ORDER FOR SUPPLIES OR SERVICES

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER: 08/14/2017

2. CONTRACT NO. (If any): EP-C-16-008

3. ORDER NO.: 0005

4. REQUISITION/REFERENCE NO.: See Schedule

5. ISSUING OFFICE (Address correspondence to):
CPOD
US Environmental Protection Agency
26 West Martin Luther King Drive
Mail Code: NWD
Cincinnati OH 45268

6. SHIP TO:
a. NAME OF CONSIGNEE: AWPB-MB
b. STREET ADDRESS: US EPA-OW-OWOW-AWPD-MB
1200 PENNSYLVANIA AVE., NW
MC-4503-T
c. CITY: WASHINGTON
d. STATE: DC
e. ZIP CODE: 20460

7. TO: William J Arnold
a. NAME OF CONTRACTOR: GREAT LAKES ENVIRONMENTAL CENTER, INC.
b. COMPANY NAME:
c. STREET ADDRESS: 739 HASTINGS STREET
d. CITY: TRAVERSE CITY
e. STATE: MI
f. ZIP CODE: 496863458

f. SHIP VIA:

8. TYPE OF ORDER
☐ a. PURCHASE
REFERENCE YOUR:
Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.
☒ b. DELIVERY
Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.

9. ACCOUNTING AND APPROPRIATION DATA: See Schedule

10. REQUISITIONING OFFICE:

11. BUSINESS CLASSIFICATION (Check appropriate box(es))
☐ a. SMALL ☐ b. OTHER THAN SMALL ☐ c. DISADVANTAGED ☐ d. WOMEN-OWNED ☐ e. HUBZone
☐ f. SERVICE-DISABLED VETERAN-OWNED ☐ g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM ☐ h. EDWOSB

12. F.O.B. POINT: Destination

13. PLACE OF
a. INSPECTION: Destination
b. ACCEPTANCE: Destination

14. GOVERNMENT B/L NO.:

15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date): 02/01/2018

16. DISCOUNT TERMS:

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: 800884181 (b)(4) Continued ...					

18. SHIPPING POINT:

19. GROSS SHIPPING WEIGHT:

20. INVOICE NO.:

17(h) TOTAL (Cont. pages): $687,500.00

21. MAIL INVOICE TO:
a. NAME: RTP Finance Center
b. STREET ADDRESS (or P.O. Box): US Environmental Protection Agency
RTP-Finance Center (AA216-01)
109 TW Alexander Drive
www2.epa.gov/financial/contracts
c. CITY: Durham
d. STATE: NC
e. ZIP CODE: 27711

SEE BILLING INSTRUCTIONS ON REVERSE

17(i) GRAND TOTAL: (b)(4)

22. UNITED STATES OF AMERICA BY (Signature): 08/14/2017 ELECTRONIC SIGNATURE

23. NAME (Typed): Sandra Stargardt-Licis
TITLE: CONTRACTING/ORDERING OFFICER

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER	CONTRACT NO.	ORDER NO.
08/14/2017	EP-C-16-008	0005

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	TOCOR: Brian Hasty Max Expire Date: 05/26/2021 Admin Office: CPOD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD Cincinnati OH 45268 Period of Performance: 02/01/2018 to 11/30/2020					
0001	NRSA Diatoms Base (b)(4)				(b)(4)	
	Incrementally Funded Amount: (b)(4) Requisition No: PR-OW-17-00485, PR-OW-17-00491 Accounting Info: 16-E1D-87FM-202B06XP1-4183-1787ME7025-001 BFY: 16 Fund: E1D Budget Org: 87FM Program (PRC): 202B06XP1 Budget (BOC): 4183 DCN - Line ID: 1787ME7025-001 Funding Flag: Partial Funded: (b)(4) Accounting Info: 16-E1D-87FM-202B06XP1-4183-1787ME7030-001 BFY: 16 Fund: E1D Budget Org: 87FM Program (PRC): 202B06XP1 Budget (BOC): 4183 DCN - Line ID: 1787ME7030-001 Funding Flag: Partial Funded: (b)(4) Accounting Info: 17-E1-87FM-202B06XP1-2505-1787ME7030-002 BFY: 17 Fund: E1 Budget Org: 87FM Program (PRC): 202B06XP1 Budget (BOC): 2505 DCN - Line ID: 1787ME7030-002 Funding Flag: Partial Funded: (b)(4) Continued ...					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H)) (b)(4)

ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER	CONTRACT NO.	ORDER NO.
08/14/2017	EP-C-16-008	0005

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
0002	NRSA Diatoms Optional Samples (b)(4) (b)(4)				(b)(4)	
	TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))				(b)(4)	

Task Order Clauses

EPA-F-12-101 Period of performance

The period of performance of this contract shall be from **February 1, 2018** through **November 30, 2020** exclusive of all required reports.

EPA-G-42-101 Contract Administration Representatives

Contract-Level Contracting Officers Representatives (CORs)/Project Officers for this contract are as follows:

TOCOR: Brian Hasty, Phone: 202-564-2236, Email: hasty.brian@epa.gov

Alternate COR: Richard Mitchell, Phone: 202-564-0644, Email: mitchell.richard@epa.gov

Contracting Officials responsible for administering this contract are as follows:

Contracting Officer: Sandy Licis, Phone: 513-487-2006, Email: Licis.Sandy@epa.gov

Contract Specialist: D'Andre Boulden, Phone: 513-487-2079, Email: Boulden.Dandre@epa.gov

EPAAR 1552.237-72 Key personnel

(a) The Contractor shall assign to this contract the following key personnel:

(b)(4)

(b) During the first ninety (90) days of performance, the Contractor shall make no substitutions of key personnel unless the substitution is necessitated by illness, death, or termination of employment. The Contractor shall notify the Contracting Officer within 15 calendar days after the occurrence of any of these events and provide the information required by paragraph (c) of this clause. After the initial 90-day period, the Contractor shall submit the information required by paragraph (c) to the Contracting Officer at least 15 days prior to making any permanent substitutions.

(c) The Contractor shall provide a detailed explanation of the circumstances necessitating the proposed substitutions, complete resumes for the proposed substitutes, and any additional information requested by the Contracting Officer. Proposed substitutes should have comparable qualifications to those of the persons being replaced. The Contracting Officer will notify the Contractor within 15 calendar days after receipt of all required information of the decision on substitutions. This clause will be modified to reflect any approved changes of key personnel.

Performance Work Statement
NARS2 Contract
EP-C-16-008
Task Order 05

TITLE: National Rivers and Streams Assessment: Diatom Identification

A. EPA PERSONNEL

Task Order Contracting Officer Representative (TOCOR):

Name: Brian Hasty
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: 202-564-2236
E-mail: hasty.brian@epa.gov

Alternate Task Order Contracting Officer Representative (ATOCOR):

Name: Richard Mitchell
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: 202-564-0644
E-mail: mitchell.richard@epa.gov

B. PERIOD OF PERFORMANCE

February 1, 2018 through **November 30, 2020**

C. TASK ORDER TYPE

Firm Fixed Price

I. BACKGROUND:

The U.S. EPA, states and other partners are planning the third survey of the nation's rivers and streams to provide regional and national data on their condition. The 2018-2019 National Rivers and Streams Assessment (NRSA) is designed to evaluate conditions in the nation's rivers and streams. Field crews from EPA, United States Geological Survey (USGS), States, and Tribes will collect samples from sites from May 1 through September 30 in study years 2018 and 2019. The field sampling method involves the collection of diatom samples from streams and rivers. Laboratory analysis of the samples shall begin in 2018 and end in 2020.

