AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE 1 OF PAGES 2

2. AMENDMENT/MODIFICATION NO. P00010

3. EFFECTIVE DATE See Block 16C

4. REQUISITION/PURCHASE REQ. NO.

5. PROJECT NO. *(If applicable)*

6. ISSUED BY CODE CAD

CAD
US Environmental Protection Agency
26 West Martin Luther King Drive
Mail Code: W136
Cincinnati OH 45268-0001

7. ADMINISTERED BY *(If other than Item 6)* CODE

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

GREAT LAKES ENVIRONMENTAL CENTER, INC.
Attn: William J Arnold
739 HASTINGS STREET
TRAVERSE CITY MI 496863458

CODE 800884181 FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

x 10A. MODIFICATION OF CONTRACT/ORDER NO. EP-C-16-008 0004

10B. DATED *(SEE ITEM 13)* 06/15/2017

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended , by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted ; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted , such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*
See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation data, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☒ is not ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

DUNS Number: 800884181
TOCOR: Danielle Grunzke InvoiceApprover: Danielle Grunzke Alt Invoice App: Sarah Lehmann
LIST OF CHANGES:
Reason for Modification: Other Administrative Action

Section I: Clause titled "Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment. (AUG 2020)" is incorporated by reference. Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment. (AUG 2020)

The purpose of this modification is to incorporate the attached EPA blanket administrative
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*

16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
Sandra Stargardt-Licis

15B. CONTRACTOR/OFFEROR
(Signature of person authorized to sign)

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA
ELECTRONIC SIGNATURE
(Signature of Contracting Officer)

16C. DATE SIGNED 09/03/2020

NAME OF OFFEROR OR CONTRACTOR
GREAT LAKES ENVIRONMENTAL CENTER, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	modification signed by Raoul Scott on July 30, 2020. All other terms and conditions remain unchanged. Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 Period of Performance: 06/15/2017 to 05/30/2021				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES

2. AMENDMENT/MODIFICATION NUMBER	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQUISITION NUMBER	5. PROJECT NUMBER *(If applicable)*
	08/13/2020		

6. ISSUED BY CODE

Raoul D. Scott, Director
OMS/ARM/OAS/Policy, Training and Oversight Division
US Environmental Protection Agency, Mail Code 3802R
1200 Pennsylvania Avenue, NW
Washington, DC 20004

7. ADMINISTERED BY *(If other than Item 6)* CODE

8. NAME AND ADDRESS OF CONTRACTOR *(Number, street, county, State and ZIP Code)*

To All EPA Contractors

CODE FACILITY CODE

(X) 9A. AMENDMENT OF SOLICITATION NUMBER

☐ 9B. DATED *(SEE ITEM 11)*

☒ 10A. MODIFICATION OF CONTRACT/ORDER NUMBER

To all EPA Contracts and Orders

10B. DATED *(SEE ITEM 13)*

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NUMBER AS DESCRIBED IN ITEM 14.

CHECK ONE	
☐	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NUMBER IN ITEM 10A.
☒	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation data, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
☐	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
☐	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☒ is not ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

This contract/order is being modified in accordance with the applicability instructions in interim FAR Case 2019-009, and FAR 4.2105, requiring contracting officers to include FAR clause 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

See attached for the full text version of FAR 52.204-25. Contractor Acknowledgment of receipt required.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*	
		Raoul D. Scott, Director Policy, Training and Oversight Division	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		RAOUL SCOTT Digitally signed by RAOUL SCOTT Date: 2020.07.30 11:40:17 -04'00' *(Signature of Contracting Officer)*	

Previous edition unusable

STANDARD FORM 30 (REV. 11/2016)
Prescribed by GSA FAR (48 CFR) 53.243

52.204-25 Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

As prescribed in 4.2105(b) and in the applicability instructions in interim FAR Case 2019-009, insert the following clause:

Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment (Aug 2020)

(a) *Definitions.* As used in this clause—

Backhaul means intermediate links between the core network, or backbone network, and the small subnetworks at the edge of the network (e.g., connecting cell phones/towers to the core telephone network). Backhaul can be wireless (e.g., microwave) or wired (e.g., fiber optic, coaxial cable, Ethernet).

Covered foreign country means The People's Republic of China.

Covered telecommunications equipment or services means–

(1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities);

(2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);

(3) Telecommunications or video surveillance services provided by such entities or using such equipment; or

(4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Critical technology means–

(1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;

(2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled-

(i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or

(ii) For reasons relating to regional stability or surreptitious listening;

(3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);

(4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);

(5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or

(6) Emerging and foundational technologies controlled pursuant to section 1758 of the Export Control Reform Act of 2018 (50 U.S.C. 4817).

Interconnection arrangements means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is ultimately delivered (e.g., connection of a customer of telephone provider A to a customer of telephone company B) or sharing data and other information resources.

Reasonable inquiry means an inquiry designed to uncover any information in the entity's possession about the identity of the producer or provider of covered telecommunications equipment or services used by the entity that excludes the need to include an internal or third-party audit.

Roaming means cellular communications services (e.g., voice, video, data) received from a visited network when unable to connect to the facilities of the home network either because signal coverage is too weak or because traffic is too high.

Substantial or essential component means any component necessary for the proper function or performance of a piece of equipment, system, or service.

(b) Prohibition. (1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. The Contractor is prohibited from providing to the Government any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104.

(2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract, or extending or renewing a contract, with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract.

(c) *Exceptions.* This clause does not prohibit contractors from providing—

(1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(2) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(d) Reporting requirement.

(1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the Contractor is notified of such by a subcontractor at any tier or by any other source, the Contractor shall report the information in paragraph (d)(2) of this clause to the Contracting Officer, unless elsewhere in this contract are established procedures for reporting the information; in the case of the Department of Defense, the Contractor shall report to the website at https://dibnet.dod.mil. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at https://dibnet.dod.mil.

(2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause

(i) Within one business day from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) *Subcontracts.* The Contractor shall insert the substance of this clause, including this paragraph (e) and excluding paragraph (b)(2), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial items.

(End of clause)

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE 1 OF PAGES 2

2. AMENDMENT/MODIFICATION NO. P00011

3. EFFECTIVE DATE See Block 16C

4. REQUISITION/PURCHASE REQ. NO. PR-OW-21-00094

5. PROJECT NO. *(If applicable)*

6. ISSUED BY CODE CAD

CAD
US Environmental Protection Agency
26 West Martin Luther King Drive
Mail Code: W136
Cincinnati OH 45268-0001

7. ADMINISTERED BY *(If other than Item 6)* CODE

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

GREAT LAKES ENVIRONMENTAL CENTER, INC.
Attn: William J Arnold
739 HASTINGS STREET
TRAVERSE CITY MI 496863458

CODE 800884181 FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

x 10A. MODIFICATION OF CONTRACT/ORDER NO. EP-C-16-008 0004

10B. DATED *(SEE ITEM 13)* 06/15/2017

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended , by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted ; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted , such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*
See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation data, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: Bilateral - FAR 52.243-1 and Mutual Agreement of the Parties
	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

DUNS Number: 800884181
The purpose of this modification is to extend the Period of Performance end date from May 30, 2021 to April 15, 2022 in accordance with the attached revised Performance Work Statement at no additional cost to the government due to delays related to the Covid-19 Pandemic.
TOCOR: Danielle Grunzke Max Expire Date: 04/15/2022 InvoiceApprover: Danielle Grunzke Alt Invoice App: Sarah Lehmann
LIST OF CHANGES:

Reason for Modification: Supplemental Agreement for work within scope
Period Of Performance End Date changed from 30-MAY-21 to 15-APR-22
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*

16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
Sandra Stargardt-Licis

15B. CONTRACTOR/OFFEROR
(Signature of person authorized to sign)

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA
ELECTRONIC SIGNATURE
(Signature of Contracting Officer)

16C. DATE SIGNED 12/07/2020

NAME OF OFFEROR OR CONTRACTOR
GREAT LAKES ENVIRONMENTAL CENTER, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Maximum Potential Expiration Date changed to: 04/15/2022 CHANGES FOR LINE ITEM NUMBER: 9999 CHANGES FOR DELIVERY LOCATION: CPOD Delivery Date changed from 04/18/2019 to 04/15/2022 Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 Period of Performance: 06/15/2017 to 04/15/2022 All other terms and conditions remain unchanged.				

Performance Work Statement
NARS2 Contract
EP-C-16-008
Task Order #4

TITLE: National Aquatic Resource Surveys: Microcystins and Cylindrospermopsin Immunoassays

A. EPA PERSONNEL

Task Order Contracting Officer Representative (TOCOR):

Name: Danielle Grunzke
Office: Office of Water/Office of Wetlands, Oceans & Watersheds/Assessment and Watershed Protection Division/Monitoring Branch
Address: 1200 Pennsylvania Avenue NW (4503T), Washington, DC 20460
Telephone: 202-566-2876
E-mail: grunzke.danielle@epa.gov

Alternate Task Order Contracting Officer Representative (ATOCOR):

Name: Kendra Forde
Office: Office of Water/Office of Wetlands, Oceans & Watersheds/Assessment and Watershed Protection Division/Monitoring Branch
Address: 1200 Pennsylvania Avenue NW (4503T), Washington, DC 20460
Telephone: 202-566-0417
E-mail: Forde.Kendra@epa.gov

B. PERIOD OF PERFORMANCE

Date of Award through ~~May 30, 2021~~April 15, 2022

C. TASK ORDER TYPE

Firm Fixed Price

I. BACKGROUND:

The National Aquatic Resource Surveys (NARS) program consists of four surveys that operate on a 5-year cycle. The NARS program will conduct the National Lakes Assessment in 2017, National Rivers and Streams Assessment (NRSA) in 2018-2019, followed by the National Coastal Condition Assessment (NCCA) in 2020. The NARS program is striving for consistency in laboratory protocols from one survey to the next. NLA and NRSA have decided to evaluate microcystins in water samples. NCCA is considering its inclusion as an indicator again. EPA is also considering adding another algal toxin, cylindrospermopsin, to the NRSA and NCCA. Because the laboratory procedure for measuring microcystins and cylindrospermopsin in water is similar whether the samples are collected in rivers, streams, or coastal waters (with exception of

slight variation for factoring salinity), EPA has decided to use a single task order for laboratory services that will process the samples from NRSA and potentially NCCA. The NLA is adding a second microcystin sample in a separate sample container for QC purposes and to assist in tracking changes over time from past surveys.

