AGREEMENT BETWEEN CITY/COUNTY ASSOCIATION OF GOVERNMENTS OF SAN MATEO COUNTY AND EOA, INC.

This Agreement is entered into this 15th of December, 2023, by and between the CITY/COUNTY ASSOCIATION OF GOVERNMENTS OF SAN MATEO COUNTY, a joint powers agency whose members include the County of San Mateo and the twenty incorporated cities and towns within San Mateo County, hereinafter called "C/CAG," and EOA, Inc., hereinafter called "Consultant."

WHEREAS, C/CAG administers the Countywide Water Pollution Prevention Program to support its member agencies to comply with state and federal mandated requirements of the Municipal Regional Stormwater Permit, issued by the San Francisco Bay Regional Water Quality Control Board (MRP); and

WHEREAS, The US Environmental Protection Agency awarded C/CAG \$3,366,000 in grant funds under the San Francisco Bay Water Quality Improvement Fund grant program to complete the *Watching Our Watersheds Regional Trash Monitoring Project* (hereinafter referred to as "Project") on behalf of C/CAG's member agencies and the other Phase II MRP countywide stormwater programs represented by the Bay Area Municipal Stormwater Collaborative (hereinafter referred to as "Partners"); and

WHEREAS, the primary goal of the Project is supporting countywide and regional trash monitoring requirements and compliance with trash reduction milestones during the current MRP permit term; and

WHEREAS, in July 2023, the C/CAG Board of Directors approved Resolution 23-69, authorizing the C/CAG Executive Director to enter into a grant agreement with the US Environmental Protection Agency to complete the Project; and

WHEREAS, as of July 19, 2023 such grant agreement has been executed, specifying a cumulative grant amount not to exceed \$3,366,000 (including \$195,000 in grant funds allocated to C/CAG staff to administer the grant and oversee the project) and a total project cost of \$6,372,000, including in-kind match contributions from the Partners, and a project term of April 3, 2023 through June 30, 2028; and

WHEREAS, C/CAG requires consultant services to complete the Project; and

WHEREAS, C/CAG has determined that Consultant has the requisite qualifications to complete the Project; and

WHEREAS, the total amount available to Consultant to complete this project is not exceed \$3,171,000; and

WHEREAS, the federally-required clauses including the grant terms and conditions as required by USEPA in Exhibit D, EPA Watching our Watersheds Grant Agreement, and Exhibit E, EPA General Terms and Conditions Effective October 1, 2022, attached hereto and incorporated herein, apply to the Project with applicable provisions similarly imposed upon Consultant; and

NOW, THEREFORE, IT IS HEREBY AGREED by the parties as follows:

1. **Services to be provided by Consultant**. In consideration of the payments hereinafter set forth, Consultant shall provide services described in Exhibit A, *Scope of Work*, *Schedule and Budget* attached hereto (the "Services").

In the performance of its services, Consultant represents that it has and will exercise the degree of professional care, skill, efficiency, and judgment of consultants with special expertise in providing such services, and Consultant represents that it carries and will maintain all applicable licenses, certificates, and registrations needed for the work in current and good standing.

2. **Payments.** In consideration of the services rendered with all terms, conditions, and specifications set forth herein, in Exhibit A, *Scope of Work, Schedule and Budget*, and Exhibit C, *Staffing Plan and Key Personnel Assignments*, and in any subsequent task orders executed under the governance of this Agreement, C/CAG shall compensate Consultant on a time and materials basis. The aggregate total amount of payment by C/CAG to Consultant for services shall not exceed \$3,171,000, as shown in Exhibit A for services provided during the Contract Term set forth below.

Consultant will be paid promptly upon receipt and approval by C/CAG Project Manager of satisfactory itemized invoices. Invoices shall be submitted no later than thirty (30) calendar days after the performance of work for which Consultant is billing. Invoices shall detail the work performed on each deliverable or each task as applicable, note the percentage of deliverables completed and identify the expenditures. C/CAG shall have the right to receive, upon request, documentation substantiating charges billed to C/CAG. Invoices shall follow the format stipulated in Exhibit A, *Scope of Work, Schedule and Budget*, and shall reference this Agreement project title. The final project invoice must contain the final cost and all credits due to C/CAG. The final invoice should be submitted within sixty (60) calendar days after completion of Consultant's work. Invoices shall be emailed to C/CAG Project Manager at the following address:

City/County Association of Governments of San Mateo County Attention: Reid Bogert, Stormwater Program Director rbogert@smcgov.org

- 3. **Progress Reports and Meetings.** Consultant shall submit progress reports at least once a month with each project invoice during the term of this Agreement summarizing the work performed during the prior month and planned work for the following month. The progress report should be sufficiently detailed, addressing all relevant tasks/sub-tasks, for the C/CAG Project Manager to determine if Consultant is performing to expectations and is on schedule; to provide communication of interim findings; and to sufficiently address any difficulties or specific problems encountered, so remedies can be developed. Consultant's Project Manager shall meet with C/CAG Project Manager, as needed, to discuss progress on the Scope of Work.
- 4. **Key Personnel.** The key personnel to be assigned to this work by Consultant and, if applicable, their hourly rates and the estimated hours to be supplied by each, are set forth in Exhibit B, *Consultant Billing Rates, and* Exhibit C, *Staffing Plan and Key Personnel Assignments*, attached hereto and incorporated herein by this reference. Substitution of any of the personnel named in Exhibit C or a decrease in the hours provided to the Project by such personnel of more than 10% requires the prior written approval of the C/CAG Project Manager or a designee. Consultant shall maintain records documenting compliance with this Section, and such records shall be subject to the audit requirements of Section 16. Consultant agrees that all personnel assigned to this work will be professionally qualified for the assignment to be undertaken. C/CAG reserves the right to direct removal of any individual, including key personnel, assigned to this work.
- 5. **Contract Materials**. At the end of this Agreement, or in the event of termination, all finished or unfinished documents, data, studies, maps, photographs, reports, and other written materials (collectively referred to as "contract materials") prepared by Consultant under this Agreement shall become the property of C/CAG and shall be promptly delivered to C/CAG. Upon termination, Consultant may make and retain a copy of such contract materials if permitted by law.
- 6. **Relationship of the Parties**. It is understood that Consultant is an Independent Consultant and this Agreement is not intended to, and shall not be construed to, create the relationship of agent, servant, employee, partnership, joint venture or association, or any other relationship whatsoever other than that of Independent Consultant.
- 7. **Non-Assignability**. Consultant shall not assign this Agreement or any portion thereof to a third party, or subcontract with a third party, without the prior written consent of the C/CAG Executive Director. Any such assignment or subcontract without the C/CAG Executive Director's prior written consent shall give C/CAG the right to automatically and immediately terminate this Agreement without penalty or advance notice.
- 8. **Contract Term/Termination**. This Agreement shall be in effect as of December 15, 2023, and Consultant shall commence work after notification to proceed by the C/CAG Project Manager, and the Agreement shall terminate on June 30, 2028; provided, however, the C/CAG Chairperson may terminate this Agreement at any time for any reason by providing 30 days' notice to Consultant. Termination will be effective on the date specified in the notice. In the event of termination under this Section, Consultant

shall be paid for all services provided to the date of termination, subject to availability of funding. Such payment shall be that prorated portion of the full payment determined by comparing the work completed to the work required by the Agreement.

9. **Hold Harmless/Indemnity**.

General. Consultant shall indemnify and save harmless C/CAG and its officers, a. agents, employees, and servants from all claims, suits, or actions of every name, kind, and description resulting from this Agreement, the performance of any work or services required of Consultant under this Agreement, or payments made pursuant to this Agreement brought for, or on account of, any of the following: (A) injuries to or death of any person, including Consultant or its employees/officers/agents; (B) damage to any property of any kind whatsoever and to whomsoever belonging; (C) any sanctions, penalties, or claims of damages resulting from Consultant's failure to comply, if applicable, with the requirements set forth in the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and all Federal regulations promulgated thereunder, as amended; or (D) any other loss or cost, including but not limited to that caused by the concurrent active or passive negligence of C/CAG and/or its officers, agents, employees, or servants. However, Consultant's duty to indemnify and save harmless under this Section shall not apply to injuries or damage for which C/CAG has been found in a court of competent jurisdiction to be liable by reason of its own negligence or willful misconduct. The duty of Consultant to indemnify and save harmless as set forth by this Section shall include the duty to defend as set forth in Section 2778 of the California Civil Code.

This indemnification provision will survive termination or expiration of this Agreement.

b. *Intellectual Property*. Consultant hereby certifies that it owns, controls, and/or licenses and retains all right, title, and/or interest in and to any intellectual property it uses in relation to this Agreement, including the design, look, feel, features, source code, content, and/or other technology relating to any part of the services it provides under this Agreement and including all related patents, inventions, trademarks, and copyrights, all applications therefor, and all trade names, service marks, know how, and trade secrets (collectively referred to as "IP Rights") except as otherwise noted by this Agreement.

Consultant warrants that the services it provides under this Agreement do not infringe, violate, trespass, or constitute the unauthorized use or misappropriation of any IP Rights of any third party. Consultant shall defend, indemnify, and hold harmless C/CAG from and against all liabilities, costs, damages, losses, and expenses (including reasonable attorney fees) arising out of or related to any claim by a third party that the services provided under this Agreement infringe or violate any third-party's IP Rights provided any such right is enforceable in the United States. Consultant's duty to defend, indemnify, and hold harmless under this Section applies

only provided that: (a) C/CAG notifies Consultant promptly in writing of any notice of any such third-party claim; (b) C/CAG cooperates with Consultant, at Consultant's expense, in all reasonable respects in connection with the investigation and defense of any such third-party claim; (c) Consultant retains sole control of the defense of any action on any such claim and all negotiations for its settlement or compromise (provided Consultant shall not have the right to settle any criminal action, suit, or proceeding without C/CAG's prior written consent, not to be unreasonably withheld, and provided further that any settlement permitted under this Section shall not impose any financial or other obligation on C/CAG, impair any right of C/CAG, or contain any stipulation, admission, or acknowledgement of wrongdoing on the part of C/CAG without C/CAG's prior written consent, not to be unreasonably withheld); and (d) should services under this Agreement become, or in Consultant's opinion be likely to become, the subject of such a claim, or in the event such a third party claim or threatened claim causes C/CAG's reasonable use of the services under this Agreement to be seriously endangered or disrupted, Consultant shall, at Consultant's option and expense, either: (i) procure for C/CAG the right to continue using the services without infringement or (ii) replace or modify the services so that they become non-infringing but remain functionally equivalent.

Notwithstanding anything in this Section to the contrary, Consultant will have no obligation or liability to C/CAG under this Section to the extent any otherwise covered claim is based upon: (a) any aspects of the services under this Agreement which have been modified by or for C/CAG (other than modification performed by, or at the direction of, Consultant) in such a way as to cause the alleged infringement at issue; and/or (b) any aspects of the services under this Agreement which have been used by C/CAG in a manner prohibited by this Agreement.

The duty of Consultant to indemnify and save harmless as set forth by this Section shall include the duty to defend as set forth in Section 2778 of the California Civil Code.

10. **Contract Assurance.**

- a. Consultant shall not discriminate on the basis of race, color, national origin or sex in the performance of this Agreement. The Consultant shall carry out applicable requirements of 40 CFR part 33 in the award and administration of contracts awarded under USEPA financial assistance agreements. Failure by the Consultant to carry out these requirements is a material breach of this Agreement which may result in the termination of this Agreement or other legally available remedies.
- b. Any subcontract entered into as a result of this Agreement shall contain the provisions of this section and any applicable provisions of the EPA Watching our Watersheds Grant Agreement (Exhibit D), and EPA General Terms and Conditions Effective October 1, 2022 (Exhibit E).

11. **Insurance**.

- a. General Requirements. Consultant or its subconsultants performing the services on behalf of Consultant shall not commence work under this Agreement until all insurance required under this section has been obtained. Consultant shall use diligence to obtain such insurance. Consultant shall furnish C/CAG with Certificates of Insurance evidencing the required coverage and there shall be a specific contractual liability endorsement extending Consultant's coverage to include the contractual liability assumed by Consultant pursuant to this Agreement. These Certificates shall specify or be endorsed to provide that thirty (30) days' notice must be given, in writing, to C/CAG of any pending change in the limits of liability or of non-renewal, cancellation, or modification of the policy.
- b. Workers' Compensation and Employer Liability Insurance. Consultant shall have in effect, during the entire life of this Agreement, Workers' Compensation and Employer Liability Insurance providing full statutory coverage. In signing this Agreement, Consultant certifies, as required by Section 1861 of the California Labor Code, that (a) it is aware of the provisions of Section 3700 of the California Labor Code, which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of the Labor Code, and (b) it will comply with such provisions before commencing the performance of work under this Agreement.
- c. Liability Insurance. Consultant shall take out and maintain during the life of this Agreement such Bodily Injury Liability and Property Damage Liability Insurance as shall protect Consultant, its employees, officers and agents while performing work covered by this Agreement from any and all claims for damages for bodily injury, including accidental death, as well as any and all claims for property damage that may arise from Consultant's operations under this Agreement, whether such operations be by Consultant or by any sub-consultant or by anyone directly or indirectly employed by either of them. Such insurance shall be combined single limit bodily injury and property damage for each occurrence and shall be not less than \$1,000,000 unless another amount is specified below and shows approval by C/CAG Staff.
- d. Insurance Limits; Insured Entities; Breach. Required insurance shall include:

	Required Amount	Approval by C/CAG Staff if under \$ 1,000,000
1. Comprehensive General Liability	\$ 1,000,000	
2. Workers' Compensation	\$ Statutory	
3. Professional Liability	\$1,000,000	
4. Motor Vehicle Liability	\$1,000,000	

C/CAG and its officers, agents, employees and servants shall be named as additional insured on any such policies of insurance, which shall also contain a provision that the insurance afforded thereby to C/CAG, its officers, agents, employees, and servants shall be primary insurance to the full limits of liability of the policy, and that if C/CAG, or its officers, agents, employees, and servants have other insurance against a loss covered by such a policy, such other insurance shall be excess insurance only.

In the event of the breach of any provision of this section, or in the event any notice is received which indicates any required insurance coverage will be diminished or canceled, the C/CAG Chairperson, at his/her option, may, notwithstanding any other provision of this Agreement to the contrary, immediately declare a material breach of this Agreement and suspend all further work and payment pursuant to this Agreement.

- 12. **Compliance with All Laws**. Consultant shall at all times comply with all applicable federal, state, San Mateo County, and municipal laws, ordinances, and regulations, including without limitation those regarding services to disabled persons, including any requirements of Section 504 of the Rehabilitation Act of 1973. In the event of a conflict between the terms of this Agreement and any applicable state, federal, San Mateo County, or municipal law or regulation, the requirements of the applicable law or regulation will take precedence over the requirements set forth in this Agreement. Consultant will timely and accurately complete, sign, and submit all necessary documentation of compliance.
- 13. **Non-discrimination**. Consultant and any subconsultants performing the services on behalf of Consultant shall not discriminate or permit discrimination against any person or group of persons on the basis of race, color, religion, national origin or ancestry, age, sex, sexual orientation, marital status, pregnancy, childbirth or related conditions, medical condition, mental or physical disability or veteran's status, or in any manner prohibited by federal, state or local laws.
- 14. **Substitutions**. If particular persons or classifications are identified in Exhibit C as working on this Agreement, Consultant will not assign others to work in their place without the prior written consent of the C/CAG Project Manager or a designee. Any substitution shall be with a person or classification of commensurate experience and knowledge unless otherwise authorized by the C/CAG Project Manager or a designee.
- 15. **Sole Property of C/CAG**. Work products of Consultant which are delivered under this Agreement or which are developed, produced and paid for under this Agreement, shall be and become the property of C/CAG. Consultant shall not be liable for C/CAG's use, modification or re-use of products without Consultant's participation or for purpose other than those specifically intended pursuant to this Agreement.
- 16. Record Retention; Right to Monitor and Audit.

- a. Consultant shall maintain all required records relating to services provided under this Agreement for four (4) years after C/CAG makes final payment and all other pending matters are closed, and Consultant's records shall be subject to the examination and/or audit by C/CAG, a federal grantor agency, and/or the State of California.
- b. Consultant shall comply with all program and fiscal reporting requirements set forth by applicable federal, State, and local agencies and as required by C/CAG, including any applicable requirements related to USEPA funding, as set forth in Exhibit D or Exhibit E.
- c. Consultant agrees, upon reasonable notice, to provide to C/CAG, to any federal or State department having monitoring or review authority, to C/CAG's authorized representative, and/or to any of their respective audit agencies access to and the right to examine all records and documents necessary to determine compliance with relevant federal, State, and local statutes, rules, and regulations, to determine compliance with this Agreement, and to evaluate the quality, appropriateness, and timeliness of services performed.
- 17. **Permits/Licenses**. If any license, permit, or approval is required to perform the work or services required by this Agreement, Consultant bears the responsibility to obtain said license, permit, or approval from the relevant agency at Consultant's own expense prior to commencement of said work/services. Failure to do so will result in forfeit of any right to compensation under this Agreement.
- 18. **Lobbying.** Consultant agrees to comply with the restrictions on the use of federal funds for lobbying activities set forth in 31 United States Code §1352 and 49 CFR Part 20.
- 19. **Merger Clause; Amendments**. This Agreement, including all Exhibits attached hereto and incorporated herein by reference, constitutes the sole agreement of the parties hereto regarding the matters covered in this Agreement, and correctly states the rights, duties and obligations of each party as of the document's date. Any prior agreement, promises, negotiations or representations between the parties not expressly stated in this Agreement are not binding. All subsequent amendments shall be in writing and signed by the C/CAG Chair or C/CAG Executive Director. In the event of a conflict between the terms, conditions or specifications set forth herein and those in the exhibits attached hereto, the terms, conditions or specifications set forth herein shall prevail.
- 20. **Governing Law**. This Agreement shall be governed by the laws of the State of California, without regard to its choice of law rules, and any suit or action initiated by either party shall be brought in the County of San Mateo, California.
- 21. **Notices**. All notices hereby required under this agreement shall be in writing and delivered in person or sent by certified mail, postage prepaid and addressed as follows:

City/County Association of Governments of San Mateo County 555 County Center, 5th Floor Redwood City, CA 94063

Attention: Reid Bogert, Stormwater Program Director

Notices required to be given to Consultant shall be addressed as follows:

EOA, Inc. 1411 Jackson Street Oakland, CA 94612 Attention: Paul Randall, Project Manager

IN WITNESS WHEREOF, the parties hereto have affixed their hands on the day and year first above written.

EOA, Inc. (Consultant)		
Ву		
	Date	
City/County Association of Governments of Sa	an Mateo County (C/CAG)	
Ву		
Sean Charpentier	Date	
C/CAG Executive Director		
Ву	<u> </u>	
Melissa Andrikopoulos	Date	
C/CAG Legal Counsel		

Exhibit A

Scope of Work, Schedule and Budget

A-1. WORK PLAN

This section provides the EOA Project Team's detailed Work Plan to implement the Scope of Work described in the RFP. Based on the information presented in the RFP, it is understood that Project Partners will provide defined levels of in-kind services for all tasks described below. The in-kind contributions collectively committed by Project Partners are listed in Table A3-1 (Section A-3 – Cost Proposal).

TASK 1 – STORMWATER TRASH CONTROLS

The primary objective of this task is to inform the effective implementation of stormwater trash controls and the application of On-land Visual Trash Assessment (OVTA) methods to demonstrate improvements in the trash levels in stormwater discharges. There are three (3) subtasks included under Task 1. The approaches that the EOA Project Team will implement to successfully complete these subtasks are described below. Completion of these subtasks will assist Project Partners in reducing the generation of trash (1a), reducing littering behaviors (1b), and measuring trash reductions in trash-contributing watersheds (1c).

Task 1a – Single-use Plastics Source Control Ordinance Effectiveness Evaluation

The objective of Task 1a is to evaluate the effectiveness of local ordinances implemented by Project Partners to reduce the levels of single-use plastic items on streets and sidewalks that are available for transport to receiving waters by stormwater runoff. Task 1a is a continuation of a SMCWPPP study (Phase I – Trash Characterization pre-Ordinance) started in 2021 prior to the effective date of expanded source control ordinances. Phase I of the study was designed to document the baseline (pre-Ordinance) levels of trash on streets and sidewalks. Task 1a of the WOW Project represents Phase II of the study, where trash levels at the same sites monitored during Phase I will be reassessed after local Ordinances have gone into place and are being actively implemented in San Mateo County. The study is intended to not only be representative of actions implemented by SMCWPPP member agencies, but also of similar actions taken by other Bay Area municipalities. Therefore, the results of the study will inform implementation actions that have occurred or are planned to occur in other areas of California. EOA staff will lead the completion of Task 1a.

The EOA Project Team will develop a Sampling and Analysis Plan (SAP) and a Quality Assurance Project Plan (QAPP) as a first step under Task 1a. The SAP will describe the monitoring design and methodology that will be used in the study. Methods included in the SAP will include both qualitative and quantitative approaches to documenting trash levels and types. Trash monitoring will be conducted during two sample events: May/June 2024 (dry season) and Feb/March 2025 (wet season). The study will sample the same or similar monitoring sites included in the Phase I Study, which included more than 50 sites representing a range of land use types and jurisdictions. Trash collected during both sampling events will be stored for characterization using existing Standard Operating Protocols (SOPs) developed for the Phase I Study. The QAPP will outline methods to ensure that sampling and characterization events yield high quality, comparable data.

All data will be compiled into a Microsoft Excel or a Microsoft Access database. Statistical analyses will be performed to evaluate if local ordinances have reduced the levels of trash on streets and sidewalks within the project areas. Sampling results and conclusions will be presented in a technical report. The EOA Project Team will distribute the draft report to PMT for review and comment. The final technical will be completed by EOA during Quarter 2 of 2025.