EPA arranges for laboratory support for processing diatom samples. States and Tribes can choose to use their own laboratories or EPA's contract laboratory. Because of State, Tribal, and EPA choices, the actual number of samples can vary throughout the season. In addition, there are circumstances in which field crews might not collect samples, either in part or in whole. For example, some sample transects may be too dangerous to access, so those subsamples may not be collected. Considering these aspects, the contractor shall receive a minimum of 1500 samples for processing through the life of the task order. To allow for the potential of additional samples collected by the survey and other regional studies, the task order contains options for EPA to order up to another 1000 additional samples (10 options of 100 samples).

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

- The lead taxonomist shall review the data to ensure that:
    - Sample preparation information is correct and complete
    - Taxonomy data/information is correct and complete
    - The appropriate method from the NRSA 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
    - Taxonomy data are scientifically sound and appropriate
    - Quality control measures were within established guidelines
    - Qualitative and quantitative results are correct
    - Data spreadsheet with results 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.

II. PURPOSE

The purpose of this task order is to identify the diatoms in samples collected in the NRSA 2018-2019 and related studies. The types of support required for this project include technical support, sample identifications, transmittal of the results in database format, and a reconciled 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: https://usepa.sharepoint.com/sites/OW_Community/nars/Contracts/Forms/AllItems.aspx?id=%2Fsites%2FOW%5FCommunity%2Fnars%2FContracts%2FNRSA%202018%2D19

- Draft 2018-2019 Laboratory Operations Manual (LOM) (The PWS refers to the relevant chapter as the "Method.")
- Draft 2018-2019 Field Operations Manual (FOM); and

As they become available, the EPA TOCOR will provide the contractor with revisions of relevant documents, including the 2018-2019 FOM, 2018-2019 LOM, 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 shall 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).

For any database or spreadsheet submitted to EPA, the contractor shall 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. Final versions shall be provided to EPA in the original format (e.g., Excel).

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 the sorting, identification, and enumeration of diatoms 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 diatom samples and results. Prior to the shipping of the first specimens in each sampling year (2018, 2019), 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. Taxonomic references
   v. Training, experience, and proficiency of taxonomists
   vi. Standard Operating Procedures (SOPs)
   vii. Possible consultation with independent experts to resolve taxonomic discrepancies.

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 for which specimens were delivered.
   ii. The number of samples for which the laboratory has finished data entry.
   iii. The taxonomists that performed the identifications.
   iv. 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).
   v. Data for the samples processed, or reconciled, 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.

vi. Provide a simple list of the invoiced samples with sample #, site ID, and visit #. The TOCOR will compare the list with the NRSA master list 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.

Deliverables and Schedule under Task 1:

Subtask	**Deliverable**	**Due (working days do not include Saturday, Sunday, and Federal Holidays)**
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.
e.	Revised technical plan and schedule	Revisions within 5 working days per written technical direction.

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;

- NRSA 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 NRSA 2018-2019 quality documents will evolve throughout the task order. 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. 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).

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 award of the task order, 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 taxonomic analyses, 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 NRSA measurement quality objectives, the contractor shall, at a minimum, ensure that the data meet the measurement quality objectives in the QAPP.

Deliverables and Schedule under Task 2:

Subtask	**Deliverable**	**Due (working days do not include Saturday, Sunday, and Federal Holidays)**
a.	Original QAPP signature page	No later than 5 working days after effective date of task order or 5 days from receipt of the approved QAPP from the 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 the end of the performance period. Otherwise, provide an email stating that the SOPs have remained unchanged throughout the task order.
	Documentation of QA activities	With deliverables
	Bench sheets with Lead Taxonomist review	With monthly progress report
b.	Monthly reports of QA activities during months when samples are delivered and/or processed	With monthly progress report
c.	Data and QC elements identified in procedure	With database

Task 3. Training for Diatom Regional Voucher Flora Development and Pre- and Post-Sample Processing Activities (Contract PWS C.4)

The lead taxonomist shall travel to meet with USGS Staff from the CWEST/INSTAAR Laboratory in Boulder, Colorado (likely spring/summer 2018). This meeting will last one week and entail training/overview of the pre-count regional voucher flora development process, as well other pre and post-sample processing activities such as of OTU code coordination of taxa

that were not part of the original regional vouchers flora; and final data processing using the regional voucher flora information.

Task 4. Diatom Analysis (Contract PWS B.3, C.4)

The contractor shall strictly follow ALL procedures for diatom analysis as described in the Method for sub-sampling, sorting, counting and identifying diatoms in samples collected by the NRSA field crews in 2018 and 2019.

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. Alternatively, for shipments with a large number of samples, the contractor shall 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.

b. Develop pre-count regional voucher flora documents for each of the nine aggregate ecoregions as reported in the NRSA 2008-2009 report. More detailed overview of the process is found in the diatom laboratory procedures.

    - The project lead taxonomist will be responsible for obtaining light micrographs and developing each of the regional voucher flora.
    - The goal is to capture most of the taxa likely to be encountered by during the counting process of samples from a given aggregate ecoregion.
    - The lead taxonomist will review a minimum of 80% of the projects prepared microslides and spend about 15 minutes per slide searching for species that need to be documented.
    - The contractor will be required to provide the appropriate regional voucher flora to any state lab that may be processing their own diatom samples for NRSA 2018-2019.

c. Retain:
    - All permanent slides and remaining subsample should be archived at an appropriate repository two years after the final NRSA 2018-2019 report has been made public (see methods for more details).
    - Original records, including bench notebooks and the reference library, for a minimum of ten (10) years from the date that EPA publishes the final report.

d. Retain original records, including laboratory notebooks and the reference library, 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 4:

Subtask	**Deliverable**	**Due (working days do not include Saturday, Sunday, and Federal Holidays)**
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.	Email with recommended changes to keys and references	Within 5 working days of identified need for change.
c.	Copies of all regional voucher flora documents	Upon EPA TOCOR's written request via technical direction.
c.	Copy of digital library by email, FTP transfer, or SharePoint upload	With final database. Interim copies within 10-15 days per written technical direction from the EPA TOCOR.
e.	Access to laboratory notebooks	Upon EPA TOCOR's written request via technical direction.

Task 5. Final Database (Contract PWS B.1, B.3, C.4)

The contractor shall provide revised and final databases for the results of the diatom analyses 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 and reconciliation activities.
c. Final database that incorporates revisions identified by the EPA TOCOR's technical direction.

Deliverables and Schedule under Task 5:

Subtask	Deliverable	Due (working days do not include Saturday, Sunday, and Federal Holidays)
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 database	10 working days after receiving written technical direction; but no later than 5 working days prior to the end of the period of performance.

CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:
The EPA projects that none of the individual meetings identified in these tasks will exceed a total cost of $20,000. The Contractor shall immediately notify the CO, PO and TOCOR of any anticipated individual event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur $20,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the CO.