Field crews will collect samples from lakes from May through September 2017, streams and rivers from approximately June 1 through September 30 in study years 2018 and 2019; and coastal waters and the Great Lakes from approximately May 1 through September 30 in study year 2020. During the task order period of performance, the contractor shall receive a minimum of 1000 samples for microcystin analysis associated with the NLA (and a final database) and 800 samples for microcystin analysis associated with the NRSA (and a final database). The Task Order also includes options for EPA to order 6000 additional samples for a total of 7800 possible microcystins samples and third database for NCCA. Further, the Task Order includes options for EPA to order 4000 cylindrospermopsin samples and two databases (one each for NRSA and NCCA). For both types of algal toxins, the proposal includes options for both freshwater and marine samples to be costed out separately.

Before the laboratory submits the data to EPA, the analyst who generated the data and a quality assurance manager/data reviewer must independently check and review the data:

- The analyst shall review the data to ensure that:
    - Sample preparation information is correct and complete.
    - The appropriate method from the NLA, NRSA or NCCA Laboratory Operations Manual was followed.
    - Analytical results are correct and complete.
    - Quality control measures were within established limits.
    - Documentation is complete.
- The quality assurance manager/data reviewer shall review the data package to verify that:
    - Internal QC are included for each batch of samples.
    - Quality control measures were within established guidelines.
    - Qualitative and quantitative results are correct.
    - Data spreadsheet conforms to EPA data template requirements.
    - Documentation is complete.

Accompanying its data submission for each batch, the laboratory shall provide a short narrative that includes the following information:

- Project summary referencing the batch QC identification number, total number of samples in the batch and their sample numbers, and the analytical methodology used for analysis;
- Discussion of any protocol deviations that may have occurred during sample testing;
- Discussion of QC questions that were encountered and the corrective measures taken;
- Definitions of any laboratory QC codes used in the data;
- Internal QC exceeding established control limits or parameters required by laboratory internal analytical SOPs.

Up to two times during each of the field seasons, the External QC Coordinator (an EPA or EPA contractor separate from this Task Order) shall provide one or two identical sets of QC samples

to all participating laboratories. Each set shall contain up to five QC samples. As determined by the External QC Coordinator, the QC samples may be synthetic or reference/standard samples obtained from an organization such as the National Institute of Standards and Technology or other. Each laboratory will run the QC samples following the same procedures used for the other samples. The External QC Coordinator shall compare the results to the expected value and determine consistency between laboratories (e.g., determine if one laboratory is consistently higher or lower than all others). Based upon the evaluation, the External QC Coordinator may request additional information from one or more laboratories about any unique laboratory practices that might account for differences between the laboratory and others. With this additional information, the External QC Coordinator shall determine an appropriate course of action, including no action, flagging the data, or excluding some or all of the laboratory's data.

As another potential quality control step of field operations, EPA may require each field crew to provide field blank samples. In this case, the contractor shall analyze each field blank sample using the same procedures as those for the regular field samples.

II. PURPOSE

The purpose of this task order is to measure microcystins and potentially cylindrospermopsin in water samples collected in the NLA 2017, NRSA 2018-2019, NCCA 2020, and related studies. The types of support required for this project include technical support, sample analyses, transmittal of the results in database format, and a revised database at the conclusion of quality control procedures.

III. GOVERNMENT FURNISHED INFORMATION

EPA will arrange for delivery of the samples to the laboratories.

The following documents are references for the task order. They are located at this SharePoint site:[1]

- NLA 2017 Laboratory Operations Manual
- NLA 2017 Quality Assurance Project Plan
- Draft NRSA 2018-2019 Laboratory Operations Manual (LOM) (The PWS refers to the relevant chapter as the "Method.")
- Draft NRSA 2018-2019 Field Operations Manual (FOM);
- NCCA 2015 Laboratory Operations Manual (The PWS refers to the relevant chapter as the "Method.")
- NCCA 2015 Quality Assurance Project Plan
- Draft Cylindrospermopsin method (from NLA 2017) (The PWS refers to the relevant chapter as the "Method."); and
- Example Data template (i.e., spreadsheet for reporting laboratory data; microcystin provided).

[1] https://usepa.sharepoint.com/sites/OW_Community/nars/Contracts/Forms/AllItems.aspx?id=%2Fsites%2FOW%5FCommunity%2Fnars%2FContracts%2FNRSA%202018%2D19%2FManuals

As they become available, the EPA TOCOR will provide the contractor with revisions of relevant documents, including the QAPP and LOMs for the three surveys, and any other information deemed necessary for the contractor to provide the support for the Performance Work Statement (PWS).

IV. GENERAL REQUIREMENTS

In providing support under the tasks described in Section V, the contractor also shall adhere to the following general requirements:

1. Deliverables (see Contract PWS B.1)

Memoranda shall be placed on company letterhead and the subject line will include the phrase "EPA Contract #".

The contractor shall name all electronic files using a logical abbreviation for the name of the document (e.g., TO14Data), the contractor name, and the date of edits to assist in version control (ex: TO14Data_ LABNAME_2020_12_02).

The contractor shall use EPA's templates for reporting the results of the laboratory procedures for the NLA, NRSA and NCCA samples. For any other database or spreadsheet submitted to EPA, the contractor must provide metadata that, at a minimum, identify the fields recorded for each sample, define the codes used for the field, and include the version number and date.

The contractor shall ensure that documentation is created using Agency standard software formats (e.g., Microsoft Office) to facilitate EPA use and review.

2. Identification at Meetings/Teleconferences (see Contract clause C.2)

Contractor personnel shall always identify themselves as contractor employees by name and organization. Contractor personnel are prohibited from acting as the Agency's official representative. The contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the TOCOR.

V. SCOPE OF WORK

The contractor shall provide laboratory support for measuring microcystins and cylindrospermopsin in water samples as described in the following tasks.

Task 1. Task Order Management and Monthly progress reports (See Contract Attachment 3; PWS B.2 and C.4)

The contractor shall manage the Task Order (TO) and submit monthly progress and financial reports prepared and submitted in accordance with the contract clause, Contract Attachment 3, Reports of Work.

a. Teleconferences: The contractor, and its laboratories, shall participate in EPA's teleconferences about laboratory procedures for receiving, storing, tracking, analyzing, and reporting samples and results. Prior to the shipping of the first samples in each sampling year (2017, 2018, 2019, 2020), EPA will coordinate and facilitate 1-3 teleconference calls, each to last approximately 1 hour, to review the Method, required reporting elements, data templates, and the relevant requirements in the QAPP. The participants will include EPA, the contractor's laboratories, subcontract laboratories, and State laboratories. If EPA conducts multiple teleconferences (e.g., due to State laboratory personnel availability), the contractor shall participate in all calls because different issues may arise that would require feedback from the contractor. The goal of the teleconferences is to ensure consensus on the analytical procedures and a schedule for sample processing and reporting. The agenda will include review of the:
   i. QAPP
   ii. LOM
   iii. Data template
   iv. Standard Operating Procedures (SOPs)

b. Status Summaries: Prior to delivering the progress report, the contractor shall provide monthly status summaries. The monthly status summary shall match the time period covered by the progress report. The contractor shall provide Excel spreadsheets with the monthly status summaries that include:
   i. The number of samples delivered. (The QC samples, as described in the Method, shall be considered "samples" for the purpose of invoicing, scheduling, and reporting.)
   ii. The number of samples for which the laboratory has finished data entry.
   iii. Percent capacity reached in the contract (i.e., number of samples in 1.c.ii compared to the maximum number specified in task order when all quantities are exercised).
   iv. Data for the samples processed, or revised, since the previous summary. The contractor shall report the data using EPA's data template, but updated with the new, revised, and reconciled data. In addition, the contractor shall provide a separate case narrative (e.g., emailed Word or pdf file) for the EPA TOCOR to review with the data.
   v. Provide a simple list of the invoiced samples with sample #, site ID, and visit #. The TOCOR will compare the list with the NLA, NRSA and NCCA master lists of samples to verify that every sample has been invoiced one time.

c. Monthly Progress and Financial Reports: The contractor shall provide a progress and financial report each month that matches the costs in the corresponding invoice.
   i. The contractor shall provide a progress report each month that includes project status; expenditures to date; number of samples in each processing stage compared to the plan; unexpected problems or concerns, including with quality assurance; lessons learned; QA/QC activities; and next steps. The contractor shall prepare and submit the monthly progress reports in accordance with the contract clause, Contract Attachment 3, Reports of Work.

ii. The contractor shall prepare and submit the financial reports in accordance with the contract clause, Contract Attachment 3, Reports of Work.
iii. For the sample analyses completed during the month and billed in the invoice, the financial report shall identify the sample using its site identification code and sample number.
iv. For the month in which the contractor delivers the final database for Task 4, the contractor shall include the costs for Task 4.

d. Issues Requiring EPA Resolution: The contractor shall immediately notify the EPA TOCOR of any unexpected problems or concerns, including issues with QA/QC, and recommend remedies or corrective actions. Upon receiving written technical direction from the EPA TOCOR, the contractor shall revise its schedule in the technical proposal. The contractor also shall include problems and concerns in the monthly progress report.
e. Other: The contractor shall immediately notify the EPA TOCOR if any sample shows concentrations of microcystin above World Health Organization (WHO) moderate or high risk levels or EPA thresholds, if available. The contractor shall immediately notify the EPA TOCOR if any samples show concentrations of cylindrospermopsin above EPA thresholds, if available.

Deliverables and Schedule under Task 1:

Subtask	Deliverable	Due
a.	Participation in teleconferences	Date/time per written technical direction from EPA TOCOR based upon contractor's recommended dates/times
b.	Status updates with data in spreadsheet, sample list, and separate case narrative.	Monthly
c.	Progress and financial reports in electronic format	Monthly
d.	Email	Immediately when issue identified.
d.	Revised technical plan and schedule	Revisions within 5 working days per written technical direction.
e.	Email	Immediately if concentrations are above WHO or EPA thresholds.

