Detection, Response, and Recovery. Additionally, this work assignment contributes to the commitments made in EPA's Strategic Plan: 2011 to 2015 and EPA's Homeland Security Strategy (2004). Under EPA's Strategic Plan, reference is made to Goal 2 (Clean and Safe Water), Objective 2.1 (Protecting Human Health), Sub-objective 2.1.1 (Water Safe to Drink), and to the Cross-Goal on homeland security. Under EPA's Homeland Security Strategy, reference is made to Objective 1 (Critical Infrastructure Protection).

In fulfillment of these requirements, this contract supports the nation's drinking and wastewater infrastructure, collectively known as the Water Sector, in being informed, coordinated, and prepared to prevent, detect, respond to, and recover from terrorist attack and other intentional acts, natural disasters, and other hazards (referred to as the "all hazards' approach), which may also occur, including the needs and challenges posed by natural disasters, catastrophic events, adaptation and impacts of climate change, floods, earthquakes, pandemic illness, and any other events which impact the safety and availability of our water supply.

In pursuit of these efforts, the contractor may be tasked with preparing a correlation summary comparing the results under this work assignment to the components of the Water Security Strategy framework.

II. BACKGROUND:

Homeland Security Presidential Directive 9 (HSPD9) was signed on June 30, 2004. It established a national policy to defend the agriculture and food system against terrorist attacks, major disasters, and other emergencies. HSPD9 specifically required EPA to "develop robust, comprehensive, and fully coordinated surveillance and monitoring systems … for … water quality that provide early detection and awareness of disease, pest, or poisonous agents." EPA's response to HSPD9 was to establish WSI, a program to develop, evaluate, and promote SRS in the Water Sector.

An SRS involves the active deployment and use of monitoring and surveillance strategies to collect, integrate, analyze, and communicate information to provide a timely warning of potential water quality problems and to initiate a response to correct the identified problem. The four surveillance components of the SRS architecture include:

- Online Water Quality Monitoring for parameters in order to detect a change from an established baseline. This includes monitoring in the source water and distribution system.
- Enhanced Security Monitoring to detect physical intrusions into a drinking water facility that provides access to finished water. This includes Advanced Metering Infrastructure to detect tampering and backflow events at service connections.
- Customer Complaint Surveillance to detect changes in the aesthetic character of the water that might indicate a deterioration in water quality.
- Public Health Surveillance to detect unusual occurrence of disease or illness in the population and to determine if it's related to contaminated drinking water.

The SRS architecture also includes two response components: Consequence Management and Sampling and Analysis. If the investigation of an alert from a surveillance component cannot rule out contamination, Consequence Management is activated to guide the threat level determination process and response actions to minimize consequences. Sampling and Analysis is performed during the investigation of a possible contamination incident in an attempt to confirm contamination and identify the specific contaminant. Activities performed under sampling and analysis include field safety screening and rapid field testing that occur during site characterization as well as laboratory analysis of samples collected from the field. This component also includes routine monitoring to establish a baseline for key contaminants.

EPA is implementing the SRS program in three phases: 1) design an effective SRS architecture; 2) demonstrate and evaluate the SRS architecture through a pilot program; and 3) develop guidance and products to promote voluntary adoption of SRS practices within the Water Sector. EPA has completed the first two phases of WSI, and made substantial progress in the third phase during fiscal years (FY) 12, 13, 14, 15, 16 and 17. EPA will continue this effort under the first option period for this contract and through the end of FY18. Specifically, EPA intends to complete development of all SRS guidance and tools, continue SRS outreach and training activities, and complete several SRS implementation projects.

III. QA REQUIREMENTS:

Sub-tasks 3.5, 4.2, 4.3, 5.3, and 5.4 in this WA require quality assurance (QA). Consistent with the Agency's QA requirements, the contractor must prepare a complete Project Specific Quality Assurance Project Plan (PQAPP), to assure the quality of the data used under this WA. Work on these sub-tasks cannot proceed until the contractor receives notification of PQAPP approval from the Contract Level Contracting Officer Representative (CLCOR) via e-mail. The QA requirements must be addressed in the work plan and monthly progress reports as specified under Task 0, below.

IV. DETAILED TASK DESCRIPTION:

All direction under this WA will be provided as written technical direction from the WACOR or Alternate WACOR. If provided first as verbal technical direction to the contractor, it will be confirmed in writing within 5 calendar days, with a copy to the Contract Level Contracting Officer's Representative (CL COR) and the Contracting Officer (CO), and is subject to the limitations of the technical direction contract clause. The WACOR will provide LOE estimates with each tasking and the contractor shall not exceed the estimated LOE without justification and approval by the WACOR.

Unless otherwise specified, the contractor should assume that all products listed in this WA will be developed in the following stages: outline, multiple internal drafts for EPA review, review draft for external peer review, and final draft for publication. Each initial deliverable shall be provided to the EPA WACOR in draft form for review and comment. The contractor shall incorporate EPA WACOR review comments into subsequent revisions. The EPA WACOR will coordinate peer review of the draft product. The contractor, in consultation with the EPA WACOR, shall review all comments and the contractor shall prepare a disposition of comments using a format specified by the WACOR. The contractor shall revise each product according to a revision plan approved by the EPA WACOR, and prepare it for publication. All final products will also undergo a complete technical, editorial, and managerial review. This review shall ensure that the document complies with standards in the SRS Style Guide, and the EPA Style Guide. Any products that will be published shall also be reviewed and revised for 508 compliance.

The contractor shall notify the WACOR of all staff involved in the production of technical products and guidance, and these staff shall participate in all substantive discussions with the EPA WACOR related to products on which they work.

In addition to Task 0, Work Plan, Progress Evaluations, and Monthly Project Reports, there are eight tasks described in this work assignment. The titles of each task are listed in the following table. A kickoff meeting will be held for each of the Tasks 1 through 8 to establish priorities and a milestone schedule for each task.

Task #	Task Title
0	Work Plan, Progress Evaluations, and Monthly Project Reports
1	Web-based Tools

Task #	Task Title
2	Outreach and Training
3	Online Water Quality Monitoring
4	Enhanced Security Monitoring
5	Customer Complaint Surveillance
6	Public Health Surveillance
7	Sampling and Analysis
8	Consequence Management

Task 0: Work Plan, Progress evaluations, and Monthly Progress Reports (LOE 1,560)
The contractor shall develop a WP that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the work plan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at http://www.epa.gov/accessibility/. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a PQAPP, as noted above, and ensure the quality of primary and secondary data used to complete the indicated sub-tasks. Work on these sub-tasks cannot proceed until the contractor receives notification of PQAPP approval from the CL COR via e-mail. The PQAPP shall be submitted to the EPA WACOR per the deliverable date listed in the following table. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved.

In each monthly progress report, the contractor shall, at the introduction to the discussion of this WA, discuss actual progress toward achieving the purpose of this work assignment, including problems encountered, issues that may need to be resolved, and anticipated timing for completing the goals of the WA. The contractor shall provide an overview of contract projects, striving to implement efficiencies in performance when complimentary requirements are issued. The contractor shall assure that duplication of effort relative to other ongoing WA under this contract is not occurring.

In addition, the contractor shall submit a financial tracking spreadsheet populated with incurred and lagging costs for the current billing cycle. The EPA WACOR will provide a template for the financial tracking spreadsheet. The financial tracking spreadsheet shall be updated and submitted monthly along with the monthly progress and financial report.

EPA does not anticipate the need for the contractor to travel in support of this task.
Task 0 Deliverables: Specific deliverables under this task are listed in the following table:

Sub-task	Deliverable	Due to EPA
0	WA-02-01 Work Plan including: schedule, staffing plan, LOE, cost estimates, key assumptions, and qualifications of proposed staff	August 21, 2017
0	Monthly progress and financial reports, including updates to the financial tracking spreadsheet. Summary of Quality Assurance Activities and Issues by Work Assignment.	Monthly, as specified in the contract
0	PQAPP for Sub-tasks 3.5, 4.2, 4.3, 5.3, and 5.4 of this WA. Checklist for Quality Assurance Project Plans.	September 1, 2017

Task 1: Web-based Tools (LOE 1,527)
Task 1 supports the development of web-based tools that guide the utilization of SRS products posted on the WQSR Microsite. The primary objective of Task 1 is to develop tools that enhance the user experience with the WQSR Microsite and help users locate products in their areas of interest. The contractor shall support this task with staff having an in-depth understanding of effective website design and development of web-based tools and applications. Task 1 is divided into four sub-tasks:

1. Build the SRS Capabilities Assessment Tool
2. Develop a Roadmap to SRS Products
3. Support Maintenance of the WQSR Microsite
4. Support Electronic SRS Tools

Each sub-task is described below, and additional details regarding each sub-task will be provided to the contractor through written technical direction. EPA does not anticipate the need for the contractor to travel in support of this task.

<u>Sub-task 1.1: Build the SRS Capabilities Assessment Tool</u>
Under this sub-task, the contractor shall support EPA in building the SRS Capabilities Assessment Tool by developing a Capabilities Assessment (CA) for each of the six SRS components.

Each CA will present a user with up to 15 questions to assess their utility's existing capabilities with respect to a given SRS component. Each question will be presented on a dedicated screen, and the exact sequence of questions a user encounters may depend on how they respond to the questions. After a user has completed an entire sequence of questions, a Capabilities Assessment Report (CAR) will be generated, which compares a utility's existing capabilities with target capabilities, recommends potential enhancements, and directs users to resources that could help them implement those enhancements.

A beta version of the SRS Capabilities Assessment Tool has been built and undergone internal testing. Furthermore, the PHS, ESM, and CCS CAs will be completed by July 31, 2017. CAs for the remaining SRS components (OWQM, S&A, and CM) shall be designed in the same manner as those that have

been completed. EPA will provide the contractor with all of the SRS component-specific content required to build the CAs, which will be developed under Tasks 3, 7, and 8.

To finalize the SRS Capabilities Assessment Tool and prepare it to be posted on the WQSR Microsite, the contractor shall:

- Develop initial versions of the OWQM, CM, and S&A CAs
- Revise the functionality of the SRS Capabilities Assessment Tool to address comments received during user acceptance testing (comments on component content will be addressed under Tasks 3, 7, and 8)
- Modify the SRS Capabilities Assessment Tool to address functionality issues, including 508 compliance, identified during the final product review
- Update the SRS Capabilities Assessment Tool to correct bugs identified by EPA personnel and other users. The contractor shall track known and reported issues.

Sub-task 1.2: Develop a Roadmap to SRS Products

Under this sub-task, the contractor shall support EPA in developing a Roadmap to SRS Products. The roadmap will inform users of relevant SRS products and provide a suggested progression through these products based on defined use cases. EPA has developed a PowerPoint document that defines ten potential use cases with associated progressions. This document will be provided to the contractor. To finalize the Roadmap to SRS Products and prepare it to be posted on the WQSR Microsite, the contractor shall:

- Conduct a review of available platforms for the roadmap that meet EPA requirements
- Complete the roadmap design
- Update the roadmap design to address peer review comments
- Prepare a 508 compliant version of the final Roadmap to SRS Products for publication and posting to the WQSR Microsite

Sub-task 1.3: Support Maintenance of the WQSR Microsite

Under this sub-task, the contractor shall support EPA in maintaining the WQSR Microsite. Maintenance activities may include:

- Facilitating the transfer of tools or products across servers (potentially requiring the development of link pages)
- Updating documents posted on the Microsite, which may involve updating terminology for consistency with the SRS paradigm, updating cover pages, and other minor edits as specified by the EPA TM.

Sub-task 1.4: Support Electronic SRS Tools

Under this subtask, the contractor shall support EPA in maintaining electronic SRS tools, such as the SRS Information Management Requirements Development Tool (IMRT) and the SRS Exercise Development Toolbox (SRS-EDT). To maintain these tools, the contractor shall:

- Provide limited technical support to users of electronic SRS tools
- Track known and reported issues
- Update the tools to correct bugs identified by EPA personnel and other users

Task 1 Deliverables: Final deliverables under this task are listed in the following table. The first activity implemented under this task shall be a kickoff meeting to set priorities and develop a milestone schedule for Task 1.

Sub-task	Deliverable	Due to EPA
---	Kickoff meeting and milestone schedule for Task 1	August 21, 2017
1.1	Final versions of SRS component Capabilities Assessments	As specified in Task 1 milestone schedule
1.2	Final version of Roadmap to SRS Products	As specified in Task 1 milestone schedule
1.3	Address maintenance requests for the WQSR Microsite	Within 4 working days of the request
1.4	Address issues with electronic SRS tools (e.g., IMRT and EDT)	Within 2 working days of the request

Task 2: Outreach and Training (LOE 1,320)

Task 2 supports outreach and training activities under the SRS Program. Under Task 2, the contractor shall develop high quality, finished products in a variety of media, from simple factsheets and flyers to training modules and videos. Content that the contractor shall convert to outreach and training materials may be developed under this task, or under Tasks 3 through 8 of this WA. In general, this content will be derived from existing materials (e.g., guidance documents, tools, presentations, etc.). The contractor shall also provide logistical support and facilitation of live webinars and in-person training events.

This task requires staff with previous experience in developing training modules and videos using professional-grade, multi-media production software. The contractor shall have experience or training in communication and marketing to a variety of technical and non-technical audiences. The contractor shall arrange for professional narrators to record scripts for videos and training modules. The contractor shall have access to free stock images or fee-based images, if required. The contractor shall be able to print color posters up to 36 inches wide. The contractor shall ensure that all products developed under this task are consistent with standards in the SRS Product Style Guide, compliant with applicable EPA multi-media standards, and compliant with 508 standards. The contractor shall stay apprised of the Water Security Division's (WSD's) comprehensive communication and outreach efforts to ensure that products developed under this task maintain the look and feel of other WSD products.

This task is divided into four sub-tasks:

1. Produce Factsheets, Flyers, and Posters
2. Produce Training Modules and Videos
3. Provide Logistical and Facilitation Support for In-person Training

4. Provide Logistical and Facilitation Support for Webinars

Each sub-task is described below, and additional details regarding each sub-task will be provided to the contractor through written technical direction from the EPA WACOR . Contractor travel may be required to support this task. For estimating purposes, assume two trips lasting three days (two nights), and requiring participation from two contractor personnel. For estimating purposes, assume that the destination for each trip is a medium-large sized city in the Midwest.

Sub-task 2.1: Produce Factsheets, Flyers, and Posters
Under this sub-task, the contractor shall develop high-quality outreach materials, such as factsheets, flyers, and posters. Content for outreach materials shall be prepared by contractor personnel with appropriate subject matter expertise. This content will be reviewed and edited by the EPA WACOR. Once the content has been finalized and approved by the EPA WACOR, the contractor shall develop the finished product for final review and approval. The format of each product will be specified through technical direction from the EPA WACOR, but for estimating purposes, assume that up to six flyers or factsheets and two 36 inch posters shall be developed.

Sub-task 2.2: Produce Training Modules and Videos
Under this sub-task, the contractor shall develop high-quality training modules and videos. Training modules will be based on PowerPoint slides, or "screen-capture" video from applications or websites, and developed by contractor personnel with the appropriate subject matter expertise. Once the content has been finalized and approved by the EPA WACOR, the contractor shall develop a script and animation instructions for each slide or scene. The script shall be recorded by a professional narrator, and matched with the slide animation or screen capture video. The final product must be converted to "mp4" format, and include closed captioning files, to allow the final video to be posted to the EPA YouTube Channel. Topics for pre-recorded webinars will be specified in technical direction and may include tutorials for using SRS tools and self-guided learning on the principles of SRS design. For estimating purposes, assume up to 4 training modules (i.e., using either PowerPoint slides or "screen-capture" video) shall be developed.

Videos may require the contractor to shoot live footage, purchase stock footage, or build computer generated imagery (CGI) sequences. The EPA WACOR will specify parameters for any video project, including the topic, key sequencing, format, style, and duration. The contractor shall use these parameters to develop a script and a storyboard for the video, which will be reviewed by the EPA WACOR. The final script shall be recorded by a professional narrator, and matched with the video elements. The final product must be converted to "mp4" format, and include closed captioning files, to allow the final video to be posted to the EPA YouTube Channel. Topics for videos will be specified in technical direction and may include revisions to the SRS Introduction Video, video testimonials from SRS implementers, and documentation of SRS pilots (as described in Tasks 3 through 8). For estimating purposes, assume up to 2 videos shall be developed, collectively requiring no more than two days of shooting, 2 hours of stock footage, and 1 hour or CGI.

Sub-task 2.3: Provide Logistical and Facilitation Support for In-Person Training
Under this sub-task, the contractor shall provide logistical and facilitation support for in-person training events. The contractor shall compile printed participant manuals, pre-loaded thumb-drives, hand-outs,

name tags, sign-in sheets, and course evaluation forms. The contractor shall facilitate training events by introducing speakers, alerting speakers to questions from the audience, and managing time. The contractor shall participate in planning meetings prior to the training event, compile course evaluations, and capture lessons-learned to improve future training. The contractor may be required to coordinate registration for training events using EventBrite or other types of registration software. The contractor may be required to help arrange for participants to receive contact hour credits for attending the course. The contractor may also be required to support development PowerPoint presentations, in close collaboration with EPA personnel. For estimating purposes, assume up to two in-person training events.

Sub-task 2.4: Provide Logistical and Facilitation Support for Live Webinars
Under this sub-task, the contractor shall provide logistical and facilitation support for delivery of live webinars. PowerPoint presentations shall be prepared by contractor personnel with appropriate subject matter expertise. The contractor may be required to use Adobe Connect or other webinar software. The contractor shall participate in planning meetings, coordinate webinar registration, introduce speakers, facilitate Q&A time, and help arrange for contact hour credit (if requested). The contractor may also be required to support development PowerPoint presentations, in close collaboration with EPA personnel. The contractor shall also compile summary information from the webinar, such as attendee lists, answers to polling questions, and Q&A. For estimating purposes, assume up to 12 live webinar events.

Task 2 Deliverables: Final deliverables under this task are listed in the following table. The first activity implemented under this task shall be a kickoff meeting to set priorities and develop a milestone schedule for Task 2.

Sub-task	**Deliverable**	**Due to EPA**
---	Kickoff meeting and milestone schedule for Task 2	August 21, 2017
2.1	Final version of factsheet, flyer, or poster	As specified in Task 2 milestone schedule
2.2	Final version of training module	As specified in Task 2 milestone schedule
2.2	Final version of video	As specified in Task 2 milestone schedule
2.3	Final set of materials for in-person training event	As specified in Task 2 milestone schedule
2.3	Final course evaluation and lessons learned report from each in-person training event	As specified in Task 2 milestone schedule

Sub-task	Deliverable	Due to EPA
2.4	Final version of webinar presentation materials	As specified in Task 2 milestone schedule
2.4	Final version of brief summary report from each webinar event	As specified in Task 2 milestone schedule

Task 3: Online Water Quality Monitoring (LOE 1,336)
Task 3 supports the Online Water Quality Monitoring (OWQM) component of the SRS Program. The OWQM component consists of two primary applications: source water monitoring (SWM) and distribution system monitoring (DSM). The primary objective of Task 3 is to develop guidance and training materials to support voluntary implementation of OWQM by drinking water utilities. The contractor shall support this task using personnel with excellent technical writing and product development skills as well as experience with OWQM design and operation, particularly with respect to online water quality instruments, station placement, information management and analysis, and alert investigations. Task 3 is divided into six sub-tasks:

1. Develop Online Distribution System Water Quality Monitoring
2. Develop Selecting Online Water Quality Monitoring Instruments
3. Develop a Supplementary OWQM Guidance Document
4. Support Development of OWQM Content for the SRS Capabilities Assessment Tool
5. Support OWQM Implementation Projects
6. Develop OWQM Outreach and Training Products

Each sub-task is described below, and additional details regarding each sub-task will be provided to the contractor through written technical direction. Contractor travel may be required to support this task. For estimating purposes, assume three trips lasting three days (two nights), and requiring participation from one contractor personnel. For estimating purposes, assume that the destination for each trip is a medium-large sized city in the Midwest. Sub-task 3.5 may require the collection and use of primary or secondary data and thus may require a PQAPP.

<u>Sub-task 3.1: Develop Online Distribution System Water Quality Monitoring</u>
Under this sub-task, the contractor shall support EPA in developing the guidance document: Online Distribution System Water Quality Monitoring. This document provides guidance on designing a DSM system, which includes discussions of DSM design elements, case studies that highlight multiple approaches for DSM implementation, and lessons learned from DSM implementation.

Note that a peer review draft of the document will be completed by July 31, 2017, and will be provided to the contractor, as needed. To finalize the document, the contractor shall:

- Revise the document based on peer review comments
- Revise the document to address comments generated during final product review

- Prepare a 508 compliant, PDF version of the final document for publication and posting on the WQSR Microsite

Sub-task 3.2: Develop Selecting Online Water Quality Monitoring Instruments
Under this sub-task, the contractor shall support EPA in finalizing the guidance document: Selecting Online Water Quality Monitoring Instruments. This document provides overviews of SWM and DSM parameters, describes available technologies that can be used to monitor each parameter, and discusses factors that should be considered when evaluating water quality instruments.

Note that this document will be approximately 50% complete by July 31, 2017. An updated version of the document will be provided to the contractor, as needed.

To finalize the document and prepare it for publication, the contractor shall:
- Develop draft sections of the document
- Revise the document based on EPA comments
- Revise the document based on peer review comments
- Revise the document to address comments generated during final product review
- Prepare a 508 compliant, PDF version of the final document for publication and posting on the WQSR Microsite

Sub-task 3.3: Develop a Supplementary OWQM Guidance Document
Under this sub-task, the contractor shall support EPA in developing a supplementary OWQM guidance document. This document shall be no longer than 15 pages, and its topic and scope will be specified by the EPA WACOR through technical direction; however, potential topics include the status of emerging OWQM technologies and strategies for OWQM data validation.

To develop this document and prepare it for publication, the contractor shall:
- Develop draft sections of the document
- Revise the document based on EPA comments
- Revise the document based on peer review comments
- Revise the document to address comments generated during final product review
- Prepare a 508 compliant, PDF version of the final document for publication and posting on the WQSR Microsite

Sub-task 3.4: Support Development of OWQM Content for the SRS Capabilities Assessment Tool
Under this sub-task, the contractor shall support EPA in developing OWQM content for the SRS Capabilities Assessment Tool. EPA will take the lead in development of this content. The contractor shall support EPA by providing technical feedback on OWQM content and conducting up to three technical reviews of the content.

Sub-task 3.5: Support OWQM Implementation Projects
Under this sub-task, the contractor shall support EPA in the execution of up to three OWQM Implementation Projects. The purpose of these projects is to provide an opportunity for EPA to use available OWQM resources to help a utility implement elements of the OWQM component, and

evaluate the value of the OWQM resources used during each project. Each project shall involve engagement with a single drinking water utility and will focus on either SWM or DSM.

The projects will involve utility engagement facilitated and monitored by EPA. It is anticipated that each project will require at least eight phone or web meetings and one site visit. While the scope and focus of each project will be tailored to the needs and interests of the participating utility, it is anticipated that each project will involve the following activities:

- Planning meetings with the participating utility
- An assessment of the utility's existing surveillance and response capabilities
- Development of documentation to guide implementation of the project
- Procurement of products and/or services to facilitate OWQM implementation
- Development of a procedure for investigating OWQM alerts
- An exit meeting with the participating utility
- Development of a case study report from the OWQM Implementation Project

To support implementation of up to three OWQM Implementation Projects, the contractor shall:

- Assist EPA in identifying and selecting utilities to participate in the projects
- Develop documentation necessary to implement the projects
- Facilitate phone and web meetings
- Procure OWQM equipment, including online water quality instruments
- Procure products or services to support OWQM information management and analysis
- Collect and evaluate data generated during the implementation project
- Collect photographs and possibly video footage during the project
- Develop the case study report for the OWQM Implementation Project, noting that this shall be a concise, internal report that will not be published as a stand-alone document

<u>Sub-task 3.6: Develop OWQM Outreach and Training Products</u>
Under this sub-task, the contractor shall support EPA in developing up to four training and outreach products.