TRAVEL

The lead taxonomist shall travel to meet with USGS Staff from the CWEST/INSTAAR Laboratory in Boulder, Colorado (likely spring/summer of 2018). This meeting will entail training/overview of the pre-count regional flora voucher development process, as well other pre and post-sample processing activities such as of OTU code coordination of taxa that were not part of the original regional flora vouchers.

CONTRACTOR IDENTIFICATION:
The Contractor staff shall be required to identify themselves as contractors whenever their EPA work brings them in contact with the public (such as when they are providing technical information or conducting training and conferences). Contractor staff must always wear Contractor ID badges when interacting with the public. 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.

SECTION 508 COMPLIANCE
All electronic and information technology (eit) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at http://www.epa.gov/accessibility/. The contractor shall include documentation which indicates that the contractor has tested the deliverable against applicable Section 508 Standards.

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	No more than 25% of reviewed deliverables and data shall require revisions to meet the requirements of the QMP, NRSA QAPP,	100% of the data, taxonomists' resumes, and training certifications (per Task 1) will be reviewed by the EPA TOCOR to identify	Unsatisfactory rating under the category of **Quality** in CPARS when the contractor does not meet the measurable performance standards

Performance Requirement	Measureable Performance Standards	Surveillance Method	Incentives/Disincentives
QMP, the NRSA QAPP, and the diatom method.	data templates, and diatom method. None of the samples in the final database (Task V.4) shall have counts less than 600 values unless the entire sample was sorted and identified. All of the assigned staff must meet the LOM requirements for their assigned duties.	noncompliance issues with the QMP, NRSA QAPP, and diatom method.	during an applicable period of performance.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE 1 OF PAGES 4

2. AMENDMENT/MODIFICATION NO. P00001

3. EFFECTIVE DATE See Block 16C

4. REQUISITION/PURCHASE REQ. NO. PR-OW-18-00338

5. PROJECT NO. *(If applicable)*

6. ISSUED BY CODE CPOD

CPOD
US Environmental Protection Agency
26 West Martin Luther King Drive
Mail Code: NWD
Cincinnati OH 45268

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 0005

10B. DATED *(SEE ITEM 13)* 08/14/2017

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 telegram 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 telegram or letter, provided each telegram or letter 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 date, 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:
X	D. OTHER *(Specify type of modification and authority)* Unilateral-FAR 52.216-22

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
(b)(4)

(b)(4) All other terms and conditions remain unchanged.
TOCOR: Brian Hasty Max Expire Date: 11/30/2020
LIST OF CHANGES:
Reason for Modification: Exercise an Option
Obligated Amount for this Modification: (b)(4)
New Total Obligated Amount for this Award: (b)(4)
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)*
Angela Lower

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 06/26/2018

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)
	Incremental Funded Amount changed: (b)(4) Buyer changed from D'Andre Boulden to Nicholas Bisher Contracting Officer changed from Sandra Stargardt-Licis to Angela Lower CHANGES FOR LINE ITEM NUMBER: 1 Total Amount changed (b)(4) CHANGES FOR DELIVERY LOCATION: OW-OWOW-AWPD-MB Amount changed (b)(4) NEW ACCOUNTING CODE ADDED: Account code: 18-E1-87FM-000B06XP1-4183-1887ME8009-001 Beginning FiscalYear 18 Ending Fiscal Year Fund (Appropriation) E1 Budget Organization 87FM Program (PRC) 000B06XP1 Budget (BOC) 4183 Job # (Site/Project) Cost Organization DCN-LineID 1887ME8009-001 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 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)
	NEW ACCOUNTING CODE ADDED: Account code: 18-19-B-87FM-000BD4-2505-1887ME8009-002 Beginning FiscalYear 18 Ending Fiscal Year 19 Fund (Appropriation) B Budget Organization 87FM Program (PRC) 000BD4 Budget (BOC) 2505 Job # (Site/Project) Cost Organization DCN-LineID 1887ME8009-002 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 CHANGES FOR LINE ITEM NUMBER: 2 Description changed from NRSA Diatoms Optional Samples From: (b)(4) to (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)
	Total Amount changed (b)(4) CHANGES FOR DELIVERY LOCATION: OW-OWOW-AWPD-MB (b)(4) Delivery Location Code: OW-OWOW-AWPD-MB AWPB-MB US EPA-OW-OWOW-AWPD-MB 1200 PENNSYLVANIA AVE., NW MC-4503-T WASHINGTON DC 20460 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: 02/01/2018 to 11/30/2020				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE 1 OF PAGES 3

2. AMENDMENT/MODIFICATION NO. P00002

3. EFFECTIVE DATE See Block 16C

4. REQUISITION/PURCHASE REQ. NO. PR-OW-18-00523

5. PROJECT NO. *(If applicable)*

6. ISSUED BY CODE CPOD

CPOD
US Environmental Protection Agency
26 West Martin Luther King Drive
Mail Code: NWD
Cincinnati OH 45268

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 0005

10B. DATED *(SEE ITEM 13)* 08/14/2017

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 telegram 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 telegram or letter, provided each telegram or letter 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 date, 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:
X	D. OTHER *(Specify type of modification and authority)* Unilateral - FAR 52.216-22

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

The purpose of this modification is to:

(b)(4)

2. Update the Contracting Officer to Nicholas Bisher, (513)487-2652, Bisher.Nicholas@epa.gov.

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)*
Nicholas Bisher

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 08/10/2018

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)
	TOCOR: Brian Hasty Max Expire Date: 11/30/2020 LIST OF CHANGES: Reason for Modification: Exercise an Option (b)(4) Incremental Funded Amount changed: (b)(4) Contracting Officer changed from Angela Lower to Nicholas Bisher CHANGES FOR LINE ITEM NUMBER: 1 Total Amount changed (b)(4) NEW ACCOUNTING CODE ADDED: Account code: 18-E1-87FM-000B06XP1-4183-1887ME8021-001 Beginning FiscalYear 18 Ending Fiscal Year Fund (Appropriation) E1 Budget Organization 87FM Program (PRC) 000B06XP1 Budget (BOC) 4183 Job # (Site/Project) Cost Organization DCN-LineID 1887ME8021-001 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 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)
	CHANGES FOR LINE ITEM NUMBER: 2 Description changed to: NRSA Diatoms Optional Samples (b)(4) (b)(4) (b)(4) Total Amount changed (b)(4) Delivery Location Code: OW-OWOW-AWPD-MB AWPB-MB US EPA-OW-OWOW-AWPD-MB 1200 PENNSYLVANIA AVE., NW MC-4503-T WASHINGTON DC 20460 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: 02/01/2018 to 11/30/2020 All other terms and conditions remain unchanged.				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF PAGES
	1	3

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
P00003	See Block 16C	See Schedule	

6. ISSUED BY CODE CPOD

CPOD
US Environmental Protection Agency
26 West Martin Luther King Drive
Mail Code: NWD
Cincinnati OH 45268

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 0005

10B. DATED *(SEE ITEM 13)* 08/14/2017

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 telegram 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 telegram or letter, provided each telegram or letter 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 date, 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 amend the PWS to include One (1) additional trip, resulting in (b)(4) to line item 1. Additionally, this modification obligates funding in the amount of (b)(4) which fully funds this task order.