No.	Deliverable	Completion Date	Lead Project
			Team Member
1a-1	Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP)	March 2024	EOA
1a-2	Technical Report	December 2025	EOA

Task 1b - Regional Litter Reduction Campaign

As a subcontractor to EOA, SGA will lead the effort to conduct a three-month regional litter reduction Public Education and Outreach Campaign in the Bay Area utilizing either existing resources developed by Caltrans as part of the Caltrans Clean California Initiative (CCI) campaign or developing new materials that align with the goals of the WOW Project. To implement a coordinated, regional outreach campaign, SGA will obtain and review existing litter reduction public education and outreach resources created through the CCI campaign or Project Partners. SGA will work with the PMT to modify the messages to create compelling messages that communicate the linkages between on-land littering, illegal dumping, and the detrimental impacts on local water bodies. SGA will develop a Regional Outreach Work Plan, in coordination with the PMT, that identifies various channels and tactics and establishes clear campaign goals and key performance indicators to measure effectiveness. Below are some key steps that will be used in developing and implementing the campaign:

- 1. **Audience Segmentation**: The target audience will be segmented based on demographics, behavior, and interests. This will help tailor messages and outreach methods for maximum impact. For example, young adults might respond better to social media campaigns, while older generations might engage more with print collateral.
- 2. **Content Creation:** The outreach materials will emphasize the importance of litter reduction and its impact on the local environment. As resources are available, we will use visuals, storytelling, and data to make the message compelling and create tailored content for each channel.
- 3. **Multi-Channel Approach**: A multi-channel approach will be used to reach a wider audience, which allocates resources to bus/transit panels/shelters, print collateral, paid digital ad space (e.g., Google/Facebook Ads), social media, and engaging website content. A consistent message and branding across all channels will be ensured.
- 4. **Partnerships and Collaboration**: Collaborations with local organizations, environmental groups, relevant government agencies, and more importantly, with disadvantaged and underserved communities will be sought. Their support can enhance the credibility and reach of the campaign, and their networks and resources can help promote the trash characterization events.
- 5. **Media Relations**: A media relations strategy that includes press releases and engagement with local media outlets to leverage their reach to amplify campaign messages and share success stories will be implemented. SGA can help prepare statements, if needed.
- 6. **Data Collection and Survey**: Data on campaign reach and engagement, such as monitoring social media metrics, website traffic, ad performance, and attendance at the trash characterization events, will be collected. An online pre- and post- campaign survey will be implemented to evaluate changes in awareness and behavior.

Once the three-month campaign is completed, a comprehensive summary report of the regional outreach campaign and its outcomes will be prepared. The report will include the results of the online survey and an evaluation of each advertising channel (e.g., reach, impressions, ad clicks). This report will serve as a valuable resource for assessing the impact of the campaign and refining strategies for ongoing litter reduction efforts in the Bay Area.

No.	Deliverable	Completion	Lead Project Team
		Date	Member
1b-1	Regional Outreach Work Plan for Litter Reduction Campaign	Nov 2024	SGA
1b-2	End-of-campaign summary report including effectiveness assessment	Sep 2025	SGA

Task 1c - Streamlining On-land Trash Assessment Methods

In 2025, Project Partners will be required to comply with the MRP 100% trash reduction benchmark. Project Partners previously established baseline (2009) trash generation levels for land areas within their jurisdictional areas that drain to MS4s and have used established On-land Visual Trash Assessment (OVTA) protocols tested through a State of California grant-funded project¹ to demonstrate trash reductions achieved to date within areas that are not addressed by Full Trash Capture (FTC) systems. To support the cost-effective and sustainable implementation of these OVTA methods, the EOA Project Team will conduct an analysis of existing OVTA data to inform on-going data collection efforts designed to effectively demonstrate that the levels of trash in local watersheds have been controlled and that the stormwater trash reduction benchmark of 100% trash reduction has been (and will be continue to be) achieved.

EOA will lead this task, obtaining OVTA data from Project Partners and compiling these data into a single Microsoft Excel or Access database for analysis. EOA will develop a draft Work plan for PMT review and finalize the work plan based on PMT input. The Work Plan will include a description of the task objectives and management questions that will be addressed, and the methods that will be employed to address these objectives/questions. Once the Work Plan is finalized, EOA will perform a statistical analysis of the compiled OVTA data to inform the extent of data needed by Project Partners to effectively demonstrate the 100% trash load reduction benchmark has been achieved, with an acceptable level of statistical confidence. Based on the results of the analysis, EOA will develop a technical report that will detail the methods, results, and conclusions.

No.	Deliverable	Completion Date	Lead Project
			Team Member
1c-1	Data analysis Work Plan	February 2024	EOA
1c-2	Technical Report	August 2024	EOA

 $^{{}^{1}\,}https://basmaa.org/wp-content/uploads/2021/07/Evaluation-of-the-On-land-Visual-Assessment-Protocol-as-a-Method-to-Establish-Baseline-Levels-of-Trash-and-Detect-Improvements-in-Stormwater-Quality-with-Appendices.pdf$

TASK 2 –TRASH MONITORING METHODS

The primary goals for the three (3) subtasks under Task 2 (Trash Monitoring Methods) are to develop trash stormwater outfall and receiving water monitoring methods and establish a trash monitoring network. Through the implementation of this Task, the EOA Project Team will coordinate the MRP Trash Monitoring Technical Advisory Group (TAG), previously established by BAMSC, to provide input on the development/refinement of receiving water and stormwater outfall trash monitoring plans to ensure that they are regionally consistent and accepted by the regulatory and scientific community (Task 2a). Trash monitoring data collection will be conducted by the EOA Project Team via Tasks 2b and 2c using standardized methods described in the monitoring plans. As part of the trash data characterization efforts described in Task 2c, the EOA Project Team will characterize all data collected as part of the WOW Project (Task 2c-1) and conduct outreach to increase public awareness of trash litter and reduction efforts being implemented by Project Partners (Task 2c-2). Additional details on each subtask are provided below.

Task 2a - Technical Advisory Group

Prior to the WOW Project, Project Partners convened a Trash Monitoring Technical Advisory Group (TAG) and held two meetings, consistent with MRP requirements. The TAG includes Project Partner representatives, Regional Water Board staff, and impartial science advisors. To date, the TAG has provided guidance and scientific peer-review on the monitoring design and approach for stormwater outfall monitoring. The Project Partners incorporated the TAG comments into the Regional Trash Outfall Monitoring Plan (Outfall MP) and QAPP that were submitted to the Regional Water Board Executive Officer for approval on July 1, 2023. Conditional approval of the Outfall MP and QAPP was granted on September 1, 2023 and the Project Partners are currently working together to address the comments.

During the entire term of the WOW Project, the Trash Monitoring TAG will continue to provide technical guidance on the methods and approach used to conduct trash monitoring at stormwater outfalls and in receiving waters. Under this task, EOA will lead the coordination of all TAG communications and meetings. EOA will schedule and coordinate six remaining TAG meetings, seek feedback and comments from the TAG members on trash planning and monitoring efforts, and provide applicable compensation to TAG members through the WOW Project funding. As described in the RFP, it is anticipated that Project Partner representatives will participate in TAG meetings as an in-kind contribution to the WOW Project. It is anticipated that three TAG meetings will be conducted in 2024, with a primary goal of informing development of receiving water monitoring methods and site selection. One TAG meeting will be conducted in each of the subsequent calendar years of the WOW Project (i.e., 2025, 2026, 2027). These TAG meetings will inform monitoring method refinements, data interpretation, and reporting. As subcontractors to EOA, Bal Hydro will participate in TAG meetings, as needed, to receive input on receiving water monitoring methods and approaches that will be used to complete Task 2.b.

No.	Deliverable	Completion Date	Lead Project
			Team Member
2a-1	Meeting agendas and summaries for the six (6) remaining coordinated TAG meetings	Three (3) meetings 2024; One (1) meeting per year in	EOA
		three (3) subsequent years	

Task 2b – Outfall Trash Monitoring Data Management and Reporting

As described in the RFP, Project Partners will conduct stormwater outfall monitoring beginning in Water Year 2024 (WY 2024; October 1, 2023 through September 30, 2024) and continue through the term of the MRP (i.e., WY 2027) in compliance with the Outfall MP and QAPP. In-kind resources expended by Project Partners to conduct outfall monitoring will be used (in part) as the matching funds to the WOW Project.

To support the implementation of the Outfall MP, the EOA Project Team will conduct the following subtasks:

- Standardized Data Management. The WOW Project will ensure standardized storage and management of the outfall trash monitoring data collected by Project Partners in compliance with Provision C.8.e. The EOA Team will develop a regionally consistent data management template in Microsoft Excel for the Project Partners use when entering and storing the trash outfall monitoring data collected during the WOW Project. The first version of the template will focus on outfall monitoring data. Receiving water monitoring data will also be stored in the template and therefore the second version will be updated to include data fields associated with receiving water monitoring.
- Trash Outfall Monitoring Reporting. Consistent with MRP Provision C.8.e, the five (5) Project Partners will summarize outfall monitoring data results in separate Outfall Monitoring Progress Reports relevant to their counties. Resources expended to develop the reports will be used (in part) as match funds for the WOA Project. In addition, the EOA Team will annually compile (beginning in 2023) the five (5) Outfall Monitoring Progress Reports into one reporting package and develop an executive summary for submittal to the Regional Water Board by March 31 of each year. One draft and one final executive summary will be developed each year.

Task 2b will be led and completed by EOA.

No.	Deliverable	Completion Date	Responsible Party
2b-1	Data Management Template	April 2024	EOA
2b-2	Annually compiled Trash Outfall	March of 2024; 2025;	EOA
	Monitoring Reports	2026; 2027; and 2028	

Task 2c - Receiving Water Monitoring

Trash monitoring in receiving waters is the largest task included in the WOW Project. As such, the EOA Project Team includes a number of very experienced subcontractors that will assist C/CAG and other Project Partners in completing the subtasks described in the RFP and in compliance with MRP Provision C.8.e. This task will be led by Balance Hydrologics (Bal Hydro), with support from EOA and other monitoring subcontractors. Details of the approaches that the EOA Project Team will use to complete this task are described below, including the development and implementation of an updated Trash Monitoring Plan to quantify the volumes of trash transported during storm events at six receiving water sites.

<u>Task 2c-1. Literature Review on Methods for Receiving Water Monitoring</u>

The EOA Project Team will conduct a literature review of existing methods on trash monitoring in receiving waters, with major emphasis given to the 2016 Tracking California Trash Report, which describes trash monitoring in receiving waters in SF Bay conducted by 5 Gyres and the San Francisco Estuary Institute

(SFEI). Methods implemented in the 2022 Santa Ana River macroplastic flux study (Cowger et al. 2022²) and other recent studies will also be evaluated. For the WOW Project, 5 Gyres, a southern California non-profit organization focused on monitoring plastics in receiving waters, will provide technical guidance on the selection of sampling methods, process, and equipment for trash monitoring in receiving waters. Based on the literature review and technical guidance from 5 Gyres, the EOA Project Team will develop a technical memorandum that summarizes approaches previously used to monitor trash during storm events, identifies successes and challenges experienced during previous studies, and identifies recommended monitoring method(s) and approaches that should be used to complete Task 2c-2. The EOA Project Team will present these findings at a Trash Monitoring TAG meeting (likely in early 2024) to receive input from TAG members.

Task 2c-2. Receiving Water Monitoring Site Selection

The EOA Project Team will work closely with the Project Partners to develop criteria for the selection of receiving water monitoring sites where methods identified in Task 2c-1 will be deployed. Several members of the EOA Project Team developed a similar approach to select outfall monitoring sites for the Project Partners and will apply lessons learned from that process to identify sites for receiving water trash monitoring.

Site selection criteria will be highly influenced by the methods that are determined in the previous task. For example, if the preferred method requires sampling from bridges, then creek sites at bridge locations will be the initial criteria. The EOA Project Team will attempt to satisfy guidance on site selection provided in the MRP. The MRP states "to the extent feasible, in-stream monitoring sites should be co-located with MS4 outfall monitoring sites". The permit also states that monitoring sites should be located at "sample sections of receiving waters that receive runoff primarily from MS4 outfalls that drain tributary drainage areas controlled to the Low trash generation". The EOA Project Team will attempt to select sites that meet these conditions, to the extent practicable, with the understanding that other criteria (described below) may preclude applying these criteria included in the MRP.

The EOA Project Team will conduct GIS desktop analysis to characterize the upstream drainage area for potential sites (e.g., land use, trash generation, existing trash controls). Sites that are downstream of direct discharge sites (e.g., homeless encampments and illegal dumping sites) will be excluded from consideration. Additional site-specific factors will also be considered, such as channel size and type, ownership, and proximity to existing stream flow gages. Environmental permitting constraints associated with the presence of sensitive/protected species will likely be a critical factor that will influence site selection. For example, some sites may be eliminated if it appears that permitting constraints will delay the project. Sites that meet criteria based on desktop analysis will then be evaluated in the field for access and safety issues (e.g., use of sampling equipment on bridges with heavy traffic). The list of sites that meet both desktop and field criteria will then be presented to the Project Partners and Trash Monitoring TAG members. The EOA Project Team will attempt to select sites that are representative of the range of urban creeks/channels found in the SF Bay Area.

Task 2c-3. Evaluate Permit Requirements and Obtain Permits

Once Project Partners, the PMT, and Trash TAG members have agreed upon the six (6) site locations (along with a list of priority back-up locations), the EOA Project Team will work with property owners and easement holders to identify and obtain the necessary permits and right-to-enter agreements needed to

² Cowger, W., Gray, A., Brownlee, S., Hapich, H., Deshpande, A., and Waldschlager, K. 2022. Estimating floating macroplastic flux in the Santa Ana River, California. Journal of Hydrology: Regional Studies 44 (2022) 101264.

access the sites for the installation of monitoring equipment and conducting sampling events. Site descriptions will be developed for each site to assist in permit applications. As a subcontractor to EOA, WRA will lead an evaluation of potential environmental permit requirements from State and Federal Agencies (Army Corps, CDFW, Water Board) at the proposed monitoring sites. WRA will evaluate the presence of special status species and provide technical guidance on necessary steps to obtain environmental permits and/or exemptions with the appropriate agency in a timely manner. Permit fees required by State and Federal agencies will be paid by the EOA Project Team and reimbursed via grant funds.

Task 2c-4. Update Trash Monitoring Plan and QAPP

The EOA Project Team will update the Outfall MP and QAPP to incorporate the methods and data quality objectives applicable to receiving water trash monitoring. The updated MP will identify and summarize receiving water monitoring sites, monitoring methods and the sample design. The QAPP will follow SWAMP comparable QA/QC protocols, data management methods, and reporting procedures, as applicable. As a subcontractor to EOA, AMS, the author of the existing QAPP, will be responsible for QAPP updates. A draft updated MP and QAPP (Version 2.0) will be submitted to the Project Partners and PMT for review and comment prior to submittal to the Trash Monitoring TAG for review and comment. Following updates to the MRP in response to TAG comments, the Final Trash Monitoring Plan and QAPP (version 2.0) will be submitted to the Regional Water Board (no later than July 31, 2023) for Executive Officer (EO) approval. The EOA Project Team will address all comments received by the Regional Water Board and develop a Final MP and QAPP if needed to address these comments.

Task 2c-5. Conduct Receiving Water Trash Monitoring Field Sampling

Immediately following the endorsement of the methods and sites for receiving water monitoring by the Trash Monitoring TAG and Regional Water Board, which is anticipated in advance of formal EO approval of the Final Trash Monitoring Plan and QAPP, the EOA Project Team will work with equipment vendors and/or fabricators to procure the necessary monitoring equipment. 5 Gyres will work directly with fabricators to ensure trash monitoring equipment is obtained in a timely manner so it will be available to deploy by October 2024. Bal Hydro will procure all sampling equipment related to stream flow monitoring at sites that do not have existing stream gages.

After approval of the sampling locations and procurement of necessary permits and permissions, Bal Hydro will commence setting up the sites for sampling, which may include establishing anchors and fixed lines to facilitate gaging, installation of staff plates and water level and flow measurement equipment, if necessary. Prior to the wet season, Bal Hydro will lead a training session with all team members which will cover safety, go over standard operating procedures to maintain consistency in sampling methods between teams to consistently meet the standards laid out in the MRP, the Updated MP, and the QAPP. Bal Hydro has developed a highly-qualified roster of field experts with long successful records for safe stream-based field work and high standards for data quality, including staff from Bal Hydro, Total Flow Inc., and Blaine Tech to meet sampling demands of this project with at least three (3) staff per team and six (6) teams per storm to cover the six (6) sample locations for three sample events per year.

Following the procurement of sampling equipment and permits, receiving water trash monitoring field work and data collection at all six (6) sites will be conducted. As required by the MRP, receiving water monitoring will be conducted during the wet season over the term of the MRP, beginning October 1, 2024 and continuing through the end of Water Year 2027 (May 2027). The receiving water storm monitoring experts included on the EOA Project Team understand the challenges of reading weather forecasts and predicting rainfall patterns, especially within the microclimates of the Bay Area. We have allocated

adequate budget to coordinate the sampling team, and will leverage our experience to direct teams to the appropriate locations for sampling. We understand the MRP guidance is to sample the first forecasted significant storm and at least one (1) event greater than the one-year, one-hour storm event, and will endeavor to meet those requirements on an annual basis.

Stream flow rates will either be extrapolated from nearby stream gages or derived from gages installed by the EOA Project Team expressly for this project, where necessary. Streamflow equipment will be installed near trash sampling locations and will include self-contained pressure transducers. Water level-flow rating curves will be developed and employed to convert water level to an estimate of flow for each of the stations, where necessary. For the sampled streams, these data will help interpret which flow rates contribute the most trash to the San Francisco Bay.

All samples will be handled according to procedures described in the Trash MP and QAPP. The EOA Project Team will transport all trash samples to a single location where they will be stored and processed. Trash processing will follow procedures described in the MP and QAPP. All trash items will be separated from organic matter and placed in bags and stored for later characterization. Organic matter will be disposed of appropriately. The EOA Project Team will maintain a high standard for QA/QC and data management by following the QAPP and by using data templates developed under Task 2b.

The EOA Project Team will compile all receiving water monitoring data collected during the WOW Project into a Microsoft Excel spreadsheet. Monitoring data will include trash characterization data, described in Task 2d. Monitoring data will be evaluated using procedures described in the MP and QAPP. The data results will be summarized each year in Trash Monitoring Progress Reports. As required by the MRP, the Progress reports will include a description of receiving water sampling events and locations (including maps), descriptions of storm events that were sampled, summary of data results, including statistical analyses; data quality assurance procedures that were implemented for samples collected; lessons learned and recommended changes to monitoring plan for the subsequent year. Draft Progress reports will be submitted to Project Partners and PMT for review. Progress reports will be finalized by March 31 each year beginning in 2025 for submission to the Regional Water Board with each of the Project Partners Urban Creeks Monitoring Report.

No.	Deliverable	Completion	Responsible Team
		Date	Member
2c-1	Trash Receiving Water Methods Literature Review	March 2024	Balance, 5 Gyres
	Technical Memorandum		
2c-2	Revised Trash Monitoring Plan and QAPP (Version	July 2024	EOA, Geosyntec,
	2.0)		AMS, Balance
2c-3	Annual Trash Receiving Water Monitoring Progress	March of 2025;	EOA, Balance
	Reports	2026; and	
		2027; and 2028	

Task 2d - Trash Characterization and Public Engagement Events

There are two subtasks associated with Task 2.d - 1) Trash Characterization and 2) Community Engagement Events. Both are described below.

Task 2-d-1. Trash Characterization

The EOA Project Team will conduct trash characterization for all samples collected at the eleven (11) outfall monitoring sites and the six (6) receiving water monitoring sites during each year of the WOW Project, beginning with characterization of outfall samples collected in WY 2024. EOA will lead this task, with support from Geosyntec as a subcontractor to EOA, and conduct trash characterization of all samples following procedures described in the Trash Outfall Monitoring Plan and QAPP. Trash data will consist of measured volume of trash items sorted into 13 possible categories of trash (e.g., single-use carryout plastic bags). Replicate characterizations of one (1) sample from each of the five (5) counties participating in trash outfall and receiving water monitoring will be performed each year for a minimum total of 20 replicates by the end of the WOW Project. The trash characterization data will be incorporated into the data management template (see Task 2b) and reported in Annual Progress Reports, as described in Task 2c. Task 2d includes budget to store and transport trash samples, as needed.

Task 2-d-2. Community Engagement/Outreach Events

To engage stakeholders and increase public awareness of trash issues in receiving waters and to communicate the linkages between on-land littering and illegal dumping and trash impacts on local waterways, the EOA Project Team, led by SGA (as subcontractors to EOA), will conduct trash characterization demonstration events in public locations (e.g., public parks). Four community-based trash characterization events will be conducted, likely during the last two years of the WOW Project. The following strategies will be used for each public engagement event:

- Community-Centered Events: The trash characterization demonstration events will be conducted
 in accessible public locations such as parks, where community members can see the impacts of
 littering. The events will provide opportunities for hands-on involvement, like sorting and
 categorizing a small sample of trash, to create a tangible connection between litter on land and its
 impact on local waterways. This direct engagement fosters a sense of ownership and responsibility
 among participants.
- Involve Disadvantaged Communities: The EOA Team recognizes the importance of involving
 Disadvantaged Communities in these efforts. As we reach out to community members, we will
 ensure our outreach addresses specific accessibility needs and interests. We will work diligently to
 find locations that are easily reachable for these communities and provide educational resources
 in multiple languages. This inclusive approach not only spreads awareness but also fosters a sense
 of inclusivity.
- Involve Local Non-profits The EOA Team will involve local non-profit organizations, such as Save the Bay, Surfrider Foundation San Mateo County, Watershed Project, Grassroots Ecology, and Santa Clara Clean Creeks Coalition in promoting the events. Their networks will be very important in promoting these events to the general public. A number of these non-profit organizations provided support letters for the WOW Project to USEPA during the grant application stage.
- Media Engagement and Press Coverage: We will reach out to journalists and invite them to attend the events.³ We will also provide them with compelling story angles that highlight the connection

³ Any press events will be approved by C/CAG and USEPA staff, prior to initiating.

between on-land littering, illegal dumping, and their adverse effects on local waterways. More importantly, we will offer access to experts or community representatives who can provide firsthand accounts and insights. This media engagement serves as a powerful amplifier, extending the reach of the campaign beyond the immediate participants.

No.	Deliverable	Completion Date	Responsible Team Member
2d-1	If needed, updated methods for Trash Characterization will be incorporated into the Trash Monitoring Plan and QAPP (Version 2.0)	July 2024	EOA, AMS
2d-2	Trash characterization data from all outfall and receiving water samples (132 outfall, 54 receiving water)	June 2027	EOA
2d-3	Four community-based trash characterization events (two per year in 2026 and 2027)	August 2026 and August 2027	SGA, EOA

TASK 3 - INFORMATION DISSIMINATION

The objective of Task 3 (Information Dissemination) is to synthesize and disseminate the information and knowledge gained during the project to the Project Partners, stakeholders, and the general public. This objective will be achieved through the implementation of three tasks led by the EOA Project Team as described in the following sections.