EPA plans to task the contractor with developing up to two outreach products related to OWQM. These products should be concise and visually appealing, and may take the form of factsheets, articles, informatics, or other formats to be specified by the EPA WACOR. Final production of finished products shall be coordinated with Task 2. The specific topics and scope of outreach products will be specified by the EPA WACOR through technical direction.

EPA plans to task the contractor with developing up to two training products related to OWQM. Training products shall be developed in the form of PowerPoint presentations that can be delivered in-person, delivered as a webinar, or recorded as a multi-media training module. Final production, including professional narration and graphics development as needed, shall be completed under Task 2. The topics and scope of the training products will be specified by the EPA WACOR through technical direction; however, potential topics include selection of parameters and monitoring locations to maximize the benefit of an OWQM system, information management and analysis methods, and case studies of OWQM implementation.

Task 3 Deliverables: Final deliverables under this task are listed in the following table. The first activity implemented under this task shall be a kickoff meeting to set priorities and develop a milestone schedule for Task 3.

Sub-task	Deliverable	Due to EPA
---	Kickoff meeting and milestone schedule for Task 3	August 21, 2017
3.1	Final version of Online Distribution System Water Quality Monitoring	As specified in Task 3 milestone schedule
3.2	Final version of Selecting Online Water Quality Monitoring Instruments	As specified in Task 3 milestone schedule
3.3	Final version of supplementary OWQM guidance document	As specified in Task 3 milestone schedule
3.5	OWQM implementation project plan	As specified in Task 3 milestone schedule
3.5	OWQM implementation project report	As specified in Task 3 milestone schedule
3.6	Final versions of OWQM outreach products	As specified in Task 3 milestone schedule
3.6	Final versions of OWQM training products	As specified in Task 3 milestone schedule

Task 4: Enhanced Security Monitoring (LOE 1,255)

Task 4 supports the Enhanced Security Monitoring (ESM) component of the SRS Program. The primary objective of Task 4 is to develop ESM guidance, training materials, and projects to support voluntary implementation of ESM by drinking water utilities. The contractor shall support this task using personnel with excellent technical writing and product development capabilities as well as experience with security, risk assessment, coordinating with law enforcement, video and intrusion detection equipment datastreams, and data analysis methods. Task 4 is divided into four sub-tasks:

1. Complete All Guidance, Products and Tools for ESM
2. Demonstrate AMI as a Component of an SRS
3. Support ESM Implementation Projects
4. Develop ESM Outreach and Training Products

Each sub-task is described below, and additional details regarding each sub-task will be provided to the contractor through written technical direction. Contractor travel may be required to support this task. For estimating purposes, assume four trips lasting three days (two nights). For estimating purposes, assume that the destination for each trip is a medium-large sized city in the Midwest. Sub-tasks 4.2 and 4.3 may require the collection and use of primary or secondary data and thus may require a PQAPP.

Sub-task 4.1: Complete All Guidance, Products and Tools for ESM

Under this sub-task, the contractor shall support EPA in completing any outstanding guidance, products, or other deliverables that were initiated under the previous option period, and which are not explicitly identified by other sub-tasks under this task. The contractor shall support EPA by completing the following ESM products:

- Complete the Designing ESM for SRSs guidance document
- Complete the Equipment Use and Functionality report
- Assist in required revisions to the ESM content in the Capabilities Assessment Tool

Note that these products were substantially completed during the first option period of this contract. The contractor may be required to do the following activities in order to finalize these products:

- Revise the content based on review and comments provided by the EPA WACOR
- Revise the content based on any peer review comments
- Revise the content to address comments generated during final product review
- Prepare a 508 compliant, PDF version of the final product for publication and posting on the WQSR Microsite

Sub-task 4.2: Demonstrate AMI as a component of an SRS

Under this sub-task, the contractor shall support EPA in developing a one to two day workshop to discuss Advanced Metering Infrastructure (AMI) as a potential component of an SRS. Applications and challenges related to AMI may be discussed. EPA has drafted documents about AMI, which will be provided to the contractor as editable Word documents (along with source files for graphics contained in the documents). To plan, coordinate, deliver and document the findings of the workshop the contractor shall:

- Prepare an agenda, registration and materials for utility and other participants
- Facilitate and participate in the workshop
- Take notes and summarize key findings and next steps from the meeting in an internal report

Additionally, the contractor shall complete the AMI mini-pilot that was initiated during the previous option period. The contractor will also be tasked to conduct one additional AMI implementation project. The purpose of the AMI implementation project is to provide an opportunity for EPA to leverage available information from ongoing implementations of smart water technology in order to evaluate AMI applications in the context of an SRS and to enhance distribution system management. Potential focus areas for this AMI implementation project include: (1) further identifying the feasibility of AMI as an SRS component; (2) evaluating application of AMI data for an SRS; (3) developing and testing AMI alert investigation procedures; and (4) incorporating smart water technologies in to an SRS. This sub-task may require contractor personnel to travel to the location of the workshop and implementation

project. To support the AMI implementation project, the contractor shall:

- Assist EPA in identifying candidate utilities for one AMI implementation project
- Develop a project plan for the implementation project
- Provide technical and logistical support during the implementation project
- Collect data and information during the implementation project
- Draft a report summarizing the implementation, results, and findings from the implementation project

Sub-task 4.3: Support ESM Implementation Projects

Under this sub-task, the contractor shall support EPA in the implementation of two ESM implementation projects. The purpose of the implementation project is to provide an opportunity for EPA to use some of the available ESM resources to help a utility implement elements of ESM, and evaluate the ESM resources used in this implementation. Possible focus areas for an ESM implementation project include: (1) identifying new and existing sites based on facility attributes and recommending security enhancements; (2) analyzing ESM alert data and invalid alert rates; (3) providing technical support for evaluation of the feasibility of using commercially available off the shelf (COTS) packaged security systems for use at single facility at a utility; and (4) developing and testing ESM alert investigation procedures. This sub-task may require contractor personnel to travel to the project site to support meetings, workshops, and/or installation and commissioning of COTS ESM equipment. To support implementation of ESM implementation projects, the contractor shall:

- Assist EPA in identifying and selecting utilities to participate in the projects
- Develop documentation necessary to implement the projects
- Facilitate phone and web meetings
- Facilitate one or two workshops
- Procure COTS ESM equipment
- Support installation, commissioning, and data collection of the COTS equipment
- Collect and evaluate data generated during the implementation project
- Collect photographs and possibly video footage during the project
- Develop the case study report for each ESM Implementation Project, noting that this shall be a concise, internal report that will not be published as a stand-alone document

Sub-task 4.4: Develop ESM Outreach and Training Products

Under this sub-task, the contractor shall support EPA in developing up to four training and outreach products. EPA plans to task the contractor with developing up to two outreach products related to ESM. These products should be concise and visually appealing and may take the form of factsheets, articles, informatics, or other formats to be specified by the EPA WACOR. Production of the finished product will be completed under Task 2. The specific topics and scope of the outreach products will be specified by the EPA WACOR through technical direction.

EPA plans to task the contractor with developing up to two training products related to ESM. Training products shall be developed in the form of PowerPoint presentations that can be delivered live, delivered as a webinar, or recorded as a multi-media training module. Final production, including professional narration and graphics development as needed, will be completed under Task 2. The topics and scope of each training products will be specified by the EPA WACOR through technical direction; however,

potential topics include training for utilities on the role of ESM and AMI in an SRS, and a case study that will illustrate the importance of security monitoring in assuring the safety of the drinking water supply.

Task 4 Deliverables: Final deliverables under this task are listed in the following table. The first activity implemented under this task shall be a kickoff meeting to set priorities and develop a milestone schedule for Task 4.

Sub-task	**Deliverable**	**Due to EPA**
---	Kickoff meeting and milestone schedule for Task 4	August 21, 2017
4.1	Final versions of the content for guidance, products and tools	As specified in Task 4 milestone schedule
4.2	Final version of the report documenting findings and outcomes from the Advanced Metering Infrastructure workshop	As specified in Task 4 milestone schedule
4.2	AMI implementation project plan	As specified in Task 4 milestone schedule
4.2	Final version of the AMI implementation project report	As specified in Task 4 milestone schedule
4.3	ESM implementation project plans	As specified in Task 4 milestone schedule
4.3	Final version of the ESM implementation project reports	As specified in Task 4 milestone schedule
4.4	Final version of ESM outreach products	As specified in Task 4 milestone schedule
4.4	Final version of ESM training products	As specified in Task 4 milestone schedule

Task 5: Customer Complaint Surveillance (LOE 1,050)

Task 5 supports the Customer Compliant Surveillance (CCS) component of the SRS Program. The primary objective of Task 5 is to develop CCS guidance, training materials, and projects to support voluntary implementation of CCS by drinking water utilities. The contractor shall support this task using personnel with excellent technical writing and product development capabilities as well as experience

with contact centers, call and work management systems, customer service, and data analysis methods. Task 5 is divided into five sub-tasks:

1. Complete all Guidance, Products and Tools
2. Develop CCS Complaint Handling Standards and Categorization Document
3. Investigate Social Media as a CCS Datastream
4. Support CCS Implementation Projects
5. Develop CCS Outreach and Training Products

Each sub-task is described below, and additional details regarding each sub-task will be provided to the contractor through written technical direction from the EPA WACOR. Contractor travel may be required to support this task. For estimating purposes, assume two trips lasting three days (two nights), and requiring participation from one contractor personnel. For estimating purposes, assume that the destination for each trip is a medium-large sized city in the Midwest. Sub-tasks 5.3 and 5.4 may require the collection and use of primary or secondary data and thus may require a PQAPP.

Sub-task 5.1: Complete All Guidance, Products and Tools for CCS

Under this sub-task, the contractor shall support EPA in completing any outstanding guidance, products, or other deliverables that were initiated under the previous option period, and which are not explicitly identified by other sub-tasks under this task. The contractor shall support EPA by completing the following that is necessary to build CCS capabilities:

- Complete the Designing CCS for SRSs guidance document
- Complete the videos for the Alert Estimation Tool and Threshold Analysis Tool
- Assist in required revisions to the CCS content in the Capabilities Assessment Tool

Note that these products were substantially completed during the first option period of this contract. The contractor may be required to do the following activities in order to finalize these products:

- Revise the content based on review and comments provided by the EPA WACOR
- Revise the content based on any peer review comments
- Revise the content to address comments generated during final product review
- Prepare a 508 compliant, PDF version of the final product for publication and posting on the WQSR Microsite

Sub-task 5.2: Develop a CCS Complaint Handling Standards and Categorization Document

Under this sub-task, the contractor shall support EPA in developing content for a CCS Complaint Handling Standards and Categorization Document. This document will summarize existing resources and standards related to water quality complaints, and how to incorporate these complaints into CCS. The document will define a process for developing complaint categories that can be used to configure CCS datastreams. The document will include a decision tree template and a set of CCS data fields that can be used to document customer water quality complaints. The contractor shall support EPA in the development of this document as follows:

- Assist EPA in identifying literature and resources for the document
- List all relevant resources, standards, and customer complaint categories used by drinking water utilities
- Map the complaints categories to the decision tree template
- Develop the draft document and template

- Address all comments from EPA and prepare the document for peer review
- Consolidate peer review comments, develop a revision plan for the document, and implement the revision plan
- Prepare a 508 compliant, PDF version of the final document for publication and posting to the WQSR Microsite

Sub-task 5.3: Investigate Social Media Monitoring as CCS Datastream

Under this sub-task, the contractor shall support EPA in investigating Social Media Monitoring as a tool to monitor for drinking water contamination incidents. Specifically, the contractor shall evaluate the ability of free internet analytical products to support social media monitoring, refine open source code to perform social media monitoring, and use a water contamination case study to demonstrate social media monitoring as a CCS datastream (potentially using retrospective and/or prospective data analysis). The contractor may also interview up to nine drinking water utilities currently using social media to inform the investigation. The contractor is further authorized to procure a social media monitoring subscription service for use in an implementation project, for up to one year, providing the monthly subscription does not exceed $100 per month. Purchase of the subscription service will allow for a comparison of capabilities between free and fee-based Social Media Monitoring services. The contractor shall support EPA in the demonstration of Social Media Monitoring as CCS datastream as follows:

- Make modifications to open source code
- Develop a case study that demonstrates the role of social media in detection of and response to a water contamination incident
- Design and implement a social media monitoring implementation project
- Finalize a report summarizing the potential of Social Media Monitoring as a CCS datastream

Sub-task 5.4: Support CCS Implementation Projects

Under this sub-task, the contractor shall support EPA in the implementation of up to two CCS implementation projects. The purpose of the implementation project is to provide an opportunity for EPA to use some of the available CCS resources to help a utility implement elements of CCS, and evaluate the CCS resources used in this implementation. Possible focus areas for a CCS implementation project include: (1) using call and work management systems for CCS; (2) identifying and assessing opportunities for vendor integration; (3) establishing CCS complaint categories and thresholds; and (4) developing and testing CCS alert investigation procedures. This implementation project shall include a workshop (one to two days) involving key personnel from the pilot utility and a data evaluation period. This sub-task may require contractor personnel to travel to the project site to support meetings, workshops, and/or data analysis. To support implementation of a CCS implementation project, the contractor shall:

- Assist EPA in identifying potential utilities for the implementation project
- Once the utility is selected, help identify partners
- Develop a project plan for the implementation project
- Provide technical and logistical support during implementation of the implementation project
- Collect and evaluate data generated during the implementation project
- Collect photographs and possibly video footage during the project
- Develop the case study report for each CCS Implementation Project, noting that this will be a concise, internal report that will not be published as a stand-alone document

Sub-task 5.5: Develop CCS Outreach and Training Products

Under this sub-task, the contractor shall support EPA in developing up to four training and outreach products. EPA plans to task the contractor with developing up to two outreach products related to CCS. These products should be concise and visually appealing and may take the form of factsheets, articles, informatics, or other formats to be specified by the EPA WACOR. Final production of the finished product shall be completed under Task 2. The specific topics and scope of the outreach products will be specified by the EPA WACOR through technical direction.

EPA plans to task the contractor with developing up to two training products related to CCS. Training products shall be developed in the form of PowerPoint presentations that can be delivered live, delivered as a webinar, or recorded as a multi-media training module. Final production, including professional narration and graphics development as needed, shall be completed under Task 2. The topics and scope of each training products will be specified by the EPA WACOR through technical direction; however, potential topics include a video tutorial that guides a utility through the process of designing a CCS component using available EPA resources, such as the Designing CCS document.

Task 5 Deliverables: Final deliverables under this task are listed in the following table. The first activity implemented under this task shall be a kickoff meeting to set priorities and develop a milestone schedule for Task 5.

Sub-task	**Deliverable**	**Due to EPA**
---	Kickoff meeting and milestone schedule for Task 5	August 21, 2017
5.1	Final versions of CCS guidance, products and tools	As specified in Task 5 milestone schedule
5.2	Final version of the CCS Complaint Handling Standards and Categorization Document in both PDF and Word formats (only the PDF needs to be 508 compliant)	As specified in Task 5 milestone schedule
5.3	Project Plan and Final Report for Social Media Monitoring	As specified in Task 5 milestone schedule
5.4	CCS Implementation Project plan	As specified in Task 5 milestone schedule
5.4	Final version of the CCS Implementation Project report	As specified in Task 5 milestone schedule
5.5	Final version of CCS outreach products	As specified in Task 5 milestone schedule

Sub-task	Deliverable	Due to EPA
5.5	Final version of CCS training products	As specified in Task 5 milestone schedule

Task 6: Public Health Surveillance (LOE 1,436)
Task 6 supports the Public Health Surveillance (PHS) component of the SRS Program. The primary objective of Task 6 is to develop PHS guidance, training materials, and projects to support voluntary implementation of PHS by drinking water utilities and their public health partners. The contractor shall support this task using personnel with excellent technical writing and product development capabilities as well as experience with public health partners, public health surveillance datastreams, and data analysis methods. Task 6 is divided into two sub-tasks:

1. Support PHS Implementation Projects
2. Develop PHS Outreach and Training Products

Each sub-task is described below, and additional details regarding each sub-task will be provided to the contractor through written technical direction from EPA WACOR. Contractor travel may be required to support this task. For estimating purposes, assume four trips lasting two days (one night), and requiring participation from one contractor personnel. For estimating purposes, assume that the destination for each trip is a medium-large sized city in the Midwest.

<u>Sub-task 6.1: Support PHS Implementation Projects</u>
Under this sub-task, the contractor shall support EPA in the implementation of up to six PHS Implementation Projects. The purpose of these projects is to provide an opportunity for EPA to use available PHS resources to help a utility implement elements of the PHS component, and evaluate the value of the PHS resources used during these projects. Each project shall involve engagement with a single drinking water utility and its local/state/regional public health partners.

The implementation project shall involve utility and public health partner engagement facilitated and monitored by EPA. It is anticipated that each project will require at least eight phone or web meetings and one in-person workshop. While the scope and focus of each PHS implementation project will be tailored to the needs and interests of the participating utility, it is anticipated that each project shall involve the following activities:

- Planning meetings with the participating utility
- An assessment of the utility's existing surveillance and response capabilities
- Development of documentation to guide the implementation project
- One in-person workshop involving the participating utility, it's public health partners, and EPA
- An assessment of public health partner surveillance capabilities
- Development of a joint utility and public health procedure for investigating PHS alerts
- Execution of a tabletop exercise to evaluate the alert investigation procedure
- An exit meeting with the participating utility

- Development of a case study report from the PHS Implementation Project

To support implementation of up to six PHS Implementation Projects, the contractor shall:

- Assist EPA in identifying and selecting participating utilities
- Once the utilities are selected, help to identify their public health partners
- Develop documentation necessary to implement the pilot, noting that the PHS Implementation Project documentation developed under the previous option period will be heavily leveraged
- Facilitate phone and web meetings
- Provide onsite facilitation during the in-person workshop for each project
- Develop the scenario and documents for the tabletop exercise, noting that a single exercise can be used for all project, with minor adjustments as needed to tailor the exercise to the specific circumstances of a utility
- Develop the case study report for the PHS Implementation Project, noting that this will be a concise, internal report that will not be published as a stand-alone document
- Collect photographs and possibly video footage during the pilot

Sub-task 6.2: Develop PHS Outreach and Training Products

Under this sub-task, the contractor shall support EPA in developing up to six training and outreach products. EPA plans to task the contractor with developing up to two outreach products related to PHS. These products should be concise and visually appealing and may take the form of factsheets, articles, informatics, or other formats to be specified by the EPA WACOR. Final production of the finished product will be completed under Task 2. The specific topics and scope of the outreach products will be specified by the EPA WACOR through technical direction.

EPA plans to task the contractor with developing up to four training products related to PHS. Training products shall be developed in the form of PowerPoint presentations that can be delivered in-person, delivered as a webinar, or recorded as a multi-media training module. Final production, including professional narration and graphics development as needed, will be completed under Task 2. The topics and scope of each training product will be specified by the EPA WACOR through technical direction; however, potential topics include lessons learned from PHS Implementation Projects, an overview of waterborne disease outbreaks, and recent development in the field of public health surveillance.

Task 6 Deliverables: Final deliverables under this task are listed in the following table. The first activity implemented under this task shall be a kickoff meeting to set priorities and develop a milestone schedule for Task 6.

Sub-task	**Deliverable**	**Due to EPA**
---	Kickoff meeting and milestone schedule for Task 6	August 21, 2017
6.1	All documentation needed to execute each PHS Implementation Project	As specified in Task 6 milestone schedule

Sub-task	Deliverable	Due to EPA
6.1	Final report for each PHS Implementation Project	As specified in Task 6 milestone schedule
6.2	Final version of PHS outreach products	As specified in Task 6 milestone schedule
6.2	Final version of PHS training products	As specified in Task 6 milestone schedule

Task 7: Sampling and Analysis (LOE 1,360)
Task 7 supports the Sampling and Analysis (S&A) component of the SRS Program. The primary objective of Task 7 is to develop S&A guidance, training materials, and outreach products.

This task requires technical staff with experience using field and laboratory methods for analysis of drinking water samples. The contractor shall support this task using personnel with excellent technical writing and product development capabilities as well as experience in designing and implementing emergency response sampling and analysis programs for water utilities. The contractor shall have knowledge of water system operations and an in depth knowledge of field and laboratory data management systems that small, medium, and large systems use. The contractor shall have education and experience in statistical design of studies to determine baseline occurrence of contaminants in drinking water and in statistical analysis of baseline data for use in drinking water contamination emergencies.

The contractor shall have experience implementing the following EPA guidance: Modules 3 and 4 of the Response Protocol Toolbox: Planning for and Responding to Drinking Water Contamination Threats and Incidents and Water Security Initiative: Guidance for Building Laboratory Capabilities to Respond to Drinking Water Contamination. The contractor shall be experienced in the use of Water Laboratory Alliance tools such as the Water Contaminant Information Tool, the Compendium of Environmental Testing Laboratories, and other tools and databases for researching contaminant information and laboratories. The contractor shall be familiar with the rules and regulations governing drinking water monitoring at water utilities.

Task 7 is divided into five sub-tasks:
1. Support Completion of Hazard Awareness and Safe Work Practices Training
2. Develop Guidance for Establishing Baseline Contaminant Occurrence in Drinking Water Distribution Systems
3. Support Revision of Guidance for Building Laboratory Capabilities to Respond to Drinking Water Contamination
4. Support Development of S&A Content for the SRS Capabilities Assessment Tool

5. Develop S&A Outreach and Training Products

Each sub-task is described below, and additional details regarding each sub-task will be provided to the contractor through written technical direction from EPA WACOR. EPA does not anticipate the need for contractor travel in support of this task.

Sub-task 7.1: Support Completion of Hazard Awareness and Safe Work Practices Training
Under this sub-task, the contractor shall support EPA in completing Hazard Awareness and Safe Work Practices Training. The contractor shall support development of this training by developing slides and multi-media presentations, and formatting and editing documents. The contractor shall possess the expertise and creativity necessary to develop a professional, visually appealing product.

The following materials that support this training and their status are described below:

- Background for Water Utilities: A brief document to provide background for utility managers on the Hazardous Waste Operations and Emergency Response (HAZWOPER) standard, the different levels of training within that standard, and how awareness level training can better prepare their employees for responding to all hazards. EPA has a complete version of this document, which will be provided to the contractor in an editable format.
- Guidelines for Training Coordinators: Utilities shall identify a utility Training Coordinator, who will use the guidelines document to identify the units and modules of training that will be offered, employees to be trained, and qualified instructors. The Training Coordinator also shall customize the training to contain relevant utility information on their Emergency Response Plan, Distribution System Contamination Response Plan, and associated procedures. This document was completed under a previous contract.
- Five Instructor Manuals: The training consists of five units. Each unit shall have an Instructor Manual, which will contain core content, training tips, review questions, and placeholders for insertion of utility specific information. EPA has a complete version of the Unit 1 Instructor Manual, which will be provided to the contractor in an editable format. The contractor shall support development of Instructor Manuals for the remaining four units of training.
- Supplementary Materials: Supplementary Materials will be available to facilitate delivery of the training and to evaluate the participants and the course. Supplementary Materials include 1) Speaker Slides for each unit of training, 2) Participant Manuals, 3) Participant Evaluation Forms, 4) Course Evaluation Forms, and 5) Certificates of Completion. Supplementary Materials are graphics heavy and may require embedded video in the Speaker Slides. Unit 1 Speaker Slides, Course Evaluation and Participant Evaluation have been completed and will be provided to the contractor from EPA. The Course Evaluation Form can be used for all five units of training.