TOCOR: Brian Hasty Max Expire Date: 11/30/2020
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)*	
		Nicholas Bisher	
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 09/18/2018

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)
	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) Obligated Amount for this Modification: (b)(4) New Total Obligated Amount for this Award: (b)(4) Incremental Funded Amount changed: (b)(4) CHANGES FOR LINE ITEM NUMBER: 1 Total Amount changed (b)(4) CHANGES FOR DELIVERY LOCATION: OW-OWOW-AWPD-MB Amount changed (b)(4) NEW ACCOUNTING CODE ADDED: Account code: 18-19-B-87FM-000BD4-2505-1887ME8027-001 Beginning Fiscal Year 18 Ending Fiscal Year 19 Fund (Appropriation) B Budget Organization 87FM Program (PRC) 000BD4 Budget (BOC) 2505 Job # (Site/Project) Cost Organization DCN-LineID 1887ME8027-001 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 Delivery: 09/18/2018 Delivery Location Code: OW-OWOW-AWPD-MB AWPB-MB US EPA-OW-OWOW-AWPD-MB 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)
	1200 PENNSYLVANIA AVE., NW MC-4503-T WASHINGTON DC 20460 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: 02/01/2018 to 11/30/2020				

Performance Work Statement
NARS2 Contract
EP-C-16-008 Task Order 5

TITLE: National Rivers and Streams Assessment: Diatom Identification

A. EPA PERSONNEL

Task Order Contracting Officer Representative (TOCOR):

Name: Brian Hasty
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: 202-564-2236
E-mail: hasty.brian@epa.gov

Alternate Task Order Contracting Officer Representative (ATOCOR):

Name: Richard Mitchell
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: 202-564-0644
E-mail: mitchell.richard@epa.gov

B. PERIOD OF PERFORMANCE

February 1, 2018 through **November 30, 2020**

C. TASK ORDER TYPE

Firm Fixed Price

I. BACKGROUND:

The U.S. EPA, states and other partners are planning the third survey of the nation's rivers and streams to provide regional and national data on their condition. The 2018-2019 National Rivers and Streams Assessment (NRSA) is designed to evaluate conditions in the nation's rivers and streams. Field crews from EPA, United States Geological Survey (USGS), States, and Tribes will collect samples from sites from May 1 through September 30 in study years 2018 and 2019. The field sampling method involves the collection of diatom samples from streams and rivers. Laboratory analysis of the samples shall begin in 2018 and end in 2020.

EPA arranges for laboratory support for processing diatom samples. States and Tribes can choose to use their own laboratories or EPA's contract laboratory. Because of State, Tribal, and EPA choices, the actual number of samples can vary throughout the season. In addition, there are circumstances in which field crews might not collect samples, either in part or in whole. For example, some sample transects may be too dangerous to access, so those subsamples may not be collected. Considering these aspects, the contractor shall receive a minimum of 1500 samples for processing through the life of the task order. To allow for the potential of additional samples collected by the survey and other regional studies, the task order contains options for EPA to order up to another 1000 additional samples (10 options of 100 samples).

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

- The lead taxonomist shall review the data to ensure that:
    - Sample preparation information is correct and complete
    - Taxonomy data/information is correct and complete
    - The appropriate method from the NRSA 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
    - Taxonomy data are scientifically sound and appropriate
    - Quality control measures were within established guidelines
    - Qualitative and quantitative results are correct
    - Data spreadsheet with results 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.

II. PURPOSE

The purpose of this task order is to identify the diatoms in samples collected in the NRSA 2018-2019 and related studies. The types of support required for this project include technical support, sample identifications, transmittal of the results in database format, and a reconciled 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: https://usepa.sharepoint.com/sites/OW_Community/nars/Contracts/Forms/AllItems.aspx?id=%2Fsites%2FOW%5FCommunity%2Fnars%2FContracts%2FNRSA%202018%2D19

- Draft 2018-2019 Laboratory Operations Manual (LOM) (The PWS refers to the relevant chapter as the "Method.")
- Draft 2018-2019 Field Operations Manual (FOM); and

As they become available, the EPA TOCOR will provide the contractor with revisions of relevant documents, including the 2018-2019 FOM, 2018-2019 LOM, 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 shall 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).

For any database or spreadsheet submitted to EPA, the contractor shall 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. Final versions shall be provided to EPA in the original format (e.g., Excel).

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 the sorting, identification, and enumeration of diatoms 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 diatom samples and results. Prior to the shipping of the first specimens in each sampling year (2018, 2019), 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. Taxonomic references
   v. Training, experience, and proficiency of taxonomists
   vi. Standard Operating Procedures (SOPs)
   vii. Possible consultation with independent experts to resolve taxonomic discrepancies.

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 for which specimens were delivered.
   ii. The number of samples for which the laboratory has finished data entry.
   iii. The taxonomists that performed the identifications.
   iv. 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).
   v. Data for the samples processed, or reconciled, 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.

vi. Provide a simple list of the invoiced samples with sample #, site ID, and visit #. The TOCOR will compare the list with the NRSA master list 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.

Deliverables and Schedule under Task 1:

Subtask	**Deliverable**	**Due (working days do not include Saturday, Sunday, and Federal Holidays)**
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.
e.	Revised technical plan and schedule	Revisions within 5 working days per written technical direction.

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;

- NRSA 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 NRSA 2018-2019 quality documents will evolve throughout the task order. 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. 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).

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 award of the task order, 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 taxonomic analyses, 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 NRSA measurement quality objectives, the contractor shall, at a minimum, ensure that the data meet the measurement quality objectives in the QAPP.

Deliverables and Schedule under Task 2:

Subtask	Deliverable	Due (working days do not include Saturday, Sunday, and Federal Holidays)
a.	Original QAPP signature page	No later than 5 working days after effective date of task order or 5 days from receipt of the approved QAPP from the 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 the end of the performance period. Otherwise, provide an email stating that the SOPs have remained unchanged throughout the task order.
	Documentation of QA activities	With deliverables
	Bench sheets with Lead Taxonomist review	With monthly progress report
b.	Monthly reports of QA activities during months when samples are delivered and/or processed	With monthly progress report
c.	Data and QC elements identified in procedure	With database

Task 3. Training for Diatom Regional Voucher Flora Development and Pre- and Post-Sample Processing Activities (Contract PWS C.4)

The lead taxonomist shall travel to meet with USGS Staff from the CWEST/INSTAAR Laboratory in Boulder, Colorado two times. These meetings will last one week and entail training/overview of the pre-count regional voucher floradevelopment process, as well other pre and post-sample processing activities such as of OTU code coordination of taxa

that were not part of the original regional vouchers flora; and final data processing using the regional voucher flora information.

Task 4. Diatom Analysis (Contract PWS B.3, C.4)

The contractor shall strictly follow ALL procedures for diatom analysis as described in the Method for sub-sampling, sorting, counting and identifying diatoms in samples collected by the NRSA field crews in 2018 and 2019.

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. Alternatively, for shipments with a large number of samples, the contractor shall 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.

b. Develop pre-count regional voucher flora documents for each of the nine aggregate ecoregions as reported in the NRSA 2008-2009 report. More detailed overview of the process is found in the diatom laboratory procedures.