Task 2. Quality Assurance (Contract PWS B.3)

Quality Assurance (QA) is an important component of EPA's work to assure that minimum quality standards are attained. The contractor shall address the QA requirements of this task order by adhering to the requirements and procedures identified in:

- The contractor's Quality Management Plan incorporated into this NARS contract;

- NLA, NRSA and NCCA Survey QA documents which document how quality assurance and quality control will be applied to the collection of environmental data for the survey. The documents relevant to support in this task order are:
    - Quality Assurance Project Plan (QAPP)
    - Laboratory Operations Manual (LOM)
    - The quality documents will evolve throughout the task order. During NLA implementation, the contractor shall notify the EPA TOCOR immediately if it identifies areas where its previous activities are not consistent with the revisions made to the 2017 QAPP and LOM. During NRSA implementation, the contractor shall notify the EPA TOCOR immediately if it identifies areas where its previous activities are not consistent with the revisions made to the 2018-2019 QAPP and LOM. Similarly, during options associated with the NCCA, the contractor must notify the EPA TOCOR immediately if it identifies areas where its previous activities are not consistent with revisions being made to the 2020 NCCA and LOM.

  The EPA TOCOR will determine whether any modifications to the contractor's previous activities will be necessary, which may require a modification to the task order by the EPA Contracting Officer (CO).

For each survey, as demonstration of the contractor's:

a. Commitment to adhere to the QAPP, the contractor's Quality Assurance Official (QAO) and each laboratory's QAO shall sign the page "Review & Distribution Acknowledgment and Commitment to Implement" in the introductory section of the QAPP. The contractor shall distribute the version of the QAPP and LOM available at the start of each survey and any additional revisions approved by the EPA QAO, throughout the contractor's organization, including subcontractors and consultants. If EPA distributes an updated version of the LOM and states that it contains a "significant change" relevant to algal toxin immunoassays, the contractor shall acknowledge, in writing (e.g., Email), that it has received and distributed the revised LOM to the appropriate personnel.

b. Implementation of QA in performing the other tasks in this Performance Work Statement, the contractor shall document its QA activities as follows:

    i. Standard Operating Procedures (SOPs) and any other quality assurance documentation developed or adopted by the contractor's laboratory for use in performing the required analyses. If the contractor does not develop or modify them as part of the costs incurred by the task order, the contractor may claim the SOPs to be proprietary.

    ii. Reports of relevant QA activities in any deliverable. All QA documentation prepared under the task order shall be considered non-proprietary.

iii. Monthly reports of QA activities performed during implementation of this task order. These monthly QA reports shall identify QA activities performed to support implementation of this task order, problems encountered, deviations from the QAPP, and corrective actions taken. The contractor shall include the QA report with the monthly progress report.

c. Ability to conform to NLA, NRSA and NCCA measurement quality objectives, the contractor must, at a minimum, ensure that the data meet the measurement quality objectives in the relevant survey QAPP.

Deliverables and Schedule under Task 2:

Subtask	Deliverable	Due
a.	Original QAPP signature page for NLA	No later than 5 working days after receipt of approved QAPP from TOCOR
	Original QAPP signature page for NRSA	No later than 5 working days after receipt of approved QAPP from TOCOR
	Original QAPP signature page for NCCA	No later than 5 working days after receipt of approved QAPP from TOCOR
	Email acknowledgement of LOM with "significant change"	No later than 10 working days after receiving revised LOM
	Laboratory SOPs	No later than 5 working days after effective date of task order. If the laboratory modified the SOPs during the performance period, provide the final versions 5 working days before May 30, 2018 for NLA, 5 working days before May 30, 2020 for NRSA and 5 working days before May 30, 2021 for NCCA. Otherwise, provide an email stating that the SOPs have remained unchanged throughout the task order.
b.	Documentation of QA activities	With deliverables
	Monthly reports of QA activities	With monthly progress report
c.	Data and QC elements identified in procedure	With database

Task 3. Microcystins Immunoassays (Contract PWS B.3.e, C.4)

The contractor shall strictly follow ALL procedures in the Method to measure microcystins AND cylindrospermopsin in water samples.

If the contractor identifies a situation requiring a minor change in the Method, the EPA TOCOR must approve the deviation before the contractor can implement the change.

In addition to the delivery of data addressed in Task 1, the contractor shall provide the deliverables resulting from the following activities:

a. Log each sample and record the condition of the sample container into the NARS Information Management (IM) system within 24 (clock) hours of the sample arriving at the laboratory. If the sample does not arrive when expected, the contractor shall immediately notify the EPA TOCOR or her designee. It is anticipated that the log-in process will be conducted by use of a spreadsheet. The contractor shall upload to SharePoint or email a spreadsheet with the sample login information to the EPA TOCOR with a copy to the person assigned to track the samples for the survey per the relevant QAPP and LOM.

   Retain the samples for the period specified in the Method. If EPA determines that transfer to another location is necessary, EPA will make separate arrangements (e.g., task order modification, purchase order) with the contractor for any necessary packaging and shipping expenses. Otherwise, at the end of the retention period, the contractor shall follow its internal protocols for disposal.

b. Retain original records, including laboratory notebooks, for a minimum of 10 years from the date that EPA publishes the final report. If EPA determines that copies or physical transfer to another location is necessary, EPA will make separate arrangements (e.g., task order modification, purchase order) for any necessary photocopying, packaging and shipping expenses. Otherwise, at the end of the retention period, the contractor shall follow its internal protocols for disposal.

   Unless the TOCOR grants an exception, the contractor shall not publish findings based upon work conducted under this task order. This restriction shall remain in effect until EPA provides public access to the data.

Deliverables and Schedule under Task 3:

Subtask	Deliverable	Due
a.	Sample logged into NARS IM system or transmittal of spreadsheet	Within 24 (clock) hours of sample receipt
a.	Email identifying missing sample	Immediately if sample does not arrive when expected
b.	Access to samples	Upon EPA TOCOR's written request via technical direction.
b.	Access to laboratory notebooks	Upon EPA TOCOR's written request via technical direction.

Task 4. Final Database (Contract PWS B.1, B.3, C.4)

The contractor shall provide revised and final databases for the results of the microcystins and cylindrospermopsin immunoassays reported in Task 1. The contractor shall provide:

a. Responses to EPA's questions about the data, as conveyed by the EPA TOCOR's technical direction.
b. Revised databases per written technical direction describing required changes based upon EPA's review of the data.
c. Final database that incorporates revisions identified by the EPA TOCOR's technical direction.

Deliverables and Schedule under Task 4:

Subtask	Deliverable	Due
a.	Email with responses to data questions	1-5 working days per technical direction
b.	Revised databases and emails that summarize the changes	10 working days after receiving the EPA TOCOR's written technical direction. The contractor shall assume five revisions and associated summaries will be required as a result of EPA's review of the data.
c.	Final databases for NLA samples	10 working days after receiving written technical direction; but no later than 5 working days before May 30, 2018.
	Final databases for NRSA samples	10 working days after receiving written technical direction; but no later than 5 working days before May 30, 2020.
	Final databases for NCCA samples	10 working days after receiving technical direction; but no later than 5 days prior to the end of the period of performance (~~May 30~~April 15, 202~~1~~2).

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VI. TRAVEL

EPA does not anticipate that any travel will be necessary to perform the tasks in the Performance Work Statement.

VII. QUALITY ASSURANCE SURVEILLANCE PLAN

EPA will judge performance using the following Quality Assurance Surveillance Plan (QASP).

Performance Requirement	Measureable Performance Standards	Surveillance Method	Incentives/Disincentives
Management and Communications: The Contractor shall maintain contact with the EPA TOCOR throughout the performance of the task order and shall immediately bring potential problems to the attention of the EPA TOCOR. 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 TOCOR within 3-working days of occurrence.	EPA TOCOR will identify unreported issues.	Two or more incidents where the contractor: • Does not provide timely notification; or • Created a severe adverse situation 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 where the contractor does not meet the measureable performance standard will be considered acceptable performance and will be reported as such in the CPARS Performance Evaluation System under the category of Business Relations
Timeliness: Data (Task 1) and databases (Task 4) shall be delivered in accordance with the schedule developed in PWS Task 1. After EPA accepts the final schedule in Task 1, it is unlikely that EPA will be willing to extend the schedule due to any factors under the contractor's control (e.g., to complete work under another contract).	• No more than 25% of the data for Task 1 shall be submitted more than 3 working days past the date in the accepted schedule. • None of the data for Task 1 shall be submitted more than 40 working days past the date in the accepted schedule. • No more than 10% of the revised databases (Task 4) shall be submitted more than 3 working days past the date in the accepted schedule. • No delays in submitting the final database (Task 4) by the "no later than" date in the PWS.	100% of the progress reports, data submissions, and databases will be reviewed by the EPA TOCOR monthly to compare actual delivery dates against those in the approved schedule from Task 1.	Unsatisfactory rating under the category of **Schedule** in CPARS when the contractor does not meet the measurable performance standards during the applicable period of performance.
Technical Effort: The Contractor shall assign appropriately leveled and skilled personnel to all tasks; and abide by the contractor's QMP, the NLA/NRSA/NCCA QAPP, and the Method.	No more than 25% of reviewed deliverables and data shall require revisions to meet the requirements of the QMP, NLA/NRSA/NCCA QAPP, data templates, and Method.	100% of the data will be reviewed by the EPA TOCOR to identify noncompliance issues with the QMP, NLA/NRSA/NCCA QAPP, and Method.	Unsatisfactory rating under the category of **Quality** in CPARS when the contractor does not meet the measurable performance standards during an applicable period of performance.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE 1 OF PAGES 7

2. AMENDMENT/MODIFICATION NO. P00012

3. EFFECTIVE DATE See Block 16C

4. REQUISITION/PURCHASE REQ. NO. See Schedule

5. PROJECT NO. *(If applicable)*

6. ISSUED BY CODE CAD

CAD
US Environmental Protection Agency
26 West Martin Luther King Drive
Mail Code: W136
Cincinnati OH 45268-0001

7. ADMINISTERED BY *(If other than Item 6)* CODE

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

GREAT LAKES ENVIRONMENTAL CENTER, INC.
Attn: William J Arnold
739 HASTINGS STREET
TRAVERSE CITY MI 496863458

CODE 800884181 FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

x 10A. MODIFICATION OF CONTRACT/ORDER NO. EP-C-16-008 0004

10B. DATED *(SEE ITEM 13)* 06/15/2017

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended , by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted ; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted , such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*
See Schedule (b)(4)

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation data, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: Bilateral - Mutual Agreement of the Parties
	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

DUNS Number: 800884181
The purpose of this modification is to:

1) (b)(4)
(b)(4)
2) Revise the Performance Work Statement in accordance with Attachment 1, Performance Work Statement;
3) Exercise (b)(4)
4) Exercise
5) Exercise
6) Exercise
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*

16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
Sandra Stargardt-Licis

15B. CONTRACTOR/OFFEROR
(Signature of person authorized to sign)

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA
ELECTRONIC SIGNATURE
(Signature of Contracting Officer)

16C. DATE SIGNED 04/26/2021

NAME OF OFFEROR OR CONTRACTOR
GREAT LAKES ENVIRONMENTAL CENTER, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	7) Obligate funding in the amount of (b)(4) to fully fund this Modification. TOCOR: Danielle Grunzke Max Expire Date: 04/15/2022 InvoiceApprover: Danielle Grunzke Alt Invoice App: Sarah Lehmann LIST OF CHANGES: Reason for Modification: Supplemental Agreement for work within scope Total Amount for this Modification: (b)(4) New Total Amount for this Version: (b)(4) New Total Amount for this Award: (b)(4) Obligated Amount for this Modification: (b)(4) New Total Obligated Amount for this Award: (b)(4) CHANGES FOR LINE ITEM NUMBER: 6 Description changed from Option E - Perform services in accordance with the attached PWS and proposal in response to - Request for Task Order Proposal, Solicitation PR-OW-16-00681, Project Entitled: "National Aquatic Resource Surveys: Microcystins and Cylindrospermopsin Immunoassays". (b)(4) Perform services in accordance with the attached PWS and proposal in response to - Request for Task Order Proposal, Solicitation PR-OW-16-00681, Project Entitled: "National Aquatic Resource Surveys: Microcystins and Cylindrospermopsin Immunoassays". (b)(4) (b)(4) CHANGES FOR LINE ITEM NUMBER: 2 Description changed from Option A - Perform services in accordance with the attached PWS and proposal in response to - Request for Task Order Proposal, Solicitation PR-OW-16-00681, Project Entitled: "National Aquatic Resource Surveys: Microcystins and Cylindrospermopsin Immunoassays". (b)(4) microcystin(freshwater) Continued ...				

NAME OF OFFEROR OR CONTRACTOR
GREAT LAKES ENVIRONMENTAL CENTER, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Task 1-3 Freshwater (b)(4) per option; Task 1-3 Marine (b)(4) (b)(4)				
	(b)(4)				
	Total Amount changed (b)(4)				
	CHANGES FOR DELIVERY LOCATION:Amount changed from (b)(4)				
	CHANGES FOR LINE ITEM NUMBER: 5 Description changed from Option D - Perform services in accordance with the attached PWS and proposal in response to - Request for Task Order Proposal, Solicitation PR-OW-16-00681, Project Entitled: "National Aquatic Resource Surveys: Microcystins and Cylindrospermopsin Immunoassays".				
	(b)(4)				
	(b)(4)				
	Continued ...				

NAME OF OFFEROR OR CONTRACTOR
GREAT LAKES ENVIRONMENTAL CENTER, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	(b)(4)				
	Total Amount changed (b)(4)				
	CHANGES FOR DELIVERY LOCATION: Amount changed (b)(4)				
	CHANGES FOR ACCOUNTING CODE: 17-E1-87FM-202B06XP1-2505-1787ME7027-001 Amount changed (b)(4)				
	CHANGES FOR LINE ITEM NUMBER: 1 Description changed from Perform services in accordance with the attached PWS and proposal in response to - Request for Task Order Proposal, Solicitation PR-OW-16-00681, Project Entitled: "National Aquatic Resource Surveys: Microcystins and Cylindrospermopsin Immunoassays".				
	(b)(4)				
	Perform services in accordance with the attached PWS and proposal in response to - Request for Task Order Proposal, Solicitation PR-OW-16-00681, Project Entitled: "National Aquatic Resource Surveys: Microcystins and Cylindrospermopsin Immunoassays".				
	(b)(4)				
	CHANGES FOR DELIVERY LOCATION: OW-OWOW-AWPD-MB Amount changed (b)(4)				
	NEW ACCOUNTING CODE ADDED: Account code: 20-E1D-87FM-000B06XP1-4183-2187ME4017-001 Beginning FiscalYear 20 Ending Fiscal Year Fund (Appropriation) E1D Budget Organization 87FM				
	Continued ...				

NAME OF OFFEROR OR CONTRACTOR
GREAT LAKES ENVIRONMENTAL CENTER, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Program (PRC) 000B06XP1 Budget (BOC) 4183 Job # (Site/Project) Cost Organization DCN-LineID 2187ME4017-001 Quantity: 0 Amount: (b)(4) Percent: (b)(4) Subject To Funding: N Payment Address: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 NEW ACCOUNTING CODE ADDED: Account code: 21-22-B-87FM-000B67-2505-2187ME4017-002 Beginning FiscalYear 21 Ending Fiscal Year 22 Fund (Appropriation) B Budget Organization 87FM Program (PRC) 000B67 Budget (BOC) 2505 Job # (Site/Project) Cost Organization DCN-LineID 2187ME4017-002 Quantity: 0 Amount: (b)(4) Percent: (b)(4) Subject To Funding: N Payment Address: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 NEW ACCOUNTING CODE ADDED: Account code: 21-22-B-05HEL-000BJ7XF5-2505-2105HIX505-001 Beginning FiscalYear 21 Ending Fiscal Year 22 Fund (Appropriation) B Budget Organization 05HEL Continued ...				

NAME OF OFFEROR OR CONTRACTOR
GREAT LAKES ENVIRONMENTAL CENTER, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Program (PRC) 000BJ7XF5 Budget (BOC) 2505 Job # (Site/Project) Cost Organization DCN-LineID 2105HIX505-001 Quantity: 0 Amount: (b)(4) Percent: (b)(4) Subject To Funding: N Payment Address: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 NEW ACCOUNTING CODE ADDED: Account code: Beginning FiscalYear 00 Ending Fiscal Year Fund (Appropriation) ZERO Budget Organization DOLLAR Program (PRC) ADMIN Budget (BOC) REQ Job # (Site/Project) Cost Organization DCN-LineID Quantity: 0 Amount: $0.00 Percent: 0 Subject To Funding: N Payment Address: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 CHANGES FOR LINE ITEM NUMBER: 3 Description changed from Option B - Perform services in accordance with the attached PWS and proposal in response to - Request for Task Order Proposal, Solicitation PR-OW-16-00681, Project Entitled: "National Aquatic ResourceSurveys: Microcystins and Cylindrospermopsin Immunoassays". Continued ...				

NAME OF OFFEROR OR CONTRACTOR
GREAT LAKES ENVIRONMENTAL CENTER, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	(b)(4)				
	P00012 added and exercised two option B Marine samples for a total of (b)(4) (b)(4)				
	Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 Period of Performance: 06/15/2017 to 04/15/2022 All other terms and conditions remain unchanged.				

Performance Work Statement
EP-C-16-008
Task Order 4

TITLE: National Aquatic Resource Surveys: Microcystins and Cylindrospermopsin Immunoassays

A. EPA PERSONNEL

Task Order Contracting Officer Representative (TOCOR):

Name: Danielle Grunzke
Office: Office of Water/Office of Wetlands, Oceans & Watersheds/Assessment and Watershed Protection Division/Monitoring Branch
Address: 1200 Pennsylvania Avenue NW (4503T), Washington, DC 20460
Telephone: 202-566-2876
E-mail: grunzke.danielle@epa.gov

Alternate Task Order Contracting Officer Representative (ATOCOR):

Name: Kendra Forde
Office: Office of Water/Office of Wetlands, Oceans & Watersheds/Assessment and Watershed Protection Division/Monitoring Branch
Address: 1200 Pennsylvania Avenue NW (4503T), Washington, DC 20460
Telephone: 202-566-0417
E-mail: Forde.Kendra@epa.gov

B. PERIOD OF PERFORMANCE

Date of Award through April 15, 2022

C. TASK ORDER TYPE

Firm Fixed Price

I. BACKGROUND:

The National Aquatic Resource Surveys (NARS) program consists of four surveys that operate on a 5-year cycle. The NARS program will conduct the National Lakes Assessment in 2017, National Rivers and Streams Assessment (NRSA) in 2018-2019, followed by the National Coastal Condition Assessment (NCCA) in 2020. The NARS program is striving for consistency in laboratory protocols from one survey to the next. NLA and NRSA have decided to evaluate microcystins in water samples. NCCA is considering its inclusion as an indicator again. EPA is also considering adding another algal toxin, cylindrospermopsin, to the NRSA and NCCA. Because the laboratory procedure for measuring microcystins and cylindrospermopsin in water is similar whether the samples are collected in rivers, streams, or coastal waters (with exception of

slight variation for factoring salinity), EPA has decided to use a single task order for laboratory services that will process the samples from NRSA and potentially NCCA. The NLA is adding a second microcystin sample in a separate sample container for QC purposes and to assist in tracking changes over time from past surveys.

Field crews will collect samples from lakes from May through September 2017, streams and rivers from approximately June 1 through September 30 in study years 2018 and 2019; and coastal waters and the Great Lakes from approximately May 1 through September 30 in study year 2020. During the task order period of performance, the contractor shall receive a minimum of 1000 samples for microcystin analysis associated with the NLA (and a final database) and 800 samples for microcystin analysis associated with the NRSA (and a final database). The Task Order also includes options for EPA to order (b)(4) additional samples for a total of (b)(4) possible microcystins samples and third database for NCCA. Further, the Task Order includes options for EPA to order (b)(4) cylindrospermopsin samples and two databases (one each for NRSA and NCCA). For both types of algal toxins, the proposal includes options for both freshwater and marine samples to be costed out separately. The Task Order also includes an additional (b)(4) marine microcystin samples added to the base effort by task order modification P00007. This modification adds an additional (b) microcystin marine samples and (b)(4) cylindrospermopsin marine samples to the total effort.

Before the laboratory submits the data to EPA, the analyst who generated the data and a quality assurance manager/data reviewer must independently check and review the data:

- The analyst shall review the data to ensure that:
  - Sample preparation information is correct and complete.
  - The appropriate method from the NLA, NRSA or NCCA Laboratory Operations Manual was followed.
  - Analytical results are correct and complete.
  - Quality control measures were within established limits.
  - Documentation is complete.
- The quality assurance manager/data reviewer shall review the data package to verify that:
  - Internal QC are included for each batch of samples.
  - Quality control measures were within established guidelines.
  - Qualitative and quantitative results are correct.
  - Data spreadsheet conforms to EPA data template requirements.
  - Documentation is complete.