Under this sub-task, the contractor shall:

- Review, edit and format Instructor Manuals prepared by the EPA WACOR
- Develop Speaker Slides for Units 2 through 5
- Develop Participant Manuals for Units 1 through 5
- Develop Participant Evaluation Forms for Units 2 through 5
- Develop a Certificate of Completion Template that can be filled in with the name of the participant and the unit of training

The contractor should assume up to 3 revisions for each product.

Sub-task 7.2: Develop Guidance for Establishing Baseline Contaminant Occurrence in Drinking Water Distribution Systems

Under this sub-task, the contractor shall support EPA in developing Guidance for Establishing Baseline Contaminant Occurrence in Drinking Water Distribution Systems. This document shall present guidance for water utilities on establishing method performance and contaminant occurrence data for field and laboratory methods. Considerations for establishing baseline data include availability of historical data, costs to implement new monitoring, data analysis, storage, retrieval, visualization, maintenance monitoring, and how baseline data can be used during response S&A. Lessons learned from the WSI pilots shall be incorporated in the guidance. This task requires that the contractor have knowledge of water systems and field and laboratory data management systems that small, medium, and large utilities use.

A partially completed draft of this guidance was completed during the previous period of performance. To support this sub-task, the contractor shall:

- Complete development of the guidance document
- Address all comments from EPA and prepare the document for peer review
- Consolidate peer review comments, develop a revision plan for the document, and implement the revision plan
- Prepare a 508 compliant, PDF version of the final document for publication and posting to the WQSR Microsite

The contractor shall assume up to 3 revisions for this product.

Sub-task 7.3: Support Revision of EPA Guidance for Building Laboratory Capabilities for Responding to Drinking Water Contamination

Procedures that are used during response S&A are often different from routine procedures. Under this sub-task, the contractor shall support EPA in revising the 2013 document: Guidance for Building Laboratory Capabilities for Responding to Drinking Water Contamination. Revision shall include updating terminology that references Contamination Warning Systems, updating resources and references, adding information collection forms to help utilities evaluate partner laboratories, adding a list of procedures and documentation for emergency response, discussing a utility-specific Laboratory Response Plan, and discussing and referencing the SRS Exercise Development Toolbox. Lessons learned from the WSI pilots will be incorporated in the guidance. A partially completed draft of the revised guidance was developed during the previous period of performance. To support this sub-task, the contractor shall:

- Develop revisions to the guidance document
- Address all comments from EPA and prepare the document for peer review
- Consolidate peer review comments, develop a revision plan for the document, and implement the revision plan
- Prepare a 508 compliant, PDF version of the final document for publication and posting to the WQSR Microsite

The contractor shall assume up to 3 revisions for this product.

Sub-task 7.4: Develop S&A Content for the Capabilities Assessment Tool
Under this sub-task, the contractor shall support EPA in developing S&A content for the Capabilities Assessment Tool (CAT). The contractor shall support EPA by developing the following content that is necessary to build the S&A Capabilities Assessment in the CAT:

- Questions designed to determine existing S&A capabilities
- Response choices for each question
- Statements of target capability for each S&A (sub) design element
- Statements of existing capability for each S&A (sub) design element for all possible permutations of responses to the S&A questions related to that (sub) design element
- Descriptions of potential enhancements
- Descriptions of the specific resources available to implement each enhancement

To finalize the content and prepare it for coding, the contractor shall:

- Revise the content based on input provided by the EPA WACOR
- Revise the content based on management and peer review comments
- Revise the content to address comments generated during final product review
- Prepare the final content for coding (note that the actual coding will be performed under Task 1)

Sub-task 7.5: Develop S&A Outreach and Training Products
Under this sub-task, the contractor shall support EPA in developing up to three outreach or training products. These products should be concise and visually appealing and may take the form of factsheets, articles, flyers or other formats to be specified by the EPA WACOR . Final production of the finished product shall be coordinated with Task 2. The specific topics and scope of the outreach products will be specified by the EPA WACOR through technical direction.

Training products shall be developed in the form of PowerPoint presentations that can be delivered live, delivered as a webinar, or recorded as a multi-media training module. Final production, including professional narration and graphics development, shall be coordinated with Task 2.

Task 7 Deliverables: Final deliverables under this task are listed in the following table. The first activity implemented under this task shall be a kickoff meeting to set priorities and develop a milestone schedule for Task 7.

Sub-task	**Deliverable**	**Due to EPA**
---	Kickoff meeting and milestone schedule for Task 7	August 21, 2017
7.1	Final versions of Hazard Awareness and Safe Work Practices Training in PowerPoint, PDF and Word formats (only the PowerPoint and PDF versions need to be 508 compliant)	As specified in Task 7 milestone schedule

Sub-task	Deliverable	Due to EPA
7.2	Final version of Guidance for Establishing Baseline Contaminant Occurrence in Drinking Water Distribution Systems	As specified in Task 7 milestone schedule
7.3	Final version of revised Guidance for Building Laboratory Capabilities for Responding to Drinking Water Contamination	As specified in Task 7 milestone schedule
7.4	Final version of the S&A content for the CAT	As specified in Task 7 milestone schedule
7.5	Final versions of S&A outreach products such as factsheets, flyers, articles or posters (some products may be finalized under Task 2)	As specified in Task 7 milestone schedule

Task 8: Consequence Management (LOE 1,614)
Task 8 supports the Consequence Management (CM) component of the SRS Program. The primary objective of Task 8 is to develop CM guidance and training materials to support voluntary implementation of CM by drinking water utilities and their response partners.

The contractor shall support this task with staff knowledgeable in emergency response planning as well as excellent technical writing and product development capabilities. Task 8 is divided into six sub-tasks:

1. Develop Guidance for Developing a Distribution System Contamination Response Plan
2. Develop the Guidance for Developing Tools to Track Contamination in Distribution Systems Document and Excel Tool
3. Develop the CM Design Guidance Document
4. Support Development of CM Content for the SRS Capabilities Assessment Tool
5. Support CM Implementation Projects
6. Develop CM Outreach and Training Products

Each sub-task is described below, and additional details regarding each sub-task will be provided to the contractor through written technical direction from the EPA WACOR. Contractor travel may be required to support this task, specifically Sub-tasks 8.2 and 8.5. For estimating purposes, assume two trips lasting two days (one night), and requiring participation from one contractor personnel. For estimating purposes, assume that the destination for each trip is a medium-large sized city in the Midwest.

<u>Sub-task 8.1: Develop Guidance for Developing a Distribution System Contamination Response Plan</u>
Under this sub-task, the contractor shall develop a guide and template for creating a Distribution System Contamination Response Plan (DSC RP). The guide should be an interactive document that leads the user through a step-wise process to develop a DSC RP. The guide should contain a downloadable, editable template for a DSC RP and should provide an explanation of the template as well as contain background information and instructions for populating each section of the DSC RP template. The

template should be a shell of a complete DSC RP that will contain example text, which the user can edit to create a custom DSC RP. Development of the guide and template will leverage information contained in the Water Security Initiative: Interim Guidance on Developing Consequence Management Plans for Drinking Water Utilities (2008) and in the CM Design Guidance being developed in sub-task 8.3. It shall also incorporate lessons learned from the WSI pilots. EPA has developed an outline and partial content for both the guide and the template, which will be provided to the contractor as editable Word documents (along with the source files for graphics contained in the documents).

In order to finalize this document and prepare it for publication, the contractor shall:

- Complete the draft guide and template
- Address all outstanding comments from EPA and prepare the documents for peer review
- Consolidate peer review comments, develop a revision plan for the documents, and implement the revision plan
- Prepare a 508 compliant, PDF version of the final documents for publication and posting to the WQSR Microsite

Sub-task 8.2: Develop the Guidance for Developing Tools to Track Contamination in Distribution Systems Document and Excel Tool

Under this sub-task, the contractor shall support EPA in finalizing the guidance document Water Quality Surveillance and Response System Guidance for Developing Tools to Track Contamination in Distribution Systems as well as develop an Excel tool based on the document to automate many of the steps. EPA has a substantially (90%) complete draft of this document and a partially completed (75%) Excel tool, which will be provided to the contractor as editable documents (along with the source files for graphics contained in the documents).

In order to finalize this document and Excel tool and prepare them for publication, the contractor shall:

- Complete development of the Excel tool based on the document
- Work with a utility to test and evaluate the Excel tool
- Update the document as necessary to be consistent with changes made during development of the Excel tool
- Address all outstanding comments from EPA and prepare the document for peer review and prepare the Excel tool for testing and peer review
- Consolidate peer review comments, develop a revision plan for the document and Excel tool, and implement the revision plan
- Prepare a 508 compliant, PDF version of the final document and a 508 compliant version of the final Excel tool for publication and posting to the WQSR Microsite

Sub-task 8.3: Develop the CM Design Guidance Document

Under this sub-task, the contractor shall support EPA in developing the guidance document: Consequence Management for Drinking Water Contamination Incidents for Water Quality Surveillance and Response Systems. This sub-task involves updating the document Water Security Initiative: Interim Guidance on Developing Consequence Management Plans for Drinking Water Utilities (2008) with information and lessons learned from the WSI pilots. This sub-task will leverage a nearly complete (90%) draft, which will be provided to the contractor as an editable Word document (along with the

source files for graphics contained in the document). This sub-task is closely linked to the products to be developed under sub-tasks 8.1 and 8.2 as well as the previously published Developing Risk Communication Plans for Drinking Water Contamination Incidents document (2013). The CM Design Guidance will provide a framework within which to develop CM capabilities (as a component of an SRS or as a stand-alone capability), connecting these products together.

In order to finalize this document and prepare it for publication, the contractor shall:

- Complete the draft guidance document leveraging information from documents and products under Sub-tasks 8.1 and 8.2
- Address all comments from EPA and prepare the document for peer review
- Consolidate peer review comments, develop a revision plan for the document, and implement the revision plan
- Prepare a 508 compliant, PDF version of the final document for publication and posting to the WQSR Microsite

Sub-task 8.4: Develop Content for the CM Capabilities Assessment Tool

Under this sub-task, the contractor shall support EPA in developing CM content for the Capabilities Assessment Tool (CAT). The contractor shall support EPA by developing the following content that is necessary to build the CM Capabilities Assessment in the CAT:

- Questions designed to determine existing CM capabilities
- Response choices for each question
- Statements of target capability for each CM (sub) design element
- Statements of existing capability for each CM (sub) design element for all possible permutations of responses to the questions related to that (sub) design element
- Descriptions of potential enhancements
- Descriptions of the specific resources available to implement each enhancement

To finalize the content and prepare it for coding, the contractor shall:

- Revise the content based on review and comments provided by the EPA WACOR
- Revise the content based on peer review comments
- Revise the content to address comments generated during final product review
- Prepare the final content for coding (note that the actual coding will be performed under Task 1)

Sub-task 8.5: Support CM Implementation Projects

Under this sub-task, the contractor shall support EPA in planning and conducting up to two CM Implementation Project. The contractor may also be required to develop CM-related content in support of implementation projects for the other SRS surveillance components (tasks 3-6) as needed. The purpose of the CM Implementation Projects is provide an opportunity for EPA to use the developed CM resources to help a utility implement elements of CM, and evaluate the CM resources used in the project. Possible focus areas of the CM Implementation Pilots include: (1) aiding a utility in creating a contamination response plan, (2) helping a utility to develop relationships with local and regional response partners, and (3) testing a utility's response plan through a drill or exercise. The project would be executed through a series of meetings/conference calls and/or 1-day workshops (2-3) over the course of several weeks/months. To support the CM implementation project, the contractor shall:

- Assist EPA in identifying potential utilities for the project
- Once the utility is selected, help identify the most suitable project for the utility's needs
- Develop a project plan for the project
- Provide technical and logistical support during implementation of the project
- Complete a report, at the conclusion of the project, evaluating the use of the CM resources during the project

Sub-task 8.6: Develop CM Outreach and Training Products

Under this sub-task, the contractor shall support EPA in developing up to four training and outreach products. EPA plans to task the contractor with developing up to two outreach products related to CM. These products should be concise and visually appealing and may take the form of factsheets, articles, informatics, or other formats to be specified by the EPA WACOR. Final production of the finished product shall be coordinated with Task 2. The specific topics and scope of the outreach products will be specified by the EPA WACOR through technical direction.

EPA plans to task the contractor with developing up to two training products related to CM. Training products shall be developed in the form of PowerPoint presentations that can be delivered live, delivered as a webinar, or recorded as a multi-media training module. Final production, including professional narration and graphics development, shall be coordinated with Task 2. The specific topics and scope of the training products will be specified by the EPA WACOR through technical direction.

Task 8 Deliverables: Specific deliverables under this task are listed in the following table. The first activity implemented under this task shall be a kickoff meeting to set priorities and develop a milestone schedule for Task 8.

Sub-task	**Deliverable**	**Due to EPA**
---	Kickoff meeting and milestone schedule for Task 8	August 21, 2017
8.1	Final version of guide and template for developing a Distribution System Contamination Incident Response Plan	As specified in Task 8 milestone schedule
8.2	Final version of Guidance for Developing Tools to Track Contamination in Distribution Systems document and Excel tool	As specified in Task 8 milestone schedule
8.3	Final version of the CM Design Guidance document in both PDF and Word formats (only the PDF needs to be 508 compliant)	As specified in Task 8 milestone schedule
8.4	Final version of the CM content for the CAT	As specified in Task 8 milestone schedule

Sub-task	Deliverable	Due to EPA
8.5	Final project plan for each CM Implementation Project	As specified in Task 8 milestone schedule
8.5	Final report for each CM Implementation Project	As specified in Task 8 milestone schedule
8.6	Final version of CM outreach and training products	As specified in Task 8 milestone schedule

V. SCHEDULE/DELIVERABLES

Detailed listings of deliverables are included for each task in Section IV.

VI. REPORTING REQUIREMENTS

1. Monthly Progress Reports (including a progress evaluation discussion)
2. Financial Reports (including the populated financial tracking spreadsheet)
3. Project Specific PQAPP

VII. GREEN MEETINGS AND CONFERENCES

The contractor shall follow the provision of EPA prescription 1523.703-1, Acquisition of environmentally preferable meeting and conference services (May 2007), for the use of off-site commercial facilities for an EPA event, whether the event is a meeting, conference, training session, or other purpose. Environmental preferability is defined at FAR 2.101, and shall be used when soliciting quotes or offers for meeting/conference services on behalf of the Agency.

VIII. CONFERENCES AND WORKSHOPS

The tasks under this work assignment do not require the acquisition of "off-site" facilities for conferences and meetings as defined in the IPN 12-05. AND the events associated with this work assignment are not covered by EPA Order 1900.3 and do not require EPA Form 5170.

The contractor shall immediately alert the WACOR to any anticipated event under the work assignment which may incur an estimated cost to EPA of $20,000 or more, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The EPA WACOR will then prepare for approval the internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA

organization, the organization providing the planning is responsible for the approval.

Any event which meets the definition of a "conference," with total net expenditures greater than $20,000, is required to submit EPA Electronic Form 5170 and Form 5170-A (with cost estimates/actuals). In the case the workflow system is down and CORs require emergency approval, they can submit EPA Form 5170 (PDF) (2pp, 93K) (with cost estimates) to conference@epa.gov.

IX. SOFTWARE APPLICATION AND ACCESSIBILITY (SECTION 508 REHABILITATION ACT AND AMENDMENTS)

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: http://www.section508.gov/

Preferred text format:	MS Word, 8.0 or higher (Office 2007 or higher)
Preferred presentation format:	Power Point, Office 2007 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0

The WACOR shall identify which of delivered products will require 508 compliance.

QUALITY ASSURANCE SURVEILLANCE PLAN
for WSD's Mission Support

Quality Assurance Surveillance Plan

The requirements contained in this WA are considered performance-based, focusing on the Agency's desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency's performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards described below. The Contractor's performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the "Contractor Performance Evaluation" clause in the contract). The WACOR shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the Project Officer in preparing the overall evaluations submitted annually in response to the CPE requirements in the contract.

Performance Requirement	Measureable Performance Standards	Surveillance Method	Incentives/ Disincentives
Management and Communications: The Contractor shall maintain contact with the EPA Contracting Officer (CO), Contract Level Contracting Officer's Representative (CL COR), and Work Assignment Contracting Officer's Representative (WACOR) throughout the performance of the contract and shall immediately bring potential problems to the attention of the EPA CL COR and appropriate WACOR. In cases where issues have a direct impact on project schedules, cost, time, or quality, the contractor shall provide options for EPA's consideration on resolving the issues or mitigating their impacts.	Any issue adversely impacting project schedules, cost, time, or quality shall be brought to the attention of the EPA CL COR and appropriate WACOR within 3 work-days of occurrence.	100% of active work assignments (WA) will be reviewed by the EPA WACORs (via the monthly progress report) to identify unreported issues. The EPA WACORs will report any issues to the EPA CL COR who will bring the issue(s) to the Contractor's attention through the CO.	Two or more incidents per contract period of performance where the contractor does not meet the measureable performance standard will be considered unsatisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of **Management**. Fewer than two incidents per contract period of performance where the contractor does not meet the measureable performance standard will be considered satisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of **Management.**
Cost Management and Control: The Contractor shall monitor, track, and accurately report level of effort, labor cost, other direct cost, and fee expenditures to	The contractor shall manage costs to the level of the approved cost estimate on each individual WA. The contractor shall notify the EPA WACOR, CL COR, and CO when	100% of the active WAs under the contract will be reviewed by the EPA CL COR and appropriate WACOR monthly (via meetings, monthly progress	If the contractor does not meet the measurable performance standards in an applicable contract period of performance it will be assigned a rating of Unsatisfactory in CPARS under the

Performance Requirement	Measureable Performance Standards	Surveillance Method	Incentives/ Disincentives
EPA through progress reports and approved special reporting requirements. The Contractor shall assign an appropriate level of skilled personnel to all tasks, practice and encourage time management, and ensure accurate and appropriate cost control.	75% of the approved cost estimate for any particular WA is reached. If a contractor fails to manage and control cost, any resultant overrun cannot exceed the total contract obligation for that period.	reports & milestones established for each deliverable) to compare actual versus projected expenditures. The EPA CL COR shall review the Contractor's monthly progress reports and request the WACOR's verification of expenditures before authorizing invoice payments.	category of **Cost Control.** A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Cost Control if the contractor meets the measureable performance standards and accurately reports the costs in the progress reports according to the requirements in the "Reports of Work" attachment to the RFP.
Timeliness: Services and deliverables shall be in accordance with schedules stated in each WA, unless amended or modified by an approved EPA action.	No more than 15% of all deliverables per WA shall be submitted more than 3 work days past the due date.	100% of the active WAs/deliverables under the contract will be reviewed by the EPA CL COR/WACOR monthly (via monthly progress report & milestones established for each deliverable) to compare actual delivery dates against those approved.	If the contractor does not meet the measurable performance standards per WA during an applicable period of performance, it will be assigned a rating of Unsatisfactory in CPARS under the category of **Schedule.** A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of **Schedule** if the contractor meets the measureable performance standards.
Technical Effort: The Contractor shall abide by its QMP and QAPPs for individual WAs in performing services and providing	No more than 15% of deliverables and work products for any WA furnished to EPA for review by CL COR/WACOR and	100% of active WAs/deliverables (and work products) will be reviewed by the EPA CL COR/WACOR to identify	If the contractor does not meet the measurable performance standards per work assignment it will be assigned a rating of Unsatisfactory in

Performance Requirement	Measureable Performance Standards	Surveillance Method	Incentives/ Disincentives
the support on this contract.	QAO shall require revisions to meet the requirements of the QMP and QAPP for the WA.	noncompliance issues with the QMP and QAPPs for individual WAs.	CPARS under the category of **Technical (Quality of Product)**. A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of **Technical (Quality of Product)** if the contractor meets the measureable performance standards.

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 02-01

☐ Other ☒ Amendment Number: 000001

Contract Number	Contract Period	Title of Work Assignment/SF Site Name
EP-C-15-012	08/01/2015 To 07/31/2018 Base Option Period Number 2	Water Security Initiative

Contractor: CSRA LLC

Specify Section and paragraph of Contract SOW: 2.2, 2.6, 2.11, 2.15, 2.17

Purpose:
- ☐ Work Assignment
- ☒ Work Assignment Amendment
- ☐ Work Plan Approval
- ☐ Work Assignment Close-Out
- ☐ Incremental Funding

Period of Performance: From 08/01/2017 To 07/31/2018

Comments:
The purpose of this amendment 1 to CSRA (EP-C-15-012) WA 02-01 is to change the QA language included in the PWS. There is no change in the level-of-effort hours.

☐ Superfund — Accounting and Appropriations Data — ☒ Non-Superfund

Note: To report additional accounting and appropriations date use EPA Form 1900-69A.

SFO (*Max 2*) ☐

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

	Cost/Fee:	LOE:
Contract Period: 08/01/2015 To 07/31/2018		12,458
This Action:		0
Total:		12,458

Work Plan / Cost Estimate Approvals

	Cost/Fee	LOE:
Contractor WP Dated:		
Cumulative Approved:		

Work Assignment Manager Name: Steve Allgeier	(Signature)	(Date)	Branch/Mail Code: Phone Number: 513-569-7131 FAX Number:
Project Officer Name: Nancy Parrotta	(Signature)	(Date)	Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:
Other Agency Official Name	(Signature)	(Date)	Branch/Mail Code: Phone Number: FAX Number:
Contracting Official Name: Donna Reinhart	(Signature)	(Date)	Branch/Mail Code: Phone Number: 513-487-2114 FAX Number:

DONNA REINHART

Digitally signed by DONNA REINHART
DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=DONNA REINHART, dnQualifier=0000010546
Date: 2017.07.28 15:36:34 -04'00'

WORK ASSIGNMENT
PERFORMANCE WORK STATEMENT (PWS)
Amendment 1

Contract No: EP-C-15-012

Work Assignment: WA-02-01

WACOR:	**Name:**	**Steven C. Allgeier**
	Branch:	SRS Program / IO
	Division:	Water Security Division
	Office:	Office of Ground Water and Drinking Water
	Phone:	513-569-7131
	FAX:	513-569-7191
	E-mail:	Allgeier.Steve@epa.gov
	Mail code:	AWBERC, WSD-140
	Street Address:	26 West Martin Luther King Dr.
	City, State, Zip:	Cincinnati, OH 45268

Alt WACOR:	**Name:**	**Matthew Umberg**
	Branch:	SRS Program / IO
	Division:	Water Security Division
	Office:	Office of Ground Water and Drinking Water
	Phone:	513-569-7357
	FAX:	513-569-7191
	E-mail:	Umberg.Matt@epa.gov
	Mail code:	AWBERC, WSD-140
	Street Address:	26 West Martin Luther King Dr.
	City, State, Zip:	Cincinnati, OH 45268

LOE: 12,458 hours

Period of Performance: August 1, 2017 to July 31, 2018

Title: Surveillance and Response Systems

PWS Sections: 2.2, 2.6, 2.11, 2.15, 2.17

I. PURPOSE:

The purpose of this work assignment (WA) is to increase the knowledge base for Water Quality Surveillance and Response Systems (SRS) for drinking water utilities, and to use this knowledge to promote the voluntary adoption of practices relating to SRS deployment. This goal will be achieved

through the development of guidance, tools, and other products that disseminate information to the Water Sector gained through the Water Security Initiative (WSI) pilots, research, and other sources. To achieve this purpose the contractor shall support EPA in the development of products that enable the Water Sector to implement SRS. In general the work falls into three main areas: 1) product development, 2) outreach and training, and 3) SRS implementation projects. Under product development, the contractor shall support EPA in the development of guidance, tools, and other materials that can be used by the Water Sector to implement SRS. These products will be made available through the Water Quality Surveillance and Response (WQSR) Microsite. Under outreach and training, the contractor shall support EPA in the development of outreach materials such as factsheets, videos, informational materials, and other products that serve to increase awareness of SRS practices in the Water Sector. The contractor shall also develop high quality training materials including presentations and webinars, and shall facilitate in-person training events. Under implementation projects, the contractor shall support EPA in the implementation of projects to develop SRS capabilities at specific utilities. These implementation projects will provide an opportunity to test EPA tools and guidance, develop case studies for successful SRS implementation, and develop utility ambassadors for the SRS program.