    - The project lead taxonomist will be responsible for obtaining light micrographs and developing each of the regional voucher flora.
    - The goal is to capture most of the taxa likely to be encountered by during the counting process of samples from a given aggregate ecoregion.
    - The lead taxonomist will review a minimum of 80% of the projects prepared microslides and spend about 15 minutes per slide searching for species that need to be documented.
    - The contractor will be required to provide the appropriate regional voucher flora to any state lab that may be processing their own diatom samples for NRSA 2018-2019.

c. Retain:
    - All permanent slides and remaining subsample should be archived at an appropriate repository two years after the final NRSA 2018-2019 report has been made public (see methods for more details).
    - Original records, including bench notebooks and the reference library, for a minimum of ten (10) years from the date that EPA publishes the final report.

d. Retain original records, including laboratory notebooks and the reference library, 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 4:

Subtask	Deliverable	Due (working days do not include Saturday, Sunday, and Federal Holidays)
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.	Email with recommended changes to keys and references	Within 5 working days of identified need for change.
c.	Copies of all regional voucher flora documents	Upon EPA TOCOR's written request via technical direction.
c.	Copy of digital library by email, FTP transfer, or SharePoint upload	With final database. Interim copies within 10-15 days per written technical direction from the EPA TOCOR.
e.	Access to laboratory notebooks	Upon EPA TOCOR's written request via technical direction.

Task 5. Final Database (Contract PWS B.1, B.3, C.4)

The contractor shall provide revised and final databases for the results of the diatom analyses 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 and reconciliation activities.
c. Final database that incorporates revisions identified by the EPA TOCOR's technical direction.

Deliverables and Schedule under Task 5:

Subtask	Deliverable	Due (working days do not include Saturday, Sunday, and Federal Holidays)
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 database	10 working days after receiving written technical direction; but no later than 5 working days prior to the end of the period of performance.

CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:
The EPA projects that none of the individual meetings identified in these tasks will exceed a total cost of $20,000. The Contractor shall immediately notify the CO, PO and TOCOR of any anticipated individual event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur $20,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the CO.

TRAVEL

The lead taxonomist shall travel to meet with USGS Staff from the CWEST/INSTAAR Laboratory in Boulder, Colorado two times. These meetings will entail training/overview of the pre-count regional flora voucher development process, as well other pre and post-sample processing activities such as of OTU code coordination of taxa that were not part of the original regional flora vouchers. If additional meetings are identified, EPA will issue a modification.

CONTRACTOR IDENTIFICATION:
The Contractor staff shall be required to identify themselves as contractors whenever their EPA work brings them in contact with the public (such as when they are providing technical information or conducting training and conferences). Contractor staff must always wear Contractor ID badges when interacting with the public. 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.

SECTION 508 COMPLIANCE
All electronic and information technology (eit) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at http://www.epa.gov/accessibility/. The contractor shall include documentation which indicates that the contractor has tested the deliverable against applicable Section 508 Standards.

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	No more than 25% of reviewed deliverables and data shall require revisions to meet the requirements of the QMP, NRSA QAPP,	100% of the data, taxonomists' resumes, and training certifications (per Task 1) will be reviewed by the EPA TOCOR to identify	Unsatisfactory rating under the category of **Quality** in CPARS when the contractor does not meet the measurable performance standards

Performance Requirement	Measureable Performance Standards	Surveillance Method	Incentives/Disincentives
QMP, the NRSA QAPP, and the diatom method.	data templates, and diatom method. None of the samples in the final database (Task V.4) shall have counts less than 600 values unless the entire sample was sorted and identified. All of the assigned staff must meet the LOM requirements for their assigned duties.	noncompliance issues with the QMP, NRSA QAPP, and diatom method.	during an applicable period of performance.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE 1 OF PAGES 5

2. AMENDMENT/MODIFICATION NO. P00004

3. EFFECTIVE DATE See Block 16C

4. REQUISITION/PURCHASE REQ. NO. See Schedule

5. PROJECT NO. *(If applicable)*

6. ISSUED BY CODE CPOD

CPOD
US Environmental Protection Agency
26 West Martin Luther King Drive
Mail Code: NWD
Cincinnati OH 45268

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 0005

10B. DATED *(SEE ITEM 13)* 08/14/2017

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).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X 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 amend the Performance Work Statement to account for the (b)(4) required per sample for voucher slide effort resulting in an (b)(4)

TOCOR: Brian Hasty Max Expire Date: 11/30/2020 InvoiceApprover: Brian Hasty Alt Invoice
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)* Nicholas Bisher

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 04/16/2020

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)
	App: Richard Mitchell LIST OF CHANGES: Reason for Modification: Supplemental Agreement for work within scope (b)(4) Incremental Funded Amount changed: (b)(4) CHANGES FOR LINE ITEM NUMBER: 9999 NEW DELIVERY LOCATION RECORD: Quantity: 0 Amount: $0.00 Delivery date: 11/30/2020 Shipping Address: OW US Environmental Protection Agency 26 West Martin Luther King Drive Cincinnati OH 45268 Mark For Address: NEW ACCOUNTING CODE ADDED: Account code: 00-ZERO-DOLLAR-ADMIN-REQ 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 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)
	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: 1 Total Amount changed (b)(4) CHANGES FOR DELIVERY LOCATION: OW-OWOW-AWPD-MB Amount changed (b)(4) Delivery Date changed from 09/18/2018 to 11/30/2020 NEW ACCOUNTING CODE ADDED: Account code: 19-E1D-87FM-000B06XP1-2505-2087ME4005-001 Beginning FiscalYear 19 Ending Fiscal Year Fund (Appropriation) E1D Budget Organization 87FM Program (PRC) 000B06XP1 Budget (BOC) 2505 Job # (Site/Project) Cost Organization DCN-LineID 2087ME4005-001 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: 19-E1-87FM-000B06XP1-4183-2087ME4005-002 Beginning FiscalYear 19 Ending Fiscal Year 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)
	Fund (Appropriation) E1 Budget Organization 87FM Program (PRC) 000B06XP1 Budget (BOC) 4183 Job # (Site/Project) Cost Organization DCN-LineID 2087ME4005-002 Quantity: 0 Amount: (b)(4) 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 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: 02/01/2018 to 11/30/2020				

Performance Work Statement
NARS2 Contract
EP-C-16-008 Task Order 5

TITLE: National Rivers and Streams Assessment: Diatom Identification

A. EPA PERSONNEL

Task Order Contracting Officer Representative (TOCOR):

Name: Brian Hasty
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: 202-564-2236
E-mail: hasty.brian@epa.gov

Alternate Task Order Contracting Officer Representative (ATOCOR):

Name: Richard Mitchell
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: 202-564-0644
E-mail: mitchell.richard@epa.gov

B. PERIOD OF PERFORMANCE

February 1, 2018 through **November 30, 2020**

C. TASK ORDER TYPE

Firm Fixed Price

I. BACKGROUND:

The U.S. EPA, states and other partners are planning the third survey of the nation's rivers and streams to provide regional and national data on their condition. The 2018-2019 National Rivers and Streams Assessment (NRSA) is designed to evaluate conditions in the nation's rivers and streams. Field crews from EPA, United States Geological Survey (USGS), States, and Tribes will collect samples from sites from May 1 through September 30 in study years 2018 and 2019. The field sampling method involves the collection of diatom samples from streams and rivers. Laboratory analysis of the samples shall begin in 2018 and end in 2020.