Task 3a - Trash Monitoring Methods Guidance Document

The EOA Project Team will incorporate both outfall and receiving water trash monitoring methods developed for the WOW Project into a Trash Monitoring Methods (TMM) Guidance Document. The TMM Guidance Document will supplement the *Trash Monitoring Methods Playbook*, developed by the Ocean Protection Council (OPC) in December 2020, and other monitoring guidance documents developed by environmental organizations and agencies. The objective of this subtask is to create a foundation for developing a consistent, standardized approach to stormwater and receiving water trash monitoring and a process for updating those methods to address both the challenges and insights gained from over a decade of implementing and evaluating trash control measures in the Bay Area. The TMM Guidance Document will include all field sampling and QA/QC considerations, data management and standardization needs, and training considerations. The TMM Guidance Document will be developed collaboratively with the Project Partners, Regional Water Board and the Trash Monitoring TAG. EOA will lead this task with support from both Bal Hydro and Geosyntec.

No.	Deliverable	Completion Date	Responsible Team Member
3a-1	Trash Monitoring Methods (TMM) Guidance Document	October 2027	EOA, Balance, Geosyntec

Task 3.b - Trash Prevention and Monitoring Information Portal

The WOW Project will produce several documents, data sets, and reports. To make this information widely available, the EOA Project Team will create a new Stormwater Trash Management and Monitoring portal on the public BAMSC website. The information presented will be visually appealing and easy to understand. Other stormwater trash management and monitoring reports, factsheets, guidance documents, and protocols will also be made available on the portal, as applicable. Content will be reviewed by the PMT and Project Partners as part of their match contribution to the project via in-kind services.

	No.	Deliverable	Completion Date	Responsible Team Member
•	3b-1	Stormwater Trash Management and Monitoring Web Portal	May 2028	EOA

Task 3.c - Bay Area Trash Symposium

The EOA Project Team will organize a Bay Area Trash Symposium to share the lessons learned from the stormwater trash control measure and monitoring implementation with a broad audience, including the Project Partners, water quality regulatory agencies, technical advisors, and other interested parties and public agencies throughout the Bay Area and California. The symposium will be a virtual event and include at least four presentations on conclusions and lessons learned from the WOW Project. The presentations

will be recorded and made available on the web portal developed in task 3.b. EOA will lead this task with support from Bal Hydro and SGA, as subcontractors to EOA.

No.	Deliverable	Completion	Responsible
		Date	Team Member
3c-1	Symposium agenda and materials, high-profile keynote speaker presentation, recording of symposium	October 2027	EOA
3c-2	At least four presentations on project conclusions and	November 2027	EOA, Balance,
	lessons learned		SGA

TASK 4 – PROJECT ADMINISTRATION AND MANAGEMENT

The EOA Project Team will provide project coordination and management services throughout the WOW Project to ensure that all grant tasks and deliverables are completed within budget and the grant schedule. Descriptions of the tasks that the EOA Project Team will complete are described below. EOA will lead this task.

Task 4.a. Project Management

The EOA Project Manager will provide oversight over all WOW Project tasks described in this Work Plan and serve as the central point-of-contact for the C/CAG Grant Manager and all EOA subcontractors. The Project Manager will schedule and facilitate PMT meetings, including preparation of agendas and meeting minutes, and presenting updates. Additionally, the Project Manager will identify issues that arise during the project, evaluate potential solutions, formulate recommendations, and discuss options with the C/CAG Grant Manager as needed. The Project Manager will also communicate with the USEPA Project Manager and attend coordination meetings as directed by the C/CAG Grant Manager.

No.	Deliverable	Completion	Responsible Team
		Date	Member
4a-1	Project Management – PMT meeting preparation and	July 2028	EOA
	facilitation (i.e., agendas, meeting minutes,		
	presentations, and facilitation)		

Task 4.b. Invoicing and Progress Reporting

In addition to leading project implementation and coordinating with the PMT, the EOA Project Team will also conduct the following activities:

- <u>Track In-kind Match Funds</u> Create a template to track match funds and distribute it to the Project Partners. The spreadsheet will be collected quarterly from Project Partners.
- <u>Track Grant Expenditures</u> Track all EOA and sub-contractor grant expenditures.
- <u>Develop Quarterly progress and financial reports</u> Develop and submit quarterly progress reports and invoices in USEPA's preferred format.
- <u>Prepare final grant documentation</u> Prepare and submit final grant report.

All invoicing and progress reporting for the WOW Project will be completed by EOA.

No.	Deliverable	Completion Date	Responsible Team Member
4b-1	In-kind match cost tracking template for Project Partners	January 2025	EOA
4b-2	Quarterly project progress reports (4 reports per grant year) and subsequent invoices	January, April, July, and October of each year	EOA
4b-3	Annual Federal Financial Report	September of each year	EOA
4b-4	Final Grant Report	July 2028	EOA

A-2. SCHEDULE OF WORK

The detailed implementation schedule for the WOW Project is shown in Table A2-1 below. The schedule includes significant milestones, such as meetings, plans, reports, monitoring timeframes, and events.

Table A2-1. Schedule of Work

Task#	Cuant Duaguage Franchism on Activity	2023		20	24			20	25			20	26			20	27		20	28
Task#	Grant Program Function or Activity	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
1	Stormwater Trash Controls																			
1a	Single-use Plastics Source Control Ordinance Effectiveness Evaluation		R							R										
1b	Regional Expansion of Clean California Initiative Public Outreach Campaign			R					R											
1c	Streamlining On-land Trash Assessment Methods		R		R															
2	Trash Monitoring Methods																			
2a	Technical Advisory Group		М		M		М				M				М				М	
2b	Stormwater Outfall Monitoring	F	F, R			F	F, R			F	F, R			F	F, R				R	
2c	Receiving Water Monitoring				R	F	F, R			F	F, R			F	F, R				R	
2d	Trash Characterization & Public Engagement Events						R				R		Е		R		Е		R	
3	Information Dissemination																			
3a	Trash Monitoring Methods Handbook																	R		
3b	Trash Prevention and Monitoring Information Portal								Е				R				R			
3c	Bay Area Trash Symposium																	Е		
4	Project Administration/ Management																			
4a	Project Management	M	М	М	М	М	М	М	М	М	М	М	М	М	М	М	М	М	М	М
4b	Invoicing & Progress Reporting		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

Notes: Task Implementation

M = meeting

F = field monitoring

E = event / portal launch

R = plan / report / portal update

A-3. COST PROPOSAL

This section provides the EOA Project Team's Cost Proposal for implementing the Work Plan described in Section 1. Consistent with the RFP, cost estimates are provided in three types of cost breakdown tables - Table A3-1 provides the cost breakdown by task and subtask for grant funds and match funds, Table A3-2 provides the cost breakdown by task and team member, and Table A3-3 provides the cost estimate for the EOA Project Team by task and fiscal year. The Project Manager will be responsible for tracking all budgets and making sure that grant funds are expended as planned. The Project Manager will inform C/CAG staff if any adjustments to the budget are required. Invoices will be submitted quarterly, as required by the RFP.

Table A3-1. EOA Project Team Cost Breakdown by Task, Sub-task, Grant Funds and Match Funds

Subtask				Grant-Fu	nded Costs	Match-	Total	
#	Subtask Name Work Products/Deliverables		Timeframe	C/CAG	EOA Project Team	Funded Costs	Project Costs	
Task 1 St	ormwater Trash Controls							
1a	Single-use Plastics Source Control Ordinance Effectiveness Evaluation	 Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP). Technical Report documenting observed reductions in trash generation. 	Nov 2023 – Dec 2025	\$0	\$81,000	\$1,500	\$82,500	
1b	Regional Expansion of Clean California Initiative Public Outreach Campaign	 Regional Outreach plan for Clean California Initiative. End-of-campaign summary report including effectiveness assessment. 	Jul 2024 - Mar 2025	\$0	\$205,000	\$11,000	\$216,000	
1c	Streamline On-land Trash Assessment Methods	 Technical report that effectively demonstrates that trash levels on land have achieved stormwater trash reduction goals. Regionally consistent OVTA data management system populated with all Bay Area OVTA data. 		\$0	\$66,000	\$5,000	\$71,000	
			Subtotal	\$0	\$352,000	\$17,500	\$369,500	
Task 2 Tr	ash Monitoring Methods				1			
2a	Technical Advisory Group	Meeting agendas and summaries for six (6) TAG meetings.	Duration of WOW Project	\$0	\$75,000	\$100,000	\$175,000	
2b	Stormwater Outfall Monitoring	Regionally consistent data management template. Annually compiled Trash Outfall Monitoring Reports.	Duration of WOW Project	\$0	\$78,000	\$3,000,000	\$3,078,000	
2c	Receiving Water Monitoring	 Trash Receiving Water Methods Technical Memorandum. Revised Trash Monitoring Plan and QAPP (Version 2.0). Annual Trash Receiving Water Monitoring Progress Reports. 	Duration of WOW Project	\$0	\$1,900,000	\$100,000	\$2,000,000	
2d	Trash Characterization & Public Engagement Events	 If needed, updates to trash characterization sections of Trash Monitoring Plan and QAPP. Trash characterization data from 132 outfall 54 receiving water monitoring samples. Four community-based trash characterization events. 	Duration of WOW Project	\$0	\$425,000	\$10,000	\$435,000	
			Subtotal	\$0	\$2,478,000	\$3,210,000	\$5,688,000	
Task 3 In	formation Dissemination							
3a	Trash Monitoring Methods Guidance	Trash Monitoring Methods (TMM) Guidance Document.	Jul 2026 - Dec 2027	\$0	\$87,000	\$7,500	\$94,500	
3b	Trash Prevention and Monitoring Portal	Updated BAMS Collaborative website, including new trash monitoring portal.	Jul 2024 - Jun 2028	\$0	\$36,000	\$3,500	\$39,500	
3c	Bay Area Trash Symposium	 Symposium agenda and materials, high-profile keynote speaker presentation, recording of symposium. At least four presentations on project conclusions and lessons learned. 	Oct 2026 - Jun 2028	\$0	\$50,000	\$11,500	\$61,500	
			Subtotal	\$0	\$173,000	\$22,500	\$195,500	
Task 4 Pi	oject Administration				1			
4a	Project Management (Including PMT)	 Project Management – PMT meeting preparation and facilitation (i.e., agendas, meeting minutes, presentations, and facilitation). 	Duration of WOW Project	\$45,000	\$40,000	\$64,000	\$0	
4b	Invoicing & Progress Reporting	 In-kind match tracking template Quarterly project progress reports (4 reports per grant year) and subsequent invoices. Annual Federal Financial Reports. Final Grant Report. 	Duration of WOW Project	\$150,000	\$128,000	\$52,000	\$0	
			Subtotal	\$195,000	\$168,000	\$116,000	\$0	
			TOTAL	\$195,000	\$3,171,000	\$3,366,000	\$6,253,000	

Table A3-2. EOA Project Team Cost Breakdown by Project Team Member

Subtask #	Subtask Name	EOA	Balance Hydrologics ^a	SGA	Geosyntec	AMS	5-Gyres	WRA	Total EOA Team Project Costs
Task 1 Stor	rmwater Trash Controls								
1a	Single-use Plastics Source Control Ordinance Effectiveness Evaluation	\$81,000	\$0	\$0	\$0	\$0	\$0	\$0	\$81,000
1b	Regional Expansion of Clean California Initiative (or Other) Public Outreach Campaign	\$9,762	\$0	\$195,238	\$0	\$0	\$0	\$0	\$205,000
1c	Streamline On-land Trash Assessment Methods	\$61,000	\$0	\$0	\$0	\$5,000	\$0	\$0	\$66,000
	Subtotal	\$151,762	\$0	\$195,238	\$0	\$5,000	\$0	\$0	\$352,000
Task 2 Tras	sh Monitoring Methods								
2a	Technical Advisory Group	\$65,000	\$10,000	\$0	\$0	\$0	\$0	\$0	\$75,000
2b	Stormwater Outfall Monitoring	\$78,000	\$0	\$0	\$0	\$0	\$0	\$0	\$78,000
2c	Receiving Water Monitoring	\$841,620	\$800,380	\$0	\$25,000	\$25,000	\$160,000	\$48,000	\$1,900,000
2d	Trash Characterization & Public Engagement Events	\$380,000	\$0	\$40,000	\$5,000	\$0	\$0	\$0	\$425,000
	Subtotal	\$1,364,620	\$810,380	\$40,000	\$30,000	\$25,000	\$160,000	\$48,000	\$2,478,000
Task 3 Info	rmation Dissemination								
3a	Trash Monitoring Methods Guidance	\$74,000	\$13,000	\$0	\$0	\$0	\$0	\$0	\$87,000
3b	Trash Prevention and Monitoring Portal	\$36,000	\$0	\$0	\$0	\$0	\$0	\$0	\$36,000
3c	Bay Area Trash Symposium	\$49,000	\$0	\$1,000	\$0	\$0	\$0	\$0	\$50,000
	Subtotal	\$159,000	\$13,000	\$1,000	\$0	\$0	\$0	\$0	\$173,000
Task 4 Proj	ject Administration						T		
4a	Project Management (Including PMT)	\$40,000	\$0	\$0	\$0	\$0	\$0	\$0	\$40,000
4b	Invoicing & Progress Reporting	\$128,000	\$0	\$0	\$0	\$0	\$0	\$0	\$128,000
	Subtotal	\$168,000	\$0	\$0	\$0	\$0	\$0	\$0	\$168,000
	TOTAL	\$1,843,382	\$823,380	\$236,238	\$30,000	\$30,000	\$160,000	\$48,000	\$3,171,000

^a Balance Hydrologic costs include those associated with field subcontractors - Total Flow and Blaine Tech Services.

Table A3-3 EOA Project Team Cost Estimates by Fiscal Year.

Subtask #	Subtask Name	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	Total EOA Project Team Costs
Task 1 Stormwater	Trash Controls						
1a	Single-use Plastics Source Control Ordinance Effectiveness Evaluation	\$22,800	\$35,700	\$22,500	\$0	\$0	\$81,000
1b	Regional Expansion of Clean California Initiative (Or Other) Public Outreach Campaign	\$5,200	\$195,450	\$4,350	\$0	\$0	\$205,000
1c	Streamline On-land Trash Assessment Methods	\$19,400	\$46,600	\$0	\$0	\$0	\$66,000
	Subtotal	\$47,400	\$277,750	\$26,350	\$0	\$0	\$352,000
Task 2 Trash Monit	oring Methods						
2a	Technical Advisory Group	\$17,646	\$14,411	\$14,411	\$14,411	\$14,123	\$75,000
2b	Stormwater Outfall Monitoring	\$21,200	\$14,200	\$14,200	\$14,200	\$14,200	\$78,000
2c	Receiving Water Monitoring	\$200,000	\$800,000	\$300,000	\$300,000	\$300,000	\$1,900,000
2d	Trash Characterization & Public Engagement Events	\$40,000	\$71,125	\$105,325	\$102,775	\$105,775	\$425,000
	Subtotal	\$278,846	\$899,736	\$433,936	\$431,386	\$434,098	\$2,478,000
Task 3 Information	Dissemination						
3a	Trash Monitoring Methods Guidance	\$0	\$0	\$0	\$77,000	\$10,000	\$87,000
3b	Trash Prevention and Monitoring Portal	\$0	\$0	\$0	\$18,000	\$18,000	\$36,000
3c	Bay Area Trash Symposium	\$0	\$0	\$0	\$13,800	\$36,200	\$50,000
	Subtotal	\$0	\$0	\$0	\$108,800	\$64,200	\$173,000
Task 4 Project Adm	inistration						
4a	Project Management (Including PMT)	\$6,316	\$8,421	\$8,421	\$8,421	\$8,421	\$40,000
4b	Invoicing & Progress Reporting	\$20,211	\$26,947	\$26,947	\$26,947	\$26,947	\$128,000
	Subtotal	\$26,526	\$35,368	\$35,368	\$35,368	\$35,368	\$168,000
	TOTAL	\$352,772	\$1,212,854	\$495,654	\$575,554	\$533,666	\$3,171,000

Exhibit B

Consultant Billing Rates

Hourly billing rates and staff for Consultant and subconsultant(s) are included on the following pages.

APPENDIX B. EOA PROJECT TEAM MEMBER FEE SCHEDULES

The hourly fee schedules for EOA, Inc. and subcontractors are provided in this Appendix. Consistent with the RFP, rates for the fee schedules included in this Appendix will not increase by more than 3% annually.

EOA 2023 FEE SCHEDULE



Special Rates for C/CAG WOW Project

Environmental and Public Health Engineering

The following fee schedule covers personnel rates for EOA, Inc. staff.

Our charges are divided into two categories: personnel, and direct expenses. A new fee schedule is issued at the beginning of each year. Charges for all work, except where other arrangements have been made, are based on the new schedule of charges.

PERSONNEL

Personnel charges are for any technical, clerical or administrative work necessary to perform the project. Work tasks include geologic and environmental consulting, engineering and computer services, regulatory liaison, and report preparation. Personnel rates are as follows:

Personnel Category Hou	rly Rates
Principal	\$299
Senior Managing Engineer/Scientist I	\$295
Managing Engineer/Scientist III	\$291
Managing Engineer/Scientist II	\$274
Managing Engineer/Scientist I	\$262
Senior Technical Specialist I	\$252
Senior Engineer/Scientist III – Project Leader	\$242
Senior Engineer/Scientist/Planner II	\$220
Senior Engineer/Scientist/Planner I	\$202
Associate Engineer/Scientist III	\$192
Associate Engineer/Scientist II	\$183
Associate Engineer/Scientist I	\$155
Assistant Engineer/Scientist	\$140
Technician, Administrative Manager	\$121
Clerical/Computer Data Entry	\$86

Charges for professional services are in increments of one quarter-hour. Depositions/legal testimony charged portal-to-portal, at 200% of standard rates, with a four-hour minimum charge. In accordance with California Civil Procedure 2037.7, where applicable, the minimum fee must be paid prior to commencement of testimony. Preparation for court cases is charged on a time-and-materials basis as outlined in this fee schedule.

DIRECT EXPENSES

Reimbursement for expenses directly related to services provided will be charged at cost plus 10%. Examples of such direct expenses include:

- Costs of sub-consultants or subcontractors
- Costs of special fees (insurance, permits, etc.)
- Costs of copying, drafting, blueprints, etc. (EOA copies charged at \$0.10 each for B&W, \$0.35 each for color. Large format \$0.15/sq ft for B&W, \$0.50/sq ft for color)
- Costs of color map production supplies (color ink and large format paper)
- Costs or rental of special equipment. Daily use fees of monitoring equipment charged at the following rates:
 - Single-parameter field meter \$10/day
 - Multi-parameter field meter and sonde \$100/day
- Costs of authorized travel and related expenses
- Automobile mileage directly related to services, at current IRS rate.

INVOICES

Invoices are prepared and submitted on a monthly basis, as either final or progress billings and are payable upon receipt unless prior arrangements have been made. Interest of 1-1/2% per month, or the maximum rate allowed by law, is payable on accounts not paid within 30 days.

*PROFESSIONAL FEE SCHEDULE, 2022-2023 BALANCE HYDROLOGICS, INC. (Effective September 18, 2022)

Scientific and Engineering Staff [†]	Hourly Rate
Senior Principal	\$252
Principal II	\$237
Principal I	\$227
Senior Professional	\$201
Project Professional	\$194
Senior Staff Professional	\$184
Staff Professional	\$158
Assistant Professional	\$145
Junior Professional	\$135
Support Staff	
GIS Senior Analyst	\$150
GIS/CADD Analyst	\$135
GIS/CADD Assistant Analyst	\$120
Senior Project Administrator	\$135
Senior Report Specialist	\$105
Report Specialist	\$95
Hydrologic Technician	\$95

- Mileage will be charged at \$0.72 mile (2WD) and \$0.75/mile (4WD, if 4WD needed).
- Rental vehicles will be charged at cost + 10%.
- Nominal use charges are applied for certain field and analytical instruments; fees vary with the nature, duration, and frequency of use. Rate schedule available on request.
- Per diem rates will be charged according to those rates set by the General Services Administration (www.gsa.gov) based on location, or nearest location to project site.
- Project-related expenses will be billed at cost plus 10%, including work by outside consultants and analytical or testing laboratories.
- Certain surcharges and minimums apply to courtroom or hearing testimony; particulars available upon request.

^{*} Reimbursable charges for mileage are subject to change based upon prevailing IRS rates.

[†] Includes environmental scientists and engineers practicing in hydrology, geology, soil and watershed sciences, and civil and erosion-control engineering.

	S.	Groner Ass	ociates			
FULLY BURDENED HOURLY RATES*						
JOB FUNCTION	2024	2025	2026	2027	2028	5YR Avg Rate
Project Director	\$223	\$234	\$246	\$258	\$271	\$246
Creative Director	\$202	\$212	\$222	\$234	\$245	\$223
Sr. Project Manager	\$202	\$212	\$222	\$234	\$245	\$223
Project Manager	\$194	\$204	\$214	\$225	\$236	\$214
Sr. Project Coordinator	\$176	\$185	\$194	\$204	\$214	\$195
Sr. Graphic Designer	\$176	\$185	\$194	\$204	\$214	\$195
Public Affairs/Media Relations Manager	\$194	\$204	\$214	\$225	\$236	\$214
Graphic Designer	\$154	\$162	\$170	\$179	\$188	\$171
Project Coordinator	\$152	\$160	\$168	\$176	\$185	\$168
Research/Survey Manager	\$194	\$204	\$214	\$225	\$236	\$214
Research/Survey Coordinator	\$152	\$160	\$168	\$176	\$185	\$168
Multimedia Services	\$176	\$185	\$194	\$204	\$214	\$195
Sr. Project Associate	\$139	\$146	\$153	\$161	\$169	\$154
Project Associate	\$131	\$138	\$145	\$152	\$159	\$145
Copywriter	\$131	\$138	\$145	\$152	\$159	\$145
Outreach Specialist	\$122	\$128	\$135	\$142	\$149	\$135
Social Media Coordinator	\$122	\$128	\$135	\$142	\$149	\$135
Project Administrator	\$144	\$152	\$159	\$167	\$176	\$160

GEOSYNTEC CONSULTANTS 2023 U.S. RATE SCHEDULE

(All Values are in \$USD)

	Rate/Hour
Staff Professional	\$165
Senior Staff Professional	\$190
Professional	\$215
Project Professional	\$245
Senior Professional	\$275
Principal	\$300
Senior Principal	\$325
Technician I	\$ 95
Technician II	\$102
Senior Technician I	\$112
Senior Technician II	\$120
Site Manager I	\$130
Site Manager II	\$145
Construction Manager I	\$160
Construction Manager II	\$175
Senior Designer	\$200
Designer	\$170
Senior Drafter/Senior CADD Operator	\$155
Drafter/CADD Operator/Artist	\$140
Project Administrator	\$ 95
Clerical	\$ 70
Direct Expenses	Cost plus 12%
Subcontract Services	Cost plus 15%
Technology/Communications Fee	3% of Professional Fees
Specialized Computer Applications (per hour)	\$ 24
Personal Automobile (per mile)	Current Gov't Rate
Photocopies (per page)	\$.10

Rates are provided on a confidential basis and are client and project specific.