The intended audience for the products developed under this WA is the Water Sector, including: drinking water utilities, wastewater utilities, laboratories, response partners, and technical assistance providers.

This project supports programmatic needs related to our national all hazards and homeland security responsibilities by improving the ability of drinking water systems to detect and respond to unusual water quality conditions in source water and distribution systems.

Other partners and external offices or agencies which should be coordinated with include: Department of Homeland Security (DHS), Centers for Disease Control and Prevention (CDC), Office of Ground Water and Drinking Water, Standards and Risk Management Division (OGWDW-SRMD), Office of Ground Water and Drinking Water, Drinking Water Protection Division (OGWDW-DWPD), American Water Works Associations (AWWA), and Association of State Drinking Water Administrators (ASDWA).

This work assignment supports the mission of the Water Security Division (WSD) as described in the Water Security Strategy framework, which relates resources, activities, outputs, audience, short- and long- term outcomes to the WSD pillars of Prevention, Detection, Response, and Recovery. Additionally, this work assignment contributes to the commitments made in EPA's *Strategic Plan: 2011 to 2015* and EPA's *Homeland Security Strategy (2004)*. Under EPA's *Strategic Plan*, reference is made to Goal 2 (Clean and Safe Water), Objective 2.1 (Protecting Human Health), Sub-objective 2.1.1 (Water Safe to Drink), and to the Cross-Goal on homeland security. Under EPA's *Homeland Security Strategy*, reference is made to Objective 1 (Critical Infrastructure Protection).

In fulfillment of these requirements, this contract supports the nation's drinking and wastewater infrastructure, collectively known as the Water Sector, in being informed, coordinated, and prepared to prevent, detect, respond to, and recover from terrorist attack and other intentional acts, natural disasters, and other hazards (referred to as the "all hazards' approach), which may also occur, including the needs and challenges posed by natural disasters, catastrophic events, adaptation and impacts of climate change,

floods, earthquakes, pandemic illness, and any other events which impact the safety and availability of our water supply.
In pursuit of these efforts, the contractor may be tasked with preparing a correlation summary comparing the results under this work assignment to the components of the Water Security Strategy framework.

II. BACKGROUND:

Homeland Security Presidential Directive 9 (HSPD9) was signed on June 30, 2004. It established a national policy to defend the agriculture and food system against terrorist attacks, major disasters, and other emergencies. HSPD9 specifically required EPA to "develop robust, comprehensive, and fully coordinated surveillance and monitoring systems … for … water quality that provide early detection and awareness of disease, pest, or poisonous agents." EPA's response to HSPD9 was to establish WSI, a program to develop, evaluate, and promote SRS in the Water Sector.

An SRS involves the active deployment and use of monitoring and surveillance strategies to collect, integrate, analyze, and communicate information to provide a timely warning of potential water quality problems and to initiate a response to correct the identified problem. The four surveillance components of the SRS architecture include:

- Online Water Quality Monitoring for parameters in order to detect a change from an established baseline. This includes monitoring in the source water and distribution system.
- Enhanced Security Monitoring to detect physical intrusions into a drinking water facility that provides access to finished water. This includes Advanced Metering Infrastructure to detect tampering and backflow events at service connections.
- Customer Complaint Surveillance to detect changes in the aesthetic character of the water that might indicate a deterioration in water quality.
- Public Health Surveillance to detect unusual occurrence of disease or illness in the population and to determine if it's related to contaminated drinking water.

The SRS architecture also includes two response components: Consequence Management and Sampling and Analysis. If the investigation of an alert from a surveillance component cannot rule out contamination, Consequence Management is activated to guide the threat level determination process and response actions to minimize consequences. Sampling and Analysis is performed during the investigation of a possible contamination incident in an attempt to confirm contamination and identify the specific contaminant. Activities performed under sampling and analysis include field safety screening and rapid field testing that occur during site characterization as well as laboratory analysis of samples collected from the field. This component also includes routine monitoring to establish a baseline for key contaminants.

EPA is implementing the SRS program in three phases: 1) design an effective SRS architecture; 2) demonstrate and evaluate the SRS architecture through a pilot program; and 3) develop guidance and products to promote voluntary adoption of SRS practices within the Water Sector. EPA has completed the first two phases of WSI, and made substantial progress in the third phase during fiscal years (FY) 12, 13, 14, 15, 16 and 17. EPA will continue this effort under the first option period for this contract and through the end of FY18. Specifically, EPA intends to complete development of all SRS guidance and tools, continue SRS outreach and training activities, and complete several SRS implementation projects.

III. QA REQUIREMENTS:

Sub-tasks 3.5, 4.3, 5.3, and 5.4 in this WA require quality assurance (QA). Consistent with the Agency's QA requirements, the contractor must prepare a complete Project Specific Quality Assurance Project Plan (PQAPP), to assure the quality of the data used under this WA. Work on these sub-tasks cannot proceed until the contractor receives notification of PQAPP approval from the Contract Level Contracting Officer Representative (CLCOR) via e-mail. Consistent with the Agency's QA requirements, the contractor prepared a PQAPP for Sub-task 4.2 on WA 01-01. Since no significant changes in data collection are expected between WA 01-01 and the work described in this work assignment, the PQAPP for WA 01-01, Sub-task 4.2, approved 09/14/2016, shall be used for this work assignment.

IV. DETAILED TASK DESCRIPTION:

All direction under this WA will be provided as written technical direction from the WACOR or Alternate WACOR. If provided first as verbal technical direction to the contractor, it will be confirmed in writing within 5 calendar days, with a copy to the Contract Level Contracting Officer's Representative (CL COR) and the Contracting Officer (CO), and is subject to the limitations of the technical direction contract clause. The WACOR will provide LOE estimates with each tasking and the contractor shall not exceed the estimated LOE without justification and approval by the WACOR.

Unless otherwise specified, the contractor should assume that all products listed in this WA will be developed in the following stages: outline, multiple internal drafts for EPA review, review draft for external peer review, and final draft for publication. Each initial deliverable shall be provided to the EPA WACOR in draft form for review and comment. The contractor shall incorporate EPA WACOR review comments into subsequent revisions. The EPA WACOR will coordinate peer review of the draft product. The contractor, in consultation with the EPA WACOR, shall review all comments and the contractor shall prepare a disposition of comments using a format specified by the WACOR. The contractor shall revise each product according to a revision plan approved by the EPA WACOR, and prepare it for publication. All final products will also undergo a complete technical, editorial, and managerial review. This review shall ensure that the document complies with standards in the *SRS Style Guide*, and the *EPA Style Guide*. Any products that will be published shall also be reviewed and revised for 508 compliance.

The contractor shall notify the WACOR of all staff involved in the production of technical products and guidance, and these staff shall participate in all substantive discussions with the EPA WACOR related to products on which they work.

In addition to Task 0, *Work Plan, Progress Evaluations, and Monthly Project Reports*, there are eight tasks described in this work assignment. The titles of each task are listed in the following table. A kickoff meeting will be held for each of the Tasks 1 through 8 to establish priorities and a milestone schedule for each task.

Task #	Task Title
0	Work Plan, Progress Evaluations, and Monthly Project Reports
1	Web-based Tools
2	Outreach and Training
3	Online Water Quality Monitoring
4	Enhanced Security Monitoring
5	Customer Complaint Surveillance
6	Public Health Surveillance
7	Sampling and Analysis
8	Consequence Management

Task 0: Work Plan, Progress evaluations, and Monthly Progress Reports (LOE 1,560)
The contractor shall develop a WP that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the work plan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at http://www.epa.gov/accessibility/. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a PQAPP, as noted above, and ensure the quality of primary and secondary data used to complete the indicated sub-tasks. Work on these sub-tasks cannot proceed until the contractor receives notification of PQAPP approval from the CL COR via e-mail. The PQAPP shall be submitted to the EPA WACOR per the deliverable date listed in the following table. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved.

In each monthly progress report, the contractor shall, at the introduction to the discussion of this WA, discuss actual progress toward achieving the purpose of this work assignment, including problems encountered, issues that may need to be resolved, and anticipated timing for completing the goals of the WA. The contractor shall provide an overview of contract projects, striving to implement efficiencies in performance when complimentary requirements are issued. The contractor shall assure that duplication of effort relative to other ongoing WA under this contract is not occurring.

In addition, the contractor shall submit a financial tracking spreadsheet populated with incurred and lagging costs for the current billing cycle. The EPA WACOR will provide a template for the financial tracking spreadsheet. The financial tracking spreadsheet shall be updated and submitted monthly along with the monthly progress and financial report.

EPA does not anticipate the need for the contractor to travel in support of this task.
Task 0 Deliverables: Specific deliverables under this task are listed in the following table:

Sub-task	Deliverable	Due to EPA
0	WA-02-01 Work Plan including: schedule, staffing plan, LOE, cost estimates, key assumptions, and qualifications of proposed staff	August 21, 2017
0	Monthly progress and financial reports, including updates to the financial tracking spreadsheet. Summary of Quality Assurance Activities and Issues by Work Assignment.	Monthly, as specified in the contract
0	PQAPP for Sub-tasks 3.5, 4.2, 4.3, 5.3, and 5.4 of this WA. Checklist for Quality Assurance Project Plans.	As specified in Task-specific milestone schedules

Task 1: Web-based Tools (LOE 1,527)
Task 1 supports the development of web-based tools that guide the utilization of SRS products posted on the WQSR Microsite. The primary objective of Task 1 is to develop tools that enhance the user experience with the WQSR Microsite and help users locate products in their areas of interest. The contractor shall support this task with staff having an in-depth understanding of effective website design and development of web-based tools and applications. Task 1 is divided into four sub-tasks:

1. Build the *SRS Capabilities Assessment Tool*
2. Develop a *Roadmap to SRS Products*
3. Support Maintenance of the WQSR Microsite
4. Support Electronic SRS Tools

Each sub-task is described below, and additional details regarding each sub-task will be provided to the contractor through written technical direction. EPA does not anticipate the need for the contractor to travel in support of this task.

Sub-task 1.1: Build the *SRS Capabilities Assessment Tool*
Under this sub-task, the contractor shall support EPA in building the *SRS Capabilities Assessment Tool* by developing a Capabilities Assessment (CA) for each of the six SRS components.

Each CA will present a user with up to 15 questions to assess their utility's existing capabilities with respect to a given SRS component. Each question will be presented on a dedicated screen, and the exact sequence of questions a user encounters may depend on how they respond to the questions. After a user has completed an entire sequence of questions, a Capabilities Assessment Report (CAR) will be generated, which compares a utility's existing capabilities with target capabilities, recommends potential enhancements, and directs users to resources that could help them implement those enhancements.

A beta version of the *SRS Capabilities Assessment Tool* has been built and undergone internal testing.

Furthermore, the PHS, ESM, and CCS CAs will be completed by July 31, 2017. CAs for the remaining SRS components (OWQM, S&A, and CM) shall be designed in the same manner as those that have been completed. EPA will provide the contractor with all of the SRS component-specific content required to build the CAs, which will be developed under Tasks 3, 7, and 8.

To finalize the *SRS Capabilities Assessment Tool* and prepare it to be posted on the WQSR Microsite, the contractor shall:

- Develop initial versions of the OWQM, CM, and S&A CAs
- Revise the functionality of the *SRS Capabilities Assessment Tool* to address comments received during user acceptance testing (comments on component content will be addressed under Tasks 3, 7, and 8)
- Modify the *SRS Capabilities Assessment Tool* to address functionality issues, including 508 compliance, identified during the final product review
- Update the *SRS Capabilities Assessment Tool* to correct bugs identified by EPA personnel and other users. The contractor shall track known and reported issues.

Sub-task 1.2: Develop a *Roadmap to SRS Products*

Under this sub-task, the contractor shall support EPA in developing a *Roadmap to SRS Products*. The roadmap will inform users of relevant SRS products and provide a suggested progression through these products based on defined use cases. EPA has developed a PowerPoint document that defines ten potential use cases with associated progressions. This document will be provided to the contractor. To finalize the *Roadmap to SRS Products* and prepare it to be posted on the WQSR Microsite, the contractor shall:

- Conduct a review of available platforms for the roadmap that meet EPA requirements
- Complete the roadmap design
- Update the roadmap design to address peer review comments
- Prepare a 508 compliant version of the final *Roadmap to SRS Products* for publication and posting to the WQSR Microsite

Sub-task 1.3: Support Maintenance of the WQSR Microsite

Under this sub-task, the contractor shall support EPA in maintaining the WQSR Microsite. Maintenance activities may include:

- Facilitating the transfer of tools or products across servers (potentially requiring the development of link pages)
- Updating documents posted on the Microsite, which may involve updating terminology for consistency with the SRS paradigm, updating cover pages, and other minor edits as specified by the EPA TM.

Sub-task 1.4: Support Electronic SRS Tools

Under this subtask, the contractor shall support EPA in maintaining electronic SRS tools, such as the *SRS Information Management Requirements Development Tool* (IMRT) and the *SRS Exercise Development Toolbox* (SRS-EDT). To maintain these tools, the contractor shall:

- Provide limited technical support to users of electronic SRS tools
- Track known and reported issues

- Update the tools to correct bugs identified by EPA personnel and other users

Task 1 Deliverables: Final deliverables under this task are listed in the following table. The first activity implemented under this task shall be a kickoff meeting to set priorities and develop a milestone schedule for Task 1.

Sub-task	Deliverable	Due to EPA
---	Kickoff meeting and milestone schedule for Task 1	August 21, 2017
1.1	Final versions of SRS component Capabilities Assessments	As specified in Task 1 milestone schedule
1.2	Final version of *Roadmap to SRS Products*	As specified in Task 1 milestone schedule
1.3	Address maintenance requests for the WQSR Microsite	Within 4 working days of the request
1.4	Address issues with electronic SRS tools (e.g., IMRT and EDT)	Within 2 working days of the request

Task 2: Outreach and Training (LOE 1,320)

Task 2 supports outreach and training activities under the SRS Program. Under Task 2, the contractor shall develop high quality, finished products in a variety of media, from simple factsheets and flyers to training modules and videos. Content that the contractor shall convert to outreach and training materials may be developed under this task, or under Tasks 3 through 8 of this WA. In general, this content will be derived from existing materials (e.g., guidance documents, tools, presentations, etc.). The contractor shall also provide logistical support and facilitation of live webinars and in-person training events.

This task requires staff with previous experience in developing training modules and videos using professional-grade, multi-media production software. The contractor shall have experience or training in communication and marketing to a variety of technical and non-technical audiences. The contractor shall arrange for professional narrators to record scripts for videos and training modules. The contractor shall have access to free stock images or fee-based images, if required. The contractor shall be able to print color posters up to 36 inches wide. The contractor shall ensure that all products developed under this task are consistent with standards in the *SRS Product Style Guide*, compliant with applicable EPA multi-media standards, and compliant with 508 standards. The contractor shall stay apprised of the Water Security Division's (WSD's) comprehensive communication and outreach efforts to ensure that products developed under this task maintain the look and feel of other WSD products.

This task is divided into four sub-tasks:

1. Produce Factsheets, Flyers, and Posters

2. Produce Training Modules and Videos
3. Provide Logistical and Facilitation Support for In-person Training
4. Provide Logistical and Facilitation Support for Webinars

Each sub-task is described below, and additional details regarding each sub-task will be provided to the contractor through written technical direction from the EPA WACOR . Contractor travel may be required to support this task. For estimating purposes, assume two trips lasting three days (two nights), and requiring participation from two contractor personnel. For estimating purposes, assume that the destination for each trip is a medium-large sized city in the Midwest.

Sub-task 2.1: Produce Factsheets, Flyers, and Posters

Under this sub-task, the contractor shall develop high-quality outreach materials, such as factsheets, flyers, and posters. Content for outreach materials shall be prepared by contractor personnel with appropriate subject matter expertise. This content will be reviewed and edited by the EPA WACOR. Once the content has been finalized and approved by the EPA WACOR, the contractor shall develop the finished product for final review and approval. The format of each product will be specified through technical direction from the EPA WACOR, but for estimating purposes, assume that up to six flyers or factsheets and two 36 inch posters shall be developed.

Sub-task 2.2: Produce Training Modules and Videos

Under this sub-task, the contractor shall develop high-quality training modules and videos. Training modules will be based on PowerPoint slides, or "screen-capture" video from applications or websites, and developed by contractor personnel with the appropriate subject matter expertise. Once the content has been finalized and approved by the EPA WACOR, the contractor shall develop a script and animation instructions for each slide or scene. The script shall be recorded by a professional narrator, and matched with the slide animation or screen capture video. The final product must be converted to "mp4" format, and include closed captioning files, to allow the final video to be posted to the EPA YouTube Channel. Topics for pre-recorded webinars will be specified in technical direction and may include tutorials for using SRS tools and self-guided learning on the principles of SRS design. For estimating purposes, assume up to 4 training modules (i.e., using either PowerPoint slides or "screen-capture" video) shall be developed.

Videos may require the contractor to shoot live footage, purchase stock footage, or build computer generated imagery (CGI) sequences. The EPA WACOR will specify parameters for any video project, including the topic, key sequencing, format, style, and duration. The contractor shall use these parameters to develop a script and a storyboard for the video, which will be reviewed by the EPA WACOR. The final script shall be recorded by a professional narrator, and matched with the video elements. The final product must be converted to "mp4" format, and include closed captioning files, to allow the final video to be posted to the EPA YouTube Channel. Topics for videos will be specified in technical direction and may include revisions to the SRS Introduction Video, video testimonials from SRS implementers, and documentation of SRS pilots (as described in Tasks 3 through 8). For estimating purposes, assume up to 2 videos shall be developed, collectively requiring no more than two days of shooting, 2 hours of stock footage, and 1 hour or CGI.

Sub-task 2.3: Provide Logistical and Facilitation Support for In-Person Training

Under this sub-task, the contractor shall provide logistical and facilitation support for in-person training events. The contractor shall compile printed participant manuals, pre-loaded thumb-drives, hand-outs, name tags, sign-in sheets, and course evaluation forms. The contractor shall facilitate training events by introducing speakers, alerting speakers to questions from the audience, and managing time. The contractor shall participate in planning meetings prior to the training event, compile course evaluations, and capture lessons-learned to improve future training. The contractor may be required to coordinate registration for training events using EventBrite or other types of registration software. The contractor may be required to help arrange for participants to receive contact hour credits for attending the course. The contractor may also be required to support development PowerPoint presentations, in close collaboration with EPA personnel. For estimating purposes, assume up to two in-person training events.

Sub-task 2.4: Provide Logistical and Facilitation Support for Live Webinars
Under this sub-task, the contractor shall provide logistical and facilitation support for delivery of live webinars. PowerPoint presentations shall be prepared by contractor personnel with appropriate subject matter expertise. The contractor may be required to use Adobe Connect or other webinar software. The contractor shall participate in planning meetings, coordinate webinar registration, introduce speakers, facilitate Q&A time, and help arrange for contact hour credit (if requested). The contractor may also be required to support development PowerPoint presentations, in close collaboration with EPA personnel. The contractor shall also compile summary information from the webinar, such as attendee lists, answers to polling questions, and Q&A. For estimating purposes, assume up to 12 live webinar events.

Task 2 Deliverables: Final deliverables under this task are listed in the following table. The first activity implemented under this task shall be a kickoff meeting to set priorities and develop a milestone schedule for Task 2.

Sub-task	**Deliverable**	**Due to EPA**
---	Kickoff meeting and milestone schedule for Task 2	August 21, 2017
2.1	Final version of factsheet, flyer, or poster	As specified in Task 2 milestone schedule
2.2	Final version of training module	As specified in Task 2 milestone schedule
2.2	Final version of video	As specified in Task 2 milestone schedule
2.3	Final set of materials for in-person training event	As specified in Task 2 milestone schedule

Sub-task	Deliverable	Due to EPA
2.3	Final course evaluation and lessons learned report from each in-person training event	As specified in Task 2 milestone schedule
2.4	Final version of webinar presentation materials	As specified in Task 2 milestone schedule
2.4	Final version of brief summary report from each webinar event	As specified in Task 2 milestone schedule

Task 3: Online Water Quality Monitoring (LOE 1,336)
Task 3 supports the Online Water Quality Monitoring (OWQM) component of the SRS Program. The OWQM component consists of two primary applications: source water monitoring (SWM) and distribution system monitoring (DSM). The primary objective of Task 3 is to develop guidance and training materials to support voluntary implementation of OWQM by drinking water utilities. The contractor shall support this task using personnel with excellent technical writing and product development skills as well as experience with OWQM design and operation, particularly with respect to online water quality instruments, station placement, information management and analysis, and alert investigations. Task 3 is divided into six sub-tasks:

1. Develop *Online Distribution System Water Quality Monitoring*
2. Develop *Selecting Online Water Quality Monitoring Instruments*
3. Develop a Supplementary OWQM Guidance Document
4. Support Development of OWQM Content for the *SRS Capabilities Assessment Tool*
5. Support OWQM Implementation Projects
6. Develop OWQM Outreach and Training Products

Each sub-task is described below, and additional details regarding each sub-task will be provided to the contractor through written technical direction. Contractor travel may be required to support this task. For estimating purposes, assume three trips lasting three days (two nights), and requiring participation from one contractor personnel. For estimating purposes, assume that the destination for each trip is a medium-large sized city in the Midwest. Sub-task 3.5 may require the collection and use of primary or secondary data and thus may require a PQAPP.

<u>Sub-task 3.1: Develop *Online Distribution System Water Quality Monitoring*</u>
Under this sub-task, the contractor shall support EPA in developing the guidance document: *Online Distribution System Water Quality Monitoring*. This document provides guidance on designing a DSM system, which includes discussions of DSM design elements, case studies that highlight multiple approaches for DSM implementation, and lessons learned from DSM implementation.

Note that a peer review draft of the document will be completed by July 31, 2017, and will be provided

to the contractor, as needed. To finalize the document, the contractor shall:

- Revise the document based on peer review comments
- Revise the document to address comments generated during final product review
- Prepare a 508 compliant, PDF version of the final document for publication and posting on the WQSR Microsite

Sub-task 3.2: Develop *Selecting Online Water Quality Monitoring Instruments*

Under this sub-task, the contractor shall support EPA in finalizing the guidance document: *Selecting Online Water Quality Monitoring Instruments*. This document provides overviews of SWM and DSM parameters, describes available technologies that can be used to monitor each parameter, and discusses factors that should be considered when evaluating water quality instruments.

Note that this document will be approximately 50% complete by July 31, 2017. An updated version of the document will be provided to the contractor, as needed.

To finalize the document and prepare it for publication, the contractor shall:

- Develop draft sections of the document
- Revise the document based on EPA comments
- Revise the document based on peer review comments
- Revise the document to address comments generated during final product review
- Prepare a 508 compliant, PDF version of the final document for publication and posting on the WQSR Microsite

Sub-task 3.3: Develop a Supplementary OWQM Guidance Document

Under this sub-task, the contractor shall support EPA in developing a supplementary OWQM guidance document. This document shall be no longer than 15 pages, and its topic and scope will be specified by the EPA WACOR through technical direction; however, potential topics include the status of emerging OWQM technologies and strategies for OWQM data validation.

To develop this document and prepare it for publication, the contractor shall:

- Develop draft sections of the document
- Revise the document based on EPA comments
- Revise the document based on peer review comments
- Revise the document to address comments generated during final product review
- Prepare a 508 compliant, PDF version of the final document for publication and posting on the WQSR Microsite

Sub-task 3.4: Support Development of OWQM Content for the *SRS Capabilities Assessment Tool*

Under this sub-task, the contractor shall support EPA in developing OWQM content for the *SRS Capabilities Assessment Tool*. EPA will take the lead in development of this content. The contractor shall support EPA by providing technical feedback on OWQM content and conducting up to three technical reviews of the content.