Accompanying its data submission for each batch, the laboratory shall provide a short narrative that includes the following information:

- Project summary referencing the batch QC identification number, total number of samples in the batch and their sample numbers, and the analytical methodology used for analysis;
- Discussion of any protocol deviations that may have occurred during sample testing;
- Discussion of QC questions that were encountered and the corrective measures taken;
- Definitions of any laboratory QC codes used in the data;
- Internal QC exceeding established control limits or parameters required by laboratory internal analytical SOPs.

Up to two times during each of the field seasons, the External QC Coordinator (an EPA or EPA contractor separate from this Task Order) shall provide one or two identical sets of QC samples

to all participating laboratories. Each set shall contain up to five QC samples. As determined by the External QC Coordinator, the QC samples may be synthetic or reference/standard samples obtained from an organization such as the National Institute of Standards and Technology or other. Each laboratory will run the QC samples following the same procedures used for the other samples. The External QC Coordinator shall compare the results to the expected value and determine consistency between laboratories (e.g., determine if one laboratory is consistently higher or lower than all others). Based upon the evaluation, the External QC Coordinator may request additional information from one or more laboratories about any unique laboratory practices that might account for differences between the laboratory and others. With this additional information, the External QC Coordinator shall determine an appropriate course of action, including no action, flagging the data, or excluding some or all of the laboratory's data.

As another potential quality control step of field operations, EPA may require each field crew to provide field blank samples. In this case, the contractor shall analyze each field blank sample using the same procedures as those for the regular field samples.

II. PURPOSE

The purpose of this task order is to measure microcystins and potentially cylindrospermopsin in water samples collected in the NLA 2017, NRSA 2018-2019, NCCA 2020, and related studies. The types of support required for this project include technical support, sample analyses, transmittal of the results in database format, and a revised database at the conclusion of quality control procedures.

III. GOVERNMENT FURNISHED INFORMATION

EPA will arrange for delivery of the samples to the laboratories.

The following documents are references for the task order. They are located at this SharePoint site:[1]

- NLA 2017 Laboratory Operations Manual
- NLA 2017 Quality Assurance Project Plan
- Draft NRSA 2018-2019 Laboratory Operations Manual (LOM) (The PWS refers to the relevant chapter as the "Method.")
- Draft NRSA 2018-2019 Field Operations Manual (FOM);
- NCCA 2015 Laboratory Operations Manual (The PWS refers to the relevant chapter as the "Method.")
- NCCA 2015 Quality Assurance Project Plan
- Draft Cylindrospermopsin method (from NLA 2017) (The PWS refers to the relevant chapter as the "Method."); and
- Example Data template (i.e., spreadsheet for reporting laboratory data; microcystin provided).

[1] https://usepa.sharepoint.com/sites/OW_Community/nars/Contracts/Forms/AllItems.aspx?id=%2Fsites%2FOW%5FCommunity%2Fnars%2FContracts%2FNRSA%202018%2D19%2FManuals

As they become available, the EPA TOCOR will provide the contractor with revisions of relevant documents, including the QAPP and LOMs for the three surveys, and any other information deemed necessary for the contractor to provide the support for the Performance Work Statement (PWS).

IV. GENERAL REQUIREMENTS

In providing support under the tasks described in Section V, the contractor also shall adhere to the following general requirements:

1. Deliverables (see Contract PWS B.1)

Memoranda shall be placed on company letterhead and the subject line will include the phrase "EPA Contract #".

The contractor shall name all electronic files using a logical abbreviation for the name of the document (e.g., TO14Data), the contractor name, and the date of edits to assist in version control (ex: TO14Data_ LABNAME_2020_12_02).

The contractor shall use EPA's templates for reporting the results of the laboratory procedures for the NLA, NRSA and NCCA samples. For any other database or spreadsheet submitted to EPA, the contractor must provide metadata that, at a minimum, identify the fields recorded for each sample, define the codes used for the field, and include the version number and date.

The contractor shall ensure that documentation is created using Agency standard software formats (e.g., Microsoft Office) to facilitate EPA use and review.

2. Identification at Meetings/Teleconferences (see Contract clause C.2)

Contractor personnel shall always identify themselves as contractor employees by name and organization. Contractor personnel are prohibited from acting as the Agency's official representative. The contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the TOCOR.

V. SCOPE OF WORK

The contractor shall provide laboratory support for measuring microcystins and cylindrospermopsin in water samples as described in the following tasks.

Task 1. Task Order Management and Monthly progress reports (See Contract Attachment 3; PWS B.2 and C.4)

The contractor shall manage the Task Order (TO) and submit monthly progress and financial reports prepared and submitted in accordance with the contract clause, Contract Attachment 3, Reports of Work.

a. Teleconferences: The contractor, and its laboratories, shall participate in EPA's teleconferences about laboratory procedures for receiving, storing, tracking, analyzing, and reporting samples and results. Prior to the shipping of the first samples in each sampling year (2017, 2018, 2019, 2020), EPA will coordinate and facilitate 1-3 teleconference calls, each to last approximately 1 hour, to review the Method, required reporting elements, data templates, and the relevant requirements in the QAPP. The participants will include EPA, the contractor's laboratories, subcontract laboratories, and State laboratories. If EPA conducts multiple teleconferences (e.g., due to State laboratory personnel availability), the contractor shall participate in all calls because different issues may arise that would require feedback from the contractor. The goal of the teleconferences is to ensure consensus on the analytical procedures and a schedule for sample processing and reporting. The agenda will include review of the:
   i. QAPP
   ii. LOM
   iii. Data template
   iv. Standard Operating Procedures (SOPs)

b. Status Summaries: Prior to delivering the progress report, the contractor shall provide monthly status summaries. The monthly status summary shall match the time period covered by the progress report. The contractor shall provide Excel spreadsheets with the monthly status summaries that include:
   i. The number of samples delivered. (The QC samples, as described in the Method, shall be considered "samples" for the purpose of invoicing, scheduling, and reporting.)
   ii. The number of samples for which the laboratory has finished data entry.
   iii. Percent capacity reached in the contract (i.e., number of samples in 1.c.ii compared to the maximum number specified in task order when all quantities are exercised).
   iv. Data for the samples processed, or revised, since the previous summary. The contractor shall report the data using EPA's data template, but updated with the new, revised, and reconciled data. In addition, the contractor shall provide a separate case narrative (e.g., emailed Word or pdf file) for the EPA TOCOR to review with the data.
   v. Provide a simple list of the invoiced samples with sample #, site ID, and visit #. The TOCOR will compare the list with the NLA, NRSA and NCCA master lists of samples to verify that every sample has been invoiced one time.

c. Monthly Progress and Financial Reports: The contractor shall provide a progress and financial report each month that matches the costs in the corresponding invoice.
   i. The contractor shall provide a progress report each month that includes project status; expenditures to date; number of samples in each processing stage compared to the plan; unexpected problems or concerns, including with quality assurance; lessons learned; QA/QC activities; and next steps. The contractor shall prepare and submit the monthly progress reports in accordance with the contract clause, Contract Attachment 3, Reports of Work.

ii. The contractor shall prepare and submit the financial reports in accordance with the contract clause, Contract Attachment 3, Reports of Work.
iii. For the sample analyses completed during the month and billed in the invoice, the financial report shall identify the sample using its site identification code and sample number.
iv. For the month in which the contractor delivers the final database for Task 4, the contractor shall include the costs for Task 4.

d. Issues Requiring EPA Resolution: The contractor shall immediately notify the EPA TOCOR of any unexpected problems or concerns, including issues with QA/QC, and recommend remedies or corrective actions. Upon receiving written technical direction from the EPA TOCOR, the contractor shall revise its schedule in the technical proposal. The contractor also shall include problems and concerns in the monthly progress report.
e. Other: The contractor shall immediately notify the EPA TOCOR if any sample shows concentrations of microcystin above World Health Organization (WHO) moderate or high risk levels or EPA thresholds, if available. The contractor shall immediately notify the EPA TOCOR if any samples show concentrations of cylindrospermopsin above EPA thresholds, if available.

Deliverables and Schedule under Task 1:

Subtask	Deliverable	Due
a.	Participation in teleconferences	Date/time per written technical direction from EPA TOCOR based upon contractor's recommended dates/times
b.	Status updates with data in spreadsheet, sample list, and separate case narrative.	Monthly
c.	Progress and financial reports in electronic format	Monthly
d.	Email	Immediately when issue identified.
d.	Revised technical plan and schedule	Revisions within 5 working days per written technical direction.
e.	Email	Immediately if concentrations are above WHO or EPA thresholds.

Task 2. Quality Assurance (Contract PWS B.3)

Quality Assurance (QA) is an important component of EPA's work to assure that minimum quality standards are attained. The contractor shall address the QA requirements of this task order by adhering to the requirements and procedures identified in:

- The contractor's Quality Management Plan incorporated into this NARS contract;

- NLA, NRSA and NCCA Survey QA documents which document how quality assurance and quality control will be applied to the collection of environmental data for the survey. The documents relevant to support in this task order are:
    - Quality Assurance Project Plan (QAPP)
    - Laboratory Operations Manual (LOM)
    - The quality documents will evolve throughout the task order. During NLA implementation, the contractor shall notify the EPA TOCOR immediately if it identifies areas where its previous activities are not consistent with the revisions made to the 2017 QAPP and LOM. During NRSA implementation, the contractor shall notify the EPA TOCOR immediately if it identifies areas where its previous activities are not consistent with the revisions made to the 2018-2019 QAPP and LOM. Similarly, during options associated with the NCCA, the contractor must notify the EPA TOCOR immediately if it identifies areas where its previous activities are not consistent with revisions being made to the 2020 NCCA and LOM.

  The EPA TOCOR will determine whether any modifications to the contractor's previous activities will be necessary, which may require a modification to the task order by the EPA Contracting Officer (CO).