Unless otherwise agreed, rates will be adjusted annually based on a minimum of the Producer Price Index for Engineering Services.

Rates for field equipment, health and safety equipment, and graphical supplies presented upon request.

Construction management fee presented upon request.



Applied Marine Sciences, Inc. 2023 Labor Schedule

Labor Category	Labor Rate
Principal Scientist	\$215 - \$257
Sr. Scientist	\$130 - \$180
Staff Scientist	\$125 - \$130
Administrative	\$115 - \$130

RATE SCHEDULE

Effective: January 1, 2023



Director/Principal\$289-3	323
Senior Associate\$257-2	
Associate\$2	216 annual
Senior Scientist\$1	L97
Scientist\$1	L80 Necess
Senior Technician\$1	L64 are bill
Technician\$1	L35
_	
Landscape Design	Engine
Senior Restoration Designer\$2	273 Senior
Sr Associate Landscape Architect\$2	257 Sr Asso

Rates shown are per hour and subject to an annual adjustment each January 1st.

Necessary project expenses and subconsultants are billed at cost plus ten percent.

Landscape Design	Engineering
Senior Restoration Designer\$273	Senior Engineer\$273
Sr Associate Landscape Architect\$257	Sr Associate Engineer\$257
Associate Landscape Architect\$216	Associate Engineer\$232
Landscape Architect\$197	Engineer II\$200
Landscape Designer III\$180	Engineer I\$186
Landscape Designer II\$164	Assistant Engineer II\$170
Landscape Designer I\$143	Assistant Engineer\$148
Environmental Planning	GIS Mapping & Analysis
Senior Environmental Planner\$273	GIS Manager\$257
Senior Public Access Planner\$273	GIS Professional II\$206
Sr Associate Environmental Planner\$257	GIS Professional\$180
Associate Environmental Planner\$216	GIS Sr Technician\$164
Environmental Planner II\$197	GIS Technician\$143
Environmental Planner I\$180	
Assistant Environmental Planner II\$164	Field Specialists
Assistant Environmental Planner\$143	Senior Field Technician\$180
	Field Technician\$143
Conservation Strategies	Junior Field Technician\$117
Conservation Strategies Sr Project Mgr\$273	
Conservation Strategies Sr Associate\$257	Compliance Monitoring (OT = Rate x 1.5)
Conservation Strategies Associate\$232	Senior Project Biologist\$129
Conservation Strategies Sr Scientist\$200	Project Biologist\$108
Conservation Strategies Scientist\$186	
Conservation Strategies Sr Technician\$170	Grant Cultivation & Administration
Conservation Strategies Technician\$148	Community Resilience Team\$88-190
	Clerical Support\$93

Expert Witness.....Rate x 1.5

Exhibit C

Staffing Plan and Key Personnel Assignments

EXHIBIT C - Project Team Staffing Plan

The EOA Project Team consists of several consulting firms and organizations that have successfully worked together on grant-funded stormwater and trash monitoring projects. Each Project Team member selected to work on the WOW Project brings a significant resume of technical and/or regulatory expertise. Together, the EOA Project Team members provide a comprehensive set of skills and experience in project management, grant administration, trash monitoring, statistical analysis, data interpretation, public outreach and engagement, and communications. This set of skills is needed to successfully complete a diverse and multi-year project like the WOW Project.

The Project Manager for the WOW Project will be Paul Randall, Senior Technical Specialist at EOA. Paul has 25 years of project management experience, specializing in stormwater management, water quality monitoring (including trash), ecological assessment, pollutant source ID and control studies, and stakeholder communications and engagement. Paul has successfully managed multiple large, multifaceted projects that include the oversight over multiple subcontractors and team members, and communications with project management teams and stakeholders.

Paul will be assisted by Chris Sommers (Principal-in-Charge) and Vishakha Atre (Administrative & Engagement Coordinator). Both Chris and Vishakha have significant experience in managing and participating in large Federal and State grant-funded projects and are heavily experienced in assisting public agencies with MRP compliance in the Bay Area, which is important given that some tasks included in the WOW Project are intended to assist with NPDES permit compliance. Chris and Vishakha will provide direct support and guidance to Paul throughout the term of the WOW Project.

Numerous additional staff from EOA and other Project Team members will provide invaluable leadership and support on specific tasks outlined in the Work Plan. An organizational chart for the EOA Project Team illustrating the lead and support staff for the Project and each task is presented in Figure C-1. Table C-1 also identifies key staff from each firm and provides their relevant experience.

USEPA Region 9 Project Participants External to Luisa Valiela **USEPA Project Manager EOA Project** Team Members C/CAG Reid Bogert **EOA Principal-in-Charge & Technical Advisor** C/CAG Project Manager Watching Our Watersheds Chris Sommers (EOA) **Project Management Team (PMT) EOA Team Project Manager Administrative & Engagement Coordinator** Reid Bogert (C/CAG) Other MRP Permittee Representatives Paul Randall (EOA) Vishakha Atre (EOA) Regional Water Board staff Task 4 Task 2 Task 1 Task 3 **Project Management Stormwater Trash Controls Trash Monitoring Methods Information Dissemination** B - Invoicing & B - Trash A - Single-use B - Regional A - Project A - Monitoring A – Trash Monitoring B – Stormwater **Progress** Information **Plastics Source Expansion of CCI** Methods Playbook Management **Outfall Monitoring TAG Coordination** Portal Reports **Control Evaluation** Campaign Vishakha Atre (EOA) Brittani Bohlke (EOA) Paul Randall (EOA) Vishakha Atre (EOA) Bonnie de Berry (EOA) Chris Sommers (EOA) John Fusco (EOA) Michelle Dissel (SGA) Craig Johnson (EOA) Bonnie de Berry (EOA) Vishakha Atre (EOA) Brittani Bohlke (EOA) Justin Huber (EOA) Helek Rutten (EOA) Paul Randall (EOA) Paige Rosenthal (SGA) Eric Donaldson (Bal Hydro) Stephen Groner (SGA) Lisa Austin (Geosyntec) D - Trash Characterize & C - Streamlining C - Receiving Water C - Trash Symposium **Assessment Methods Pub Engagement Monitoring** Chris Sommers (EOA) Eric Donaldson (Balance) Trash Characterization Brittani Bohlke (EOA) Justin Huber (EOA) Emma Goodwin (Balance) John Fusco (EOA) Vishakha Atre (EOA) Aroon Melwani (AMS) Jonathon Owens (Balance) Helek Rutten (EOA) Paul Randall (EOA) Bonnie de Berry (EOA) Grace Yao (Geosyntec) Eric Donaldson (Bal Hydro) Helek Rutten (EOA) Stephen Groner (SGA) Marcus Ericson (5 Gyres) **Public Engagement** Lisa Welsh (Geosyntec) Michelle Dissel (SGA) **BAMSC Trash Monitoring** Paul Salop (AMS) Brittani Bohlke (EOA) **Technical Advisory Group (TAG)** Patricia Valcarcel (WRA) Paige Rosenthal (SGA) Other Bal Hydro Staff and Subconsultants for Field Work

Figure C-1. EOA Project Team Staffing Plan and Organizational Chart (lead staff for each major subtask are indicated in bold)

Table C-1. EOA Project Team Key Personnel

Name (Affiliation) & Title	Summary of Expertise and Related Experience
Paul Randall (EOA) Project Manager Senior Tech Specialist EOA Team Project Manager	25 years of project management experience, specializing in stormwater management, water quality monitoring, ecological assessment and pollutant source ID and control studies. Project management experience includes: • Implementation of Creek Status Monitoring Programs for SCVURPPP and SMCWPPP • Assisted with development of Trash Outfall Monitoring Plan and QAPP • Development of Receiving Water Monitoring Trash Program for BASMAA Design and implementation of Stressor Source Identification Projects for SCVURPPP
Chris Sommers (EOA) Principal-in-Charge/ Technical Advisor President	25 years of consulting and project management experience, specializing in stormwater management, NPDES permitting and water policy/regulations. Project management experience includes: • Coordination of the trash management and assessment program for SCVURPPP and SMCWPPP • San Francisco Bay Area Stormwater Trash Generation Rates Project • Trash BMP Toolbox Project • Developed On-land Visual Trash Assessment (OVTA) Protocols
Vishakha Atre (EOA) Administrative and Engagement Coordinator Senior Engineer/Scientist	Over 20 years of consulting experience specializing in public education and outreach. Relevant project experience includes: • Managing the public education program for SCVURPPP • Assisted with the development of two grant funded Stormwater Resource Plans (SWRP). Developed quarterly progress reports, tracked and documented grant and match funds, and assisting with the Technical Advisory Committee meetings for the Santa Clara Basin SWRP.
Bonnie de Berry (EOA) Managing Scientist	Over 20 years of experience managing consulting projects specializing in water quality, stormwater management, and monitoring/assessment. Relevant project experience includes: • Coordination of monitoring programs in compliance with MRP for SCVURPPP and SMCWPPP • Assisted with development of Trash Outfall Monitoring Plan and QAPP • Assistance to South Santa Clara County on Phase II NPDES Permit Compliance
John Fusco (EOA) Senior Tech Specialist	Over 30 years of project management and technical responsibility for a range of projects related to stormwater program management and implementation, hazardous waste regulatory compliance. Relevant project experience includes: • Development of trash load reduction plans for numerous Cities in the Bay Area • Conducted several effectiveness studies of trash control measures
Brittani Bohlke (EOA) Senior Scientist	Over 10 years of experience coordinating and managing water resource and water quality projects. Relevant project experience includes: • Technical support for NPDES stormwater permit compliance. • Previous worked as the Manager for the Water Quality Program at the San Mateo Resource Conservation District
Helek Rutten (EOA) Associate Scientist	 Over 6 years of consulting experience coordinating and managing water resource and water quality projects. Relevant project experience includes: Litter characterization project to evaluate the effectiveness of true-source control compliance strategies that address Trash Load Reduction for SMCWPPP. Technical support for water quality monitoring and reporting efforts related to Phase I and Phase II NPDES permit compliance.
Justin Huber (EOA) Associate Scientist	 Over 2 years of consulting experience coordinating and managing water quality projects. Relevant project experience includes: GIS data analysis and visualization in developing PCBs control measure and low impact development monitoring plans.

Name (Affiliation) & Title	Summary of Expertise and Related Experience
Jonathan Owens (Bal Hydro) Principal-in-Charge	 30 years of experience conducting geomorphic and hydrologic studies. Relevant project experience includes: Expert in sediment transport and monitoring of flood conditions, and effects of bed and bank vegetation management practices on roughness and channel stability. Assists numerous public works departments to improve channel stability, bank-protection, and fish passage Coordinates Balance's stream-gaging and sediment monitoring program which includes more than 40 watersheds in California
Eric Donaldson (Bal Hydro) Project Manager	 20 years of experience in coastal, estuarine, fluvial, and hillslope geomorphology and hydrology. Relevant project experience includes: Directs complex field campaigns that require developing and designing specialized equipment and deployment techniques to overcome sampling challenges Manages multiple monitoring projects for flow, bed, and suspended load sediment sampling, and acoustic doppler velocimetry on large and small rivers and streams across the Bay Area
Emma Goodwin (Bal Hydro) Hydrologist	 5 years of experience in consulting working as a hydrologist. Relevant project experience includes: • Specializes in water quality monitoring and excels and developing sampling protocols, quality control procedures, and field safety • Led teams in the design of permanent and temporary sampling installations, both from the bank and off our existing infrastructure, including bridges and culverts
Stephen Groner (SGA) President	 25 years of experience working as a consultant on several large pollution prevention and community outreach programs. Relevant project experience includes: Communication and community engagement on the Los Angeles County Clearwater Tunnel Project; Branding and marketing campaign to promote clean water and water pollution prevention for the Los Angeles County Department of Public Works communication and outreach for capital improvement projects as part of the Safe Clean Water Program LA County Dept. of Public Works
Michelle Dissel (SGA) Project Manager	 20 years of experience in marketing, advertising, and communications. Relevant project experience includes: Communication and community engagement for the San Mateo Countywide Water Pollution Prevention Program Working for the Contra Costa Clean Water Program on public outreach and education for pollution prevention campaign
Paige Rosenberg (SGA) Assistant Project Manager	 5 years of experience in marketing, advertising, and communications. Relevant project experience includes: San Mateo Countywide Water Pollution Prevention Program – communication and community engagement Contra Costa Clean Water Program – public outreach and education for pollution prevention campaign
Paul Salop (AMS) Principal Scientist	 Over 25 years of experience working for consulting firms and state and federal agencies. Relevant project experience includes: Manages field collection efforts and field quality control for the Status and Trends component of the Regional Monitoring Program for Water Quality in the San Francisco Estuary Oversees stormwater monitoring efforts for the Alameda Countywide Clean Water Program and Solano Stormwater Alliance
Aroon Melwani (AMS) Principal Scientist	19 years of experience in water quality and biological sampling and has demonstrated expertise in data analysis and statistics. Relevant project experience includes:

Name (Affiliation) & Title	Summary of Expertise and Related Experience
	 Supported clients on technical issues for water quality, stormwater monitoring, fish tissue studies, and stream bioassessment, including the analysis of regional probabilistic (GRTS) sampling designs Development and optimization of several Bay Area regional monitoring studies, including the Central Coast Long-term Environmental Assessment Network (CCLEAN), Delta and San Francisco Bay Regional Monitoring Programs, and the Bay Area Stormwater Management Agencies Association (BASMAA) regional bioassessment and trash programs
Lisa Austin (Geosyntec) Senior Principal	 33 years of experience in water quality and stormwater management. Relevant project experience includes: Supports both the Alameda County and Contra Costa Clean Water Programs in coordinating their monitoring and pollutants of concern programs in compliance with the municipal regional permit. Provides technical support to the Programs regarding trash outfall monitoring site selection and permitting and participates in the BAMSC Trash Workgroup
Lisa Welsh (Geosyntec) Project Scientist	 10 years of experience in environmental consulting. Relevant project experience includes: Supports both the Alameda County and Contra Costa Clean Water Programs in coordinating their monitoring and pollutants of concern programs in compliance with the municipal regional permit. Provides technical support to the Programs regarding trash outfall monitoring site selection and permitting and participates in the BAMSC Trash Workgroup
Grace Yao (Geosyntec) Senior Staff Professional	 2 years of experience in spatial analysis, best management practices (BMP) planning, and model development, calibration, and testing. Relevant project experience includes: Provides technical support for stormwater management planning and program implementation including trash outfall monitoring site selection, on-land visual trash assessments and Trash Load Reduction Accounting for Alameda County Clean Water Program and municipal clients such as Contra Costa County Public Works
Patricia Valcarcel (WRA) Regulatory Permitting Director	 18 years of experience in wildlife biology and wildlife regulations. Relevant project experience includes: Provides oversight of complex environmental permitting including Clean Water Act 404/401 and California Fish and Game Code 1602, permit compliance, and associated mitigation and monitoring efforts.
Bianca Clarke (WRA) Senior Regulatory Permitting Specialist	 15 years of experience in managing projects that require coordination across several disciplines and various regulatory agencies. Relevant project experience includes: Managed a diverse range of projects, led field efforts, and has authored and co-authored several California Environmental Quality Act (CEQA) and non-CEQA level reports
Marcus Ericson (5 Gyres) Co-founder & Scientist	 20+ years of experience leading microplastics research and leading expeditions around the world to research plastic marine pollution. Relevant experience includes: Co-publishing the first global estimate and the discovery of plastic microbeads in the Great Lakes, which led to the federal Microbead-free Waters Act of 2015. Providing technical direction and advising plastics monitoring programs, including the testing of trash monitoring methods in creeks and channels.

Exhibit D

EPA Watching our Watersheds Grant Agreement

W9 - 98T61401 - 0 Page 1

	AL PROTECTION	
MAKA	AL PROTECTION	

RECIPIENT TYPE:

Special District

U.S. ENVIRONMENTAL PROTECTION AGENCY

Grant Agreement

Send Payment Request to:

Contact EPA RTPFC at: rtpfc-grants@epa.gov

RECIPIENT: PAYER

City/County Association of Governments of San Mateo County
555 County Center, Fifth Floor
555 County Center, Fifth Floor

Redwood City, CA 94063

Redwood City, CA 94063

EIN: 94-3157181		
PROJECT MANAGER	EPA PROJECT OFFICER	EPA GRANT SPECIALIST
Reid Bogert	Luisa Valiela	Katya Obrez
555 County Center, Fifth Floor	75 Hawthorne Street, WTR-3	Grants Branch, MSD-6
Redwood City, CA 94063	San Francisco, CA 94015	75 Hawthorne Street
Email: rbogert@smcgov.org	Email: Valiela.Luisa@epa.gov	San Francisco, CA 94015
Phone: 650-863-2126	Phone: 415-972-3400	Email: obrez.katya@epa.gov
		Phone: 415-972-3744

PROJECT TITLE AND DESCRIPTION

San Francisco Bay Area Water Quality Improvement Fund

See Attachment 1 for project description.

 BUDGET PERIOD
 PROJECT PERIOD
 TOTAL BUDGET PERIOD COST
 TOTAL PROJECT PERIOD COST

 04/03/2023 - 06/30/2028
 04/03/2023 - 06/30/2028
 \$6,732,000.00
 \$6,732,000.00

NOTICE OF AWARD

Based on your Application dated 09/20/2022 including all modifications and amendments, the United States acting by and through the US Environmental Protection Agency (EPA) hereby awards \$3,366,000.00. EPA agrees to cost-share 50.00% of all approved budget period costs incurred, up to and not exceeding total federal funding of \$3,366,000.00. Recipient's signature is not required on this agreement. The recipient demonstrates its commitment to carry out this award by either: 1) drawing down funds within 21 days after the EPA award or amendment mailing date; or 2) not filing a notice of disagreement with the award terms and conditions within 21 days after the EPA award or amendment mailing date. If the recipient disagrees with the terms and conditions specified in this award, the authorized representative of the recipient must furnish a notice of disagreement to the EPA Award Official within 21 days after the EPA award or amendment mailing date. In case of disagreement, and until the disagreement is resolved, the recipient should not draw down on the funds provided by this award/amendment, and any costs incurred by the recipient are at its own risk. This agreement is subject to applicable EPA regulatory and statutory provisions, all terms and conditions of this agreement and any attachments.

ISSUING OFFICE (GRANTS MANAGEMENT OFFICE)	AWARD APPROVAL OFFICE				
ORGANIZATION / ADDRESS	ORGANIZATION / ADDRESS				
U.S. EPA, Region 9 , U.S. EPA, Region 9 Grants Branch, MSD-6 75 Hawthorne Street San Francisco, CA 94105	U.S. EPA, Region 9, Water Division, WTR-1 R9 - Region 9 75 Hawthorne Street San Francisco, CA 94015				
THE UNITED STATES OF AMERICA BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY					
Digital signature applied by EPA Award Official for Carolyn Truong - Gra					
Angela Mendiola - Av	ward Official Delegate 06/24/20	023			

EPA Funding Information

FUNDS	FORMER AWARD	THIS ACTION	AMENDED TOTAL
EPA Amount This Action	\$0	\$3,366,000	\$3,366,000
EPA In-Kind Amount	\$0	\$0	\$0
Unexpended Prior Year Balance	\$0	\$0	\$0
Other Federal Funds	\$0	\$0	\$0
Recipient Contribution	\$0	\$0	\$0
State Contribution	\$0	\$0	\$0
Local Contribution	\$0	\$3,366,000	\$3,366,000
Other Contribution	\$0	\$0	\$0
Allowable Project Cost	\$0	\$6,732,000	\$6,732,000

Assistance Program (CFDA)	Statutory Authority	Regulatory Authority
66.126 - Geographic Programs - San Francisco Bay Water Quality Improvement Fund	Clean Water Act: Sec. 320	2 CFR 200, 2 CFR 1500 and 40 CFR 33

Fiscal									
Site Name	Req No	FY	Approp. Code	Budget Oganization	PRC	Object Class	Site/Project	Cost Organization	Obligation / Deobligation
-	2309W32037	2324	В	09L2	000BK4	4158	-	-	\$3,366,000
									\$3,366,000

Budget Summary Page

Table A - Object Class Category (Non-Construction)	Total Approved Allowable Budget Period Cost
1. Personnel	\$195,000
2. Fringe Benefits	\$0
3. Travel	\$0
4. Equipment	\$0
5. Supplies	\$0
6. Contractual	\$6,537,000
7. Construction	\$0
8. Other	\$0
9. Total Direct Charges	\$6,732,000
10. Indirect Costs: 0.00 % Base	\$0
11. Total (Share: Recipient <u>50.00</u> % Federal <u>50.00</u> %)	\$6,732,000
12. Total Approved Assistance Amount	\$3,366,000
13. Program Income	\$0
14. Total EPA Amount Awarded This Action	\$3,366,000
15. Total EPA Amount Awarded To Date	\$3,366,000

Attachment 1 - Project Description

Over the last decade, public agencies in the Bay Area have invested significant resources in developing and implementing trash assessment and control measure tracking programs to meet the requirements under the stormwater permit for trash reduction. However, the tracking and assessment methods to demonstrate that their actions have resulted in positive environmental outcomes have been constrained to indirect measurements, including mapping trash reduction measures and collecting trash assessment data on streets, sidewalks, and parking lots to estimate improvements in trash generation. The tasks proposed under the Watching Our Watersheds (WOW) project will result in new monitoring protocols and networks that directly measure the levels of trash in stormwater discharges and in receiving waters. Additionally, the project will enhance regional partnerships between Bay Area municipalities and transportation agencies via the implementation of a regional anti-littering outreach campaign and expand engagement with environmental organizations via the characterization and analysis of trash monitoring data that will inform future trash source control implementation. Lastly, the project will disseminate the data-driven outcomes and conclusions with Bay Area stakeholders about effective trash controls and monitoring results. The 5.5-year grant-funded project will provide important data to the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) and USEPA to better evaluate trash levels in stormwater discharges and determine whether mandated trash load reduction goals have been achieved.

This assistance agreement provides full federal funding in the amount of \$3,366,000.00. Preaward costs are approved back to 4/3/2023. The project activities are as follows:

Task 1 Stormwater Trash Controls

Approximately 50% reduction in the volume/number of applicable litter-prone trash in communities implementing ordinances.