Sub-task 3.5: Support OWQM Implementation Projects

Under this sub-task, the contractor shall support EPA in the execution of up to three OWQM Implementation Projects. The purpose of these projects is to provide an opportunity for EPA to use available OWQM resources to help a utility implement elements of the OWQM component, and evaluate the value of the OWQM resources used during each project. Each project shall involve engagement with a single drinking water utility and will focus on either SWM or DSM.

The projects will involve utility engagement facilitated and monitored by EPA. It is anticipated that each project will require at least eight phone or web meetings and one site visit. While the scope and focus of each project will be tailored to the needs and interests of the participating utility, it is anticipated that each project will involve the following activities:

- Planning meetings with the participating utility
- An assessment of the utility's existing surveillance and response capabilities
- Development of documentation to guide implementation of the project
- Procurement of products and/or services to facilitate OWQM implementation
- Development of a procedure for investigating OWQM alerts
- An exit meeting with the participating utility
- Development of a case study report from the OWQM Implementation Project

To support implementation of up to three OWQM Implementation Projects, the contractor shall:

- Assist EPA in identifying and selecting utilities to participate in the projects
- Develop documentation necessary to implement the projects
- Facilitate phone and web meetings
- Procure OWQM equipment, including online water quality instruments
- Procure products or services to support OWQM information management and analysis
- Collect and evaluate data generated during the implementation project
- Collect photographs and possibly video footage during the project
- Develop the case study report for the OWQM Implementation Project, noting that this shall be a concise, internal report that will not be published as a stand-alone document

<u>Sub-task 3.6: Develop OWQM Outreach and Training Products</u>
Under this sub-task, the contractor shall support EPA in developing up to four training and outreach products.

EPA plans to task the contractor with developing up to two outreach products related to OWQM. These products should be concise and visually appealing, and may take the form of factsheets, articles, informatics, or other formats to be specified by the EPA WACOR. Final production of finished products shall be coordinated with Task 2. The specific topics and scope of outreach products will be specified by the EPA WACOR through technical direction.

EPA plans to task the contractor with developing up to two training products related to OWQM. Training products shall be developed in the form of PowerPoint presentations that can be delivered in-person, delivered as a webinar, or recorded as a multi-media training module. Final production, including professional narration and graphics development as needed, shall be completed under Task 2. The topics and scope of the training products will be specified by the EPA WACOR through technical direction; however, potential topics include selection of parameters and monitoring locations to

maximize the benefit of an OWQM system, information management and analysis methods, and case studies of OWQM implementation.

Task 3 Deliverables: Final deliverables under this task are listed in the following table. The first activity implemented under this task shall be a kickoff meeting to set priorities and develop a milestone schedule for Task 3.

Sub-task	Deliverable	Due to EPA
---	Kickoff meeting and milestone schedule for Task 3	August 21, 2017
3.1	Final version of *Online Distribution System Water Quality Monitoring*	As specified in Task 3 milestone schedule
3.2	Final version of *Selecting Online Water Quality Monitoring Instruments*	As specified in Task 3 milestone schedule
3.3	Final version of supplementary OWQM guidance document	As specified in Task 3 milestone schedule
3.5	OWQM implementation project plan	As specified in Task 3 milestone schedule
3.5	OWQM implementation project report	As specified in Task 3 milestone schedule
3.6	Final versions of OWQM outreach products	As specified in Task 3 milestone schedule
3.6	Final versions of OWQM training products	As specified in Task 3 milestone schedule

Task 4: Enhanced Security Monitoring (LOE 1,255)

Task 4 supports the Enhanced Security Monitoring (ESM) component of the SRS Program. The primary objective of Task 4 is to develop ESM guidance, training materials, and projects to support voluntary implementation of ESM by drinking water utilities. The contractor shall support this task using personnel with excellent technical writing and product development capabilities as well as experience with security, risk assessment, coordinating with law enforcement, video and intrusion detection equipment datastreams, and data analysis methods. Task 4 is divided into four sub-tasks:

1. Complete All Guidance, Products and Tools for ESM

2. Demonstrate AMI as a Component of an SRS
3. Support ESM Implementation Projects
4. Develop ESM Outreach and Training Products

Each sub-task is described below, and additional details regarding each sub-task will be provided to the contractor through written technical direction. Contractor travel may be required to support this task. For estimating purposes, assume four trips lasting three days (two nights). For estimating purposes, assume that the destination for each trip is a medium-large sized city in the Midwest. Sub-tasks 4.2 and 4.3 may require the collection and use of primary or secondary data and thus may require a PQAPP.

Sub-task 4.1: Complete All Guidance, Products and Tools for ESM

Under this sub-task, the contractor shall support EPA in completing any outstanding guidance, products, or other deliverables that were initiated under the previous option period, and which are not explicitly identified by other sub-tasks under this task. The contractor shall support EPA by completing the following ESM products:

- Complete the *Designing ESM for SRSs* guidance document
- Complete the *Equipment Use and Functionality* report
- Assist in required revisions to the ESM content in the *Capabilities Assessment Tool*

Note that these products were substantially completed during the first option period of this contract. The contractor may be required to do the following activities in order to finalize these products:

- Revise the content based on review and comments provided by the EPA WACOR
- Revise the content based on any peer review comments
- Revise the content to address comments generated during final product review
- Prepare a 508 compliant, PDF version of the final product for publication and posting on the WQSR Microsite

Sub-task 4.2: Demonstrate AMI as a component of an SRS

Under this sub-task, the contractor shall support EPA in developing a one to two day workshop to discuss Advanced Metering Infrastructure (AMI) as a potential component of an SRS. Applications and challenges related to AMI may be discussed. EPA has drafted documents about AMI, which will be provided to the contractor as editable Word documents (along with source files for graphics contained in the documents). To plan, coordinate, deliver and document the findings of the workshop the contractor shall:

- Prepare an agenda, registration and materials for utility and other participants
- Facilitate and participate in the workshop
- Take notes and summarize key findings and next steps from the meeting in an internal report

Additionally, the contractor shall complete the AMI mini-pilot that was initiated during the previous option period. The contractor will also be tasked to conduct one additional AMI implementation project. The purpose of the AMI implementation project is to provide an opportunity for EPA to leverage available information from ongoing implementations of smart water technology in order to evaluate AMI applications in the context of an SRS and to enhance distribution system management. Potential focus areas for this AMI implementation project include: (1) further identifying the feasibility of AMI as

an SRS component; (2) evaluating application of AMI data for an SRS; (3) developing and testing AMI alert investigation procedures; and (4) incorporating smart water technologies in to an SRS. This sub-task may require contractor personnel to travel to the location of the workshop and implementation project. To support the AMI implementation project, the contractor shall:

- Assist EPA in identifying candidate utilities for one AMI implementation project
- Develop a project plan for the implementation project
- Provide technical and logistical support during the implementation project
- Collect data and information during the implementation project
- Draft a report summarizing the implementation, results, and findings from the implementation project

Sub-task 4.3: Support ESM Implementation Projects

Under this sub-task, the contractor shall support EPA in the implementation of two ESM implementation projects. The purpose of the implementation project is to provide an opportunity for EPA to use some of the available ESM resources to help a utility implement elements of ESM, and evaluate the ESM resources used in this implementation. Possible focus areas for an ESM implementation project include: (1) identifying new and existing sites based on facility attributes and recommending security enhancements; (2) analyzing ESM alert data and invalid alert rates; (3) providing technical support for evaluation of the feasibility of using commercially available off the shelf (COTS) packaged security systems for use at single facility at a utility; and (4) developing and testing ESM alert investigation procedures. This sub-task may require contractor personnel to travel to the project site to support meetings, workshops, and/or installation and commissioning of COTS ESM equipment. To support implementation of ESM implementation projects, the contractor shall:

- Assist EPA in identifying and selecting utilities to participate in the projects
- Develop documentation necessary to implement the projects
- Facilitate phone and web meetings
- Facilitate one or two workshops
- Procure COTS ESM equipment
- Support installation, commissioning, and data collection of the COTS equipment
- Collect and evaluate data generated during the implementation project
- Collect photographs and possibly video footage during the project
- Develop the case study report for each ESM Implementation Project, noting that this shall be a concise, internal report that will not be published as a stand-alone document

Sub-task 4.4: Develop ESM Outreach and Training Products

Under this sub-task, the contractor shall support EPA in developing up to four training and outreach products. EPA plans to task the contractor with developing up to two outreach products related to ESM. These products should be concise and visually appealing and may take the form of factsheets, articles, informatics, or other formats to be specified by the EPA WACOR. Production of the finished product will be completed under Task 2. The specific topics and scope of the outreach products will be specified by the EPA WACOR through technical direction.

EPA plans to task the contractor with developing up to two training products related to ESM. Training products shall be developed in the form of PowerPoint presentations that can be delivered live, delivered

as a webinar, or recorded as a multi-media training module. Final production, including professional narration and graphics development as needed, will be completed under Task 2. The topics and scope of each training products will be specified by the EPA WACOR through technical direction; however, potential topics include training for utilities on the role of ESM and AMI in an SRS, and a case study that will illustrate the importance of security monitoring in assuring the safety of the drinking water supply.

Task 4 Deliverables: Final deliverables under this task are listed in the following table. The first activity implemented under this task shall be a kickoff meeting to set priorities and develop a milestone schedule for Task 4.

Sub-task	**Deliverable**	**Due to EPA**
---	Kickoff meeting and milestone schedule for Task 4	August 21, 2017
4.1	Final versions of the content for guidance, products and tools	As specified in Task 4 milestone schedule
4.2	Final version of the report documenting findings and outcomes from the Advanced Metering Infrastructure workshop	As specified in Task 4 milestone schedule
4.2	AMI implementation project plan	As specified in Task 4 milestone schedule
4.2	Final version of the AMI implementation project report	As specified in Task 4 milestone schedule
4.3	ESM implementation project plans	As specified in Task 4 milestone schedule
4.3	Final version of the ESM implementation project reports	As specified in Task 4 milestone schedule
4.4	Final version of ESM outreach products	As specified in Task 4 milestone schedule
4.4	Final version of ESM training products	As specified in Task 4 milestone schedule

Task 5: Customer Complaint Surveillance (LOE 1,050)

Task 5 supports the Customer Compliant Surveillance (CCS) component of the SRS Program. The primary objective of Task 5 is to develop CCS guidance, training materials, and projects to support voluntary implementation of CCS by drinking water utilities. The contractor shall support this task using personnel with excellent technical writing and product development capabilities as well as experience with contact centers, call and work management systems, customer service, and data analysis methods. Task 5 is divided into five sub-tasks:

1. Complete all Guidance, Products and Tools
2. Develop *CCS Complaint Handling Standards and Categorization* Document
3. Investigate Social Media as a CCS Datastream
4. Support CCS Implementation Projects
5. Develop CCS Outreach and Training Products

Each sub-task is described below, and additional details regarding each sub-task will be provided to the contractor through written technical direction from the EPA WACOR. Contractor travel may be required to support this task. For estimating purposes, assume two trips lasting three days (two nights), and requiring participation from one contractor personnel. For estimating purposes, assume that the destination for each trip is a medium-large sized city in the Midwest. Sub-tasks 5.3 and 5.4 may require the collection and use of primary or secondary data and thus may require a PQAPP.

<u>Sub-task 5.1: Complete All Guidance, Products and Tools for CCS</u>

Under this sub-task, the contractor shall support EPA in completing any outstanding guidance, products, or other deliverables that were initiated under the previous option period, and which are not explicitly identified by other sub-tasks under this task. The contractor shall support EPA by completing the following that is necessary to build CCS capabilities:

- Complete the *Designing CCS for SRSs* guidance document
- Complete the videos for the *Alert Estimation Tool* and *Threshold Analysis Tool*
- Assist in required revisions to the CCS content in the *Capabilities Assessment Tool*

Note that these products were substantially completed during the first option period of this contract. The contractor may be required to do the following activities in order to finalize these products:

- Revise the content based on review and comments provided by the EPA WACOR
- Revise the content based on any peer review comments
- Revise the content to address comments generated during final product review
- Prepare a 508 compliant, PDF version of the final product for publication and posting on the WQSR Microsite

<u>Sub-task 5.2: Develop a *CCS Complaint Handling Standards and Categorization* Document</u>

Under this sub-task, the contractor shall support EPA in developing content for a *CCS Complaint Handling Standards and Categorization* Document. This document will summarize existing resources and standards related to water quality complaints, and how to incorporate these complaints into CCS. The document will define a process for developing complaint categories that can be used to configure CCS datastreams. The document will include a decision tree template and a set of CCS data fields that can be used to document customer water quality complaints. The contractor shall support EPA in the development of this document as follows:

- Assist EPA in identifying literature and resources for the document

- List all relevant resources, standards, and customer complaint categories used by drinking water utilities
- Map the complaints categories to the decision tree template
- Develop the draft document and template
- Address all comments from EPA and prepare the document for peer review
- Consolidate peer review comments, develop a revision plan for the document, and implement the revision plan
- Prepare a 508 compliant, PDF version of the final document for publication and posting to the WQSR Microsite

Sub-task 5.3: Investigate Social Media Monitoring as CCS Datastream

Under this sub-task, the contractor shall support EPA in investigating Social Media Monitoring as a tool to monitor for drinking water contamination incidents. Specifically, the contractor shall evaluate the ability of free internet analytical products to support social media monitoring, refine open source code to perform social media monitoring, and use a water contamination case study to demonstrate social media monitoring as a CCS datastream (potentially using retrospective and/or prospective data analysis). The contractor may also interview up to nine drinking water utilities currently using social media to inform the investigation. The contractor is further authorized to procure a social media monitoring subscription service for use in an implementation project, for up to one year, providing the monthly subscription does not exceed $100 per month. Purchase of the subscription service will allow for a comparison of capabilities between free and fee-based Social Media Monitoring services. The contractor shall support EPA in the demonstration of Social Media Monitoring as CCS datastream as follows:

- Make modifications to open source code
- Develop a case study that demonstrates the role of social media in detection of and response to a water contamination incident
- Design and implement a social media monitoring implementation project
- Finalize a report summarizing the potential of Social Media Monitoring as a CCS datastream

Sub-task 5.4: Support CCS Implementation Projects

Under this sub-task, the contractor shall support EPA in the implementation of up to two CCS implementation projects. The purpose of the implementation project is to provide an opportunity for EPA to use some of the available CCS resources to help a utility implement elements of CCS, and evaluate the CCS resources used in this implementation. Possible focus areas for a CCS implementation project include: (1) using call and work management systems for CCS; (2) identifying and assessing opportunities for vendor integration; (3) establishing CCS complaint categories and thresholds; and (4) developing and testing CCS alert investigation procedures. This implementation project shall include a workshop (one to two days) involving key personnel from the pilot utility and a data evaluation period. This sub-task may require contractor personnel to travel to the project site to support meetings, workshops, and/or data analysis. To support implementation of a CCS implementation project, the contractor shall:

- Assist EPA in identifying potential utilities for the implementation project
- Once the utility is selected, help identify partners
- Develop a project plan for the implementation project
- Provide technical and logistical support during implementation of the implementation project

- Collect and evaluate data generated during the implementation project
- Collect photographs and possibly video footage during the project
- Develop the case study report for each CCS Implementation Project, noting that this will be a concise, internal report that will not be published as a stand-alone document

Sub-task 5.5: Develop CCS Outreach and Training Products
Under this sub-task, the contractor shall support EPA in developing up to four training and outreach products. EPA plans to task the contractor with developing up to two outreach products related to CCS. These products should be concise and visually appealing and may take the form of factsheets, articles, informatics, or other formats to be specified by the EPA WACOR. Final production of the finished product shall be completed under Task 2. The specific topics and scope of the outreach products will be specified by the EPA WACOR through technical direction.

EPA plans to task the contractor with developing up to two training products related to CCS. Training products shall be developed in the form of PowerPoint presentations that can be delivered live, delivered as a webinar, or recorded as a multi-media training module. Final production, including professional narration and graphics development as needed, shall be completed under Task 2. The topics and scope of each training products will be specified by the EPA WACOR through technical direction; however, potential topics include a video tutorial that guides a utility through the process of designing a CCS component using available EPA resources, such as the *Designing CCS* document.

Task 5 Deliverables: Final deliverables under this task are listed in the following table. The first activity implemented under this task shall be a kickoff meeting to set priorities and develop a milestone schedule for Task 5.

Sub-task	**Deliverable**	**Due to EPA**
---	Kickoff meeting and milestone schedule for Task 5	August 21, 2017
5.1	Final versions of CCS guidance, products and tools	As specified in Task 5 milestone schedule
5.2	Final version of the *CCS Complaint Handling Standards and Categorization* Document in both PDF and Word formats (only the PDF needs to be 508 compliant)	As specified in Task 5 milestone schedule
5.3	Project Plan and Final Report for Social Media Monitoring	As specified in Task 5 milestone schedule
5.4	CCS Implementation Project plan	As specified in Task 5 milestone schedule

Sub-task	Deliverable	Due to EPA
5.4	Final version of the CCS Implementation Project report	As specified in Task 5 milestone schedule
5.5	Final version of CCS outreach products	As specified in Task 5 milestone schedule
5.5	Final version of CCS training products	As specified in Task 5 milestone schedule

Task 6: Public Health Surveillance (LOE 1,436)
Task 6 supports the Public Health Surveillance (PHS) component of the SRS Program. The primary objective of Task 6 is to develop PHS guidance, training materials, and projects to support voluntary implementation of PHS by drinking water utilities and their public health partners. The contractor shall support this task using personnel with excellent technical writing and product development capabilities as well as experience with public health partners, public health surveillance datastreams, and data analysis methods. Task 6 is divided into two sub-tasks:

1. Support PHS Implementation Projects
2. Develop PHS Outreach and Training Products

Each sub-task is described below, and additional details regarding each sub-task will be provided to the contractor through written technical direction from EPA WACOR. Contractor travel may be required to support this task. For estimating purposes, assume four trips lasting two days (one night), and requiring participation from one contractor personnel. For estimating purposes, assume that the destination for each trip is a medium-large sized city in the Midwest.

<u>Sub-task 6.1: Support PHS Implementation Projects</u>
Under this sub-task, the contractor shall support EPA in the implementation of up to six PHS Implementation Projects. The purpose of these projects is to provide an opportunity for EPA to use available PHS resources to help a utility implement elements of the PHS component, and evaluate the value of the PHS resources used during these projects. Each project shall involve engagement with a single drinking water utility and its local/state/regional public health partners.

The implementation project shall involve utility and public health partner engagement facilitated and monitored by EPA. It is anticipated that each project will require at least eight phone or web meetings and one in-person workshop. While the scope and focus of each PHS implementation project will be tailored to the needs and interests of the participating utility, it is anticipated that each project shall involve the following activities:

- Planning meetings with the participating utility
- An assessment of the utility's existing surveillance and response capabilities

- Development of documentation to guide the implementation project
- One in-person workshop involving the participating utility, it's public health partners, and EPA
- An assessment of public health partner surveillance capabilities
- Development of a joint utility and public health procedure for investigating PHS alerts
- Execution of a tabletop exercise to evaluate the alert investigation procedure
- An exit meeting with the participating utility
- Development of a case study report from the PHS Implementation Project

To support implementation of up to six PHS Implementation Projects, the contractor shall:

- Assist EPA in identifying and selecting participating utilities
- Once the utilities are selected, help to identify their public health partners
- Develop documentation necessary to implement the pilot, noting that the PHS Implementation Project documentation developed under the previous option period will be heavily leveraged
- Facilitate phone and web meetings
- Provide onsite facilitation during the in-person workshop for each project
- Develop the scenario and documents for the tabletop exercise, noting that a single exercise can be used for all project, with minor adjustments as needed to tailor the exercise to the specific circumstances of a utility
- Develop the case study report for the PHS Implementation Project, noting that this will be a concise, internal report that will not be published as a stand-alone document
- Collect photographs and possibly video footage during the pilot

Sub-task 6.2: Develop PHS Outreach and Training Products

Under this sub-task, the contractor shall support EPA in developing up to six training and outreach products. EPA plans to task the contractor with developing up to two outreach products related to PHS. These products should be concise and visually appealing and may take the form of factsheets, articles, informatics, or other formats to be specified by the EPA WACOR. Final production of the finished product will be completed under Task 2. The specific topics and scope of the outreach products will be specified by the EPA WACOR through technical direction.

EPA plans to task the contractor with developing up to four training products related to PHS. Training products shall be developed in the form of PowerPoint presentations that can be delivered in-person, delivered as a webinar, or recorded as a multi-media training module. Final production, including professional narration and graphics development as needed, will be completed under Task 2. The topics and scope of each training product will be specified by the EPA WACOR through technical direction; however, potential topics include lessons learned from PHS Implementation Projects, an overview of waterborne disease outbreaks, and recent development in the field of public health surveillance.

Task 6 Deliverables: Final deliverables under this task are listed in the following table. The first activity implemented under this task shall be a kickoff meeting to set priorities and develop a milestone schedule for Task 6.

Sub-task	Deliverable	Due to EPA
---	Kickoff meeting and milestone schedule for Task 6	August 21, 2017
6.1	All documentation needed to execute each PHS Implementation Project	As specified in Task 6 milestone schedule
6.1	Final report for each PHS Implementation Project	As specified in Task 6 milestone schedule
6.2	Final version of PHS outreach products	As specified in Task 6 milestone schedule
6.2	Final version of PHS training products	As specified in Task 6 milestone schedule

Task 7: Sampling and Analysis (LOE 1,360)
Task 7 supports the Sampling and Analysis (S&A) component of the SRS Program. The primary objective of Task 7 is to develop S&A guidance, training materials, and outreach products.

This task requires technical staff with experience using field and laboratory methods for analysis of drinking water samples. The contractor shall support this task using personnel with excellent technical writing and product development capabilities as well as experience in designing and implementing emergency response sampling and analysis programs for water utilities. The contractor shall have knowledge of water system operations and an in depth knowledge of field and laboratory data management systems that small, medium, and large systems use. The contractor shall have education and experience in statistical design of studies to determine baseline occurrence of contaminants in drinking water and in statistical analysis of baseline data for use in drinking water contamination emergencies.

The contractor shall have experience implementing the following EPA guidance: Modules 3 and 4 of the *Response Protocol Toolbox: Planning for and Responding to Drinking Water Contamination Threats and Incidents* and *Water Security Initiative: Guidance for Building Laboratory Capabilities to Respond to Drinking Water Contamination*. The contractor shall be experienced in the use of Water Laboratory Alliance tools such as the *Water Contaminant Information Tool*, the *Compendium of Environmental Testing Laboratories*, and other tools and databases for researching contaminant information and laboratories. The contractor shall be familiar with the rules and regulations governing drinking water monitoring at water utilities.

Task 7 is divided into five sub-tasks:

1. Support Completion of *Hazard Awareness and Safe Work Practices Training*

2. Develop *Guidance for Establishing Baseline Contaminant Occurrence in Drinking Water Distribution Systems*
3. Support Revision of *Guidance for Building Laboratory Capabilities to Respond to Drinking Water Contamination*
4. Support Development of S&A Content for the *SRS Capabilities Assessment Tool*
5. Develop S&A Outreach and Training Products

Each sub-task is described below, and additional details regarding each sub-task will be provided to the contractor through written technical direction from EPA WACOR. EPA does not anticipate the need for contractor travel in support of this task.

Sub-task 7.1: Support Completion of *Hazard Awareness and Safe Work Practices Training*
Under this sub-task, the contractor shall support EPA in completing *Hazard Awareness and Safe Work Practices Training*. The contractor shall support development of this training by developing slides and multi-media presentations, and formatting and editing documents. The contractor shall possess the expertise and creativity necessary to develop a professional, visually appealing product.