For each survey, as demonstration of the contractor's:

a. Commitment to adhere to the QAPP, the contractor's Quality Assurance Official (QAO) and each laboratory's QAO shall sign the page "Review & Distribution Acknowledgment and Commitment to Implement" in the introductory section of the QAPP. The contractor shall distribute the version of the QAPP and LOM available at the start of each survey and any additional revisions approved by the EPA QAO, throughout the contractor's organization, including subcontractors and consultants. If EPA distributes an updated version of the LOM and states that it contains a "significant change" relevant to algal toxin immunoassays, the contractor shall acknowledge, in writing (e.g., Email), that it has received and distributed the revised LOM to the appropriate personnel.

b. Implementation of QA in performing the other tasks in this Performance Work Statement, the contractor shall document its QA activities as follows:

    i. Standard Operating Procedures (SOPs) and any other quality assurance documentation developed or adopted by the contractor's laboratory for use in performing the required analyses. If the contractor does not develop or modify them as part of the costs incurred by the task order, the contractor may claim the SOPs to be proprietary.

    ii. Reports of relevant QA activities in any deliverable. All QA documentation prepared under the task order shall be considered non-proprietary.

iii. Monthly reports of QA activities performed during implementation of this task order. These monthly QA reports shall identify QA activities performed to support implementation of this task order, problems encountered, deviations from the QAPP, and corrective actions taken. The contractor shall include the QA report with the monthly progress report.

c. Ability to conform to NLA, NRSA and NCCA measurement quality objectives, the contractor must, at a minimum, ensure that the data meet the measurement quality objectives in the relevant survey QAPP.

Deliverables and Schedule under Task 2:

Subtask	Deliverable	Due
a.	Original QAPP signature page for NLA	No later than 5 working days after receipt of approved QAPP from TOCOR
	Original QAPP signature page for NRSA	No later than 5 working days after receipt of approved QAPP from TOCOR
	Original QAPP signature page for NCCA	No later than 5 working days after receipt of approved QAPP from TOCOR
	Email acknowledgement of LOM with "significant change"	No later than 10 working days after receiving revised LOM
	Laboratory SOPs	No later than 5 working days after effective date of task order. If the laboratory modified the SOPs during the performance period, provide the final versions 5 working days before May 30, 2018 for NLA, 5 working days before May 30, 2020 for NRSA and 5 working days before May 30, 2021 for NCCA. Otherwise, provide an email stating that the SOPs have remained unchanged throughout the task order.
b.	Documentation of QA activities	With deliverables
	Monthly reports of QA activities	With monthly progress report
c.	Data and QC elements identified in procedure	With database

Task 3. Microcystins and cylindrospermopsin Immunoassays
(Contract PWS B.3.e, C.4)

The contractor shall strictly follow ALL procedures in the Method to measure microcystins AND cylindrospermopsin in water samples.

If the contractor identifies a situation requiring a minor change in the Method, the EPA TOCOR must approve the deviation before the contractor can implement the change.

In addition to the delivery of data addressed in Task 1, the contractor shall provide the deliverables resulting from the following activities:

a. Log each sample and record the condition of the sample container into the NARS Information Management (IM) system within 24 (clock) hours of the sample arriving at the laboratory. If the sample does not arrive when expected, the contractor shall immediately notify the EPA TOCOR or her designee. It is anticipated that the log-in process will be conducted by use of a spreadsheet. The contractor shall upload to SharePoint or email a spreadsheet with the sample login information to the EPA TOCOR with a copy to the person assigned to track the samples for the survey per the relevant QAPP and LOM.

   Retain the samples for the period specified in the Method. If EPA determines that transfer to another location is necessary, EPA will make separate arrangements (e.g., task order modification, purchase order) with the contractor for any necessary packaging and shipping expenses. Otherwise, at the end of the retention period, the contractor shall follow its internal protocols for disposal.

b. Retain original records, including laboratory notebooks, for a minimum of 10 years from the date that EPA publishes the final report. If EPA determines that copies or physical transfer to another location is necessary, EPA will make separate arrangements (e.g., task order modification, purchase order) for any necessary photocopying, packaging and shipping expenses. Otherwise, at the end of the retention period, the contractor shall follow its internal protocols for disposal.

   Unless the TOCOR grants an exception, the contractor shall not publish findings based upon work conducted under this task order. This restriction shall remain in effect until EPA provides public access to the data.

Deliverables and Schedule under Task 3:

Subtask	Deliverable	Due
a.	Sample logged into NARS IM system or transmittal of spreadsheet	Within 24 (clock) hours of sample receipt
a.	Email identifying missing sample	Immediately if sample does not arrive when expected
b.	Access to samples	Upon EPA TOCOR's written request via technical direction.
b.	Access to laboratory notebooks	Upon EPA TOCOR's written request via technical direction.

Task 4. Final Database (Contract PWS B.1, B.3, C.4)

The contractor shall provide revised and final databases for the results of the microcystins and cylindrospermopsin immunoassays reported in Task 1. The contractor shall provide:

a. Responses to EPA's questions about the data, as conveyed by the EPA TOCOR's technical direction.
b. Revised databases per written technical direction describing required changes based upon EPA's review of the data.
c. Final database that incorporates revisions identified by the EPA TOCOR's technical direction.

Deliverables and Schedule under Task 4:

Subtask	Deliverable	Due
a.	Email with responses to data questions	1-5 working days per technical direction
b.	Revised databases and emails that summarize the changes	10 working days after receiving the EPA TOCOR's written technical direction. The contractor shall assume five revisions and associated summaries will be required as a result of EPA's review of the data.
c.	Final databases for NLA samples	10 working days after receiving written technical direction; but no later than 5 working days before May 30, 2018.
	Final databases for NRSA samples	10 working days after receiving written technical direction; but no later than 5 working days before May 30, 2020.
	Final databases for NCCA samples	10 working days after receiving technical direction; but no later than 5 days prior to the end of the period of performance (April 15, 2022).

VI. TRAVEL

EPA does not anticipate that any travel will be necessary to perform the tasks in the Performance Work Statement.

VII. QUALITY ASSURANCE SURVEILLANCE PLAN

EPA will judge performance using the following Quality Assurance Surveillance Plan (QASP).

Performance Requirement	Measureable Performance Standards	Surveillance Method	Incentives/Disincentives
Management and Communications: The Contractor shall maintain contact with the EPA TOCOR throughout the performance of the task order and shall immediately bring potential problems to the attention of the EPA TOCOR. 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 TOCOR within 3-working days of occurrence.	EPA TOCOR will identify unreported issues.	Two or more incidents where the contractor: • Does not provide timely notification; or • Created a severe adverse situation 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 where the contractor does not meet the measureable performance standard will be considered acceptable performance and will be reported as such in the CPARS Performance Evaluation System under the category of Business Relations
Timeliness: Data (Task 1) and databases (Task 4) shall be delivered in accordance with the schedule developed in PWS Task 1. After EPA accepts the final schedule in Task 1, it is unlikely that EPA will be willing to extend the schedule due to any factors under the contractor's control (e.g., to complete work under another contract).	• No more than 25% of the data for Task 1 shall be submitted more than 3 working days past the date in the accepted schedule. • None of the data for Task 1 shall be submitted more than 40 working days past the date in the accepted schedule. • No more than 10% of the revised databases (Task 4) shall be submitted more than 3 working days past the date in the accepted schedule. • No delays in submitting the final database (Task 4) by the "no later than" date in the PWS.	100% of the progress reports, data submissions, and databases will be reviewed by the EPA TOCOR monthly to compare actual delivery dates against those in the approved schedule from Task 1.	Unsatisfactory rating under the category of **Schedule** in CPARS when the contractor does not meet the measurable performance standards during the applicable period of performance.
Technical Effort: The Contractor shall assign appropriately leveled and skilled personnel to all tasks; and abide by the contractor's QMP, the NLA/NRSA/NCCA QAPP, and the Method.	No more than 25% of reviewed deliverables and data shall require revisions to meet the requirements of the QMP, NLA/NRSA/NCCA QAPP, data templates, and Method.	100% of the data will be reviewed by the EPA TOCOR to identify noncompliance issues with the QMP, NLA/NRSA/NCCA QAPP, and Method.	Unsatisfactory rating under the category of **Quality** in CPARS when the contractor does not meet the measurable performance standards during an applicable period of performance.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 / 2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
P00013	See Block 16C	PR-OW-22-00078	

6. ISSUED BY CODE CAD

CAD
US Environmental Protection Agency
26 West Martin Luther King Drive
Mail Code: W136
Cincinnati OH 45268-0001

7. ADMINISTERED BY *(If other than Item 6)* CODE

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

GREAT LAKES ENVIRONMENTAL CENTER, INC.
Attn: William J Arnold
739 HASTINGS STREET
TRAVERSE CITY MI 496863458

CODE 800884181 FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

x 10A. MODIFICATION OF CONTRACT/ORDER NO. EP-C-16-008 0004

10B. DATED *(SEE ITEM 13)* 06/15/2017

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended , by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted ; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted , such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*
See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation data, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: Bilateral - Mutual Agreement of the Parties
	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

DUNS Number: 800884181
The purpose of this modification is to: (1) Revise the Performance Work Statement in accordance with Attachment 1; and (2) Extend the Period of Performance end date from 04/15/2022 to 02/28/2023 at no additional cost to the government.
TOCOR: Danielle Grunzke Max Expire Date: 02/28/2023 InvoiceApprover: Danielle Grunzke Alt Invoice App: Sarah Lehmann
LIST OF CHANGES:
Reason for Modification: Supplemental Agreement for work within scope
Period Of Performance End Date changed from 15-APR-22 to 28-FEB-23
Total Amount for this Modification: $0.00
New Total Amount for this Version: $0.00
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*	
		Sandra Stargardt-Licis	
15B. CONTRACTOR/OFFEROR *(Signature of person authorized to sign)*	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA ELECTRONIC SIGNATURE *(Signature of Contracting Officer)*	16C. DATE SIGNED 11/16/2021

NAME OF OFFEROR OR CONTRACTOR
GREAT LAKES ENVIRONMENTAL CENTER, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Maximum Potential Expiration Date changed to: 02/28/2023 Onsite Contract changed to: n BIB - Infrastructure Bill Funds changed to: N/A Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 FOB: Unknown Period of Performance: 06/15/2017 to 02/28/2023 All other terms and conditions remain unchanged.				