EPA arranges for laboratory support for processing diatom samples. States and Tribes can choose to use their own laboratories or EPA's contract laboratory. Because of State, Tribal, and EPA choices, the actual number of samples can vary throughout the season. In addition, there are circumstances in which field crews might not collect samples, either in part or in whole. For example, some sample transects may be too dangerous to access, so those subsamples may not be collected. Considering these aspects, the contractor shall receive a minimum of 1500 samples for processing through the life of the task order. To allow for the potential of additional samples collected by the survey and other regional studies, the task order contains options for EPA to order up to another 1000 additional samples (10 options of 100 samples).

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

- The lead taxonomist shall review the data to ensure that:
    - Sample preparation information is correct and complete
    - Taxonomy data/information is correct and complete
    - The appropriate method from the NRSA 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
    - Taxonomy data are scientifically sound and appropriate
    - Quality control measures were within established guidelines
    - Qualitative and quantitative results are correct
    - Data spreadsheet with results 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.

II. PURPOSE

The purpose of this task order is to identify the diatoms in samples collected in the NRSA 2018-2019 and related studies. The types of support required for this project include technical support, sample identifications, transmittal of the results in database format, and a reconciled 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: https://usepa.sharepoint.com/sites/OW_Community/nars/Contracts/Forms/AllItems.aspx?id=%2Fsites%2FOW%5FCommunity%2Fnars%2FContracts%2FNRSA%202018%2D19

- Draft 2018-2019 Laboratory Operations Manual (LOM) (The PWS refers to the relevant chapter as the "Method.")
- Draft 2018-2019 Field Operations Manual (FOM); and

As they become available, the EPA TOCOR will provide the contractor with revisions of relevant documents, including the 2018-2019 FOM, 2018-2019 LOM, 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 shall 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).

For any database or spreadsheet submitted to EPA, the contractor shall 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. Final versions shall be provided to EPA in the original format (e.g., Excel).

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 the sorting, identification, and enumeration of diatoms 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 diatom samples and results. Prior to the shipping of the first specimens in each sampling year (2018, 2019), 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. Taxonomic references
   v. Training, experience, and proficiency of taxonomists
   vi. Standard Operating Procedures (SOPs)
   vii. Possible consultation with independent experts to resolve taxonomic discrepancies.

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 for which specimens were delivered.
   ii. The number of samples for which the laboratory has finished data entry.
   iii. The taxonomists that performed the identifications.
   iv. 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).
   v. Data for the samples processed, or reconciled, 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.

vi. Provide a simple list of the invoiced samples with sample #, site ID, and visit #. The TOCOR will compare the list with the NRSA master list 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.

Deliverables and Schedule under Task 1:

Subtask	**Deliverable**	**Due (working days do not include Saturday, Sunday, and Federal Holidays)**
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.
e.	Revised technical plan and schedule	Revisions within 5 working days per written technical direction.

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;

- NRSA 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 NRSA 2018-2019 quality documents will evolve throughout the task order. 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. 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).

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 award of the task order, 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 taxonomic analyses, 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 NRSA measurement quality objectives, the contractor shall, at a minimum, ensure that the data meet the measurement quality objectives in the QAPP.

Deliverables and Schedule under Task 2:

Subtask	Deliverable	Due (working days do not include Saturday, Sunday, and Federal Holidays)
a.	Original QAPP signature page	No later than 5 working days after effective date of task order or 5 days from receipt of the approved QAPP from the 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 the end of the performance period. Otherwise, provide an email stating that the SOPs have remained unchanged throughout the task order.
	Documentation of QA activities	With deliverables
	Bench sheets with Lead Taxonomist review	With monthly progress report
b.	Monthly reports of QA activities during months when samples are delivered and/or processed	With monthly progress report
c.	Data and QC elements identified in procedure	With database

Task 3. Training for Diatom Regional Voucher Flora Development and Pre- and Post-Sample Processing Activities (Contract PWS C.4)

The lead taxonomist shall travel to meet with USGS Staff from the CWEST/INSTAAR Laboratory in Boulder, Colorado two times. These meetings will last one week and entail training/overview of the pre-count regional voucher floradevelopment process, as well other pre and post-sample processing activities such as of OTU code coordination of taxa

that were not part of the original regional vouchers flora; and final data processing using the regional voucher flora information.

Task 4. Diatom Analysis (Contract PWS B.3, C.4)

The contractor shall strictly follow ALL procedures for diatom analysis as described in the Method for sub-sampling, sorting, counting and identifying diatoms in samples collected by the NRSA field crews in 2018 and 2019.

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. Alternatively, for shipments with a large number of samples, the contractor shall 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.

b. Develop pre-count regional voucher flora documents for each of the nine aggregate ecoregions as reported in the NRSA 2008-2009 report. More detailed overview of the process is found in the diatom laboratory procedures.

    - The project lead taxonomist will be responsible for obtaining light micrographs and developing each of the regional voucher flora.
    - The goal is to capture most of the taxa likely to be encountered by during the counting process of samples from a given aggregate ecoregion.
    - The lead taxonomist will review a minimum of 80% of the projects prepared microslides and spend about ~~15~~ 90 minutes per slide searching for species that need to be documented.
    - The contractor will be required to provide the appropriate regional voucher flora to any state lab that may be processing their own diatom samples for NRSA 2018-2019.

c. Retain:
    - All permanent slides and remaining subsample should be archived at an appropriate repository two years after the final NRSA 2018-2019 report has been made public (see methods for more details).
    - Original records, including bench notebooks and the reference library, for a minimum of ten (10) years from the date that EPA publishes the final report.

d. Retain original records, including laboratory notebooks and the reference library, 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 4:

Subtask	Deliverable	Due (working days do not include Saturday, Sunday, and Federal Holidays)
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.	Email with recommended changes to keys and references	Within 5 working days of identified need for change.
c.	Copies of all regional voucher flora documents	Upon EPA TOCOR's written request via technical direction.
c.	Copy of digital library by email, FTP transfer, or SharePoint upload	With final database. Interim copies within 10-15 days per written technical direction from the EPA TOCOR.
e.	Access to laboratory notebooks	Upon EPA TOCOR's written request via technical direction.

Task 5. Final Database (Contract PWS B.1, B.3, C.4)

The contractor shall provide revised and final databases for the results of the diatom analyses 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 and reconciliation activities.
c. Final database that incorporates revisions identified by the EPA TOCOR's technical direction.

Deliverables and Schedule under Task 5:

Subtask	Deliverable	Due (working days do not include Saturday, Sunday, and Federal Holidays)
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 database	10 working days after receiving written technical direction; but no later than 5 working days prior to the end of the period of performance.

CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:
The EPA projects that none of the individual meetings identified in these tasks will exceed a total cost of $20,000. The Contractor shall immediately notify the CO, PO and TOCOR of any anticipated individual event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur $20,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the CO.

TRAVEL

The lead taxonomist shall travel to meet with USGS Staff from the CWEST/INSTAAR Laboratory in Boulder, Colorado two times. These meetings will entail training/overview of the pre-count regional flora voucher development process, as well other pre and post-sample processing activities such as of OTU code coordination of taxa that were not part of the original regional flora vouchers. If additional meetings are identified, EPA will issue a modification.