The following materials that support this training and their status are described below:

- *Background for Water Utilities*: A brief document to provide background for utility managers on the Hazardous Waste Operations and Emergency Response (HAZWOPER) standard, the different levels of training within that standard, and how awareness level training can better prepare their employees for responding to all hazards. EPA has a complete version of this document, which will be provided to the contractor in an editable format.
- *Guidelines for Training Coordinators*: Utilities shall identify a utility Training Coordinator, who will use the guidelines document to identify the units and modules of training that will be offered, employees to be trained, and qualified instructors. The Training Coordinator also shall customize the training to contain relevant utility information on their Emergency Response Plan, Distribution System Contamination Response Plan, and associated procedures. This document was completed under a previous contract.
- *Five Instructor Manuals*: The training consists of five units. Each unit shall have an Instructor Manual, which will contain core content, training tips, review questions, and placeholders for insertion of utility specific information. EPA has a complete version of the Unit 1 Instructor Manual, which will be provided to the contractor in an editable format. The contractor shall support development of Instructor Manuals for the remaining four units of training.
- *Supplementary Materials*: Supplementary Materials will be available to facilitate delivery of the training and to evaluate the participants and the course. Supplementary Materials include 1) Speaker Slides for each unit of training, 2) Participant Manuals, 3) Participant Evaluation Forms, 4) Course Evaluation Forms, and 5) Certificates of Completion. Supplementary Materials are graphics heavy and may require embedded video in the Speaker Slides. Unit 1 Speaker Slides, Course Evaluation and Participant Evaluation have been completed and will be provided to the contractor from EPA. The Course Evaluation Form can be used for all five units of training.

Under this sub-task, the contractor shall:

- Review, edit and format Instructor Manuals prepared by the EPA WACOR

- Develop Speaker Slides for Units 2 through 5
- Develop Participant Manuals for Units 1 through 5
- Develop Participant Evaluation Forms for Units 2 through 5
- Develop a Certificate of Completion Template that can be filled in with the name of the participant and the unit of training

The contractor should assume up to 3 revisions for each product.

Sub-task 7.2: Develop *Guidance for Establishing Baseline Contaminant Occurrence in Drinking Water Distribution Systems*

Under this sub-task, the contractor shall support EPA in developing *Guidance for Establishing Baseline Contaminant Occurrence in Drinking Water Distribution Systems*. This document shall present guidance for water utilities on establishing method performance and contaminant occurrence data for field and laboratory methods. Considerations for establishing baseline data include availability of historical data, costs to implement new monitoring, data analysis, storage, retrieval, visualization, maintenance monitoring, and how baseline data can be used during response S&A. Lessons learned from the WSI pilots shall be incorporated in the guidance. This task requires that the contractor have knowledge of water systems and field and laboratory data management systems that small, medium, and large utilities use.

A partially completed draft of this guidance was completed during the previous period of performance. To support this sub-task, the contractor shall:

- Complete development of the guidance document
- Address all comments from EPA and prepare the document for peer review
- Consolidate peer review comments, develop a revision plan for the document, and implement the revision plan
- Prepare a 508 compliant, PDF version of the final document for publication and posting to the WQSR Microsite

The contractor shall assume up to 3 revisions for this product.

Sub-task 7.3: Support Revision of EPA *Guidance for Building Laboratory Capabilities for Responding to Drinking Water Contamination*

Procedures that are used during response S&A are often different from routine procedures. Under this sub-task, the contractor shall support EPA in revising the 2013 document: *Guidance for Building Laboratory Capabilities for Responding to Drinking Water Contamination*. Revision shall include updating terminology that references Contamination Warning Systems, updating resources and references, adding information collection forms to help utilities evaluate partner laboratories, adding a list of procedures and documentation for emergency response, discussing a utility-specific Laboratory Response Plan, and discussing and referencing the SRS Exercise Development Toolbox. Lessons learned from the WSI pilots will be incorporated in the guidance. A partially completed draft of the revised guidance was developed during the previous period of performance. To support this sub-task, the contractor shall:

- Develop revisions to the guidance document

- Address all comments from EPA and prepare the document for peer review
- Consolidate peer review comments, develop a revision plan for the document, and implement the revision plan
- Prepare a 508 compliant, PDF version of the final document for publication and posting to the WQSR Microsite

The contractor shall assume up to 3 revisions for this product.

Sub-task 7.4: Develop S&A Content for the *Capabilities Assessment Tool*
Under this sub-task, the contractor shall support EPA in developing S&A content for the *Capabilities Assessment Tool* (CAT). The contractor shall support EPA by developing the following content that is necessary to build the S&A Capabilities Assessment in the CAT:

- Questions designed to determine existing S&A capabilities
- Response choices for each question
- Statements of target capability for each S&A (sub) design element
- Statements of existing capability for each S&A (sub) design element for all possible permutations of responses to the S&A questions related to that (sub) design element
- Descriptions of potential enhancements
- Descriptions of the specific resources available to implement each enhancement

To finalize the content and prepare it for coding, the contractor shall:

- Revise the content based on input provided by the EPA WACOR
- Revise the content based on management and peer review comments
- Revise the content to address comments generated during final product review
- Prepare the final content for coding (note that the actual coding will be performed under Task 1)

Sub-task 7.5: Develop S&A Outreach and Training Products
Under this sub-task, the contractor shall support EPA in developing up to three outreach or training products. These products should be concise and visually appealing and may take the form of factsheets, articles, flyers or other formats to be specified by the EPA WACOR . Final production of the finished product shall be coordinated with Task 2. The specific topics and scope of the outreach products will be specified by the EPA WACOR through technical direction.

Training products shall be developed in the form of PowerPoint presentations that can be delivered live, delivered as a webinar, or recorded as a multi-media training module. Final production, including professional narration and graphics development, shall be coordinated with Task 2.

Task 7 Deliverables: Final deliverables under this task are listed in the following table. The first activity implemented under this task shall be a kickoff meeting to set priorities and develop a milestone schedule for Task 7.

Sub-task	Deliverable	Due to EPA
---	Kickoff meeting and milestone schedule for Task 7	August 21, 2017
7.1	Final versions of *Hazard Awareness and Safe Work Practices Training* in PowerPoint, PDF and Word formats (only the PowerPoint and PDF versions need to be 508 compliant)	As specified in Task 7 milestone schedule
7.2	Final version of *Guidance for Establishing Baseline Contaminant Occurrence in Drinking Water Distribution Systems*	As specified in Task 7 milestone schedule
7.3	Final version of revised *Guidance for Building Laboratory Capabilities for Responding to Drinking Water Contamination*	As specified in Task 7 milestone schedule
7.4	Final version of the S&A content for the CAT	As specified in Task 7 milestone schedule
7.5	Final versions of S&A outreach products such as factsheets, flyers, articles or posters (some products may be finalized under Task 2)	As specified in Task 7 milestone schedule

Task 8: Consequence Management (LOE 1,614)
Task 8 supports the Consequence Management (CM) component of the SRS Program. The primary objective of Task 8 is to develop CM guidance and training materials to support voluntary implementation of CM by drinking water utilities and their response partners.

The contractor shall support this task with staff knowledgeable in emergency response planning as well as excellent technical writing and product development capabilities. Task 8 is divided into six sub-tasks:

1. Develop *Guidance for Developing a Distribution System Contamination Response Plan*
2. Develop the *Guidance for Developing Tools to Track Contamination in Distribution Systems* Document and Excel Tool
3. Develop the *CM Design Guidance* Document
4. Support Development of CM Content for the *SRS Capabilities Assessment Tool*
5. Support CM Implementation Projects
6. Develop CM Outreach and Training Products

Each sub-task is described below, and additional details regarding each sub-task will be provided to the contractor through written technical direction from the EPA WACOR. Contractor travel may be required to support this task, specifically Sub-tasks 8.2 and 8.5. For estimating purposes, assume two trips lasting two days (one night), and requiring participation from one contractor personnel. For estimating purposes, assume that the destination for each trip is a medium-large sized city in the Midwest.

<u>Sub-task 8.1: Develop *Guidance for Developing a Distribution System Contamination Response Plan*</u>

Under this sub-task, the contractor shall develop a guide and template for creating a Distribution System Contamination Response Plan (DSC RP). The guide should be an interactive document that leads the user through a step-wise process to develop a DSC RP. The guide should contain a downloadable, editable template for a DSC RP and should provide an explanation of the template as well as contain background information and instructions for populating each section of the DSC RP template. The template should be a shell of a complete DSC RP that will contain example text, which the user can edit to create a custom DSC RP. Development of the guide and template will leverage information contained in the *Water Security Initiative: Interim Guidance on Developing Consequence Management Plans for Drinking Water Utilities* (2008) and in the *CM Design Guidance* being developed in sub-task 8.3. It shall also incorporate lessons learned from the WSI pilots. EPA has developed an outline and partial content for both the guide and the template, which will be provided to the contractor as editable Word documents (along with the source files for graphics contained in the documents).

In order to finalize this document and prepare it for publication, the contractor shall:

- Complete the draft guide and template
- Address all outstanding comments from EPA and prepare the documents for peer review
- Consolidate peer review comments, develop a revision plan for the documents, and implement the revision plan
- Prepare a 508 compliant, PDF version of the final documents for publication and posting to the WQSR Microsite

Sub-task 8.2: Develop the *Guidance for Developing Tools to Track Contamination in Distribution Systems* Document and Excel Tool

Under this sub-task, the contractor shall support EPA in finalizing the guidance document *Water Quality Surveillance and Response System Guidance for Developing Tools to Track Contamination in Distribution Systems* as well as develop an Excel tool based on the document to automate many of the steps. EPA has a substantially (90%) complete draft of this document and a partially completed (75%) Excel tool, which will be provided to the contractor as editable documents (along with the source files for graphics contained in the documents).

In order to finalize this document and Excel tool and prepare them for publication, the contractor shall:

- Complete development of the Excel tool based on the document
- Work with a utility to test and evaluate the Excel tool
- Update the document as necessary to be consistent with changes made during development of the Excel tool
- Address all outstanding comments from EPA and prepare the document for peer review and prepare the Excel tool for testing and peer review
- Consolidate peer review comments, develop a revision plan for the document and Excel tool, and implement the revision plan
- Prepare a 508 compliant, PDF version of the final document and a 508 compliant version of the final Excel tool for publication and posting to the WQSR Microsite

Sub-task 8.3: Develop the *CM Design Guidance* Document

Under this sub-task, the contractor shall support EPA in developing the guidance document:

Consequence Management for Drinking Water Contamination Incidents for Water Quality Surveillance and Response Systems. This sub-task involves updating the document *Water Security Initiative: Interim Guidance on Developing Consequence Management Plans for Drinking Water Utilities* (2008) with information and lessons learned from the WSI pilots. This sub-task will leverage a nearly complete (90%) draft, which will be provided to the contractor as an editable Word document (along with the source files for graphics contained in the document). This sub-task is closely linked to the products to be developed under sub-tasks 8.1 and 8.2 as well as the previously published *Developing Risk Communication Plans for Drinking Water Contamination Incidents* document (2013). The *CM Design Guidance* will provide a framework within which to develop CM capabilities (as a component of an SRS or as a stand-alone capability), connecting these products together.

In order to finalize this document and prepare it for publication, the contractor shall:

- Complete the draft guidance document leveraging information from documents and products under Sub-tasks 8.1 and 8.2
- Address all comments from EPA and prepare the document for peer review
- Consolidate peer review comments, develop a revision plan for the document, and implement the revision plan
- Prepare a 508 compliant, PDF version of the final document for publication and posting to the WQSR Microsite

<u>Sub-task 8.4: Develop Content for the *CM Capabilities Assessment Tool*</u>
Under this sub-task, the contractor shall support EPA in developing CM content for the *Capabilities Assessment Tool* (CAT). The contractor shall support EPA by developing the following content that is necessary to build the CM Capabilities Assessment in the CAT:

- Questions designed to determine existing CM capabilities
- Response choices for each question
- Statements of target capability for each CM (sub) design element
- Statements of existing capability for each CM (sub) design element for all possible permutations of responses to the questions related to that (sub) design element
- Descriptions of potential enhancements
- Descriptions of the specific resources available to implement each enhancement

To finalize the content and prepare it for coding, the contractor shall:

- Revise the content based on review and comments provided by the EPA WACOR
- Revise the content based on peer review comments
- Revise the content to address comments generated during final product review
- Prepare the final content for coding (note that the actual coding will be performed under Task 1)

<u>Sub-task 8.5: Support CM Implementation Projects</u>
Under this sub-task, the contractor shall support EPA in planning and conducting up to two CM Implementation Project. The contractor may also be required to develop CM-related content in support of implementation projects for the other SRS surveillance components (tasks 3-6) as needed. The purpose of the CM Implementation Projects is provide an opportunity for EPA to use the developed CM resources to help a utility implement elements of CM, and evaluate the CM resources used in the

project. Possible focus areas of the CM Implementation Pilots include: (1) aiding a utility in creating a contamination response plan, (2) helping a utility to develop relationships with local and regional response partners, and (3) testing a utility's response plan through a drill or exercise. The project would be executed through a series of meetings/conference calls and/or 1-day workshops (2-3) over the course of several weeks/months. To support the CM implementation project, the contractor shall:

- Assist EPA in identifying potential utilities for the project
- Once the utility is selected, help identify the most suitable project for the utility's needs
- Develop a project plan for the project
- Provide technical and logistical support during implementation of the project
- Complete a report, at the conclusion of the project, evaluating the use of the CM resources during the project

Sub-task 8.6: Develop CM Outreach and Training Products

Under this sub-task, the contractor shall support EPA in developing up to four training and outreach products. EPA plans to task the contractor with developing up to two outreach products related to CM. These products should be concise and visually appealing and may take the form of factsheets, articles, informatics, or other formats to be specified by the EPA WACOR. Final production of the finished product shall be coordinated with Task 2. The specific topics and scope of the outreach products will be specified by the EPA WACOR through technical direction.

EPA plans to task the contractor with developing up to two training products related to CM. Training products shall be developed in the form of PowerPoint presentations that can be delivered live, delivered as a webinar, or recorded as a multi-media training module. Final production, including professional narration and graphics development, shall be coordinated with Task 2. The specific topics and scope of the training products will be specified by the EPA WACOR through technical direction.

Task 8 Deliverables: Specific deliverables under this task are listed in the following table. The first activity implemented under this task shall be a kickoff meeting to set priorities and develop a milestone schedule for Task 8.

Sub-task	**Deliverable**	**Due to EPA**
---	Kickoff meeting and milestone schedule for Task 8	August 21, 2017
8.1	Final version of guide and template for developing a *Distribution System Contamination Incident Response Plan*	As specified in Task 8 milestone schedule
8.2	Final version of *Guidance for Developing Tools to Track Contamination in Distribution Systems* document and Excel tool	As specified in Task 8 milestone schedule
8.3	Final version of the *CM Design Guidance* document in both PDF and Word formats (only the PDF needs to be 508 compliant)	As specified in Task 8 milestone schedule

Sub-task	Deliverable	Due to EPA
8.4	Final version of the CM content for the CAT	As specified in Task 8 milestone schedule
8.5	Final project plan for each CM Implementation Project	As specified in Task 8 milestone schedule
8.5	Final report for each CM Implementation Project	As specified in Task 8 milestone schedule
8.6	Final version of CM outreach and training products	As specified in Task 8 milestone schedule

V. SCHEDULE/DELIVERABLES

Detailed listings of deliverables are included for each task in Section IV.

VI. REPORTING REQUIREMENTS

1. Monthly Progress Reports (including a progress evaluation discussion)
2. Financial Reports (including the populated financial tracking spreadsheet)
3. Project Specific PQAPP

VII. GREEN MEETINGS AND CONFERENCES

The contractor shall follow the provision of EPA prescription 1523.703-1, *Acquisition of environmentally preferable meeting and conference services (May 2007),* for the use of off-site commercial facilities for an EPA event, whether the event is a meeting, conference, training session, or other purpose. Environmental preferability is defined at FAR 2.101, and shall be used when soliciting quotes or offers for meeting/conference services on behalf of the Agency.

VIII. CONFERENCES AND WORKSHOPS

The tasks under this work assignment do not require the acquisition of "off-site" facilities for conferences and meetings as defined in the IPN 12-05. AND the events associated with this work assignment are not covered by EPA Order 1900.3 and do not require EPA Form 5170.

The contractor shall immediately alert the WACOR to any anticipated event under the work assignment which may incur an estimated cost to EPA of $20,000 or more, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation

costs, AV and rental of venue costs, etc. The EPA WACOR will then prepare for approval the internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

Any event which meets the definition of a "conference," with total net expenditures greater than $20,000, is required to submit EPA Electronic Form 5170 and Form 5170-A (with cost estimates/actuals). In the case the workflow system is down and CORs require emergency approval, they can submit EPA Form 5170 (PDF) (2pp, 93K) (with cost estimates) to conference@epa.gov.

IX. SOFTWARE APPLICATION AND ACCESSIBILITY (SECTION 508 REHABILITATION ACT AND AMENDMENTS)

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: http://www.section508.gov/

Preferred text format:	MS Word, 8.0 or higher (Office 2007 or higher)
Preferred presentation format:	Power Point, Office 2007 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0

The WACOR shall identify which of delivered products will require 508 compliance.

QUALITY ASSURANCE SURVEILLANCE PLAN for WSD's Mission Support

Quality Assurance Surveillance Plan

The requirements contained in this WA are considered performance-based, focusing on the Agency's desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency's performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards described below. The Contractor's performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the "Contractor Performance Evaluation" clause in the contract). The WACOR shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the Project Officer in preparing the overall evaluations submitted annually in response to the CPE requirements in the contract.

Performance Requirement	Measureable Performance Standards	Surveillance Method	Incentives/ Disincentives
Management and Communications: The Contractor shall maintain contact with the EPA Contracting Officer (CO), Contract Level Contracting Officer's Representative (CL COR), and Work Assignment Contracting Officer's Representative (WACOR) throughout the performance of the contract and shall immediately bring potential problems to the attention of the EPA CL COR and appropriate WACOR. In cases where issues have a direct impact on project schedules, cost, time, or quality, the contractor shall provide options for EPA's consideration on resolving the issues or mitigating their impacts.	Any issue adversely impacting project schedules, cost, time, or quality shall be brought to the attention of the EPA CL COR and appropriate WACOR within 3 work-days of occurrence.	100% of active work assignments (WA) will be reviewed by the EPA WACORs (via the monthly progress report) to identify unreported issues. The EPA WACORs will report any issues to the EPA CL COR who will bring the issue(s) to the Contractor's attention through the CO.	Two or more incidents per contract period of performance where the contractor does not meet the measureable performance standard will be considered unsatisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of **Management**. Fewer than two incidents per contract period of performance where the contractor does not meet the measureable performance standard will be considered satisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of **Management.**
Cost Management and Control: The Contractor shall monitor, track, and accurately report level of effort, labor cost, other direct cost, and fee expenditures to	The contractor shall manage costs to the level of the approved cost estimate on each individual WA. The contractor shall notify the EPA WACOR, CL COR, and CO when	100% of the active WAs under the contract will be reviewed by the EPA CL COR and appropriate WACOR monthly (via meetings, monthly progress	If the contractor does not meet the measurable performance standards in an applicable contract period of performance it will be assigned a rating of Unsatisfactory in CPARS under the

Performance Requirement	Measureable Performance Standards	Surveillance Method	Incentives/ Disincentives
EPA through progress reports and approved special reporting requirements. The Contractor shall assign an appropriate level of skilled personnel to all tasks, practice and encourage time management, and ensure accurate and appropriate cost control.	75% of the approved cost estimate for any particular WA is reached. If a contractor fails to manage and control cost, any resultant overrun cannot exceed the total contract obligation for that period.	reports & milestones established for each deliverable) to compare actual versus projected expenditures. The EPA CL COR shall review the Contractor's monthly progress reports and request the WACOR's verification of expenditures before authorizing invoice payments.	category of **Cost Control.** A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Cost Control if the contractor meets the measureable performance standards and accurately reports the costs in the progress reports according to the requirements in the "Reports of Work" attachment to the RFP.
Timeliness: Services and deliverables shall be in accordance with schedules stated in each WA, unless amended or modified by an approved EPA action.	No more than 15% of all deliverables per WA shall be submitted more than 3 work days past the due date.	100% of the active WAs/deliverables under the contract will be reviewed by the EPA CL COR/WACOR monthly (via monthly progress report & milestones established for each deliverable) to compare actual delivery dates against those approved.	If the contractor does not meet the measurable performance standards per WA during an applicable period of performance, it will be assigned a rating of Unsatisfactory in CPARS under the category of **Schedule.** A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of **Schedule** if the contractor meets the measureable performance standards.
Technical Effort: The Contractor shall abide by its QMP and QAPPs for individual WAs in performing services and providing	No more than 15% of deliverables and work products for any WA furnished to EPA for review by CL COR/WACOR and	100% of active WAs/deliverables (and work products) will be reviewed by the EPA CL COR/WACOR to identify	If the contractor does not meet the measurable performance standards per work assignment it will be assigned a rating of Unsatisfactory in

Performance Requirement	Measureable Performance Standards	Surveillance Method	Incentives/ Disincentives
the support on this contract.	QAO shall require revisions to meet the requirements of the QMP and QAPP for the WA.	noncompliance issues with the QMP and QAPPs for individual WAs.	CPARS under the category of **Technical (Quality of Product)**. A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of **Technical (Quality of Product)** if the contractor meets the measureable performance standards.

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 02-03

☐ Other ☐ Amendment Number:

Contract Number	Contract Period	Title of Work Assignment/SF Site Name
EP-C-15-012	08/01/2015 To 07/31/2018 Base Option Period Number 2	Risk Assessment

Contractor: CSRA LLC

Specify Section and paragraph of Contract SOW: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.10, 2.14, 2.18

Purpose:
- [X] Work Assignment
- [ ] Work Assignment Amendment
- [ ] Work Plan Approval
- [ ] Work Assignment Close-Out
- [ ] Incremental Funding

Period of Performance: From 08/01/2017 To 07/31/2018

Comments:

☐ Superfund — Accounting and Appropriations Data — [X] Non-Superfund

SFO (*Max 2*) ☐

Note: To report additional accounting and appropriations date use EPA Form 1900-69A.