Performance Work Statement
NARS2 Contract
EP-C-16-008 Task Order #4

TITLE: National Aquatic Resource Surveys: Microcystins and Cylindrospermopsin Immunoassays

A. EPA PERSONNEL

Task Order Contracting Officer Representative (TOCOR):

Name: Danielle Grunzke
Office: Office of Water/Office of Wetlands, Oceans & Watersheds/Assessment and Watershed Protection Division/Monitoring Branch
Address: 1200 Pennsylvania Avenue NW (4503T), Washington, DC 20460
Telephone: 202-566-2876
E-mail: grunzke.danielle@epa.gov

Alternate Task Order Contracting Officer Representative (ATOCOR):

Name: Kendra Forde
Office: Office of Water/Office of Wetlands, Oceans & Watersheds/Assessment and Watershed Protection Division/Monitoring Branch
Address: 1200 Pennsylvania Avenue NW (4503T), Washington, DC 20460
Telephone: 202-566-0417
E-mail: Forde.Kendra@epa.gov

B. PERIOD OF PERFORMANCE

Date of Award through ~~April 15, 2022~~February 28, 2023

C. TASK ORDER TYPE

Firm Fixed Price

I. BACKGROUND:

The National Aquatic Resource Surveys (NARS) program consists of four surveys that operate on a 5-year cycle. The NARS program will conduct the National Lakes Assessment in 2017, National Rivers and Streams Assessment (NRSA) in 2018-2019, followed by the National Coastal Condition Assessment (NCCA) in 2020. The NARS program is striving for consistency in laboratory protocols from one survey to the next. NLA and NRSA have decided to evaluate microcystins in water samples. NCCA is considering its inclusion as an indicator again. EPA is also considering adding another algal toxin, cylindrospermopsin, to the NRSA and NCCA. Because the laboratory procedure for measuring microcystins and cylindrospermopsin in water is similar whether the samples are collected in rivers, streams, or coastal waters (with exception of

slight variation for factoring salinity), EPA has decided to use a single task order for laboratory services that will process the samples from NRSA and potentially NCCA. The NLA is adding a second microcystin sample in a separate sample container for QC purposes and to assist in tracking changes over time from past surveys.

Field crews will collect samples from lakes from May through September 2017, streams and rivers from approximately June 1 through September 30 in study years 2018 and 2019; and coastal waters and the Great Lakes from approximately May 1 through September 30 in study year 2020 (as well as 2021 and 2022 due to Covid 19 restrictions). During the task order period of performance, the contractor shall receive a minimum of 1000 samples for microcystin analysis associated with the NLA (and a final database) and 800 samples for microcystin analysis associated with the NRSA (and a final database). The Task Order also includes options for EPA to order 6000 additional samples for a total of 7800 possible microcystins samples and third database for NCCA. Further, the Task Order includes options for EPA to order 4000 cylindrospermopsin samples and two databases (one each for NRSA and NCCA). For both types of algal toxins, the proposal includes options for both freshwater and marine samples to be costed out separately.

Before the laboratory submits the data to EPA, the analyst who generated the data and a quality assurance manager/data reviewer must independently check and review the data:

- The analyst shall review the data to ensure that:
    - Sample preparation information is correct and complete.
    - The appropriate method from the NLA, NRSA or NCCA Laboratory Operations Manual was followed.
    - Analytical results are correct and complete.
    - Quality control measures were within established limits.
    - Documentation is complete.
- The quality assurance manager/data reviewer shall review the data package to verify that:
    - Internal QC are included for each batch of samples.
    - Quality control measures were within established guidelines.
    - Qualitative and quantitative results are correct.
    - Data spreadsheet conforms to EPA data template requirements.
    - Documentation is complete.

Accompanying its data submission for each batch, the laboratory shall provide a short narrative that includes the following information:

- Project summary referencing the batch QC identification number, total number of samples in the batch and their sample numbers, and the analytical methodology used for analysis;
- Discussion of any protocol deviations that may have occurred during sample testing;
- Discussion of QC questions that were encountered and the corrective measures taken;
- Definitions of any laboratory QC codes used in the data;
- Internal QC exceeding established control limits or parameters required by laboratory internal analytical SOPs.

Up to two times during each of the field seasons, the External QC Coordinator (an EPA or EPA contractor separate from this Task Order) shall provide one or two identical sets of QC samples

to all participating laboratories. Each set shall contain up to five QC samples. As determined by the External QC Coordinator, the QC samples may be synthetic or reference/standard samples obtained from an organization such as the National Institute of Standards and Technology or other. Each laboratory will run the QC samples following the same procedures used for the other samples. The External QC Coordinator shall compare the results to the expected value and determine consistency between laboratories (e.g., determine if one laboratory is consistently higher or lower than all others). Based upon the evaluation, the External QC Coordinator may request additional information from one or more laboratories about any unique laboratory practices that might account for differences between the laboratory and others. With this additional information, the External QC Coordinator shall determine an appropriate course of action, including no action, flagging the data, or excluding some or all of the laboratory's data.

As another potential quality control step of field operations, EPA may require each field crew to provide field blank samples. In this case, the contractor shall analyze each field blank sample using the same procedures as those for the regular field samples.

II. PURPOSE

The purpose of this task order is to measure microcystins and potentially cylindrospermopsin in water samples collected in the NLA 2017, NRSA 2018-2019, NCCA 2020, and related studies. The types of support required for this project include technical support, sample analyses, transmittal of the results in database format, and a revised database at the conclusion of quality control procedures.

III. GOVERNMENT FURNISHED INFORMATION

EPA will arrange for delivery of the samples to the laboratories.

The following documents are references for the task order. They are located at this SharePoint site:[1]

- NLA 2017 Laboratory Operations Manual
- NLA 2017 Quality Assurance Project Plan
- Draft NRSA 2018-2019 Laboratory Operations Manual (LOM) (The PWS refers to the relevant chapter as the "Method.")
- Draft NRSA 2018-2019 Field Operations Manual (FOM);
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- Example Data template (i.e., spreadsheet for reporting laboratory data; microcystin provided).

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As they become available, the EPA TOCOR will provide the contractor with revisions of relevant documents, including the QAPP and LOMs for the three surveys, and any other information deemed necessary for the contractor to provide the support for the Performance Work Statement (PWS).

IV. GENERAL REQUIREMENTS

In providing support under the tasks described in Section V, the contractor also shall adhere to the following general requirements:

1. Deliverables (see Contract PWS B.1)

Memoranda shall be placed on company letterhead and the subject line will include the phrase "EPA Contract #".

The contractor shall name all electronic files using a logical abbreviation for the name of the document (e.g., TO14Data), the contractor name, and the date of edits to assist in version control (ex: TO14Data_ LABNAME_2020_12_02).

The contractor shall use EPA's templates for reporting the results of the laboratory procedures for the NLA, NRSA and NCCA samples. For any other database or spreadsheet submitted to EPA, the contractor must provide metadata that, at a minimum, identify the fields recorded for each sample, define the codes used for the field, and include the version number and date.

The contractor shall ensure that documentation is created using Agency standard software formats (e.g., Microsoft Office) to facilitate EPA use and review.

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V. SCOPE OF WORK

The contractor shall provide laboratory support for measuring microcystins and cylindrospermopsin in water samples as described in the following tasks.

Task 1. Task Order Management and Monthly progress reports (See Contract Attachment 3; PWS B.2 and C.4)

The contractor shall manage the Task Order (TO) and submit monthly progress and financial reports prepared and submitted in accordance with the contract clause, Contract Attachment 3, Reports of Work.

a. Teleconferences: The contractor, and its laboratories, shall participate in EPA's teleconferences about laboratory procedures for receiving, storing, tracking, analyzing, and reporting samples and results. Prior to the shipping of the first samples in each sampling year (2017, 2018, 2019, 2020), EPA will coordinate and facilitate 1-3 teleconference calls, each to last approximately 1 hour, to review the Method, required reporting elements, data templates, and the relevant requirements in the QAPP. The participants will include EPA, the contractor's laboratories, subcontract laboratories, and State laboratories. If EPA conducts multiple teleconferences (e.g., due to State laboratory personnel availability), the contractor shall participate in all calls because different issues may arise that would require feedback from the contractor. The goal of the teleconferences is to ensure consensus on the analytical procedures and a schedule for sample processing and reporting. The agenda will include review of the:
   i. QAPP
   ii. LOM
   iii. Data template
   iv. Standard Operating Procedures (SOPs)

b. Status Summaries: Prior to delivering the progress report, the contractor shall provide monthly status summaries. The monthly status summary shall match the time period covered by the progress report. The contractor shall provide Excel spreadsheets with the monthly status summaries that include:
   i. The number of samples delivered. (The QC samples, as described in the Method, shall be considered "samples" for the purpose of invoicing, scheduling, and reporting.)
   ii. The number of samples for which the laboratory has finished data entry.
   iii. Percent capacity reached in the contract (i.e., number of samples in 1.c.ii compared to the maximum number specified in task order when all quantities are exercised).
   iv. Data for the samples processed, or revised, since the previous summary. The contractor shall report the data using EPA's data template, but updated with the new, revised, and reconciled data. In addition, the contractor shall provide a separate case narrative (e.g., emailed Word or pdf file) for the EPA TOCOR to review with the data.
   v. Provide a simple list of the invoiced samples with sample #, site ID, and visit #. The TOCOR will compare the list with the NLA, NRSA and NCCA master lists of samples to verify that every sample has been invoiced one time.

c. Monthly Progress and Financial Reports: The contractor shall provide a progress and financial report each month that matches the costs in the corresponding invoice.
   i. The contractor shall provide a progress report each month that includes project status; expenditures to date; number of samples in each processing stage compared to the plan; unexpected problems or concerns, including with quality assurance; lessons learned; QA/QC activities; and next steps. The contractor shall prepare and submit the monthly progress reports in accordance with the contract clause, Contract Attachment 3, Reports of Work.

ii. The contractor shall prepare and submit the financial reports in accordance with the contract clause, Contract Attachment 3, Reports of Work.
iii. For the sample analyses completed during the month and billed in the invoice, the financial report shall identify the sample using its site identification code and sample number.
iv. For the month in which the contractor delivers the final database for Task 4, the contractor shall include the costs for Task 4.

d. Issues Requiring EPA Resolution: The contractor shall immediately notify the EPA TOCOR of any unexpected problems or concerns, including issues with QA/QC, and recommend remedies or corrective actions. Upon receiving written technical direction from the EPA TOCOR, the contractor shall revise its schedule in the technical proposal. The contractor also shall include problems and concerns in the monthly progress report.
e. Other: The contractor shall immediately notify the EPA TOCOR if any sample shows concentrations of microcystin above World Health Organization (WHO) moderate or high risk levels or EPA thresholds, if available. The contractor shall immediately notify the EPA TOCOR if any samples show concentrations of cylindrospermopsin above EPA thresholds, if available.