Increase in public awareness of trash pollution prevention issues in the SF Bay Area.

Documented achievement of 100% trash reduction benchmark in applicable Bay Area watersheds observed via OVTAs.

Task 2 Trash Monitoring Methods

Measured status of stormwater quality at 11 outfall monitoring sites.

Documented attainment of low trash generation at most stormwater discharge monitoring locations.

Measured status of water quality at 6 receiving water sampling sites.

Increase in overall awareness of litter-prone items in receiving water.

Task 3 Information Dissemination

Standardized trash monitoring methods and protocols documented and implemented in the

Bay Area, generating high quality data.

Bay Area stakeholders informed on effective trash controls.

Improvements in trash levels in stormwater and receiving waters observed.

The deliverables of the project include:

Data compilation of the effectiveness of local single-use plastic ordinances to reduce the generation of trash that ends up in stormwater and receiving waters; regional litter reduction public education and outreach plan using materials developed by the Caltrans Clean California Initiative (CCI); and OVTA data needed to effectively demonstrate (with an acceptable level of statistical confidence) that stormwater trash reduction goals have been achieved. Trash Monitoring Methods Guidance Document with new information on tested stormwater outfall and receiving water monitoring methods; a web-based Stormwater Trash Information Portal with relevant information on effective stormwater trash control measures; and a Trash Symposium to present Project findings.

The expected outcomes are:

- Documented attainment of low trash generation at all stormwater discharge monitoring locations.
- Measured status of water quality at receiving water sampling sites.
- Low trash levels in receiving waters monitoring locations.
- Increase in adoption of ordinances that limit the availability of single-use products.

The intended beneficiaries of the project is the general populace and communities of the 9 Bay Area Counties, and the habitats and wildlife that depend on the Bay for survival. No subawards are included in this assistance agreement.

Administrative Conditions

General Terms and Conditions

The recipient agrees to comply with the current EPA general terms and conditions available at: https://www.epa.gov/grants/epa-general-terms-and-conditions-effective-october-1-2022-or-later.

These terms and conditions are in addition to the assurances and certifications made as a part of the award and the terms, conditions, or restrictions cited throughout the award.

The EPA repository for the general terms and conditions by year can be found at: https://www.epa.gov/grants/grant-terms-and-conditions#general.

A. Federal Financial Reporting (FFR)

For awards with cumulative project and budget periods greater than 12 months, the recipient will submit an annual FFR (SF 425) covering the period from "project/budget period start date" to **June 30** of each calendar year to the EPA Finance Center in Research Triangle Park, NC. The annual FFR will be submitted electronically to rtpfc-grants@epa.gov no later than **September 30** of the same calendar year. Find additional information at https://www.epa.gov/financial/grants. (NOTE: The grantee must submit the Final FFR to rtpfc-grants@epa.gov within 120 days after the end of the project period.)

B. Procurement

The recipient will ensure all procurement transactions will be conducted in a manner providing full and open competition consistent with 2 CFR Part 200.319. In accordance with 2 CFR Part 200.324, the grantee and subgrantee(s) must perform a cost or price analysis in connection with applicable procurement actions, including contract modifications.

C. MBE/WBE Reporting, 40 CFR, Part 33, Subpart E (EPA Form 5700-52A)

The recipient agrees to submit a "MBE/WBE Utilization Under Federal Grants and Cooperative Agreements" report (EPA Form 5700-52A) annually for the duration of the project period. The current EPA Form 5700-52A with instructions is located at https://www.epa.gov/grants/epa-grantee-forms

This provision represents an approved exception from the MBE/WBE reporting requirements as described in 40 CFR Section 33.502.

Reporting is required for assistance agreements where funds are budgeted for procuring construction, equipment, services and supplies (including funds budgeted for direct procurement by the recipient or procurement under subawards or loans in the "Other" category) with a cumulative total that exceed the Simplified Acquisition Threshold (SAT) currently set at \$250,000 (the dollar threshold will be automatically revised whenever the SAT is adjusted; See 2 CFR Section 200.1), including amendments and/or modifications. All procurement actions are reportable when reporting is required, not just the portion which exceeds the SAT.

Recipients with expended and/or budgeted funds for procurement are required to report annually whether the planned procurements take place during the reporting period or not. If no budgeted procurements take place during the reporting period, the recipient should check the box in section 5B when completing the form.

When completing the annual report, recipients are instructed to check the box titled "annual" in section 1B of the form. For the final report, recipients are instructed to check the box indicated for the "last report" of the project in section 1B of the form. For section 2B, the Region 9 EPA DBA Coordinator is Alexandrea Perez, email: GrantsRegion9@epa.gov, phone:

415-972-3826.

The annual reports are due by October 30th of each calendar year and the final report is due within 120 days after the end of the project period, whichever comes first. The recipient will submit the MBE/WBE report(s) and/or questions to GrantsRegion9@epa.gov and the EPA Grants Specialist identified on page 1 of the award document.

D. Indirect Costs

The Cost Principles under 2 CFR Part 200, Subpart E apply to this award. Since there are no indirect costs included in the assistance budget, they are not allowable under this Assistance Agreement.

E. Non-Federal Third-Party Contributions

This award includes non-federal third party contributions. Third party contributions counting towards satisfying a cost sharing or matching requirement must be verifiable from the records of grantees and subgrantees. As applicable, these records must reflect how the value is placed on third party contributions. The value of third party contributions must be applicable to the period to which the cost sharing or matching requirement apply (2 CFR Part 200.306).

Programmatic Conditions

- **a.] Reporting:** The recipient shall submit Semi-annual progress reports electronically to the EPA Project Officer due within 30 calendar days after the end of each Federal fiscal quarters on the dates of April 30 and October 31. The progress reports should include:
 - a discussion of the activities conducted during the previous two quarters (including a comparison of actual accomplishments with the anticipated outputs and outcomes specified in the workplan),
 - progress towards milestones,
 - problems encountered with achieving outputs and outcomes, and their resolution,
 - activities planned for the next two quarters,
 - a financial accounting of costs incurred during the reporting period,
 - cumulative project costs (EPA and match amounts) since the beginning of the project, by task,
 - and identification of any special EPA assistance needed, and an explanation of any cost overruns.

The recipient will notify the EPA Project Officer if something materially impairs their ability to complete the tasks and deliver the products, outputs and outcomes identified in the workplan. Within 120 days of the end of the project period, the recipient must email to the EPA Project Officer a final report documenting project activities over the entire project period and the recipient's achievements with respect to the project's purposes and objectives.

- **b.]** Grant Source Recognition: The recipient should publicly acknowledge the US EPA San Francisco Bay Water Quality Improvement Fund as the funding vehicle for the projects when the grantee is asked by public entities, federal agencies or state and local agencies about the projects and on-going results.
- c.] Cybersecurity Grant Condition for Other Recipients, Including Intertribal Consortia: (a) The recipient agrees that when collecting and managing environmental data under this assistance agreement, it will protect the data by following all applicable State or Tribal law cybersecurity requirements.
- (b)(1) EPA must ensure that any connections between the recipient's network or information system and EPA networks

used by the recipient to transfer data under this agreement, are secure. For purposes of this Section, a connection is defined as a dedicated persistent interface between an Agency IT system and an external IT system for the purpose of transferring information. Transitory, user-controlled connections such as website browsing are excluded from this definition.

If the recipient's connections as defined above do not go through the Environmental Information Exchange Network or EPA's Central Data Exchange, the recipient agrees to contact the EPA Project Officer (PO) no later than 90 days after the date of this award and work with the designated Regional/Headquarters Information Security Officer to ensure that the connections meet EPA security requirements, including entering into Interconnection Service Agreements as appropriate. This condition does not apply to manual entry of data by the recipient into systems operated and used by EPA's regulatory programs for the submission of reporting and/or compliance data.

(b)(2) The recipient agrees that any subawards it makes under this agreement will require the subrecipient to comply with the requirements in (b)(1) if the subrecipient's network or information system is connected to EPA networks to transfer data to the Agency using systems other than the Environmental Information Exchange Network or EPA's Central Data Exchange. The recipient will be in compliance with this condition: by including this requirement in subaward agreements; and during subrecipient monitoring deemed necessary by the recipient under 2 CFR 200.332(d), by inquiring whether the subrecipient has contacted the EPA Project Officer. Nothing in this condition requires the recipient to contact the EPA Project Officer on behalf of a subrecipient or to be involved in the negotiation of an Interconnection Service Agreement between the subrecipient and EPA.

- **d.] Geospatial Data Standards:** All geospatial data created must be consistent with Federal Geographic Data Committee (FGDC) endorsed standards. Information on these standards may be found at https://www.fgdc.gov/.
- e.] Competency of Organizations Generating Environmental Measurement Data: In accordance with Agency Policy Directive Number FEM-2012-02, Policy to Assure the Competency of Organizations Generating Environmental Measurement Data under Agency-Funded Assistance Agreements, the Recipient agrees, by entering into this agreement, that it has demonstrated competency prior to award, or alternatively, where a pre-award demonstration of competency is not practicable, Recipient agrees to demonstrate competency prior to carrying out any activities under the award involving the generation or use of environmental data. Recipient shall maintain competency for the duration of the project period of this agreement and this will be documented during the annual reporting process. A copy of the Policy is available online at https://www.epa.gov/sites/production/files/2015-03/documents/competency-policy-aaia-new.pdf or a copy may also be requested by contacting the EPA Project Officer for this award.

g.] QUALITY ASSURANCE

Authority: Quality Assurance applies to all assistance agreements involving environmental information as defined in <u>2</u> <u>C.F.R. § 1500.12</u> Quality Assurance.

The recipient shall ensure that subawards involving environmental information issued under this agreement include appropriate quality requirements for the work. The recipient shall ensure sub-award recipients develop and implement [a/the] Quality Assurance (QA) planning document[s] in accordance with this term and condition; and/or ensure sub-award recipients implement all applicable approved QA planning documents.

Quality Assurance Project Plan: In accordance with 2 CFR 1500.11, the recipient must develop and implement quality assurance and quality control procedures, specifications and documentation that are sufficient to produce data of adequate quality to meet project objectives. Recipients implementing environmental programs within the scope of the assistance agreement must submit to the EPA Project Officer an approvable Quality Assurance Project Plan (QAPP) at least 60 days

prior to the initiating of data collection or data compilation. The Quality Assurance Project Plan (QAPP) is the document that provides comprehensive details about the quality assurance, quality control, and technical activities that must be implemented to ensure that project objectives are met. Environmental programs include direct measurements or data generation, environmental modeling, compilation of date from literature or electronic media, and data supporting the design, construction, and operation of environmental technology.

The QAPP should be prepared in accordance with EPA QA/R-5: EPA Requirements for Quality Assurance Project Plans. No environmental data collection or data compilation may occur until the QAPP is approved by the EPA Project Officer and Quality Assurance Regional Manager. When the recipient is delegating the responsibility for an environmental data collection or data compilation activity to another organization, the EPA Regional Quality Assurance Manager may allow the recipient to review and approve that organization's QAPP. Additional information on these requirements can be found at the EPA Office of Grants and Debarment Web Site:

https://www.epa.gov/grants/implementation-quality-assurance-requirements-organizations-receiving-epafinancial

END OF ASSISTANCE AGREEMENT

Exhibit E

EPA General Terms and Conditions Effective October 1, 2022

EPA General Terms and Conditions Effective October 1, 2022

1. Introduction

- (a) The recipient and any sub-recipient must comply with the applicable EPA general terms and conditions outlined below. These terms and conditions are in addition to the assurances and certifications made as part of the award and terms, conditions, and restrictions reflected on the official assistance award document. Recipients **must** review their official award document for additional administrative and programmatic requirements. Failure to comply with the general terms and conditions outlined below and those directly reflected on the official assistance award document may result in enforcement actions as outlined in 2 CFR 200.339 and 200.340.
- (b) If the EPA General Terms and Conditions have been revised, EPA will update the terms and conditions when it provides additional funding (incremental or supplemental) prior to the end of the period of performance of this agreement. The recipient must comply with the revised terms and conditions after the effective date of the EPA action that leads to the revision. Revised terms and conditions do not apply to the recipient's expenditures of EPA funds or activities the recipient carries out prior to the effective date of the EPA action. EPA will inform the recipient of revised terms and conditions in the action adding additional funds.
- 2. Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards
 This award is subject to the requirements of the Uniform Administrative Requirements, Cost Principles and
 Audit Requirements for Federal Awards; Title 2 CFR, Parts 200 and 1500. 2 CFR 1500.2, Adoption of 2 CFR
 Part 200, states the Environmental Protection Agency adopts the Office of Management and Budget (OMB)
 guidance Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards to
 Non-Federal Entities (subparts A through F of 2 CFR Part 200), as supplemented by 2 CFR Part 1500, as the
 Environmental Protection Agency (EPA) policies and procedures for financial assistance administration. 2 CFR
 Part 1500 satisfies the requirements of 2 CFR 200.110(a) and gives regulatory effect to the OMB guidance as
 supplemented by 2 CFR Part 1500. This award is also subject to applicable requirements contained in EPA
 programmatic regulations located in 40 CFR Chapter 1 Subchapter B.
 - **2.1.** Effective Date and Incremental or Supplemental Funding. Consistent with the OMB Frequently Asked Questions at https://cfo.gov/cofar on Effective Date and Incremental Funding, any new funding through an amendment (supplemental or incremental) on or after December 26, 2014, and any unobligated balances (defined at 2 CFR 200.1) remaining on the award at the time of the amendment, will be subject to the requirements of the Uniform Administrative Requirements, Cost Principles and Audit Requirements (2 CFR Parts 200 and 1500).

3. Termination

Consistent with 2 CFR 200.340, EPA may unilaterally terminate this award in whole or in part:

- a. if a recipient fails to comply with the terms and conditions of the award including statutory or regulatory requirements; or
- b. if the award no longer effectuates the program goals or agency priorities. Situations in which EPA may terminate an award under this provision include when:
- (i) EPA obtains evidence that was not considered in making the award that reveals that specific award objective(s) are ineffective at achieving program goals and EPA determines that it is in the government's interest to terminate the award;

- (ii) EPA obtains evidence that was not considered in making the award that causes EPA to significantly question the feasibility of the intended objective(s) of the award and EPA determines that it is in the government's interest to terminate the award;
- (iii) EPA determines that the objectives of the award are no longer consistent with funding priorities for achieving program goals.

Financial Information

4. Reimbursement Limitation

EPA's financial obligations to the recipient are limited by the amount of federal funding awarded to date as reflected on the award document. If the recipient incurs costs in anticipation of receiving additional funds from EPA, it does so at its own risk. See 2 CFR 1500.9.

5. Automated Standard Application Payments (ASAP) and Proper Payment Draw Down

Electronic Payments. Recipients must be enrolled or enroll in the Automated Standard Application for Payments (ASAP) system to receive payments under EPA financial assistance agreements unless:

- EPA grants a recipient-specific exception;
- The assistance program has received a waiver from this requirement;
- The recipient is exempt from this requirement under 31 CFR 208.4; or,
- The recipient is a fellowship recipient pursuant to 40 CFR Part 46.

EPA will not make payments to recipients until the ASAP enrollment requirement is met unless the recipients fall under one of the above categories. Recipients may request exceptions using the procedures below but only EPA programs may obtain waivers.

To enroll in ASAP, complete the ASAP Initiate Enrollment Form located at: https://www.epa.gov/financial/forms and email it to rtpfc-grants@epa.gov or mail it to:

US Environmental Protection Agency RTP-Finance Center (Mail Code AA216-01) 4930 Page Rd. Durham, NC 27711

Under this payment mechanism, the recipient initiates an electronic payment request online via ASAP, which is approved or rejected based on the amount of available funds authorized by EPA in the recipient's ASAP account. Approved payments are credited to the account at the financial institution of the recipient organization set up by the recipient during the ASAP enrollment process. Additional information concerning ASAP and enrollment can be obtained by contacting the EPA Research Triangle Park Finance Center (RTPFC), at <a href="representation-represent

EPA will grant exceptions to the ASAP enrollment requirement only in situations in which the recipient demonstrates to EPA that receiving payment via ASAP places an undue administrative or financial management burden on the recipient or EPA determines that granting the waiver is in the public interest. Recipients may request an exception to the requirement by following the procedures specified in RAIN-2018-G06-R.

Proper Payment Drawdown (for recipients other than states)

- a. As required by 2 CFR 200.305(b), the recipient must draw funds from ASAP only for the minimum amounts needed for actual and immediate cash requirements to pay employees, contractors, subrecipients or to satisfy other obligations for allowable costs under this assistance agreement. The timing and amounts of the drawdowns must be as close as administratively feasible to actual disbursements of EPA funds. Disbursement within 5 business days of drawdown will comply with this requirement and the recipient agrees to meet this standard when performing this award.
- b. Recipients may not retain more than 5% of the amount drawn down, or \$1,000 whichever is less, 5 business days after drawdown to materially comply with the standard. Any EPA funds subject to this paragraph that remain undisbursed after 5 business days must be fully disbursed within 15 business days of draw down or be returned to EPA.
- c. If the recipient draws down EPA funds in excess of that allowed by paragraph b., the recipient must contact rtpfc-grants@epa.gov for instructions on whether to return the funds to EPA. Recipients must comply with the requirements at 2 CFR 200.305(b)(8) and (9) regarding depositing advances of Federal funds in interest bearing accounts.
- d. Returning Funds: Pay.gov is the preferred mechanism to return funds. It is free, secure, paperless, expedient, and does not require the recipient/vendor to create an account. Contact RTPFC-Grants at rttpfc-grants@epa.gov to obtain complete instructions. Additional information is available at the Pay.gov website: (https://www.pay.gov/public/home). Information on how to repay EPA via check is available at https://www.epa.gov/financial/makepayment. Instructions on how to return funds to EPA electronically via ASAP are available at https://www.fiscal.treasury.gov/asap/.
- e. Failure on the part of the recipient to materially comply with this condition may, in addition to EPA recovery of the un-disbursed portions of the drawn down funds, lead to changing the payment method from advance payment to a reimbursable basis. EPA may also take other remedies for noncompliance under 2 CFR 200.208 and/or 2 CFR 200.339.
- f. If the recipient believes that there are extraordinary circumstances that prevent it from complying with the 5-business day disbursement requirement throughout the performance period of this agreement, recipients may request an exception to the requirement by following the procedures specified in RAIN-2018-G06-R. EPA will grant exceptions to the 5-business day disbursement requirement only if the recipient demonstrates that compliance places an undue administrative or financial management burden or EPA determines that granting the exception is in the public interest.

Proper Payment Drawdown for State Recipients

In accordance with 2 CFR 200.305(a), payments are governed by Treasury-State Cash Management Improvement Act (CMIA) agreements and default procedures codified at 31 CFR Part 205, Subparts A and B and Treasury Financial Manual (TFM) 4A-2000, "Overall Disbursing Rules for All Federal Agencies" unless a program specific regulation (e.g. 40 CFR 35.3160 or 40 CFR 35.3560) provides otherwise. Pursuant to 31 CFR Part 205, Subpart A—Rules Applicable to Federal Assistance Programs Included in a Treasury-State Agreement. States follow their Treasury-State CMIA Agreement for major Federal programs listed in the agreement. For those programs not listed as major in the Treasury-State agreement, the State follows the default procedures in 31 CFR Part 205, Subpart B—Rules Applicable to Federal Assistance Programs Not Included in a Treasury-State Agreement, which directs State recipients to draw-down and disburse Federal financial assistance funds in anticipation of immediate cash needs of the State for work under the award. States must comply with 2 CFR 200.302(a) in reconciling costs incurred and charged to EPA financial assistance agreements at time of close out unless a program specific regulation provides otherwise.

Selected Items of Cost

6. Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment

This term and condition implements 2 CFR 200.216 and is effective for obligations and expenditures of EPA financial assistance funding on or after 8/13/2020.

As required by 2 CFR 200.216, EPA recipients and subrecipients, including borrowers under EPA funded revolving loan fund programs, are prohibited from obligating or expending loan or grant funds to procure or obtain; extend or renew a contract to procure or obtain; or enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities). Recipients, subrecipients, and borrowers also may not use EPA funds to purchase:

- a. 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).
- b. Telecommunications or video surveillance services provided by such entities or using such equipment.
- c. Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the 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.

Consistent with 2 CFR 200.471, costs incurred for telecommunications and video surveillance services or equipment such as phones, internet, video surveillance, and cloud servers are allowable except for the following circumstances:

- a. Obligating or expending EPA funds for covered telecommunications and video surveillance services or equipment or services as described in 2 CFR 200.216 to:
- (1) Procure or obtain, extend or renew a contract to procure or obtain;
- (2) Enter into a contract (or extend or renew a contract) to procure; or
- (3) Obtain the equipment, services, or systems.

Certain prohibited equipment, systems, or services, including equipment, systems, or services produced or provided by entities identified in section 889, are recorded in the System for Award Management exclusion list.

7. Consultant Cap

EPA participation in the salary rate (excluding overhead) paid to individual consultants retained by recipients or by a recipient's contractors or subcontractors shall be limited to the maximum daily rate for a Level IV of the Executive Schedule, available at: https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/, to be adjusted annually. This limit applies to consultation services of designated individuals with specialized skills who are paid at a daily or hourly rate. This rate does not include transportation and subsistence costs for travel performed (the recipient will pay these in accordance with their normal travel reimbursement practices).

Information on how to calculate the maximum daily rate and the daily pay limitation is available at the Office Of Personnel Management's <u>Fact Sheet: How to Compute Rates of Pay</u> and <u>Fact Sheet: Expert and Consultant Pay</u>. Specifically, to determine the maximum daily rate, follow these steps:

- 1. Divide the Level IV salary by 2087 to determine the hourly rate. Rates must be rounded to the nearest cent, counting one-half cent and over as the next higher cent (e.g., round \$18.845 to \$18.85).
- 2. Multiply the hourly rate by 8 hours. The product is the maximum daily rate.

Contracts and subcontracts with firms for services that are awarded using the procurement requirements in Subpart D of 2 CFR Part 200 are not affected by this limitation unless the terms of the contract provide the recipient with responsibility for the selection, direction and control of the individuals who will be providing services under the contract at an hourly or daily rate of compensation. See 2 CFR 1500.10.

8. Establishing and Managing Subawards

If the recipient chooses to pass funds from this assistance agreement to other entities, the recipient must comply with applicable provisions of 2 CFR Part 200 and the EPA Subaward Policy, which may be found at: https://www.epa.gov/grants/grants-policy-issuance-gpi-16-01-epa-subaward-policy-epa-assistance-agreement-recipients.