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

	Cost/Fee:	LOE:
Contract Period: 08/01/2015 To 07/31/2018		0
This Action:		6,500
Total:		6,500

Work Plan / Cost Estimate Approvals

	Cost/Fee	LOE:
Contractor WP Dated:		
Cumulative Approved:		

Work Assignment Manager Name: Dan Schmelling	(Signature)	(Date)	Branch/Mail Code: Phone Number: 202-564-5281 FAX Number:
Project Officer Name: Nancy Parrotta	(Signature)	(Date)	Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:
Other Agency Official Name	(Signature)	(Date)	Branch/Mail Code: Phone Number: FAX Number:
Contracting Official Name: Donna Reinhart	(Signature)	(Date)	Branch/Mail Code: Phone Number: 513-487-2114 FAX Number:

DONNA REINHART

Digitally signed by DONNA REINHART
DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=DONNA REINHART, dnQualifier=0000010546
Date: 2017.07.12 13:45:57 -04'00'

WORK ASSIGNMENT
PERFORMANCE WORK STATEMENT (PWS)

Title: Risk Assessment and Consequence Analysis Tool Development, Improvement, Outreach / Homeland Security Coordination Activities/ Cybersecurity

Period of Performance: August 1, 2017 to July 31, 2018

PWS Sections: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.10, 2.14, 2.18

Contract No. EP-C-15-012

Work Assignment: WA-02-03

LOE: 6000 hours

Work Assignment Contract Officer Representative (WACOR):

Name:	**Daniel C. Schmelling**	
	Branch:	**WSD Immediate Office**
	Division:	**Water Security Division**
	Office:	**Office of Ground Water and Drinking Water**
	Phone:	**(202) 564-5281**
	FAX:	**(202) 566-0055**
	E-mail:	**Schmelling.Dan@epa.gov**
	Mail code:	**4608T**
	Street Address:	**1200 Pennsylvania Avenue, NW**
	City, State, Zip:	**Washington, DC 20460**

Alt WACOR: Name:		**John A. DeGour**
	Branch:	**Threats, Analysis, Prevention and Preparedness Branch**
	Division:	**Water Security Division**
	Office:	**Office of Ground Water and Drinking Water**
	Phone:	**(202) 564-3212**
	FAX:	**(202) 566-0055**
	E-mail:	**DeGour.John@epa.gov**
	Mail code:	**4608T**
	Street Address:	**1200 Pennsylvania Avenue, NW**
	City, State, Zip:	**Washington, DC 20460**

Task Managers

Tasks 0,1,2

Name: John A. DeGour
Branch: Threats, Analysis, Prevention and Preparedness Branch
Division: Water Security Division
Office: Office of Ground Water and Drinking Water
Phone: (202) 564-3212
FAX: (202) 566-0055
E-mail: DeGour.John@epa.gov
Mail code: 4608T
Street Address: 1200 Pennsylvania Avenue, NW
City, State, Zip: Washington, DC 20460

Tasks 2,3,4,5

Name: Daniel C. Schmelling
Branch: WSD Immediate Office
Division: Water Security Division
Office: Office of Ground Water and Drinking Water
Phone: (202) 564-5281
FAX: (202) 566-0055
E-mail: Schmelling.Dan@epa.gov
Mail code: 4608T
Street Address: 1200 Pennsylvania Avenue, NW
City, State, Zip: Washington, DC 20460

I. PURPOSE:

The purpose of this work assignment is to reduce risk and increase resilience for all hazards within the Water Sector through the following:

- Enabling the sector to better and more easily assess risks to all hazards and evaluate the cost-effectiveness of measures to reduce risks;
- Conducting risk assessment and consequence analysis tool outreach, which will increase knowledge in the water sector of ways to assess risks and consequences;
- Supporting coordination of activities between the EPA, Department of Homeland Security, and other public and private water sector stakeholders; and
- Promoting the adoption of cybersecurity best practices.

To achieve this purpose, the contractor shall be expected to do the following:

- Develop and improve Vulnerability Self-Assessment Tool (VSAT) – a water sector risk assessment tool;
- Conduct risk assessment and consequence analysis tool training and outreach;
- Support Homeland Security coordination activities; and

- Develop materials that promote water sector cybersecurity.

The outputs of this work assignment are intended for water and wastewater system owners and operators, as well as federal, state, local, tribal, and territorial officials that assist water sector facilities with participating in Water Sector infrastructure security and resilience activities.

This work assignment supports the mission of the Water Security Division (WSD) as described in the Water Security Strategy framework, which relates resources, activities, outputs, audience, short- and long- term outcomes to the WSD pillars of Prevention, Detection, Response, and Recovery. Additionally, this work assignment contributes to the commitments made in EPA's *Strategic Plan: 2011 to 2015* and EPA's *Homeland Security Strategy (2004)*. Under EPA's *Strategic Plan*, reference is made to Goal 2 (Protecting America's Waters), and to the Cross-Goal on homeland security. Under EPA's *Homeland Security Strategy*, reference is made to Objective 1 (Critical Infrastructure Protection).

In support of these requirements, this contract supports the nation's drinking and wastewater infrastructure, collectively known as the Water Sector, in being informed, coordinated, and prepared to prevent, detect, respond to, and recover from terrorist attack and other intentional acts, natural disasters, and other hazards (referred to as the "all hazards' approach), which may also occur, including the needs and challenges posed by natural disasters, catastrophic events, adaptation and impacts of climate change, floods, earthquakes, pandemic illness, and any other events which impact the safety and availability of our water supply.

In pursuit of these efforts, the contractor may be tasked with preparing a correlation summary comparing the results under this work assignment to the components of the Water Security Strategy framework.

II. BACKGROUND:

Presidential Preparedness Directives (PPD) 8, 21, and the Executive Order for Improving Critical Infrastructure Cyber Security are intended to strengthen and maintain the security and resilience of the Nations critical infrastructure, both physical and cyber. PPD - 21 designates the EPA as the lead agency or Sector-Specific Agency (SSA) for the Nation's Water Sector. One of many outputs related to PPD - 21 was the development of the National Infrastructure Protection Plan (NIPP) and the accompanying Sector-Specific Plans (SSPs). These plans/strategies have logically driven critical infrastructure protection initiatives towards an all-hazards (man-made and natural disasters) approach.

EPA works with the Water Sector, Federal, State, tribal and local governments, and all stakeholders to:

1. Protect the Water Sector's infrastructure from all hazards and to enhance resilience

capabilities.
2. Conduct or facilitate "all-hazards" risk assessment and consequence analysis;
3. Encourage risk management strategies to reduce vulnerabilities and mitigate public health and economic impacts (consequence); and
4. Promote communication, collaboration, and information sharing and analysis.

Much work was accomplished over the past year. However critical infrastructure protection is a continuous effort, therefore more needs to be done. All-hazards related critical infrastructure protection activities are a natural extension of EPA's long-term mission to protect human health and the environment. Accordingly, EPA and its Water Sector security partners continue to work together and are implementing a strategy to identify, prioritize, and coordinate the protection of critical Water Sector infrastructure. This strategy assists in improving Water Sector awareness, preparedness and security posture, as well as increasing resilience - in a consistent, sustainable, effective, and measurable manner.

This work assignment will support the ongoing critical infrastructure protection coordination activities/initiatives that the Agency has initiated in collaboration with the Department of Homeland Security (DHS) and water sector partners. It includes development, outreach, and training on risk assessment and analysis tools, specifically the Vulnerability Self-Assessment Tool (VSAT) and Water Health and Economic Analysis Tool (WHEAT), and efforts to promote the adoption of cybersecurity best practices in the water sector.

III. QA REQUIREMENTS:

The tasks in this WA do not require environmental measurements. Consistent with the Agency's Quality Assurance (QA) requirements, the contractor does not need to supplement the Contract Level Quality Management Plan (QMP) or prepare a Project Specific Quality Assurance Project Plan (PQAPP).

IV. DETAILED TASK DESCRIPTION:

All direction under this WA will be provided as written technical direction from the WACOR, Alternate WACOR, or Task Manager (TM), as appropriate. If provided first as verbal technical direction to the contractor, it will be confirmed in writing within 5 calendar days, with a copy to the CL COR and the Contracting Officer (CO), and is subject to the limitations of the technical direction contract clause. Each initial deliverable shall be provided to the EPA WACOR in draft form for review and comment. The contractor shall incorporate WACOR/TM review comments into revisions of the drafts. All drafts and final reports shall be approved by the WACOR.

The contractor shall perform the following tasks:

Task 0: Work Plan (WP), Progress Evaluations, and Monthly Progress Reports
Task Manager: Dan Schmelling

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the work plan shall specify that a Supplemental Project Specific Quality Assurance Project Plan (SQAPP) appending the Contract QAPP or a PQAPP is not required. This task also includes monthly progress and financial reports. Monthly financial reports must include a table with the invoice LOE and cost amount broken out by the tasks in this WA.

The contractor shall develop a WP that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the work plan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at http://www.epa.gov/accessibility/. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In each monthly progress report, the contractor shall, at the introduction to the discussion of this WA, discuss actual progress toward achieving the purpose of this work assignment, including problems encountered, issues that may need to be resolved, and anticipated timing for completing the goals of the WA. The contractor shall provide an overview of contract projects, striving to implement efficiencies in performance when complimentary requirements are issued. The contractor shall assure that duplication of effort relative to other ongoing WAs under this contract is not occurring. The contractor shall also include any requested task level metrics to measure progress toward established goals.

Deliverables: Listed in Section V of this performance work statement.

Task 1: Water Sector Homeland Security meeting/document support
Task Manager: John DeGour

The purpose of this task is to provide Water Sector meeting and document support for Homeland Security and resilience related activities, for example Critical Infrastructure Partnership Advisory Council (CIPAC) meetings. As directed by the EPA Task Manager through written technical direction, the contractor shall provide the following:

- Logistical, facilitation and administrative meeting support to include, but not limited to, facilitating and supporting meeting planning activities, delivery of meeting sessions, development of minutes and action items, and summary evaluation and report-out. The

contractor shall arrange for facilities, in accordance with Agency requirements (please see Section VIII below), suggest locations, and make necessary arrangements for meetings or conferences as requested by written technical direction from the WACOR. The contractor shall identify potential speakers and participants to attend EPA sponsored events, issue invitations, and conduct pre-meeting and on-site registration activities. The contractor shall develop and assemble agendas, supplemental materials (e.g., handouts, presentations, participant list), and other preparatory activities as needed. The contractor shall facilitate sessions and provide support to invited presenters and subject matter experts as required. Work on task activities shall begin upon receipt of written technical direction from the EPA WACOR.

The contractor shall adhere to Agency requirements for reserving meeting space. Any speakers or experts identified for travel reimbursement must have a clear role in the meeting/workshop and must have consultant agreements in place.

All appropriate clearances and approvals required by Agency policy in support of any and all conference related activities and expenses, including support of meetings, conferences, training events, award ceremonies and receptions, shall be obtained by the WACOR or EPA CL COR as needed and provided to the Contracting Officer. Work on conference-related activities and expenses shall not occur until this approval is obtained and provided by the WACOR, CL COR or CO.

- Support the writing, review, and/or dissemination of documents created in relation to Homeland Security coordination activities and other related project documents as requested in written technical direction by the EPA WACOR.

- Develop information and outreach materials for the Water Sector as requested in written technical direction by the EPA WACOR. This may include, but not be limited to, the development of fact sheets, presentations, exercises, and briefings.

Deliverables: Listed in Section V of this performance work statement.

Task 2: Completion, Review, and Deployment of VSAT Web
Task Manager: Dan Schmelling

The contractor shall complete the development and deployment of VSAT Web, which is an application of EPA's Vulnerability Self-Assessment Tool (VSAT) that is designed for use on mobile devices like tablets and iPads. Under WA 1-03 of this contract, the contractor completed a beta version of VSAT Web that was released for unrestricted review by Water Sector stakeholders. The focus of this task under WA 2-03 shall be to complete any revisions to VSAT Web as directed by the EPA Task Manager based on comments generated during review of the beta version. The contractor shall also provide support as needed to deploy VSAT Web on an EPA server.

Specifically, the contractor shall complete the following subtasks.

Subtask 2.1: Complete the development of VSAT Web following stakeholder review

The EPA Task Manager will provide written technical direction to the contractor specifying any changes the contractor shall make to VSAT Web based on reviewer comments. The contractor shall implement these changes to the application and produce a final version of VSAT Web for deployment.

In addition to Water Sector stakeholder review of VSAT Web, EPA expects to submit VSAT Web for review and approval under the DHS SAFETY Act program. This program provides limited liability protection against terrorism-related damages for products designated as effective anti-terrorism tools. The current PC version of VSAT (version 6.0) is approved under the DHS SAFETY Act program, and EPA will seek to have this approval extended to VSAT Web. The EPA Task Manager will be responsible for initiating this review with the DHS SAFETY Act office. The contractor shall support this review by providing documentation and access to the beta version of VSAT Web as required.

Subtask 2.2: Deploy VSAT Web on an EPA Server

The contractor shall work with EPA's National Computing Center and other EPA personnel as identified by the EPA Task Manager to deploy VSAT Web on an EPA server. This deployment must ensure the following:

- Access to a fully-functional version of VSAT Web by EPA and any external stakeholder;
- Compliance with all applicable requirements for deployment on an EPA server, which the contractor shall determine in consultation with designated EPA personnel;
- Capability to record contact information for users who access VSAT Web in order to inform them of corrections and updates to the application; and
- Capability for the contractor to make corrections to and update VSAT Web as required and as directed by the EPA Task Manager.

Subtask 2.3: Correct and Update VSAT Web Post-Deployment

As specified by the EPA Task Manager through written technical direction, the contractor shall correct problems with and make updates to VSAT Web following deployment on an EPA server. This subtask is not intended to include major software updates. Rather, it is limited to fixing problems and correcting issues identified with the application by users after deployment.

<u>Deliverables</u>: Listed in Section V of this performance work statement.

Deliverables must be provided in draft form for EPA review and approval prior to being finalized. Multiple drafts may be required prior to EPA approval.

Subtask 2.4: Complete WHEAT methodology peer review report

The contractor is expected to have initiated a peer review of the WHEAT methodology, with a focus on estimates of regional economic impacts, under WA 1-03 of this contract. Under WA 2-03, the contractor shall complete any remaining work on the peer review, including providing a final report that contains a record of reviewer comments, and recommendations on WHEAT methodology and potential paths forward for WHEAT.

Deliverables: Listed in Section V of this performance work statement.

Deliverables must be provided in draft form for EPA review and approval prior to being finalized. Multiple drafts may be required prior to EPA approval.

Task 3: VSAT Web Outreach and Training
Task Manager: Dan Schmelling

The contractor shall conduct the following outreach and training tasks for VSAT Web:

(1) Provide written (e.g., email) and verbal (phone) technical assistance in the use of all versions of VSAT and WHEAT (e.g., VSAT Web, VSAT 6.0 and WHEAT 3.0) as directed by the EPA Task Manager. Stakeholders may contact EPA to request technical assistance with downloading or using these tools. As necessary, EPA will pass these requests to the contractor and either (a) ask the contractor to provide assistance directly to the stakeholder by email or phone or (b) ask the contractor to provide a response to EPA, who will then contact the stakeholder.

(2) Develop outreach and training materials on VSAT Web as directed by the EPA Task Manager through written technical direction. These materials are expected to include both promotional documents (e.g., flyers, fact sheets) and educational documents (e.g., presentations for webinars or in-person training).

(3) Conduct up to 5 webinars on VSAT Web lasting up to 90 minutes each as directed by the EPA Task Manager through written technical direction. The contractor shall be responsible for developing the webinar materials and providing technical, logistical, and facilitation support for delivering the webinars. As specified by the EPA Task Manager, these webinars may be directed towards different target audiences, such as small systems and states.

Deliverables: Listed in Section V of this performance work statement.

Deliverables must be provided in draft form for EPA review and approval prior to being finalized. Multiple drafts may be required prior to EPA approval.

Task 4: Design VSAT Web Version 2.0
Task Manager: Dan Schmelling

When directed by the EPA Task Manager through written technical direction, the contractor shall initiate the design of VSAT Web Version 2.0. A primary objective of this task will be to make VSAT Web compliant with a revised version of *AWWA J100-10 Risk and Resilience Management of Water and Wastewater Systems* (hereinafter, J100 Standard). At this time, an AWWA committee is revising the J100 Standard, with the revisions expected to be finalized in 2017 (date TBD). Work on this task will not begin until the revised J100 Standard is final.

The design of VSAT Web 2.0 shall include the following enhancements:

(1) Compliance with the revised J100 Standard. Because the changes being made to the J100 Standard are not yet final, a complete list of the modifications necessary for VSAT Web to be compliant cannot be provided at this time. In general, EPA expects that the underlying risk analysis methodology of the J100 standard will not be changed. The revised standard is expected to include a new Utility Resilience Index, additional information on natural hazards, and a new method for calculating the likelihood of man-made threats.

    EPA will provide the revised J100 Standard to the contractor when it is final. At that time, the contractor shall review it and determine the changes required to VSAT Web to be compliant. The contractor shall then provide EPA with a list of proposed changes to VSAT Web, and shall design those changes approved by the EPA Task Manager.

(2) A man-made threat likelihood calculator. VSAT requires users to estimate the likelihood of man-made threats, but provides no tools to assist users with this estimate. The contractor shall design a calculator that operates within VSAT Web and assists users with determining the likelihood of man-made threats. This calculator may be based on a methodology in the revised J100 Standard or on an alternate methodology approved by the EPA Task Manager.

(3) Additional enhancements as directed by EPA. The contractor shall design additional enhancements to VSAT Web as directed by the EPA Task Manager through written technical direction. EPA does not anticipate that these enhancements will entail significant modifications. Rather, they will comprise improvements based on stakeholder feedback from using the current version of the application.

EPA does not anticipate that any travel or participation in in-person stakeholder meetings will be required from the contractor for this task. The EPA Task Manager may organize a stakeholder review of VSAT Web. However, this review, if it occurs, would be conducted on-line and not in-person.

Deliverables: Listed in Section V of this performance work statement.

Deliverables must be provided in draft form for EPA review and approval prior to being finalized. Multiple drafts may be required prior to EPA approval.

Task 5: Develop Water Sector Cybersecurity Materials

Task Manager: Dan Schmelling

The purpose of this task is to develop materials that support EPA's efforts to promote the adoption of cybersecurity best practices in the water sector. As directed by the EPA Task Manager through written technical direction, the contractor shall develop the following:

(1) Brief assessment, planning, and other documents developed in response to requests by the National Security Council, GAO, or other government entities or infrastructure sector groups. For estimating purposes, assume that up to 3 documents may be required.

(2) Brief, targeted guidance documents for underserved segments of the water sector, such as small systems and technical assistance providers. For estimating purposes, assume that up to 3 documents may be required.

(3) Web page design and technical assistance as needed to support hosting key water sector cybersecurity materials on a public web site.

(4) Outreach materials that promote water sector cybersecurity. For estimating purposes, assume that up to 3 documents may be required.

EPA does not anticipate that any travel or participation in in-person stakeholder meetings will be required from the contractor for this task. The EPA Task Manager may organize a stakeholder review of VSAT Web. However, this review, if it occurs, would be conducted on-line and not in-person.

Deliverables: Listed in Section V of this performance work statement.

Deliverables must be provided in draft form for EPA review and approval prior to being finalized. Multiple drafts may be required prior to EPA approval.

V. SCHEDULE/DELIVERABLES

The schedule of deliverables is included within each specific task.

SCHEDULE/DELIVERABLES

Task 0: Work Plan and Monthly Progress Reports		
Objective	Deliverables	Date

0	• Work plan • Project Specific Quality Assurance Project Plan • monthly progress and financial reports	In accordance with contract requirements
Task 1: Water Sector Homeland Security meeting/document support		
1	• Meeting Support • Writing/document support • Outreach materials	TBD by written technical direction from the EPA WACOR
Task 2: Complete, Review, and Deploy VSAT Web		
Subtask	Deliverables	Date
2.1	• A process to receive and catalogue reviewer comments, as well as responses to and disposition of reviewer comments; and • Completed VSAT Web application	TBD by written technical direction
2.2	• VSAT Web deployed on an EPA server	TBD by written technical direction
2.3	• Corrected versions of VSAT Web to address problems, if any, identified following deployment	TBD by written technical direction
2.4	• Provide a final report to include a record of reviewer comments, and recommendations on WHEAT methodology.	TBD by written technical direction
Task 3: Outreach and Training on VSAT Web		
Objective	Deliverables	Date
1	• Written (e.g., email) and verbal (phone) technical assistance in the use of WHEAT and VSAT provided to stakeholders or EPA, as directed by EPA, in response to stakeholder requests for help.	TBD by written technical direction
2	• Outreach and training materials to carry out the activities under this task.	TBD by written technical direction
3	• Conduct up to 5 webinars on VSAT Web lasting up to 90 minutes each.	TBD by written technical direction

Task 4: Design VSAT Web Version 2.0		
Objective	Deliverables	Date
	• Requirements documentation, screen mock-ups, and other documents as directed by the EPA Task Manager through written technical direction to support the design process.	TBD by written Technical Direction
Task 5: Develop Water Sector Cybersecurity Materials		
Objective	Deliverables	Date
1	• Up to 3 brief assessment, planning, and other documents developed in response to requests by the National Security Council, GAO, or other government entities or infrastructure sector groups.	TBD by written technical direction
2	• Up to 3 brief, targeted guidance documents for underserved segments of the water sector, such as small systems and technical assistance providers.	TBD by written technical direction
3	• Web page design and technical assistance as needed to support hosting key water sector cybersecurity materials on a public web site.	TBD by written technical direction
4	• Up to 3 outreach documents that promote water sector cybersecurity.	TBD by written technical direction

VI. REPORTING REQUIREMENTS

Monthly Progress Reports (including a progress evaluation discussion)
Financial Reports

VII. GREEN MEETINGS AND CONFERENCES

The contractor shall follow the provision of EPA prescription 1523.703-1, *Acquisition of environmentally preferable meeting and conference services (May 2007),* for the use of off-site commercial facilities for an EPA event, whether the event is a meeting, conference, training session, or other purpose. Environmental preferability is defined at FAR 2.101, and shall be used when soliciting quotes or offers for meeting/conference services on behalf of the Agency.

VIII. CONFERENCES AND WORKSHOPS

The contractor shall immediately alert the WACOR to any anticipated event under the work assignment which may result in incurring an estimated $20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, including all outlays for conference preparation, AV and rental of venue costs, etc. The EPA WACOR will then prepare for approval the internal paperwork for the event and will provide it to the CO. The CO will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

Any event which meets the definition of a "conference," with total net expenditures greater than $20,000, is required to submit EPA Electronic Form 5170 and Form 5170-A (with cost estimates/actuals). In case the workflow system is down and CORs require emergency approval, they can submit EPA Form 5170 (PDF) (2pp, 93K) (with cost estimates) to conference@epa.gov.

IX. SOFTWARE APPLICATION AND ACCESSIBILITY (SECTION 508 REHABILITATION ACT AND AMENDMENTS)

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: http://www.section508.gov/

Preferred text format:	MS Word, 8.0 or higher (Office 2007 or higher)
Preferred presentation format:	Power Point, Office 2007 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0

The WACOR shall identify which of delivered products will require 508 compliance.

QUALITY ASSURANCE SURVEILLANCE PLAN
for WSD's Mission Support

Quality Assurance Surveillance Plan

The requirements contained in this WA are considered performance-based, focusing on the Agency's desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the

requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency's performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards in Attachment 4 of the contract. The Contractor's performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the "Contractor Performance Evaluation" clause in the contract). The WACOR shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the CLCOR in preparing the overall evaluations submitted annually in response to the Contractor Performance Evaluation requirements in the contract.

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 02-03

☐ Other ☒ Amendment Number: 000001

Contract Number	Contract Period	Title of Work Assignment/SF Site Name
EP-C-15-012	08/01/2015 To 07/31/2018 Base Option Period Number 2	Risk Assessment

Contractor: CSRA LLC

Specify Section and paragraph of Contract SOW: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.10, 2.14, 2.18

Purpose:
- ☐ Work Assignment
- ☒ Work Assignment Amendment
- ☐ Work Plan Approval
- ☐ Work Assignment Close-Out
- ☐ Incremental Funding

Period of Performance: From 08/01/2017 To 07/31/2018

Comments:
The purpose of this amendment 1 to CSRA (EP-C-15-012) WA 02-03 is to add a new Task 6 to update the water sector consequence tool.

☐ Superfund — Accounting and Appropriations Data — ☒ Non-Superfund

Note: To report additional accounting and appropriations date use EPA Form 1900-69A.