Deliverables and Schedule under Task 1:

Subtask	Deliverable	Due
a.	Participation in teleconferences	Date/time per written technical direction from EPA TOCOR based upon contractor's recommended dates/times
b.	Status updates with data in spreadsheet, sample list, and separate case narrative.	Monthly
c.	Progress and financial reports in electronic format	Monthly
d.	Email	Immediately when issue identified.
d.	Revised technical plan and schedule	Revisions within 5 working days per written technical direction.
e.	Email	Immediately if concentrations are above WHO or EPA thresholds.

Task 2. Quality Assurance (Contract PWS B.3)

Quality Assurance (QA) is an important component of EPA's work to assure that minimum quality standards are attained. The contractor shall address the QA requirements of this task order by adhering to the requirements and procedures identified in:

- The contractor's Quality Management Plan incorporated into this NARS contract;

- NLA, NRSA and NCCA Survey QA documents which document how quality assurance and quality control will be applied to the collection of environmental data for the survey. The documents relevant to support in this task order are:
    - Quality Assurance Project Plan (QAPP)
    - Laboratory Operations Manual (LOM)
    - The quality documents will evolve throughout the task order. During NLA implementation, the contractor shall notify the EPA TOCOR immediately if it identifies areas where its previous activities are not consistent with the revisions made to the 2017 QAPP and LOM. During NRSA implementation, the contractor shall notify the EPA TOCOR immediately if it identifies areas where its previous activities are not consistent with the revisions made to the 2018-2019 QAPP and LOM. Similarly, during options associated with the NCCA, the contractor must notify the EPA TOCOR immediately if it identifies areas where its previous activities are not consistent with revisions being made to the 2020 NCCA and LOM.

  The EPA TOCOR will determine whether any modifications to the contractor's previous activities will be necessary, which may require a modification to the task order by the EPA Contracting Officer (CO).

For each survey, as demonstration of the contractor's:

a. Commitment to adhere to the QAPP, the contractor's Quality Assurance Official (QAO) and each laboratory's QAO shall sign the page "Review & Distribution Acknowledgment and Commitment to Implement" in the introductory section of the QAPP. The contractor shall distribute the version of the QAPP and LOM available at the start of each survey and any additional revisions approved by the EPA QAO, throughout the contractor's organization, including subcontractors and consultants. If EPA distributes an updated version of the LOM and states that it contains a "significant change" relevant to algal toxin immunoassays, the contractor shall acknowledge, in writing (e.g., Email), that it has received and distributed the revised LOM to the appropriate personnel.

b. Implementation of QA in performing the other tasks in this Performance Work Statement, the contractor shall document its QA activities as follows:

    i. Standard Operating Procedures (SOPs) and any other quality assurance documentation developed or adopted by the contractor's laboratory for use in performing the required analyses. If the contractor does not develop or modify them as part of the costs incurred by the task order, the contractor may claim the SOPs to be proprietary.

    ii. Reports of relevant QA activities in any deliverable. All QA documentation prepared under the task order shall be considered non-proprietary.

iii. Monthly reports of QA activities performed during implementation of this task order. These monthly QA reports shall identify QA activities performed to support implementation of this task order, problems encountered, deviations from the QAPP, and corrective actions taken. The contractor shall include the QA report with the monthly progress report.

c. Ability to conform to NLA, NRSA and NCCA measurement quality objectives, the contractor must, at a minimum, ensure that the data meet the measurement quality objectives in the relevant survey QAPP.

Deliverables and Schedule under Task 2:

Subtask	Deliverable	Due
a.	Original QAPP signature page for NLA	No later than 5 working days after receipt of approved QAPP from TOCOR
	Original QAPP signature page for NRSA	No later than 5 working days after receipt of approved QAPP from TOCOR
	Original QAPP signature page for NCCA	No later than 5 working days after receipt of approved QAPP from TOCOR
	Email acknowledgement of LOM with "significant change"	No later than 10 working days after receiving revised LOM
	Laboratory SOPs	No later than 5 working days after effective date of task order. If the laboratory modified the SOPs during the performance period, provide the final versions 5 working days before May 30, 2018 for NLA, 5 working days before May 30, 2020 for NRSA and 5 working days before May 30, 2021 for NCCA. Otherwise, provide an email stating that the SOPs have remained unchanged throughout the task order.
b.	Documentation of QA activities	With deliverables
	Monthly reports of QA activities	With monthly progress report
c.	Data and QC elements identified in procedure	With database

Task 3. Microcystins Immunoassays (Contract PWS B.3.e, C.4)

The contractor shall strictly follow ALL procedures in the Method to measure microcystins AND cylindrospermopsin in water samples.

If the contractor identifies a situation requiring a minor change in the Method, the EPA TOCOR must approve the deviation before the contractor can implement the change.

In addition to the delivery of data addressed in Task 1, the contractor shall provide the deliverables resulting from the following activities:

a. Log each sample and record the condition of the sample container into the NARS Information Management (IM) system within 24 (clock) hours of the sample arriving at the laboratory. If the sample does not arrive when expected, the contractor shall immediately notify the EPA TOCOR or her designee. It is anticipated that the log-in process will be conducted by use of a spreadsheet. The contractor shall upload to SharePoint or email a spreadsheet with the sample login information to the EPA TOCOR with a copy to the person assigned to track the samples for the survey per the relevant QAPP and LOM.

   Retain the samples for the period specified in the Method. If EPA determines that transfer to another location is necessary, EPA will make separate arrangements (e.g., task order modification, purchase order) with the contractor for any necessary packaging and shipping expenses. Otherwise, at the end of the retention period, the contractor shall follow its internal protocols for disposal.

b. Retain original records, including laboratory notebooks, for a minimum of 10 years from the date that EPA publishes the final report. If EPA determines that copies or physical transfer to another location is necessary, EPA will make separate arrangements (e.g., task order modification, purchase order) for any necessary photocopying, packaging and shipping expenses. Otherwise, at the end of the retention period, the contractor shall follow its internal protocols for disposal.

   Unless the TOCOR grants an exception, the contractor shall not publish findings based upon work conducted under this task order. This restriction shall remain in effect until EPA provides public access to the data.

Deliverables and Schedule under Task 3:

Subtask	Deliverable	Due
a.	Sample logged into NARS IM system or transmittal of spreadsheet	Within 24 (clock) hours of sample receipt
a.	Email identifying missing sample	Immediately if sample does not arrive when expected
b.	Access to samples	Upon EPA TOCOR's written request via technical direction.
b.	Access to laboratory notebooks	Upon EPA TOCOR's written request via technical direction.

Task 4. Final Database (Contract PWS B.1, B.3, C.4)

The contractor shall provide revised and final databases for the results of the microcystins and cylindrospermopsin immunoassays reported in Task 1. The contractor shall provide:

a. Responses to EPA's questions about the data, as conveyed by the EPA TOCOR's technical direction.
b. Revised databases per written technical direction describing required changes based upon EPA's review of the data.
c. Final database that incorporates revisions identified by the EPA TOCOR's technical direction.

Deliverables and Schedule under Task 4:

Subtask	Deliverable	Due
a.	Email with responses to data questions	1-5 working days per technical direction
b.	Revised databases and emails that summarize the changes	10 working days after receiving the EPA TOCOR's written technical direction. The contractor shall assume five revisions and associated summaries will be required as a result of EPA's review of the data.
c.	Final databases for NLA samples	10 working days after receiving written technical direction; but no later than 5 working days before May 30, 2018.
	Final databases for NRSA samples	10 working days after receiving written technical direction; but no later than 5 working days before May 30, 2020.
	Final databases for NCCA samples collected in 2020 and 2021	10 working days after receiving technical direction; but no later than 5 days prior to ~~the end of the period of performance (~~April 15, 2022~~)~~.
	Compiled final draft dataset and final dataset for NCCA samples collected in 2022	Compiled final draft dataset - 10 working days after receiving written technical direction; December 31, 2022. Compiled final dataset – no later than 5 days prior to February 28, 2023.

VI. TRAVEL

EPA does not anticipate that any travel will be necessary to perform the tasks in the Performance Work Statement.

VII. QUALITY ASSURANCE SURVEILLANCE PLAN

EPA will judge performance using the following Quality Assurance Surveillance Plan (QASP).

Performance Requirement	Measureable Performance Standards	Surveillance Method	Incentives/Disincentives
Management and Communications: The Contractor shall maintain contact with the EPA TOCOR throughout the performance of the task order and shall immediately bring potential problems to the attention of the EPA TOCOR. 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 TOCOR within 3-working days of occurrence.	EPA TOCOR will identify unreported issues.	Two or more incidents where the contractor: • Does not provide timely notification; or • Created a severe adverse situation 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 where the contractor does not meet the measureable performance standard will be considered acceptable performance and will be reported as such in the CPARS Performance Evaluation System under the category of Business Relations
Timeliness: Data (Task 1) and databases (Task 4) shall be delivered in accordance with the schedule developed in PWS Task 1. After EPA accepts the final schedule in Task 1, it is unlikely that EPA will be willing to extend the schedule due to any factors under the contractor's control (e.g., to complete work under another contract).	• No more than 25% of the data for Task 1 shall be submitted more than 3 working days past the date in the accepted schedule. • None of the data for Task 1 shall be submitted more than 40 working days past the date in the accepted schedule. • No more than 10% of the revised databases (Task 4) shall be submitted more than 3 working days past the date in the accepted schedule. • No delays in submitting the final database (Task 4) by the "no later than" date in the PWS.	100% of the progress reports, data submissions, and databases will be reviewed by the EPA TOCOR monthly to compare actual delivery dates against those in the approved schedule from Task 1.	Unsatisfactory rating under the category of **Schedule** in CPARS when the contractor does not meet the measurable performance standards during the applicable period of performance.
Technical Effort: The Contractor shall assign appropriately leveled and skilled personnel to all tasks; and abide by the contractor's QMP, the NLA/NRSA/NCCA QAPP, and the Method.	No more than 25% of reviewed deliverables and data shall require revisions to meet the requirements of the QMP, NLA/NRSA/NCCA QAPP, data templates, and Method.	100% of the data will be reviewed by the EPA TOCOR to identify noncompliance issues with the QMP, NLA/NRSA/NCCA QAPP, and Method.	Unsatisfactory rating under the category of **Quality** in CPARS when the contractor does not meet the measurable performance standards during an applicable period of performance.