As a pass-through entity, the recipient agrees to:

- 1. Be responsible for selecting subrecipients and as appropriate conducting subaward competitions using a system for properly differentiating between subrecipients and procurement contractors under the standards at 2 CFR 200.331 and EPA's supplemental guidance in Appendix A of the EPA Subaward Policy.
 - (a) For-profit organizations and individual consultants, in almost all cases, are not eligible subrecipients under EPA financial assistance programs and the pass-through entity must obtain prior written approval from EPA's Award Official for subawards to these entities unless the EPA-approved budget and work plan for this agreement contain a precise description of such subawards.
 - (b) Stipends and travel assistance for trainees (including interns) and similar individuals who are not are not employees of the pass-through entity must be classified as participant support costs rather than subawards as provided in <u>2 CFR 200.1</u> Participant support costs, <u>2 CFR 200.1</u> Subaward, and EPA's <u>Guidance on Participant Support Costs</u>.
 - (c) Subsidies, rebates and similar payments to participants in EPA funded programs to encourage environmental stewardship are also classified as *Participant support costs* as provided in 2 CFR 1500.1 and EPA's Guidance on Participant Support Costs.
- 2. Establish and follow a system that ensures all subaward agreements are in writing and contain all of the elements required by 2 CFR 200.332(a). EPA has developed a template for subaward agreements that is available in <u>Appendix D</u> of the <u>EPA Subaward Policy</u>.
- 3. Prior to making subawards, ensure that each subrecipient has a "Unique Entity Identifier (UEI)." The UEI is required by 2 CFR Part 25 and 2 CFR 200.332(a)(1). Subrecipients are not required to complete full System for Award Management (SAM) registration to obtain a UEI. Information regarding obtaining a UEI is available at the SAM Internet site: https://www.sam.gov/SAM/ and in EPA's General Term and Condition "System for Award Management and Universal Identifier Requirements" of the pass-through entity's agreement with the EPA.
- 4. Ensure that subrecipients are aware that they are subject to the same requirements as those that apply to the pass-through entity's EPA award as required by 2 CFR 200.332(a)(2). These requirements include, among others:

- (a) Title VI of the Civil Rights Act and other Federal statutes and regulations prohibiting discrimination in Federal financial assistance programs, as applicable.
- (b) Reporting Subawards and Executive Compensation under Federal Funding Accountability and Transparency Act (FFATA) set forth in the General Conditionpass-through entity's agreement with EPA entitled "Reporting Subawards and Executive Compensation."
- (c) Limitations on individual consultant fees as set forth in 2 CFR 1500.10 and the General Condition of the pass-through entity's agreement with EPA entitled "Consultant Fee Cap."
- (d) EPA's prohibition on paying management fees as set forth in General Condition of the pass-through entity's agreement with EPA entitled "Management Fees."
- (e) The Procurement Standards in <u>2 CFR Part 200</u> including those requiring competition when the subrecipient acquires goods and services from contractors (including consultants).

EPA provides general information on other statutes, regulations and Executive Orders on the <u>Grants internet site</u> at <u>www.epa.gov/grants</u>. Many Federal requirements are agreement or program specific and EPA encourages pass-through entities to review the terms of their assistance agreement carefully and consult with their EPA Project Officer for advice if necessary.

- 5. Ensure, for states and other public recipients, that subawards are not conditioned in a manner that would disadvantage applicants for subawards based on their religious character.
- 6. Establish and follow a system for evaluating subrecipient risks of noncompliance with Federal statutes, regulations and the terms and conditions of the subaward as required by 2 CFR 200.332(b) and document the evaluation. Risk factors may include:

Prior experience with same or similar subawards;

- (a) Results of previous audits;
- (b) Whether new or substantially changed personnel or systems, and;
- (c) Extent and results of Federal awarding agency or the pass-through entity's monitoring.
- 7. Establish and follow a process for deciding whether to impose additional requirements on subrecipients based on risk factors as required by 2 CFR 200.332(c). Examples of additional requirements authorized by 2 CFR 200.208 include:
 - (a) Requiring payments as reimbursements rather than advance payments;
 - (b) Withholding authority to proceed to the next phase until receipt of evidence of acceptable performance within a given period of performance;
 - (c) Requiring additional, more detailed financial reports;
 - (d) Requiring additional project monitoring;

- (e) Requiring the non-Federal entity to obtain technical or management assistance, and
- (f) Establishing additional prior approvals.
- 8. Establish and follow a system for monitoring subrecipient performance that includes the elements required by 2 CFR 200.332(d) and report the results of the monitoring in performance reports as provided in the reporting terms and conditions of this agreement.
- 9. Establish and maintain an accounting system which ensures compliance with the \$25,000 limitation at 2 CFR 200.1, *Modified Total Direct Costs*, if applicable, on including subaward costs in *Modified Total Direct Costs* for the purposes of distributing indirect costs. Recipients with Federally approved indirect cost rates that use a different basis for distributing indirect costs to subawards must comply with their Indirect Cost Rate Agreement.
- 10. Work with EPA's Project Officer to obtain the written consent of EPA's Office of International and Tribal Affairs (OITA), prior to awarding a subaward to a foreign or international organization, or a subaward to be performed in a foreign country even if that subaward is described in a proposed scope of work.
- 11. Obtain written approval from EPA's Award Official for any subawards that are not described in the approved work plan in accordance with <u>2 CFR 200.308</u>.
- 12. Obtain the written approval of EPA's Award Official prior to awarding a subaward to an individual if the EPA-approved scope of work does not include a description of subawards to individuals.
- 13. Establish and follow written procedures under <u>2 CFR 200.302(b)(7)</u> for determining that subaward costs are allowable in accordance with <u>2 CFR Part 200, Subpart E</u> and the terms and conditions of this award. These procedures may provide for allowability determinations on a pre-award basis, through ongoing monitoring of costs that subrecipients incur, or a combination of both approaches provided the pass-through entity documents its determinations.
- 14. Establish and maintain a system under 2 CFR 200.332(d)(3) and 2 CFR 200.521 for issuing management decisions for audits of subrecipients that relate to Federal awards. However, the recipient remains accountable to EPA for ensuring that unallowable subaward costs initially paid by EPA are reimbursed or mitigated through offset with allowable costs whether the recipient recovers those costs from the subrecipient or not.
- 15. As provided in 2 CFR 200.333, pass-through entities must obtain EPA approval to make fixed amount subawards. EPA is restricting the use of fixed amount subawards to a limited number of situations that are authorized in official EPA pilot projects. Recipients should consult with their EPA Project Officer regarding the status of these pilot projects.

By accepting this award, the recipient is certifying that it either has systems in place to comply with the requirements described in Items 1 through 14 above or will refrain from making subawards until the systems are designed and implemented.

9. Management Fees

Management fees or similar charges in excess of the direct costs and approved indirect rates are <u>not</u> allowable. The term "management fees or similar charges" refers to expenses added to the direct costs in order to accumulate and reserve funds for ongoing business expenses; unforeseen liabilities; or for other similar costs which are not allowable under this assistance agreement. Management fees or similar charges may not be used to improve or expand the project funded under this agreement, except to the extent authorized as a direct cost of carrying out the scope of work.

10. Federal Employee Costs

The recipient understands that none of the funds for this project (including funds contributed by the recipient as cost sharing) may be used to pay for the travel of Federal employees or for other costs associated with Federal participation in this project unless a Federal agency will be providing services to the recipient as authorized by a Federal statute.

11. Foreign Travel

EPA policy requires that all foreign travel must be approved by its Office of International and Tribal Affairs. The recipient agrees to obtain prior EPA approval before using funds available under this agreement for international travel unless the trip(s) are already described in the EPA approved budget for this agreement. Foreign travel includes trips to Mexico and Canada but does not include trips to Puerto Rico, the U.S. Territories or possessions. Recipients that request post-award approval to travel frequently to Mexico and Canada by motor vehicle (e.g. for sampling or meetings) may describe their proposed travel in general terms in their request for EPA approval. Requests for prior approval must be submitted to the Project Officer for this agreement.

12. The Fly America Act and Foreign Travel

The recipient understands that all foreign travel **funded under this assistance agreement** must comply with the Fly America Act. All travel must be on U.S. air carriers certified under 49 U.S.C. Section 40118, to the extent that service by such carriers is available even if foreign air carrier costs are less than the American air carrier.

Reporting and Additional Post-Award Requirements

13. System for Award Management and Universal Identifier Requirements

- 13.1. Requirement for System for Award Management (SAM) Unless exempted from this requirement under 2 CFR 25.110, the recipient must maintain current information in the SAM. This includes information on the recipient's immediate and highest level owner and subsidiaries, as well as on all the recipient's predecessors that have been awarded a Federal contract or Federal financial assistance within the last three years, if applicable, until the submittal of the final financial report required under this award or receipt of the final payment, whichever is later. This requires that the recipient reviews and updates the information at least annually after the initial registration, and more frequently if required by changes in the information or another award term.
- **13.2. Requirement for Unique Entity Identifier.** If the recipient is authorized to make subawards under this award, the recipient:
 - **a.** Must notify potential subrecipients that no entity (see definition in paragraph 13.3 of this award term) may receive a subaward unless the entity has provided its Unique Entity Identifier.
 - **b.** May not make a subaward to an entity unless the entity has provided its Unique Entity Identifier. Subrecipients are not required to obtain an active SAM registration but must obtain a Unique Entity Identifier.

- **13.3. Definitions**. For the purposes of this award term:
 - **a. System for Award Management (SAM)** means the Federal repository into which an entity must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the SAM Internet site: https://www.sam.gov/SAM/.
 - **b. Unique Entity Identifier** means the identifier assigned by SAM to uniquely identify business entities.
 - **c. Entity** includes non-Federal entities as defined at 2 CFR 200.1 and also includes all of the following:
 - **13.3.c.1.** A foreign organization;
 - **13.3.c.2.** A foreign public entity;
 - **13.3.c.3.** A domestic for-profit organization; and
 - **13.3.c.4.** A domestic or foreign for-profit organization; and
 - **13.3.c.5.** A Federal agency.
 - **d. Subaward** is defined at 2 CFR 200.1.
 - **e. Subrecipient** is defined at 2 CFR 200.1.

14. Reporting Subawards and Executive Compensation

14.1. Reporting of first-tier subawards.

- **a. Applicability.** Unless the recipient is exempt as provided in paragraph 14.4. of this award term, the recipient must report each action that obligates \$30,000 or more in Federal funds for a subaward to a non-Federal entity or Federal agency (see definitions in paragraph 14.5 of this award term).
- **b.** Where and when to report. (1) The recipient must report each obligating action described in paragraph 14.1.a of this award term to www.fsrs.gov. (2) For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on any date during the month of November of a given year, the obligation must be reported by no later than December 31 of that year.)
- **c. What to report.** The recipient must report the information about each obligating action as described in the submission instructions available at: http://www.fsrs.gov.

14.2. Reporting Total Compensation of Recipient Executives.

- **a. Applicability and what to report.** The recipient must report total compensation for each of their five most highly compensated executives for the preceding completed fiscal year, if:
 - **14.2.a.1.** the total Federal funding authorized to date under this award is \$30,000 or more;
 - 14.2.a.2. in the preceding fiscal year, the recipient received: (i.) 80 percent or more of their annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); (ii.) and \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
 - 14.2.a.3. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at: http://www.sec.gov/answers/execomp.htm.)
- **b.** Where and when to report. The recipient must report executive total compensation described in paragraph 14.2.a of this award term: (i.) As part of the registration Central System for Award Management profile available at https://www.sam.gov/SAM/ (ii.) By the end of the month following the month in which this award is made, and annually thereafter.

14.3. Reporting of Total Compensation of Subrecipient Executives.

- **a.** Applicability and what to report. Unless exempt as provided in paragraph 14.4. of this award term, for each first-tier non-Federal entity subrecipient under this award, the recipient shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if:
- **14.3.a.1.** in the subrecipient's preceding fiscal year, the subrecipient received: (i.) 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and (ii.) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and
- **14.3.a.2.** The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at: http://www.sec.gov/answers/execomp.htm.)
- **b.** Where and when to report. The recipient must report subrecipient executive total compensation described in paragraph 14.3.a. of this award term:
 - **14.3.b.1.** To the recipient.
 - **14.3.b.2.** By the end of the month following the month during which the recipient makes the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (i.e., between October 1 and 31), the recipient must report any required compensation information of the subrecipient by November 30 of that year.

14.4. Exemptions

- **a.** If, in the previous tax year, the recipient had gross income, from all sources, under \$300,000, the recipient is exempt from the requirements to report:
 - **14.4.a.1.** (i) subawards, and (ii) the total compensation of the five most highly compensated executives of any subrecipient.

14.5. Definitions. For purposes of this award term:

- **a. Federal agency** means a Federal agency as defined at 5 U.S.C. 551(1) and further clarified by 5 U.S.C 552(f).
- **b. Non-Federal entity** means all of the following, as defined in 2 CFR Part 25: (i.) A Governmental organization, which is a State, local government, or Indian tribe; (ii.) A foreign public entity; (iii.) A domestic or foreign nonprofit organization; and (iv.) A domestic or foreign for-profit organization.
- **c. Executive** means officers, managing partners, or any other employees in management positions.
- d. Subaward:
 - **14.5.d.1.** This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.
 - **14.5.d.2.** The term does not include procurement of property and services needed to carry out the project or program (for further explanation, see 2 CFR 200.331).
 - **14.5.d.3.** A subaward may be provided through any legal agreement, including an agreement that the recipient or a subrecipient considers a contract.
- **e. Subrecipient** means a non-Federal entity or Federal agency that:
 - **14.5.e.1.** Receives a subaward from the recipient under this award; and
 - **14.5.e.2.** Is accountable to the recipient for the use of the Federal funds provided by the subaward.
- **f. Total compensation** means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information

see 17 CFR 229.402(c)(2)):

- **14.5.f.1.** Salary and bonus.
- **14.5.f.2.** Awards of stock, stock options and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.
 - **14.5.f.3.** Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.
 - **14.5.f.4.** Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.
 - **14.5.f.5.** Above-market earnings on deferred compensation which is not tax-qualified.
 - **14.5.f.6.** Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.

15. Recipient Integrity and Performance Matters - Reporting of Matters Related to Recipient Integrity and Performance

15.1. General Reporting Requirement

If the total value of your currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of this Federal award, then you as the recipient during that period of time must maintain the currency of information reported to the System for Award Management (SAM) that is made available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System (FAPIIS)) about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition. This is a statutory requirement under section 872 of Public Law 110-417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111-212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.

15.2. Proceedings About Which You Must Report

Submit the information required about each proceeding that:

- **a.** Is in connection with the award or performance of a grant, cooperative agreement, or procurement contract from the Federal Government;
- **b.** Reached its final disposition during the most recent five-year period; and
- **c.** Is one of the following:
 - **15.2.c.1.** A criminal proceeding that resulted in a conviction, as defined in paragraph 5 of this award term and condition;
 - **15.2.c.2.** A civil proceeding that resulted in a finding of fault and liability and payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more;
 - **15.2.c.3.** An administrative proceeding, as defined in paragraph 5. of this award term and condition, that resulted in a finding of fault and liability and your payment of either a monetary fine or penalty of \$5,000 or more or reimbursement, restitution, or damages in excess of \$100,000; or
 - 15.2.c.4. Any other criminal, civil, or administrative proceeding if:
 - **15.2.c.4.1.** It could have led to an outcome described in paragraph 15.2.c.1, 15.2.c.2, or 15.2.c.3 of this award term and condition;
 - **15.2.c.4.2.** It had a different disposition arrived at by consent or compromise with an acknowledgment of fault on your part; and
 - **15.2.c.4.3.** The requirement in this award term and condition to disclose information about the proceeding does not conflict with applicable laws and regulations.

15.3. Reporting Procedures

Enter in the SAM Entity Management area the information that SAM requires about each proceeding described in paragraph 2 of this award term and condition. You do not need to submit the information a second time under assistance awards that you received if you already provided the information through SAM because you were required to do so under Federal procurement contracts that you were awarded.

15.4. Reporting Frequency

During any period of time when you are subject to the requirement in paragraph 15.1 of this award term and condition, you must report proceedings information through SAM for the most recent five year period, either to report new information about any proceeding(s) that you have not reported previously or affirm that there is no new information to report. Recipients that have Federal contract, grant, and cooperative agreement awards with a cumulative total value greater than \$10,000,000 must disclose semiannually any information about the criminal, civil, and administrative proceedings.

15.5. Definitions

For purposes of this award term and condition:

- a. Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (*e.g.*, Securities and Exchange Commission Administrative proceedings, Civilian Board of Contract Appeals proceedings, and Armed Services Board of Contract Appeals proceedings). This includes proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include audits, site visits, corrective plans, or inspection of deliverables.
- **b.** Conviction, for purposes of this award term and condition, means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, and includes a conviction entered upon a plea of nolo contendere.
- **c.** Total value of currently active grants, cooperative agreements, and procurement contracts includes—
 - **15.5.c.1.** Only the Federal share of the funding under any Federal award with a recipient cost share or match; and
 - **15.5.c.2.** The value of all expected funding increments under a Federal award and options, even if not yet exercised.

16. Federal Financial Reporting (FFR)

Pursuant to 2 CFR 200.328 and 2 CFR 200.344, EPA recipients must submit the Federal Financial Report (SF-425) at least annually and no more frequently than quarterly. EPA's standard reporting frequency is annual unless an EPA Region has included an additional term and condition specifying greater reporting frequency within this award document. EPA recipients must submit the SF-425 no later than 30 calendar days after the end of each specified reporting period for quarterly and semi-annual reports and 90 calendar days for annual reports. Final reports are due no later than 120 calendar days after the end date of the period of performance of the award Extension of reporting due dates may be approved by EPA when requested and justified by the recipient. The FFR form is available on the internet at: https://www.epa.gov/financial/forms. All FFRs must be submitted to the Research Triangle Park Finance Center (RTPFC) via email at https://www.epa.gov/financial/forms.

US Environmental Protection Agency RTP-Finance Center (Mail Code AA216-01) 4930 Page Rd. Durham, NC 27703

The RTPFC will make adjustments, as necessary, to obligated funds after reviewing and accepting a final Federal Financial Report. Recipients will be notified and instructed by EPA if they must complete any additional forms for the closeout of the assistance agreement.

17. Indirect Cost Rate Agreements

This term and condition provides requirements for recipients using EPA funds for indirect costs and applies to all EPA assistance agreements unless there are <u>statutory or regulatory limits on IDCs</u>. See also <u>EPA's Indirect Cost Policy for Recipients of EPA Assistance Agreements</u> (IDC Policy).

In order for the assistance agreement recipient to use EPA funding for indirect costs, the IDC category of the recipient's assistance agreement award budget must include an amount for IDCs and at least one of the following must apply:

- With the exception of "exempt" agencies and Institutions of Higher Education as noted below, all recipients must have one of the following current (not expired) IDC rates, including IDC rates that have been extended by the cognizant agency:
 - Provisional;
 - Final:
 - Fixed rate with carry-forward;
 - Predetermined;
 - 10% de minimis rate authorized by 2 CFR 200.414(f)
 - EPA-approved use of an expired fixed rate with carry-forward on an exception basis, as detailed in section 6.4.a. of the IDC Policy.
- "Exempt" state or local governmental departments or agencies are agencies that receive up to and including \$35,000,000 in Federal funding per the department or agency's fiscal year, and must have an IDC rate proposal developed in accordance with 2 CFR Part 200, Appendix VII, with documentation maintained and available for audit.
- Institutions of Higher Education must use the IDC rate in place at the time of award for the life of the assistance agreement (unless the rate was provisional at time of award, in which case the rate will change once it becomes final). As provided by 2 CFR Part 200, Appendix III(C)(7), the term "life of the assistance agreement", means each competitive segment of the project. Additional information is available in the regulation.

IDCs incurred during any period of the assistance agreement that are not covered by the provisions above are not allowable costs and must not be drawn down by the recipient. Recipients may budget for IDCs if they have submitted a proposed IDC rate to their cognizant Federal agency or requested an exception from EPA under subsection 6.4 of the IDC Policy. However, recipients may not draw down IDCs until their rate is approved, if applicable, or EPA grants an exception. IDC drawdowns must comply with the indirect rate corresponding to the period during which the costs were incurred.

This term and condition does not govern indirect rates for subrecipients or recipient procurement contractors under EPA assistance agreements. Pass-through entities are required to comply with 2 CFR 200.332(a)(4)(i) and (ii) when establishing indirect cost rates for subawards.

18. Audit Requirements

In accordance with <u>2 CFR 200.501(a)</u>, the recipient hereby agrees to obtain a single audit from an independent auditor, if their organization expends \$750,000 or more in total Federal funds in their fiscal year beginning on or after December 26, 2014.

The recipient must submit the form SF-SAC and a Single Audit Report Package within 9 months of the end of the recipient's fiscal year or 30 days after receiving the report from an independent auditor. The SF-SAC and a Single Audit Report Package MUST be submitted using the Federal Audit Clearinghouse's Internet Data Entry System available at: https://facides.census.gov/.

For complete information on how to accomplish the single audit submissions, you will need to visit the Federal Audit Clearinghouse Web site: https://facweb.census.gov/

19. Closeout Requirements

Reports required for closeout of the assistance agreement must be submitted in accordance with this agreement. Submission requirements and frequently asked questions can also be found at: https://www.epa.gov/grants/frequent-questions-about-closeouts

20. Suspension and Debarment

Recipient shall fully comply with Subpart C of 2 C.F.R. Part 180 entitled, "Responsibilities of Participants Regarding Transactions Doing Business With Other Persons," as implemented and supplemented by 2 C.F.R. Part 1532. Recipient is responsible for ensuring that any lower tier covered transaction, as described in Subpart B of 2 C.F.R. Part 180, entitled "Covered Transactions," and 2 C.F.R. § 1532.220, includes a term or condition requiring compliance with 2 C.F.R. Part 180, Subpart C. Recipient is responsible for further requiring the inclusion of a similar term and condition in any subsequent lower tier covered transactions. Recipient acknowledges that failing to disclose the information required under 2 C.F.R. § 180.335 to the EPA office that is entering into the transaction with the recipient may result in the delay or negation of this assistance agreement, or pursuance of administrative remedies, including suspension and debarment. Recipients may access the System for Award Management (SAM) exclusion list at https://sam.gov/SAM/ to determine whether an entity or individual is presently excluded or disqualified.