SFO (*Max 2*) ☐

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period: 08/01/2015 To 07/31/2018 Cost/Fee: LOE:

This Action:

Total:

Work Plan / Cost Estimate Approvals

Contractor WP Dated: Cost/Fee LOE:

Cumulative Approved: Cost/Fee LOE:

Work Assignment Manager Name Dan Schmelling (Signature) (Date)	Branch/Mail Code: Phone Number: 202-564-5281 FAX Number:	
Project Officer Name Nancy Parrotta (Signature) (Date)	Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:	
Other Agency Official Name (Signature) (Date)	Branch/Mail Code: Phone Number: FAX Number:	
Contracting Official Name Donna Reinhart Donna Reinhart (Signature) 4/3/2018 (Date)	Branch/Mail Code: Phone Number: 513-487-2114 FAX Number:	

WORK ASSIGNMENT
PERFORMANCE WORK STATEMENT (PWS)

Title: Risk Assessment and Consequence Analysis Tool Development, Improvement, Outreach / Homeland Security Coordination Activities/ Cybersecurity

Period of Performance: August 1, 2017 to July 31, 2018

PWS Sections: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.10, 2.14, 2.18

Contract No. EP-C-15-012

Work Assignment: WA-02-03

LOE: 6000 hours + 245 hours

Work Assignment Contract Officer Representative (WACOR):

Name:	**Daniel C. Schmelling**	
	Branch:	**WSD Immediate Office**
	Division:	**Water Security Division**
	Office:	**Office of Ground Water and Drinking Water**
	Phone:	**(202) 564-5281**
	FAX:	**(202) 566-0055**
	E-mail:	**Schmelling.Dan@epa.gov**
	Mail code:	**4608T**
	Street Address:	**1200 Pennsylvania Avenue, NW**
	City, State, Zip:	**Washington, DC 20460**

Alt WACOR: Name:		**John A. DeGour**
	Branch:	**Threats, Analysis, Prevention and Preparedness Branch**
	Division:	**Water Security Division**
	Office:	**Office of Ground Water and Drinking Water**
	Phone:	**(202) 564-3212**
	FAX:	**(202) 566-0055**
	E-mail:	**DeGour.John@epa.gov**
	Mail code:	**4608T**
	Street Address:	**1200 Pennsylvania Avenue, NW**
	City, State, Zip:	**Washington, DC 20460**

Task Managers

Tasks 0,1,2,6

Name: John A. DeGour
Branch: Threats, Analysis, Prevention and Preparedness Branch
Division: Water Security Division
Office: Office of Ground Water and Drinking Water
Phone: (202) 564-3212
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Street Address: 1200 Pennsylvania Avenue, NW
City, State, Zip: Washington, DC 20460

Tasks 2,3,4,5

Name: Daniel C. Schmelling
Branch: WSD Immediate Office
Division: Water Security Division
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Street Address: 1200 Pennsylvania Avenue, NW
City, State, Zip: Washington, DC 20460

I. PURPOSE: No change to existing tasks, new task added.

The purpose of this amendment to WA 02-03, Risk Assessment and Consequence Analysis Tool Development, Improvement, Outreach / Homeland Security Coordination Activities/ Cybersecurity is to add a new task (task 6). This task will update the water sector consequence tool.

The purpose of this work assignment is to reduce risk and increase resilience for all hazards within the Water Sector through the following:

- Enabling the sector to better and more easily assess risks to all hazards and evaluate the cost-effectiveness of measures to reduce risks;
- Conducting risk assessment and consequence analysis tool outreach, which will increase knowledge in the water sector of ways to assess risks and consequences;
- Supporting coordination of activities between the EPA, Department of Homeland Security, and other public and private water sector stakeholders; and
- Promoting the adoption of cybersecurity best practices.

To achieve this purpose, the contractor shall be expected to do the following:

- Develop and improve Vulnerability Self-Assessment Tool (VSAT) – a water sector risk assessment tool;
- Conduct risk assessment and consequence analysis tool training and outreach;
- Support Homeland Security coordination activities; and
- Develop materials that promote water sector cybersecurity.
- Update Water Health and Economic Analysis Tool (WHEAT).

The outputs of this work assignment are intended for water and wastewater system owners and operators, as well as federal, state, local, tribal, and territorial officials that assist water sector facilities with participating in Water Sector infrastructure security and resilience activities.

This work assignment supports the mission of the Water Security Division (WSD) as described in the Water Security Strategy framework, which relates resources, activities, outputs, audience, short- and long- term outcomes to the WSD pillars of Prevention, Detection, Response, and Recovery. Additionally, this work assignment contributes to the commitments made in EPA's *Strategic Plan: 2011 to 2015* and EPA's *Homeland Security Strategy (2004)*. Under EPA's *Strategic Plan*, reference is made to Goal 2 (Protecting America's Waters), and to the Cross-Goal on homeland security. Under EPA's *Homeland Security Strategy*, reference is made to Objective 1 (Critical Infrastructure Protection).

In support of these requirements, this contract supports the nation's drinking and wastewater infrastructure, collectively known as the Water Sector, in being informed, coordinated, and prepared to prevent, detect, respond to, and recover from terrorist attack and other intentional acts, natural disasters, and other hazards (referred to as the "all hazards' approach), which may also occur, including the needs and challenges posed by natural disasters, catastrophic events, adaptation and impacts of climate change, floods, earthquakes, pandemic illness, and any other events which impact the safety and availability of our water supply.

In pursuit of these efforts, the contractor may be tasked with preparing a correlation summary comparing the results under this work assignment to the components of the Water Security Strategy framework.

II. BACKGROUND:

Presidential Preparedness Directives (PPD) 8, 21, and the Executive Order for Improving Critical Infrastructure Cyber Security are intended to strengthen and maintain the security and resilience of the Nations critical infrastructure, both physical and cyber. PPD - 21 designates the EPA as the lead agency or Sector-Specific Agency (SSA) for the Nation's Water Sector. One of many outputs related to PPD - 21 was the development of the National Infrastructure Protection Plan (NIPP) and the accompanying Sector-Specific Plans (SSPs). These plans/strategies have logically driven critical infrastructure protection initiatives towards an all-hazards (man-made and natural

disasters) approach.

EPA works with the Water Sector, Federal, State, tribal and local governments, and all stakeholders to:

1. Protect the Water Sector's infrastructure from all hazards and to enhance resilience capabilities.
2. Conduct or facilitate "all-hazards" risk assessment and consequence analysis;
3. Encourage risk management strategies to reduce vulnerabilities and mitigate public health and economic impacts (consequence); and
4. Promote communication, collaboration, and information sharing and analysis.

Much work was accomplished over the past year. However critical infrastructure protection is a continuous effort, therefore more needs to be done. All-hazards related critical infrastructure protection activities are a natural extension of EPA's long-term mission to protect human health and the environment. Accordingly, EPA and its Water Sector security partners continue to work together and are implementing a strategy to identify, prioritize, and coordinate the protection of critical Water Sector infrastructure. This strategy assists in improving Water Sector awareness, preparedness and security posture, as well as increasing resilience - in a consistent, sustainable, effective, and measurable manner.

This work assignment will support the ongoing critical infrastructure protection coordination activities/initiatives that the Agency has initiated in collaboration with the Department of Homeland Security (DHS) and water sector partners. It includes development, outreach, and training on risk assessment and analysis tools, specifically the Vulnerability Self-Assessment Tool (VSAT) and Water Health and Economic Analysis Tool (WHEAT), and efforts to promote the adoption of cybersecurity best practices in the water sector.

III. QA REQUIREMENTS:

The tasks in this WA do not require environmental measurements. Consistent with the Agency's Quality Assurance (QA) requirements, the contractor does not need to supplement the Contract Level Quality Management Plan (QMP) or prepare a Project Specific Quality Assurance Project Plan (PQAPP).

IV. DETAILED TASK DESCRIPTION:

All direction under this WA will be provided as written technical direction from the WACOR, Alternate WACOR, or Task Manager (TM), as appropriate. If provided first as verbal technical direction to the contractor, it will be confirmed in writing within 5 calendar days, with a copy to the CL COR and the Contracting Officer (CO), and is subject to the limitations of the technical

direction contract clause. Each initial deliverable shall be provided to the EPA WACOR in draft form for review and comment. The contractor shall incorporate WACOR/TM review comments into revisions of the drafts. All drafts and final reports shall be approved by the WACOR.

The contractor shall perform the following tasks:

Task 0: Work Plan (WP), Progress Evaluations, and Monthly Progress Reports
Task Manager: Dan Schmelling

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the work plan shall specify that a Supplemental Project Specific Quality Assurance Project Plan (SQAPP) appending the Contract QAPP or a PQAPP is not required. This task also includes monthly progress and financial reports. Monthly financial reports must include a table with the invoice LOE and cost amount broken out by the tasks in this WA.

The contractor shall develop a WP that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the work plan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at http://www.epa.gov/accessibility/. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In each monthly progress report, the contractor shall, at the introduction to the discussion of this WA, discuss actual progress toward achieving the purpose of this work assignment, including problems encountered, issues that may need to be resolved, and anticipated timing for completing the goals of the WA. The contractor shall provide an overview of contract projects, striving to implement efficiencies in performance when complimentary requirements are issued. The contractor shall assure that duplication of effort relative to other ongoing WAs under this contract is not occurring. The contractor shall also include any requested task level metrics to measure progress toward established goals.

Deliverables: Listed in Section V of this performance work statement.

Task 1: Water Sector Homeland Security meeting/document support
Task Manager: John DeGour

The purpose of this task is to provide Water Sector meeting and document support for Homeland Security and resilience related activities, for example Critical Infrastructure Partnership Advisory

Council (CIPAC) meetings. As directed by the EPA Task Manager through written technical direction, the contractor shall provide the following:

- Logistical, facilitation and administrative meeting support to include, but not limited to, facilitating and supporting meeting planning activities, delivery of meeting sessions, development of minutes and action items, and summary evaluation and report-out. The contractor shall arrange for facilities, in accordance with Agency requirements (please see Section VIII below), suggest locations, and make necessary arrangements for meetings or conferences as requested by written technical direction from the WACOR. The contractor shall identify potential speakers and participants to attend EPA sponsored events, issue invitations, and conduct pre-meeting and on-site registration activities. The contractor shall develop and assemble agendas, supplemental materials (e.g., handouts, presentations, participant list), and other preparatory activities as needed. The contractor shall facilitate sessions and provide support to invited presenters and subject matter experts as required. Work on task activities shall begin upon receipt of written technical direction from the EPA WACOR.

  The contractor shall adhere to Agency requirements for reserving meeting space. Any speakers or experts identified for travel reimbursement must have a clear role in the meeting/workshop and must have consultant agreements in place.

  All appropriate clearances and approvals required by Agency policy in support of any and all conference related activities and expenses, including support of meetings, conferences, training events, award ceremonies and receptions, shall be obtained by the WACOR or EPA CL COR as needed and provided to the Contracting Officer. Work on conference-related activities and expenses shall not occur until this approval is obtained and provided by the WACOR, CL COR or CO.

- Support the writing, review, and/or dissemination of documents created in relation to Homeland Security coordination activities and other related project documents as requested in written technical direction by the EPA WACOR.

- Develop information and outreach materials for the Water Sector as requested in written technical direction by the EPA WACOR. This may include, but not be limited to, the development of fact sheets, presentations, exercises, and briefings.

Deliverables: Listed in Section V of this performance work statement.

Task 2: Completion, Review, and Deployment of VSAT Web
Task Manager: Dan Schmelling

The contractor shall complete the development and deployment of VSAT Web, which is an application of EPA's Vulnerability Self-Assessment Tool (VSAT) that is designed for use on mobile

devices like tablets and iPads. Under WA 1-03 of this contract, the contractor completed a beta version of VSAT Web that was released for unrestricted review by Water Sector stakeholders. The focus of this task under WA 2-03 shall be to complete any revisions to VSAT Web as directed by the EPA Task Manager based on comments generated during review of the beta version. The contractor shall also provide support as needed to deploy VSAT Web on an EPA server.

Specifically, the contractor shall complete the following subtasks.

Subtask 2.1: Complete the development of VSAT Web following stakeholder review

The EPA Task Manager will provide written technical direction to the contractor specifying any changes the contractor shall make to VSAT Web based on reviewer comments. The contractor shall implement these changes to the application and produce a final version of VSAT Web for deployment.

In addition to Water Sector stakeholder review of VSAT Web, EPA expects to submit VSAT Web for review and approval under the DHS SAFETY Act program. This program provides limited liability protection against terrorism-related damages for products designated as effective anti-terrorism tools. The current PC version of VSAT (version 6.0) is approved under the DHS SAFETY Act program, and EPA will seek to have this approval extended to VSAT Web. The EPA Task Manager will be responsible for initiating this review with the DHS SAFETY Act office. The contractor shall support this review by providing documentation and access to the beta version of VSAT Web as required.

Subtask 2.2: Deploy VSAT Web on an EPA Server

The contractor shall work with EPA's National Computing Center and other EPA personnel as identified by the EPA Task Manager to deploy VSAT Web on an EPA server. This deployment must ensure the following:

- Access to a fully-functional version of VSAT Web by EPA and any external stakeholder;
- Compliance with all applicable requirements for deployment on an EPA server, which the contractor shall determine in consultation with designated EPA personnel;
- Capability to record contact information for users who access VSAT Web in order to inform them of corrections and updates to the application; and
- Capability for the contractor to make corrections to and update VSAT Web as required and as directed by the EPA Task Manager.

Subtask 2.3: Correct and Update VSAT Web Post-Deployment

As specified by the EPA Task Manager through written technical direction, the contractor shall correct problems with and make updates to VSAT Web following deployment on an EPA server. This subtask is not intended to include major software updates. Rather, it is limited to fixing problems and correcting issues identified with the application by users after deployment.

Deliverables: Listed in Section V of this performance work statement.

Deliverables must be provided in draft form for EPA review and approval prior to being finalized. Multiple drafts may be required prior to EPA approval.

Subtask 2.4: Complete WHEAT methodology peer review report

The contractor is expected to have initiated a peer review of the WHEAT methodology, with a focus on estimates of regional economic impacts, under WA 1-03 of this contract. Under WA 2-03, the contractor shall complete any remaining work on the peer review, including providing a final report that contains a record of reviewer comments, and recommendations on WHEAT methodology and potential paths forward for WHEAT.

Deliverables: Listed in Section V of this performance work statement.

Deliverables must be provided in draft form for EPA review and approval prior to being finalized. Multiple drafts may be required prior to EPA approval.

Task 3: VSAT Web Outreach and Training
Task Manager: Dan Schmelling

The contractor shall conduct the following outreach and training tasks for VSAT Web:

(1) Provide written (e.g., email) and verbal (phone) technical assistance in the use of all versions of VSAT and WHEAT (e.g., VSAT Web, VSAT 6.0 and WHEAT 3.0) as directed by the EPA Task Manager. Stakeholders may contact EPA to request technical assistance with downloading or using these tools. As necessary, EPA will pass these requests to the contractor and either (a) ask the contractor to provide assistance directly to the stakeholder by email or phone or (b) ask the contractor to provide a response to EPA, who will then contact the stakeholder.

(2) Develop outreach and training materials on VSAT Web as directed by the EPA Task Manager through written technical direction. These materials are expected to include both promotional documents (e.g., flyers, fact sheets) and educational documents (e.g., presentations for webinars or in-person training).

(3) Conduct up to 5 webinars on VSAT Web lasting up to 90 minutes each as directed by the EPA Task Manager through written technical direction. The contractor shall be responsible for developing the webinar materials and providing technical, logistical, and facilitation support for delivering the webinars. As specified by the EPA Task Manager, these webinars may be directed towards different target audiences, such as small systems and states.

Deliverables: Listed in Section V of this performance work statement.

Deliverables must be provided in draft form for EPA review and approval prior to being finalized. Multiple drafts may be required prior to EPA approval.

Task 4: Design VSAT Web Version 2.0
Task Manager: Dan Schmelling

When directed by the EPA Task Manager through written technical direction, the contractor shall initiate the design of VSAT Web Version 2.0. A primary objective of this task will be to make VSAT Web compliant with a revised version of *AWWA J100-10 Risk and Resilience Management of Water and Wastewater Systems* (hereinafter, J100 Standard). At this time, an AWWA committee is revising the J100 Standard, with the revisions expected to be finalized in 2017 (date TBD). Work on this task will not begin until the revised J100 Standard is final.

The design of VSAT Web 2.0 shall include the following enhancements:

(1) Compliance with the revised J100 Standard. Because the changes being made to the J100 Standard are not yet final, a complete list of the modifications necessary for VSAT Web to be compliant cannot be provided at this time. In general, EPA expects that the underlying risk analysis methodology of the J100 standard will not be changed. The revised standard is expected to include a new Utility Resilience Index, additional information on natural hazards, and a new method for calculating the likelihood of man-made threats.

    EPA will provide the revised J100 Standard to the contractor when it is final. At that time, the contractor shall review it and determine the changes required to VSAT Web to be compliant. The contractor shall then provide EPA with a list of proposed changes to VSAT Web, and shall design those changes approved by the EPA Task Manager.

(2) A man-made threat likelihood calculator. VSAT requires users to estimate the likelihood of man-made threats, but provides no tools to assist users with this estimate. The contractor shall design a calculator that operates within VSAT Web and assists users with determining the likelihood of man-made threats. This calculator may be based on a methodology in the revised J100 Standard or on an alternate methodology approved by the EPA Task Manager.

(3) Additional enhancements as directed by EPA. The contractor shall design additional enhancements to VSAT Web as directed by the EPA Task Manager through written technical direction. EPA does not anticipate that these enhancements will entail significant modifications. Rather, they will comprise improvements based on stakeholder feedback from using the current version of the application.

EPA does not anticipate that any travel or participation in in-person stakeholder meetings will be required from the contractor for this task. The EPA Task Manager may organize a stakeholder review of VSAT Web. However, this review, if it occurs, would be conducted on-line and not in-person.

Deliverables: Listed in Section V of this performance work statement.

Deliverables must be provided in draft form for EPA review and approval prior to being finalized. Multiple drafts may be required prior to EPA approval.

Task 5: Develop Water Sector Cybersecurity Materials
Task Manager: Dan Schmelling

The purpose of this task is to develop materials that support EPA's efforts to promote the adoption of cybersecurity best practices in the water sector. As directed by the EPA Task Manager through written technical direction, the contractor shall develop the following:

(1) Brief assessment, planning, and other documents developed in response to requests by the National Security Council, GAO, or other government entities or infrastructure sector groups. For estimating purposes, assume that up to 3 documents may be required.

(2) Brief, targeted guidance documents for underserved segments of the water sector, such as small systems and technical assistance providers. For estimating purposes, assume that up to 3 documents may be required.

(3) Web page design and technical assistance as needed to support hosting key water sector cybersecurity materials on a public web site.

(4) Outreach materials that promote water sector cybersecurity. For estimating purposes, assume that up to 3 documents may be required.

EPA does not anticipate that any travel or participation in in-person stakeholder meetings will be required from the contractor for this task. The EPA Task Manager may organize a stakeholder review of VSAT Web. However, this review, if it occurs, would be conducted on-line and not in-person.

Deliverables: Listed in Section V of this performance work statement.

Deliverables must be provided in draft form for EPA review and approval prior to being finalized. Multiple drafts may be required prior to EPA approval.

Task 6: Update WHEAT

Task Manager: John DeGour

The purpose of this task is to update WHEAT 's data tables to provide more accurate and up to date public health and economic consequence data to the water sector. As directed by the EPA Task Manager through written technical direction, the contractor shall develop the following:

(1) An updated version of WHEAT with applicable data tables used to calculate public health

and economic data replace with its most current version and language/documentation within WHEAT to reflect new data sources and version of tool (WHEAT 3.1)

(2) Tool deployment support

Deliverables: Listed in Section V of this performance work statement.

Deliverables must be provided in draft form for EPA review and approval prior to being finalized. Multiple drafts may be required prior to EPA approval.

V. SCHEDULE/DELIVERABLES No change to existing deliverable, new deliverable added.

The schedule of deliverables is included within each specific task.

SCHEDULE/DELIVERABLES

Task 0: Work Plan and Monthly Progress Reports		
Objective	Deliverables	Date
0	• Work plan • Project Specific Quality Assurance Project Plan • monthly progress and financial reports	In accordance with contract requirements
Task 1: Water Sector Homeland Security meeting/document support		
1	• Meeting Support • Writing/document support • Outreach materials	TBD by written technical direction from the EPA WACOR
Task 2: Complete, Review, and Deploy VSAT Web		
Subtask	Deliverables	Date
2.1	• A process to receive and catalogue reviewer comments, as well as responses to and disposition of reviewer comments; and • Completed VSAT Web application	TBD by written technical direction
2.2	• VSAT Web deployed on an EPA server	TBD by written technical direction

2.3	• Corrected versions of VSAT Web to address problems, if any, identified following deployment	TBD by written technical direction
2.4	• Provide a final report to include a record of reviewer comments, and recommendations on WHEAT methodology.	TBD by written technical direction
Task 3: Outreach and Training on VSAT Web		
Objective	Deliverables	Date
1	• Written (e.g., email) and verbal (phone) technical assistance in the use of WHEAT and VSAT provided to stakeholders or EPA, as directed by EPA, in response to stakeholder requests for help.	TBD by written technical direction
2	• Outreach and training materials to carry out the activities under this task.	TBD by written technical direction
3	• Conduct up to 5 webinars on VSAT Web lasting up to 90 minutes each.	TBD by written technical direction
Task 4: Design VSAT Web Version 2.0		
Objective	Deliverables	Date
	• Requirements documentation, screen mock-ups, and other documents as directed by the EPA Task Manager through written technical direction to support the design process.	TBD by written Technical Direction
Task 5: Develop Water Sector Cybersecurity Materials		
Objective	Deliverables	Date
1	• Up to 3 brief assessment, planning, and other documents developed in response to requests by the National Security Council, GAO, or other government entities or infrastructure sector groups.	TBD by written technical direction
2	• Up to 3 brief, targeted guidance documents for underserved segments of the water sector, such as small systems and technical assistance providers.	TBD by written technical direction

3	• Web page design and technical assistance as needed to support hosting key water sector cybersecurity materials on a public web site.	TBD by written technical direction
4	• Up to 3 outreach documents that promote water sector cybersecurity.	TBD by written technical direction
Task 6: Update WHEAT		
Objective	Deliverables	Date
1	• A fully functional, updated version of WHEAT 3.1	TBD by written technical direction

VI. REPORTING REQUIREMENTS

Monthly Progress Reports (including a progress evaluation discussion)
Financial Reports

VII. GREEN MEETINGS AND CONFERENCES

The contractor shall follow the provision of EPA prescription 1523.703-1, *Acquisition of environmentally preferable meeting and conference services (May 2007),* for the use of off-site commercial facilities for an EPA event, whether the event is a meeting, conference, training session, or other purpose. Environmental preferability is defined at FAR 2.101, and shall be used when soliciting quotes or offers for meeting/conference services on behalf of the Agency.

VIII. CONFERENCES AND WORKSHOPS

The contractor shall immediately alert the WACOR to any anticipated event under the work assignment which may result in incurring an estimated $20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, including all outlays for conference preparation, AV and rental of venue costs, etc. The EPA WACOR will then prepare for approval the internal paperwork for the event and will provide it to the CO. The CO will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

Any event which meets the definition of a "conference," with total net expenditures greater than $20,000, is required to submit EPA Electronic Form 5170 and Form 5170-A (with cost

estimates/actuals). In case the workflow system is down and CORs require emergency approval, they can submit EPA Form 5170 (PDF) (2pp, 93K) (with cost estimates) to conference@epa.gov.

IX. SOFTWARE APPLICATION AND ACCESSIBILITY (SECTION 508 REHABILITATION ACT AND AMENDMENTS)

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: http://www.section508.gov/

Preferred text format:	MS Word, 8.0 or higher (Office 2007 or higher)
Preferred presentation format:	Power Point, Office 2007 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0

The WACOR shall identify which of delivered products will require 508 compliance.

QUALITY ASSURANCE SURVEILLANCE PLAN for WSD's Mission Support

Quality Assurance Surveillance Plan

The requirements contained in this WA are considered performance-based, focusing on the Agency's desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency's performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards in Attachment 4 of the contract. The Contractor's performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the "Contractor Performance Evaluation" clause in the contract). The WACOR shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the CLCOR in preparing the overall evaluations submitted annually in response to the Contractor Performance Evaluation requirements in the contract.