CONTRACTOR IDENTIFICATION:
The Contractor staff shall be required to identify themselves as contractors whenever their EPA work brings them in contact with the public (such as when they are providing technical information or conducting training and conferences). Contractor staff must always wear Contractor ID badges when interacting with the public. 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.

SECTION 508 COMPLIANCE
All electronic and information technology (eit) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at http://www.epa.gov/accessibility/. The contractor shall include documentation which indicates that the contractor has tested the deliverable against applicable Section 508 Standards.

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	No more than 25% of reviewed deliverables and data shall require revisions to meet the requirements of the QMP, NRSA QAPP,	100% of the data, taxonomists' resumes, and training certifications (per Task 1) will be reviewed by the EPA TOCOR to identify	Unsatisfactory rating under the category of **Quality** in CPARS when the contractor does not meet the measurable performance standards

Performance Requirement	Measureable Performance Standards	Surveillance Method	Incentives/Disincentives
QMP, the NRSA QAPP, and the diatom method.	data templates, and diatom method. None of the samples in the final database (Task V.4) shall have counts less than 600 values unless the entire sample was sorted and identified. All of the assigned staff must meet the LOM requirements for their assigned duties.	noncompliance issues with the QMP, NRSA QAPP, and diatom method.	during an applicable period of performance.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE 1 OF PAGES 2

2. AMENDMENT/MODIFICATION NO. P00005

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 0005

10B. DATED *(SEE ITEM 13)* 08/14/2017

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: Brian Hasty Max Expire Date: 11/30/2020 InvoiceApprover: Brian Hasty Alt Invoice App: Richard Mitchell
The purpose of this modification is to incorporate the attached EPA blanket administrative modification signed by Raoul Scott on July 30, 2020 and to change the Contract Specialist to Amanda Toole and change the Contracting Officer to Sandra Stargardt-Licis. All other
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)
	terms and conditions remain unchanged. LIST OF CHANGES: Reason for Modification: Other Administrative Action Buyer changed from Nicholas Bisher to Amanda Toole Contracting Officer changed from Nicholas Bisher to Sandra Stargardt-Licis 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) 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: 02/01/2018 to 11/30/2020				

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. P00006

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 0005

10B. DATED *(SEE ITEM 13)* 08/14/2017

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 11/30/2020 to 02/28/2021 due to excusable delays related to the Covid 19 Pandemic. The extension of the Period of Performance results in no additional cost to the government. All other terms and conditions remain unchanged.

TOCOR: Brian Hasty Max Expire Date: 02/28/2021 InvoiceApprover: Brian Hasty Alt Invoice App: Richard Mitchell
LIST OF CHANGES:

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 11/13/2020

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)
	Reason for Modification: Supplemental Agreement for work within scope Period Of Performance End Date changed from 30-NOV-20 to 28-FEB-21 Total Amount for this Modification: $0.00 Maximum Potential Expiration Date changed to: 02/28/2021 CHANGES FOR LINE ITEM NUMBER: 1 End Date changed from 30-NOV-20 to 28-FEB-21 CHANGES FOR DELIVERY LOCATION: OW-OWOW-AWPD-MB Delivery Date changed from 11/30/2020 to 02/28/2021 CHANGES FOR LINE ITEM NUMBER: 2 End Date changed from 30-NOV-20 to 28-FEB-21 CHANGES FOR DELIVERY LOCATION: OW-OWOW-AWPD-MB Delivery Date changed from 11/30/2020 to 02/28/2021 CHANGES FOR LINE ITEM NUMBER: 9999 CHANGES FOR DELIVERY LOCATION: OW Delivery Date changed from 11/30/2020 to 02/28/2021 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: 02/01/2018 to 02/28/2021				

Performance Work Statement
NARS2 Contract
EP-C-16-008 Task Order 5

TITLE: National Rivers and Streams Assessment: Diatom Identification

A. EPA PERSONNEL

Task Order Contracting Officer Representative (TOCOR):

Name: Brian Hasty
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: 202-564-2236
E-mail: hasty.brian@epa.gov

Alternate Task Order Contracting Officer Representative (ATOCOR):

Name: Richard Mitchell
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: 202-564-0644
E-mail: mitchell.richard@epa.gov

B. PERIOD OF PERFORMANCE

February 1, 2018 through ~~**November 30, 2020**~~ **February 28, 2021**

C. TASK ORDER TYPE

Firm Fixed Price

I. BACKGROUND:

The U.S. EPA, states and other partners are planning the third survey of the nation's rivers and streams to provide regional and national data on their condition. The 2018-2019 National Rivers and Streams Assessment (NRSA) is designed to evaluate conditions in the nation's rivers and streams. Field crews from EPA, United States Geological Survey (USGS), States, and Tribes will collect samples from sites from May 1 through September 30 in study years 2018 and 2019. The field sampling method involves the collection of diatom samples from streams and rivers. Laboratory analysis of the samples shall begin in 2018 and end in 2020.

EPA arranges for laboratory support for processing diatom samples. States and Tribes can choose to use their own laboratories or EPA's contract laboratory. Because of State, Tribal, and EPA choices, the actual number of samples can vary throughout the season. In addition, there are circumstances in which field crews might not collect samples, either in part or in whole. For example, some sample transects may be too dangerous to access, so those subsamples may not be collected. Considering these aspects, the contractor shall receive a minimum of 1500 samples for processing through the life of the task order. To allow for the potential of additional samples collected by the survey and other regional studies, the task order contains options for EPA to order up to another 1000 additional samples (10 options of 100 samples).

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

- The lead taxonomist shall review the data to ensure that:
    - Sample preparation information is correct and complete
    - Taxonomy data/information is correct and complete
    - The appropriate method from the NRSA 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
    - Taxonomy data are scientifically sound and appropriate
    - Quality control measures were within established guidelines
    - Qualitative and quantitative results are correct
    - Data spreadsheet with results 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.

II. PURPOSE

The purpose of this task order is to identify the diatoms in samples collected in the NRSA 2018-2019 and related studies. The types of support required for this project include technical support, sample identifications, transmittal of the results in database format, and a reconciled 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: https://usepa.sharepoint.com/sites/OW_Community/nars/Contracts/Forms/AllItems.aspx?id=%2Fsites%2FOW%5FCommunity%2Fnars%2FContracts%2FNRSA%202018%2D19

- Draft 2018-2019 Laboratory Operations Manual (LOM) (The PWS refers to the relevant chapter as the "Method.")
- Draft 2018-2019 Field Operations Manual (FOM); and

As they become available, the EPA TOCOR will provide the contractor with revisions of relevant documents, including the 2018-2019 FOM, 2018-2019 LOM, 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 shall 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).

For any database or spreadsheet submitted to EPA, the contractor shall 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. Final versions shall be provided to EPA in the original format (e.g., Excel).

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 the sorting, identification, and enumeration of diatoms 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 diatom samples and results. Prior to the shipping of the first specimens in each sampling year (2018, 2019), 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. Taxonomic references
   v. Training, experience, and proficiency of taxonomists
   vi. Standard Operating Procedures (SOPs)
   vii. Possible consultation with independent experts to resolve taxonomic discrepancies.

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 for which specimens were delivered.
   ii. The number of samples for which the laboratory has finished data entry.
   iii. The taxonomists that performed the identifications.
   iv. 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).
   v. Data for the samples processed, or reconciled, 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.

vi. Provide a simple list of the invoiced samples with sample #, site ID, and visit #. The TOCOR will compare the list with the NRSA master list 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.