21. Representation by Corporations Regarding Delinquent Tax Liability or a Felony Conviction under any Federal Law.

This award is subject to the provisions contained in an appropriations act(s) which prohibits the Federal Government from entering into a contract, memorandum of understanding, or cooperative agreement with, make a grant to, or provide a loan or loan guarantee to any corporation having a delinquent Federal tax liability or a felony conviction under any Federal law, unless the agency has considered suspension or debarment of the corporation and has made a determination that this further action is not necessary to protect the interests of the Government. A "corporation" is a legal entity that is separate and distinct from the entities that own, manage, or control it. It is organized and incorporated under the jurisdictional authority of a governmental body, such as a State or the District of Columbia. A corporation may be a for-profit or non-profit organization.

As required by the appropriations act(s) prohibitions, the Government will not enter into a contract, memorandum of understanding, or cooperative agreement with, make a grant to, or provide a loan or loan guarantee with any corporation that — (1) Has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless an agency has considered suspension or debarment of the corporation and made a determination that suspension or debarment is not necessary to protect the interests of the Government; or (2) Was convicted of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency is aware of the conviction, unless an agency has considered suspension or debarment of the corporation and made a determination that this action is not necessary to protect the interests of the Government.

By accepting this award, the recipient represents that it is not a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability; and it is not a corporation that was convicted of a felony criminal violation under a Federal law within the preceding 24 months.

Alternatively, by accepting this award, the recipient represents that it disclosed unpaid Federal tax liability information and/or Federal felony conviction information to the EPA. The Recipient may accept this award if the EPA Suspension and Debarment Official has considered suspension or debarment of the corporation based on a tax liabilities and/or Federal felony convictions and determined that suspension or debarment is not necessary to protect the Government's interests.

If the recipient fails to comply with this term and condition, EPA will annul this agreement and may recover any funds the recipient has expended in violation of the appropriations act(s) prohibition(s). The EPA may also pursue other administrative remedies as outlined in 2 CFR 200.339 and 2 CFR 200.340, and may also pursue suspension and debarment.

22. Disclosing Conflict of Interests

22.1. For awards to Non-federal entities and individuals (other than states and fellowship recipients under 40 CFR Part 46).

As required by 2 CFR 200.112, EPA has established a policy (COI Policy) for disclosure of conflicts of interest (COI) that may affect EPA financial assistance awards. EPA's COI Policy is posted at https://www.epa.gov/grants/epas-financial-assistance-conflict-interest-policy. The posted version of EPA's COI Policy is applicable to new funding (initial awards, supplemental and incremental funding) awarded on or after October 1, 2015. This COI term and condition supersedes prior COI terms and conditions for this award based on either EPA's May 22, 2015 Revised Interim COI Policy or December 26, 2014 Interim COI Policy.

For competitive awards, recipients must disclose any competition related COI described in section 4.0(a) of the COI Policy that are discovered after award to the EPA Grants Specialist listed on the Assistance Agreement/Amendment within 30 calendar days of discovery of the COI. The Grants Specialist will respond to any such disclosure within 30 calendar days.

EPA's COI Policy requires that recipients have systems in place to address, resolve and disclose to EPA COIs described in sections 4.0(b), (c) and/or (d) of the COI Policy that affect any contract or subaward regardless of amount funded under this award. The recipient's COI Point of Contact for the award must disclose any COI to the EPA Grants Specialist listed on the Assistance Agreement/Amendment within 30 calendar days of the discovery of the potential COI and their approach for resolving the COI.

EPA's COI Policy requires that subrecipients have systems in place to address, resolve and disclose COI's described in section 4.0(b)(c) and (d) of the COI Policy regardless of the amount of the transaction. Recipients who are pass-through entities as defined at 2 CFR 200.1 must require that subrecipients being considered for or receiving subawards disclose COI to the pass-through entities in a manner that, at a minimum, is in accordance with sections 5.0(d) and 7.0(c) of EPA's COI Policy. Pass-through entities must disclose the subrecipient COI along with the approach for resolving the COI to the EPA Grants Specialist listed on the Assistance Agreement/Amendment within 30 calendar days of receiving notification of the COI by the subrecipient.

EPA only requires that recipients and subrecipients disclose COI's that are discovered under their systems for addressing and resolving COI. If recipients or subrecipients do not discover a COI, they do not need to advise EPA or the pass-through entity of the absence of a COI.

Upon notice from the recipient of a potential COI and the approach for resolving it, the Agency will then make a determination regarding the effectiveness of these measures within 30 days of receipt of the recipient's notice unless a longer period is necessary due to the complexity of the matter. Recipients may not request payment from EPA for costs for transactions subject to the COI pending notification of EPA's determination. Failure to disclose a COI may result in cost disallowances.

Disclosure of a potential COI will not necessarily result in EPA disallowing costs, with the exception of procurement contracts that the Agency determines violate 2 CFR 200.318(c)(1) or

(2), provided the recipient notifies EPA of measures the recipient or subrecipient has taken to eliminate, neutralize or mitigate the conflict of interest when making the disclosure.

22.2. For awards to states including state universities that are state agencies or instrumentalities

As required by 2 CFR 200.112, EPA has established a policy (COI Policy) for disclosure of conflicts of interest (COI) that may affect EPA financial assistance awards. EPA's COI Policy is posted at: https://www.epa.gov/grants/epas-financial-assistance-conflict-interest-policy. The posted version of EPA's COI Policy is applicable to new funding (initial awards, supplemental, incremental funding) awarded on or after October 1, 2015. This COI term and condition supersedes prior COI terms and conditions for this award based on either EPA's May 22, 2015 Revised Interim COI Policy or December 26, 2014 Interim COI Policy.

For competitive awards, recipients must disclose any competition related COI described in section 4.0(a) of the COI Policy that are discovered after award to the EPA Grants Specialist listed on the Assistance Agreement/Amendment within 30 calendar days of discovery of the COI. The Grants Specialist will respond to any such disclosure within 30 calendar days.

States including state universities that are state agencies and instrumentalities receiving funding from EPA are only required to disclose subrecipient COI as a pass-through entity as defined by 2 CFR 200.1. Any other COI are subject to state laws, regulations and policies. EPA's COI Policy requires that subrecipients have systems in place to address, resolve and disclose COIs described in section 4.0(b)(c) and (d) of the COI Policy that arise after EPA made the award regardless of the amount of the transaction. States who are pass-through entities as defined at 2 CFR 200.1 must require that subrecipients being considered for or receiving subawards disclose COI to the state in a manner that, as a minimum, in accordance with sections 5.0(d) and 7.0(c) of EPA's COI Policy. States must disclose the subrecipient COI along with the approach for resolving the COI to the EPA Grants Specialist listed on the Assistance Agreement/Amendment within 30 calendar days of receiving notification of the COI by the subrecipient.

EPA only requires that subrecipients disclose COI's to state pass-through entities that are discovered under their systems for addressing, resolving, and disclosing COI. If subrecipients do not discover a COI, they do not need to advise state pass-through entities of the absence of a COI.

Upon receiving notice of a potential COI and the approach for resolving it, the Agency will make a determination regarding the effectiveness of these measures within 30 days of receipt of the state's notice of a subrecipient COI unless a longer period is necessary due to the complexity of the matter. States may not request payment from EPA for costs for transactions subject to the COI pending notification of EPA's determination. A subrecipient's failure to disclose a COI to the state and EPA may result in cost disallowances.

Disclosure of a potential subrecipient COI will not necessarily result in EPA disallowing costs, with the exception of procurement contracts that the Agency determines violate 2 CFR 200.318(c)(1) or (2), provided the subrecipient has taken measures that EPA and the state agree eliminate, neutralize or mitigate the conflict of interest.

23. Transfer of Funds and Post-Award Changes for Continuing Environmental Program Grants

Applicable to all assistance agreements other than Continuing Environmental Program Grants subject to 40 CFR 35.114 and 40 CFR 35.514 when EPA's share of the total project costs exceeds the Simplified Acquisition Threshold. Simplified Acquisition Threshold is defined at 2 CFR 200.1 and is currently set at \$250,000 but the amount is subject to adjustment.

(1) As provided at 2 CFR 200.308(f), the recipient must obtain prior approval from EPA's Grants Management

Officer if the cumulative amount of funding transfers among direct budget categories or programs, functions and activities exceeds 10% of the total budget. Recipients must submit requests for prior approval to the Grant Specialist and Grants Management Officer with a copy to the Project Officer for this agreement.

(2) Recipients must notify EPA's Grant Specialist and Project Officer of cumulative funding transfers among direct budget categories or programs, functions and activities that do not exceed 10% of the total budget for the agreement. Recipients must also notify the EPA Grant Specialist and Project Officer when transferring funds from direct budget categories to the indirect cost category or from the indirect cost category to the direct cost category. Prior approval by EPA's Grant Management Officer is required if the transfer involves any of the items listed in 2 CFR 200.407 that EPA did not previously approve at time of award or in response to a previous post-award request by the recipient.

Applicable to Continuing Environmental Program Grants subject to 40 CFR 35.114 and 40 CFR 35.514 when EPA's share of the total project costs exceeds the Simplified Acquisition Threshold. Simplified Acquisition Threshold is defined at 2 CFR 200.1 and is currently set at \$250,000 but the amount is subject to adjustment.

To determine if a post-award change in work plan commitments is significant and requires prior written approval for the purposes of 40 CFR §35.114(a) or 40 CFR §35.514(a), the recipient agrees to consult the EPA Project Officer (PO) before making the change. The term work plan commitments is defined at 40 CFR §35.102. If the PO determines the change is significant, the recipient cannot make the change without prior written approval by the EPA Award Official or Grants Management Officer.

The recipient must obtain written approval from the EPA Award Official prior to transferring funds from one budget category to another if the EPA Award Official determines that such transfer significantly changes work plan commitment(s). All transfers must be reported in required performance reports. In addition, unless approved with the budget at the time of award, Continuing Environmental Program (CEP) recipients must also obtain prior written approval from the EPA Award Official or Grants Management Officer to use EPA funds for directly charging compensation for administrative and clerical personnel under 2 CFR 200.413(c) and the General Provisions for Selected Items of Cost allowability at 2 CFR 200.420 through 200.476 as supplemented by EPA's Guidance on Selected Items of Cost. The recipient is not required to obtain prior written approval from the EPA Award Official for other items requiring prior EPA approval listed in 2 CFR §§ 200.407.

24. Electronic/Digital Signatures on Financial Assistance Agreement Form(s)/Document(s)

Throughout the life of this assistance agreement, the recipient agrees to ensure that any form(s)/document(s) required to be signed by the recipient and submitted to EPA through any means including but not limited to hard copy via U.S. mail or express mail, hand delivery or through electronic means such as e-mail are: (1) signed by the individual identified on the form/document, and (2) the signer has the authority to sign the form/document for the recipient. Submission of any signed form(s)/document(s) is subject to any provisions of law on making false statements (e.g., 18 U.S.C. 1001).

25. Extension of Project/Budget Period Expiration Date

EPA has not exercised the waiver option to allow automatic one-time extensions for non-research grants under 2 CFR 200.308(e)(2). Therefore, if a no-cost time extension is necessary to extend the period of availability of funds, the recipient must submit a written request to the EPA prior to the budget/project period expiration dates. **The written request must include:** a justification describing the need for additional time, an estimated date of completion, and a revised schedule for project completion including updated milestone target dates for the approved workplan activities. In addition, if there are overdue reports required by the general, administrative, and/or programmatic terms and conditions of this assistance agreement, the recipient must ensure that they are submitted along with or prior to submitting the no-cost time extension request.

26. Utilization of Disadvantaged Business Enterprises

GENERAL COMPLIANCE, 40 CFR, Part 33

The recipient agrees to comply with the requirements of EPA's Disadvantaged Business Enterprise (DBE) Program for procurement activities under assistance agreements, contained in 40 CFR, Part 33.

The following text either provides updates to 40 CFR, Part 33 based upon the associated class exception or highlights a requirement.

1. EPA MBE/WBE CERTIFICATION, 40 CFR, Part 33, Subpart B

EPA no longer certifies entities as Minority-Owned Business Entities (MBEs) or Women-Owned Business Entities (WBEs) pursuant to a class exception issued in October 2019. The class exception was authorized pursuant to the authority in 2 CFR, Section 1500.3(b).

2. SIX GOOD FAITH EFFORTS, 40 CFR, Part 33, Subpart C

Pursuant to 40 CFR Section 33.301, the recipient agrees to make good faith efforts whenever procuring construction, equipment, services and supplies under an EPA financial assistance agreement, and to require that sub-recipients, loan recipients, and prime contractors also comply. Records documenting compliance with the six good faith efforts shall be retained. The specific six good faith efforts can be found at: 40 CFR Section 33.301 (a)-(f).

However, in EPA assistance agreements that are for the benefit of Native Americans, the recipient must solicit and recruit Native American organizations and Native American-owned economic enterprises and give them preference in the award process prior to undertaking the six good faith efforts (40 CFR Section 33.304). If recruiting efforts are unsuccessful, the recipient must follow the six good faith efforts.

3. CONTRACT ADMINISTRATION PROVISIONS, 40 CFR Section 33.302

The recipient agrees to comply with the contract administration provisions of <u>40 CFR Section 33.302</u> (a)-(d) and (i).

4. BIDDERS LIST, 40 CFR Section 33.501(b) and (c)

Recipients of a Continuing Environmental Program Grant or other annual reporting grant, agree to create and maintain a bidders list. Recipients of an EPA financial assistance agreement to capitalize a revolving loan fund also agree to require entities receiving identified loans to create and maintain a bidders list if the recipient of the loan is subject to, or chooses to follow, competitive bidding requirements. Please see 40 CFR Section 33.501 (b) and (c) for specific requirements and exemptions.

5. FAIR SHARE OBJECTIVES, 40 CFR, Part 33, Subpart D

In October 2019, a class exception to the entire Subpart D of 40 CFR, Part 33 has been authorized pursuant to the authority in 2 CFR Section 1500.3(b). Notwithstanding Subpart D of 40 CFR, Part 33, recipients are not required to negotiate or apply fair share objectives in procurements under assistance agreements.

6. MBE/WBE REPORTING, 40 CFR, Part 33, Subpart E

When required, the recipient agrees to complete and submit a "MBE/WBE Utilization Under Federal Grants and Cooperative Agreements" report (EPA Form 5700-52A) on an annual basis. The current EPA Form 5700-52A can be found at the EPA Grantee Forms Page at https://www.epa.gov/system/files/documents/2021-08/epa_form_5700_52a.pdf.

Reporting is required for assistance agreements where funds are budgeted for procuring construction, equipment, services and supplies (including funds budgeted for direct procurement by the recipient or procurement under subawards or loans in the "Other" category) with a cumulative total that exceed the

Simplified Acquisition Threshold (SAT) (currently, \$250,000 however the threshold will be automatically revised whenever the SAT is adjusted; See 2 CFR Section 200.1), including amendments and/or modifications. When reporting is required, all procurement actions are reportable, not just the portion which exceeds the SAT.

Annual reports are due by October 30th of each year. Final reports are due 120 days after the end of the project period.

This provision represents an approved exception from the MBE/WBE reporting requirements as described in 40 CFR Section 33.502.

7. MBE/WBE RECORDKEEPING, 40 CFR, Part 33, Subpart E

The recipient agrees to comply with all recordkeeping requirements as stipulated in 40 CFR, Part 33, Subpart E including creating and maintaining a bidders list, when required. Any document created as a record to demonstrate compliance with any requirement of 40 CFR, Part 33 must be maintained pursuant to the requirements stated in this Subpart.

Programmatic General Terms and Conditions

27. Sufficient Progress

EPA will measure sufficient progress by examining the performance required under the workplan in conjunction with the milestone schedule, the time remaining for performance within the project period and/or the availability of funds necessary to complete the project. EPA may terminate the assistance agreement for failure to ensure reasonable completion of the project within the project period.

28. Copyrighted Material and Data

In accordance with <u>2 CFR 200.315</u>, EPA has the right to reproduce, publish, use and authorize others to reproduce, publish and use copyrighted works or other data developed under this assistance agreement for Federal purposes.

Examples of a Federal purpose include but are not limited to: (1) Use by EPA and other Federal employees for official Government purposes; (2) Use by Federal contractors performing specific tasks for [i.e., authorized by] the Government; (3) Publication in EPA documents provided the document does not disclose trade secrets (e.g. software codes) and the work is properly attributed to the recipient through citation or otherwise; (4) Reproduction of documents for inclusion in Federal depositories; (5) Use by State, tribal and local governments that carry out delegated Federal environmental programs as "co-regulators" or act as official partners with EPA to carry out a national environmental program within their jurisdiction and; (6) Limited use by other grantees to carry out Federal grants provided the use is consistent with the terms of EPA's authorization to the other grantee to use the copyrighted works or other data.

Under Item 6, the grantee acknowledges that EPA may authorize another grantee(s) to use the copyrighted works or other data developed under this grant as a result of:

- the selection of another grantee by EPA to perform a project that will involve the use of the copyrighted works or other data or;
- termination or expiration of this agreement.

In addition, EPA may authorize another grantee to use copyrighted works or other data developed with Agency funds provided under this grant to perform another grant when such use promotes efficient and effective use of Federal grant funds.

29. Patents and Inventions

Rights to inventions made under this assistance agreement are subject to federal patent and licensing regulations, which are codified at Title 37 CFR Part 401 and Title 35 USC Sections 200-212.

Pursuant to the Bayh-Dole Act (set forth in 35 USC 200-212), EPA retains the right to a worldwide, nonexclusive, nontransferable, irrevocable, paid-up license to practice the invention owned by the assistance agreement holder, as defined in the Act. To streamline the invention reporting process and to facilitate compliance with the Bayh-Dole Act, the recipient must utilize the Interagency Edison extramural invention reporting system at https://www.nist.gov/iedison. Annual utilization reports must be submitted through the system. The recipient is required to notify the Project Officer identified on the award document when an invention report, patent report, or utilization report is filed at https://www.nist.gov/iedison. EPA elects not to require the recipient to provide a report prior to the close-out of a funding agreement listing all subject inventions or stating that there were none.

In accordance with Executive Order 12591, as amended, government owned and operated laboratories can enter into cooperative research and development agreements with other federal laboratories, state and local governments, universities, and the private sector, and license, assign, or waive rights to intellectual property "developed by the laboratory either under such cooperative research or development agreements and from within individual laboratories."

30. Acknowledgement Requirements for Non-ORD Assistance Agreements

The recipient agrees that any reports, documents, publications or other materials developed for public distribution supported by this assistance agreement shall contain the following statement:

"This project has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement (number) to (recipient). The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does the EPA endorse trade names or recommend the use of commercial products mentioned in this document."

Recipients of EPA Office of Research Development (ORD) research awards must follow the acknowledgement requirements outlined in the research T&Cs available at: https://www.nsf.gov/awards/managing/rtc.jsp. A Federal-wide workgroup is currently updating the Federal-Wide Research Terms and Conditions Overlay to the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards and when completed recipients of EPA ORD research must abide by the research T&Cs.

31. Electronic and Information Technology Accessibility

Recipients are subject to the program accessibility provisions of Section 504 of the Rehabilitation Act, codified in 40 CFR Part 7, which includes an obligation to provide individuals with disabilities reasonable accommodations and an equal and effective opportunity to benefit from or participate in a program, including those offered through electronic and information technology ("EIT"). In compliance with Section 504, EIT systems or products funded by this award must be designed to meet the diverse needs of users (e.g., U.S. public, recipient personnel) without barriers or diminished function or quality. Systems shall include usability features or functions that accommodate the needs of persons with disabilities, including those who use assistive technology. At this time, the EPA will consider a recipient's websites, interactive tools, and other EIT as being in compliance with Section 504 if such technologies meet standards established under Section 508 of the Rehabilitation Act, codified at 36 CFR Part 1194. While Section 508 does not apply directly to grant recipients, we encourage recipients to follow either the 508 guidelines or other comparable guidelines that concern accessibility to EIT for individuals with disabilities.

Recipients may wish to consult the latest Section 508 guidelines issued by the U.S. Access Board or W3C's Web Content Accessibility Guidelines (WCAG) 2.0 (see https://www.access-board.gov/about/policy/accessibility.html).

32. Human Subjects

Human subjects research is any activity that meets the regulatory definitions of both research AND human subject. *Research* is a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. *Human subject* means a living individual about whom an investigator (whether professional or student) conducting research obtains (1) data through intervention or interaction with the individual, or (2) identifiable private information. [40 CFR 26.102 (d)(f)]

No research involving human subjects will be conducted under this agreement without prior written approval of the EPA to proceed with that research. If engaged in human subjects research as part of this agreement, the recipient agrees to comply with all applicable provisions of EPA Regulation 40 CFR 26 (Protection of Human Subjects). This includes, at Subpart A, the Basic Federal Policy for the Protection of Human Research Subjects, also known as the Common Rule. It also includes, at Subparts B, C, and D, prohibitions and additional protections for children, nursing women, pregnant women, and fetuses in research conducted or supported by EPA.

The recipient further agrees to comply with EPA's procedures for oversight of the recipient's compliance with 40 CFR 26, as given in EPA Order 1000.17 Change A1 (Policy and Procedures on Protection of Human Research Subjects in EPA Conducted or Supported Research). As per this order, no human subject may be involved in any research conducted under this assistance agreement, including recruitment, until the research has been approved or determined to be exempt by the EPA Human Subjects Research Review Official (HSRRO) after review of the approval or exemption determination of the Institutional Review Board(s) (IRB(s)) with jurisdiction over the research under 40 CFR 26.

For HSRRO approval, the recipient must forward to the Project Officer: (1) copies of all documents upon which the IRB(s) with jurisdiction based their approval(s) or exemption determination(s), (2) copies of the IRB approval or exemption determination letter(s), (3) copy of the IRB-approved consent forms and subject recruitment materials, if applicable, and (4) copies of all supplementary IRB correspondence.

Following the initial approvals indicated above, the recipient must, as part of the annual report(s), provide evidence of continuing review and approval of the research by the IRB(s) with jurisdiction, as required by 40 CFR 26.109(e). Materials submitted to the IRB(s) for their continuing review and approval are to be provided to the Project Officer upon IRB approval. During the course of the research, investigators must promptly report any unanticipated problems involving risk to subjects or others according to requirements set forth by the IRB. In addition, any event that is significant enough to result in the removal of the subject from the study should also be reported to the Project Officer, even if the event is not reportable to the IRB of record.

33. Animal Subjects

The recipient agrees to comply with the Animal Welfare Act of 1966 (P.L. 89-544), as amended, 7 USC 2131-2156. Recipient also agrees to abide by the "U.S. Government Principles for the Utilization and Care of Vertebrate Animals used in Testing, Research, and Training." (Federal Register 50(97): 20864-20865. May 20,1985). The nine principles can be viewed at https://olaw.nih.gov/policies-laws/phs-policy.htm. For additional information about the Principles, the recipient should consult the Guide for the Care and Use of Laboratory Animals, prepared by the Institute of Laboratory Animal Resources, National Research Council.

34. Light Refreshments and/or Meals

APPLICABLE TO ALL AGREEMENTS EXCEPT STATE CONTINUING ENVIRONMENTAL PROGRAMS (AS DESCRIBED BELOW):

Unless the event(s) and all of its components are described in the approved workplan, the recipient agrees to obtain prior approval from EPA for the use of grant funds for light refreshments and/or meals served at meetings, conferences, training workshops and outreach activities (events). The recipient must send requests for approval to the EPA Project Officer and include:

- (1) An estimated budget and description for the light refreshments, meals, and/or beverages to be served at the event(s);
- (2) A description of the purpose, agenda, location, length and timing for the event; and,
- (3) An estimated number of participants in the event and a description of their roles.

Costs for light refreshments and meals for recipient staff meetings and similar day-to-day activities are not allowable under EPA assistance agreements.

Recipients may address questions about whether costs for light refreshments, and meals for events may be allowable to the recipient's EPA Project Officer; however, the Agency Award Official or Grant Management Officer will make final determinations on allowability. Agency policy prohibits the use of EPA funds for receptions, banquets and similar activities that take place after normal business hours unless the recipient has provided a justification that has been expressly approved by EPA's Award Official or Grants Management Officer.

EPA funding for meals, light refreshments, and space rental may not be used for any portion of an event where alcohol is served, purchased, or otherwise available as part of the event or meeting, even if EPA funds are not used to purchase the alcohol.

Note: U.S. General Services Administration regulations define light refreshments for morning, afternoon or evening breaks to include, but not be limited to, coffee, tea, milk, juice, soft drinks, donuts, bagels, fruit, pretzels, cookies, chips, or muffins. (41 CFR 301-74.7)

FOR STATE CONTINUING ENVIRONMENTAL PROGRAM GRANT RECIPIENTS EXCLUDING STATE UNIVERSITIES:

If the state maintains systems capable of complying with federal grant regulations at 2 CFR 200.432 and 200.438, EPA has waived the prior approval requirements for the use of EPA funds for light refreshments and/or meals served at meetings, conferences, and training, as described above. The state may follow its own procedures without requesting prior approval from EPA. However, notwithstanding state policies, EPA funds may not be used for (1) evening receptions, or (2) other evening events (with the exception of working meetings). Examples of working meetings include those evening events in which small groups discuss technical subjects on the basis of a structured agenda or there are presentations being conducted by experts. EPA funds for meals, light refreshments, and space rental may not be used for any portion of an event (including evening working meetings) where alcohol is served, purchased, or otherwise available as part of the event or meeting, even if EPA funds are not used to purchase the alcohol.

By accepting this award, the state is certifying that it has systems in place (including internal controls) to comply with the requirements described above.

35. Tangible Personal Property

35.1 Reporting Pursuant to 2 CFR 200.312 and 200.314, property reports, if applicable, are required for Federally-owned property in the custody of a non-Federal entity upon completion of the Federal award or when the property is no longer needed. Additionally, upon termination or completion of the project, residual unused supplies with a total aggregate fair market value exceeding \$5,000 not needed for any other Federally-sponsored programs or projects must be reported. For Superfund awards under Subpart O, refer to 40 CFR 35.6340 and 35.6660 for property reporting requirements. Recipients should utilize the Tangible Personal Property Report form series (SF-428) to report tangible personal property.

35.2 Disposition

35.2.1 Most Recipients. Consistent with 2 CFR 200.313, unless instructed otherwise on the official award document, this award term, or at closeout, the recipient may keep the equipment and continue to use it on the project originally funded through this assistance agreement or on other federally funded projects

- whether or not the project or program continues to be supported by Federal funds.
- **35.2.2 State Agencies.** Per 2 CFR 200.313(b), state agencies may manage and dispose of equipment acquired under this assistance agreement in accordance with state laws and procedures.
- **35.2.3 Superfund Recipients.** Equipment purchased under Superfund projects is subject to specific disposal options in accordance with 40 CFR Part 35.6345.

36. Dual Use Research of Concern (DURC)

The recipient agrees to conduct all life science research* in compliance with <u>EPA's Order on the Policy and Procedures for Managing Dual Use Research of Concern</u> (EPA DURC Order) and <u>United States Government Policy for Institutional Oversight of Life Sciences Dual Use Research of Concern</u> (iDURC Policy). If the recipient is an institution within the United States that receives funding through this agreement, or from any other source, the recipient agrees to comply with the iDURC Policy if they conduct or sponsor research involving any of the agents or toxins identified in Section 6.2.1 of the iDURC Policy. If the institution is outside the United States and receives funding through this agreement to conduct or sponsor research involving any of those same agents or toxins, the recipient agrees to comply with the iDURC Policy. The recipient agrees to provide any additional information that may be requested by EPA regarding DURC and iDURC. The recipient agrees to immediately notify the EPA Project Officer should the project use or introduce use of any of the agents or toxins identified in the iDURC Policy. The recipient's Institution/Organization must also comply with USG iDURC policy and EPA DURC Order and will inform the appropriate government agency if funded by such agency of research with the agents or toxins identified in Section 6.2.1 of the iDURC Policy. If privately funded the recipient agrees to notify the National Institutes of Health at <u>DURC@od.nih.gov</u>.

*"Life Sciences Research," for purposes of the EPA DURC Order, and based on the definition of research in 40 CFR §26.102(d), is a systematic investigation designed to develop or contribute to generalizable knowledge involving living organisms (e.g., microbes, human beings, animals, and plants) and their products. EPA does not consider the following activities to be research: routine product testing, quality control, mapping, collection of general-purpose statistics, routine monitoring and evaluation of an operational program, observational studies, and the training of scientific and technical personnel. [Note: This is consistent with Office of Management and Budget Circular A-11.]

37. Research Misconduct

In accordance with 2 CFR 200.329, the recipient agrees to notify the EPA Project Officer in writing about research misconduct involving research activities that are supported in whole or in part with EPA funds under this project. EPA defines research misconduct as fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results [65 FR 76262. I], or ordering, advising or suggesting that subordinates engage in research misconduct. The recipient agrees to:

- (1) Immediately notify the EPA Project Officer who will then inform the EPA Office of Inspector General (OIG) if, at any time, an allegation of research misconduct falls into one of the categories listed below:
- A. Public health or safety is at risk.
- B. Agency resources or interests are threatened.
- C. Circumstances where research activities should be suspended.
- D. There is a reasonable indication of possible violations of civil or criminal law.
- E. Federal action is required to protect the interests of those involved in the investigation.
- F. The research entity believes that the inquiry or investigation may be made public prematurely so that appropriate steps can be taken to safeguard evidence and protect the rights of those involved.
- G. Circumstances where the research community or public should be informed. [65 FR 76263.III]
- (2) Report other allegations to the OIG when they have conducted an inquiry and determined that there is sufficient evidence to proceed with an investigation. [65 FR 76263. III]

38. Scientific Integrity Terms and Conditions

The recipient agrees to comply with <u>EPA's Scientific Integrity Policy</u> when conducting, supervising, and communicating science and when using or applying the results of science. For purposes of this award condition scientific activities include, but are not limited to, computer modelling, economic analysis, field sampling, laboratory experimentation, demonstrating new technology, statistical analysis, and writing a review article on a scientific issue. The recipient agrees to:

38.1 Scientific Products

- **38.1.1** Produce scientific products of the highest quality, rigor, and objectivity, by adhering to applicable EPA <u>information quality guidelines quality policy</u> and peer review policy.
- **38.1.2** Prohibit all recipient employees, contractors, and program participants, including scientists, managers, and other recipient leadership, from suppressing, altering, or otherwise impeding the timely release of scientific findings or conclusions.
- **38.1.3** Adhere to EPA's Peer Review Handbook, 4th Edition, for the peer review of scientific and technical work products generated through EPA grants or cooperative agreements which, by definition, are not primarily for EPA's direct use or benefit.

38.2 Scientific Findings

- **38.2.1** Require that reviews regarding the content of a scientific product that are conducted by the project manager and other recipient managers and the broader management chain be based only on scientific quality considerations, e.g., the methods used are clear and appropriate, the presentation of results and conclusions is impartial.
- 38.2.2 Ensure scientific findings are generated and disseminated in a timely and transparent manner, including scientific research performed by employees, contractors, and program participants, who assist with developing or applying the results of scientific activities.
- **38.2.3** Include, when communicating scientific findings, an explication of underlying assumptions, accurate contextualization of uncertainties, and a description of the probabilities associated with both optimistic and pessimistic projections, if applicable.
- **38.2.4** Document the use of independent validation of scientific methods.
- **38.2.5** Document any independent review of the recipient's scientific facilities and testing activities, as occurs with accreditation by a nationally or internationally recognized sanctioning body.
- **38.2.6** Make scientific information available online in open formats in a timely manner, including access to data and non-proprietary models.

38.3 Scientific Misconduct

- **38.3.1** Prohibit intimidation or coercion of scientists to alter scientific data, findings, or professional opinions or non-scientific influence of scientific advisory boards. In addition, recipient employees, contractors, and program participants, including scientists, managers, and other leadership, shall not knowingly misrepresent, exaggerate, or downplay areas of scientific uncertainty.
- 38.3.2 Prohibit retaliation or other punitive actions toward recipient employees who uncover or report allegations of scientific and research misconduct, or who express a differing scientific opinion. Employees who have allegedly engaged in scientific or research misconduct shall be afforded the due process protections provided by law, regulation, and applicable collective bargaining agreements, prior to any action. Recipients shall ensure that all employees and contractors of the recipient shall be familiar with these protections and avoid the appearance of retaliatory actions.
- **38.3.3** Require all recipient employees, contractors, and program participants to act honestly and refrain from acts of research misconduct, including publication or reporting, as described in EPA's Policy and Procedures for Addressing Research Misconduct, Section 9.C. Research misconduct does not include honest error or differences of opinion. While EPA

retains the ultimate oversight authority for EPA-supported research, grant recipients conducting research bear primary responsibility for prevention and detection of research misconduct and for the inquiry, investigation, and adjudication of research misconduct alleged to have occurred in association with their own institution.

38.3.4 Take the actions required on the part of the recipient described in EPA's Policy and Procedures for Addressing Research Misconduct, Sections 6 through 9, when research misconduct is suspected or found.

38.4 Additional Resources

For more information about the Scientific Integrity Policy, an introductory video can be accessed at: https://youtu.be/FQJCy8BXXq8. A training video is available at: https://youtu.be/Zc0T7fooot8.

Public Policy Requirements

39. Civil Rights Obligations

This term and condition incorporates by reference the signed assurance provided by the recipient's authorized representative on: 1) EPA Form 4700-4, "Preaward Compliance Review Report for All Applicants and Recipients Requesting EPA Financial Assistance"; and 2) Certifications and Representations in Sam.gov or Standard Form 424D, as applicable.

These assurances and this term and condition obligate the recipient to comply fully with applicable civil rights statutes and implementing federal and EPA regulations.

a. Statutory Requirements

- i. In carrying out this agreement, the recipient must comply with:
 - 1. Title VI of the Civil Rights Act of 1964, which prohibits discrimination based on race, color, and national origin, including limited English proficiency (LEP), by entities receiving Federal financial assistance.
 - 2. Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination against persons with disabilities by entities receiving Federal financial assistance; and
 - 3. The Age Discrimination Act of 1975, which prohibits age discrimination by entities receiving Federal financial assistance.
- ii. If the recipient is an education program or activity (e.g., school, college or university) or if the recipient is conducting an education program or activity under this agreement, it must also comply with:
 - 1. Title IX of the Education Amendments of 1972, which prohibits discrimination on the basis of sex in education programs and activities operated by entities receiving Federal financial assistance. For further information about your compliance obligations regarding Title IX, see 40 CFR Part 5 and https://www.justice.gov/crt/title-ix
- iii. If this agreement is funded with financial assistance under the Clean Water Act (CWA), the recipient must also comply with:
 - 1. Section 13 of the Federal Water Pollution Control Act Amendments of 1972, which prohibits discrimination on the basis of sex in CWA-funded programs or activities.

b. Regulatory Requirements

- i. The recipient agrees to comply with all applicable EPA civil rights regulations, including:
 - 1. For Title IX obligations, 40 C.F.R. Part 5; and
 - 2. For Title VI, Section 504, Age Discrimination Act, and Section 13 obligations, 40 CFR Part7.
 - 3. For statutory and national policy requirements, including those prohibiting discrimination and those described in Executive Order 13798 promoting free speech

- and religious freedom, 2 CFR 200.300.
- 4. As noted on the EPA Form 4700-4 signed by the recipient's authorized representative, these regulations establish specific requirements including maintaining compliance information, establishing grievance procedures, designating a Civil Rights Coordinator and providing notices of non-discrimination.

c. TITLE VI – LEP, Public Participation and Affirmative Compliance Obligation

- i. As a recipient of EPA financial assistance, you are required by Title VI of the Civil Rights Act to provide meaningful access to LEP individuals. In implementing that requirement, the recipient agrees to use as a guide the Office of Civil Rights (OCR) document entitled "Guidance to Environmental Protection Agency Financial Assistance Recipients Regarding Title VI Prohibition Against National Origin Discrimination Affecting Limited English Proficient Persons." The guidance can be found at:

 https://www.federalregister.gov/documents/2004/06/25/04-14464/guidance-to-environmental-protection-agency-financial-assistance-recipients-regarding-title-vi
- ii. If the recipient is administering permitting programs under this agreement, the recipient agrees to use as a guide OCR's Title VI Public Involvement Guidance for EPA Assistance Recipients Administering Environmental Permitting Programs. The Guidance can be found at: https://www.govinfo.gov/content/pkg/FR-2006-03-21/pdf/06-2691.pdf
- iii. In accepting this assistance agreement, the recipient acknowledges it has an affirmative obligation to implement effective Title VI compliance programs and ensure that its actions do not involve discriminatory treatment and do not have discriminatory effects even when facially neutral. The recipient must be prepared to demonstrate to EPA that such compliance programs exist and are being implemented or to otherwise demonstrate how it is meeting its Title VI obligations.

40. Drug-Free Workplace

The recipient organization of this EPA assistance agreement must make an ongoing, good faith effort to maintain a drug-free workplace pursuant to the specific requirements set forth in Title 2 CFR Part 1536 Subpart B. Additionally, in accordance with these regulations, the recipient organization must identify all known workplaces under its federal awards, and keep this information on file during the performance of the award.

Those recipients who are individuals must comply with the drug-free provisions set forth in Title 2 CFR Part 1536 Subpart C.

The consequences for violating this condition are detailed under Title <u>2 CFR Part 1536 Subpart E</u>. Recipients can access the Code of Federal Regulations (CFR) Title 2 Part 1536 at www.ecfr.gov/.

41. Hotel-Motel Fire Safety

Pursuant to 15 USC 2225a, the recipient agrees to ensure that all space for conferences, meetings, conventions or training seminars funded in whole or in part with federal funds complies with the protection and control guidelines of the Hotel and Motel Fire Safety Act (PL 101-391, as amended). Recipients may search the Hotel-Motel National Master List at https://apps.usfa.fema.gov/hotel/ to see if a property is in compliance, or to find other information about the Act.

42. Lobbying Restrictions

a) This assistance agreement is subject to lobbying restrictions as described below. Applicable to all assistance agreements:

- i) The chief executive officer of this recipient agency shall ensure that no grant funds awarded under this assistance agreement are used to engage in lobbying of the Federal Government or in litigation against the U.S. unless authorized under existing law. The recipient shall abide by the Cost Principles available at 2 CFR Part 200 which generally prohibits the use of federal grant funds for litigation against the U.S. or for lobbying or other political activities.
- ii) The recipient agrees to comply with Title 40 CFR Part 34, New Restrictions on Lobbying. The recipient shall include the language of this provision in award documents for all subawards exceeding \$100,000 and require that subrecipients submit certification and disclosure forms accordingly.
- iii) In accordance with the Byrd Anti-Lobbying Amendment, any recipient who makes a prohibited expenditure under Title 40 CFR Part 34 or fails to file the required certification or lobbying forms shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure.
- iv) Contracts awarded by a recipient shall contain, when applicable, the anti-lobbying provision as stipulated in the Appendix II to Part 200—Contract Provisions for Non-Federal Entity Contracts Under Federal Awards.
- v) By accepting this award, the recipient affirms that it is not a nonprofit organization described in Section 501(c)(4) of the Internal Revenue Code of 1986 as required by Section 18 of the Lobbying Disclosure Act; or that it is a nonprofit organization described in Section 501(c)(4) of the Code but does not and will not engage in lobbying activities as defined in Section 3 of the Lobbying Disclosure Act. Nonprofit organizations exempt from taxation under section 501(c)(4) of the Internal Revenue Code that engage in lobbying activities are ineligible for EPA subawards.

b) Applicable to assistance agreements when the amount of the award is over \$100,000:

- i) By accepting this award, the recipient certifies, to the best of its knowledge and belief, that:
 - (1) No Federal appropriated funds have been or will be paid, by or on behalf of the recipient, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, or any employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the recipient shall complete and submit the linked Standard Form -- LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
 - (3) The recipient shall require that the language of this certification be included in the award documents for all subawards exceeding \$100,000 at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

ii) This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each failure.

43. Recycled Paper

When directed to provide paper documents, the recipient agrees to use recycled paper and double-sided printing for all reports which are prepared as a part of this agreement and delivered to EPA. This requirement does not apply to reports prepared on forms supplied by EPA.

44. Resource Conservation and Recovery Act

Consistent with goals of section 6002 of RCRA (42 U.S.C. 6962), State and local institutions of higher education, hospitals and non-profit organization recipients agree to give preference in procurement programs to the purchase of specific products containing recycled materials, as identified in 40 CFR Part 247.

Consistent with section 6002 of RCRA (42 U.S.C. 6962) and 2 CFR 200.323, State agencies or agencies of a political subdivision of a State and its contractors are required to purchase certain items made from recycled materials, as identified in 40 CFR Part 247, when the purchase price exceeds \$10,000 during the course of a fiscal year or where the quantity of such items acquired in the course of the preceding fiscal year was \$10,000 or more. Pursuant to 40 CFR 247.2 (d), the recipient may decide not to procure such items if they are not reasonably available in a reasonable period of time; fail to meet reasonable performance standards; or are only available at an unreasonable price.

45. Trafficking in Persons

- a. Provisions applicable to a recipient that is a private entity.
 - i. The recipient, the recipient's employees, subrecipients under this award, and subrecipients' employees may not—
 - 1. Engage in severe forms of trafficking in persons during the period of time that the award is in effect;
 - 2. Procure a commercial sex act during the period of time that the award is in effect; or
 - 3. Use forced labor in the performance of the award or subawards under the award.
 - ii. We as the Federal awarding agency may unilaterally terminate this award, without penalty, if the recipient or a subrecipient that is a private entity—
 - 1. Is determined to have violated a prohibition in paragraph a of this award term; or
 - 2. Has an employee who is determined by the agency official authorized to terminate the award to have violated a prohibition in paragraph a of this award term through conduct that is either
 - a. Associated with performance under this award; or
 - b. Imputed to the recipient or subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR Part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our Agency at 2 CFR Part 1532.
 - **b. Provision applicable to a recipient other than a private entity.** EPA may unilaterally terminate this award, without penalty, if a subrecipient that is a private entity
 - i. Is determined to have violated an applicable prohibition in paragraph a. of this award term;
 - ii. Has an employee who is determined by the agency official authorized to terminate the

award to have violated an applicable prohibition in paragraph a of this award term through conduct that is either—

- 1. Associated with performance under this award; or
- 2. Imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR Part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by EPA at 2 CFR Part 1532.

c. Provisions applicable to any recipient.

- i. The recipient must inform the EPA immediately of any information received from any source alleging a violation of a prohibition in paragraph a of this award term.
- ii. Our right to terminate unilaterally that is described in paragraph a and b:
 - 1. Implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and
 - 2. Is in addition to all other remedies for noncompliance that are available to us under this award.
- iii. The recipient must include the requirements of paragraph a of this award term in any subaward made to a private entity.

d. Definitions. For purposes of this award term:

- i. "Employee" means either:
 - 1. An individual employed by you or a subrecipient who is engaged in the performance of the project or program under this award; or
 - Another person engaged in the performance of the project or program under this
 award and not compensated by you including, but not limited to, a volunteer or
 individual whose services are contributed by a third party as an in-kind contribution
 toward cost sharing or matching requirements.
- ii. "Forced labor" means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.
- iii. "Private entity":
 - 1. Means any entity other than a State, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25.
 - 2. Includes:
 - a. A nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 CFR 175.25(b).
 - b. A for-profit organization.
- iv. "Severe forms of trafficking in persons," "commercial sex act," and "coercion" have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. 7102).

46. Build America, Buy America (Effective May 14, 2022 and applicable to all funding that date forward; Clarifications added October 1, 2022)

a. The recipient is subject to the Buy America Sourcing requirements under the Build America, Buy America provisions of the Infrastructure Investment and Jobs Act (IIJA) (P.L. 117-58, §§70911-70917) for the types of infrastructure projects under the EPA program and activities specified in the chart, "Environmental Protection Agency's Identification of Federal Financial Assistance Infrastructure Programs Subject to the Build America Buy America Provisions of the Infrastructure Investment and Jobs Act." None of the funds provided under this award may be used for a project of infrastructure unless all iron and steel, manufactured products, and construction materials that are consumed in, incorporated into, or affixed to an infrastructure project are produced in the United States. The Buy America preference requirement applies to an entire infrastructure project, even if it is funded by

both Federal and non-Federal funds. The recipient must implement these requirements in its procurements, and these requirements must flow down to all subawards and contracts at any tier. For legal definitions and sourcing requirements, the recipient must consult EPA's <u>Build America</u>, <u>Buy America website</u> and the Office of Management and Budget's (OMB) <u>Memorandum M-22-11</u>, <u>Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure</u>.

- **b.** When supported by rationale provided in IIJA §70914, the recipient may submit a waiver request to EPA. Recipients should request guidance on the submission instructions of an EPA waiver request from the EPA Project Officer for this agreement. A list of approved EPA waivers (general applicability and project specific) is available on the EPA <u>Build America</u>, <u>Buy America website</u>.
- c. For questions regarding the applicability of the Build America, Buy America Act requirements to this assistance agreement or if there is an approved waiver in place, please contact the EPA Project Officer for this agreement.