Deliverables and Schedule under Task 1:

Subtask	**Deliverable**	**Due (working days do not include Saturday, Sunday, and Federal Holidays)**
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.
e.	Revised technical plan and schedule	Revisions within 5 working days per written technical direction.

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;

- NRSA 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 NRSA 2018-2019 quality documents will evolve throughout the task order. 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. 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).

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 award of the task order, 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 taxonomic analyses, 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 NRSA measurement quality objectives, the contractor shall, at a minimum, ensure that the data meet the measurement quality objectives in the QAPP.

Deliverables and Schedule under Task 2:

Subtask	Deliverable	Due (working days do not include Saturday, Sunday, and Federal Holidays)
a.	Original QAPP signature page	No later than 5 working days after effective date of task order or 5 days from receipt of the approved QAPP from the 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 the end of the performance period. Otherwise, provide an email stating that the SOPs have remained unchanged throughout the task order.
	Documentation of QA activities	With deliverables
	Bench sheets with Lead Taxonomist review	With monthly progress report
b.	Monthly reports of QA activities during months when samples are delivered and/or processed	With monthly progress report
c.	Data and QC elements identified in procedure	With database

Task 3. Training for Diatom Regional Voucher Flora Development and Pre- and Post-Sample Processing Activities (Contract PWS C.4)

The lead taxonomist shall travel to meet with USGS Staff from the CWEST/INSTAAR Laboratory in Boulder, Colorado two times. These meetings will last one week and entail training/overview of the pre-count regional voucher flora development process, as well other pre and post-sample processing activities such as of OTU code coordination of taxa

that were not part of the original regional vouchers flora; and final data processing using the regional voucher flora information.

Task 4. Diatom Analysis (Contract PWS B.3, C.4)

The contractor shall strictly follow ALL procedures for diatom analysis as described in the Method for sub-sampling, sorting, counting and identifying diatoms in samples collected by the NRSA field crews in 2018 and 2019.

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. Alternatively, for shipments with a large number of samples, the contractor shall 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.

b. Develop pre-count regional voucher flora documents for each of the nine aggregate ecoregions as reported in the NRSA 2008-2009 report. More detailed overview of the process is found in the diatom laboratory procedures.

    - The project lead taxonomist will be responsible for obtaining light micrographs and developing each of the regional voucher flora.
    - The goal is to capture most of the taxa likely to be encountered by during the counting process of samples from a given aggregate ecoregion.
    - The lead taxonomist will review a minimum of 80% of the projects prepared microslides and spend about 90 minutes per slide searching for species that need to be documented.
    - The contractor will be required to provide the appropriate regional voucher flora to any state lab that may be processing their own diatom samples for NRSA 2018-2019.

c. Retain:
    - All permanent slides and remaining subsample should be archived at an appropriate repository two years after the final NRSA 2018-2019 report has been made public (see methods for more details).
    - Original records, including bench notebooks and the reference library, for a minimum of ten (10) years from the date that EPA publishes the final report.

d. Retain original records, including laboratory notebooks and the reference library, 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 4:

Subtask	Deliverable	Due (working days do not include Saturday, Sunday, and Federal Holidays)
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.	Email with recommended changes to keys and references	Within 5 working days of identified need for change.
c.	Copies of all regional voucher flora documents	Upon EPA TOCOR's written request via technical direction.
c.	Copy of digital library by email, FTP transfer, or SharePoint upload	With final database. Interim copies within 10-15 days per written technical direction from the EPA TOCOR.
e.	Access to laboratory notebooks	Upon EPA TOCOR's written request via technical direction.

Task 5. Final Database (Contract PWS B.1, B.3, C.4)

The contractor shall provide revised and final databases for the results of the diatom analyses 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 and reconciliation activities.
c. Final database that incorporates revisions identified by the EPA TOCOR's technical direction.

Deliverables and Schedule under Task 5:

Subtask	Deliverable	Due (working days do not include Saturday, Sunday, and Federal Holidays)
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 database	10 working days after receiving written technical direction; but no later than 5 working days prior to the end of the period of performance.

CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:
The EPA projects that none of the individual meetings identified in these tasks will exceed a total cost of $20,000. The Contractor shall immediately notify the CO, PO and TOCOR of any anticipated individual event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur $20,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the CO.

TRAVEL

The lead taxonomist shall travel to meet with USGS Staff from the CWEST/INSTAAR Laboratory in Boulder, Colorado two times. These meetings will entail training/overview of the pre-count regional flora voucher development process, as well other pre and post-sample processing activities such as of OTU code coordination of taxa that were not part of the original regional flora vouchers. If additional meetings are identified, EPA will issue a modification.

CONTRACTOR IDENTIFICATION:
The Contractor staff shall be required to identify themselves as contractors whenever their EPA work brings them in contact with the public (such as when they are providing technical information or conducting training and conferences). Contractor staff must always wear Contractor ID badges when interacting with the public. 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.

SECTION 508 COMPLIANCE
All electronic and information technology (eit) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at http://www.epa.gov/accessibility/. The contractor shall include documentation which indicates that the contractor has tested the deliverable against applicable Section 508 Standards.

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	No more than 25% of reviewed deliverables and data shall require revisions to meet the requirements of the QMP, NRSA QAPP,	100% of the data, taxonomists' resumes, and training certifications (per Task 1) will be reviewed by the EPA TOCOR to identify	Unsatisfactory rating under the category of **Quality** in CPARS when the contractor does not meet the measurable performance standards

Performance Requirement	Measureable Performance Standards	Surveillance Method	Incentives/Disincentives
QMP, the NRSA QAPP, and the diatom method.	data templates, and diatom method. None of the samples in the final database (Task V.4) shall have counts less than 600 values unless the entire sample was sorted and identified. All of the assigned staff must meet the LOM requirements for their assigned duties.	noncompliance issues with the QMP, NRSA QAPP, and diatom method.	during an applicable period of performance.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE 1 OF PAGES 2

2. AMENDMENT/MODIFICATION NO. P00007

3. EFFECTIVE DATE See Block 16C

4. REQUISITION/PURCHASE REQ. NO. PR-OW-21-00373

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 0005

10B. DATED *(SEE ITEM 13)* 08/14/2017

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).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER *(Specify type of modification and authority)* Bilateral - Mutual Agreement of the Parties

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 (b)(4)

All other terms and conditions remain unchanged.

TOCOR: Brian Hasty Max Expire Date: 02/28/2021 InvoiceApprover: Brian Hasty Alt Invoice App: Richard Mitchell
LIST OF CHANGES:
Reason for Modification: Funding Only Action

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 05/06/2021

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)
	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) Incremental Funded Amount changed: from (b)(4) CHANGES FOR LINE ITEM NUMBER: 1 Obligated Amount for this Modification: (b)(4) Incremental Funded Amount changed from (b)(4) CHANGES FOR ACCOUNTING CODE: 19-E1D-87FM-000B06XP1-2505-2087ME4005-001 Amount changed (b)(4) CHANGES FOR ACCOUNTING CODE: 19-E1-87FM-000B06XP1-4183-2087ME4005-002 Amount changed from (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: 02/01/2018 to 02/28/2021				