



# 2021 Request for Proposals

## Demonstration of Innovative Technologies to Manage Animal Waste

### THE MARYLAND DEPARTMENT OF AGRICULTURE

issues this Request for Proposals from eligible persons seeking a grant to partially fund the development of economically feasible animal waste technology projects in Maryland. The purpose of this request is to encourage the development and implementation of proven, innovative technologies that manage animal waste in a manner that: (1) reduces the amount of nutrients in the waste; (2) changes the product's form or function for alternative uses; or (3) produces energy or other marketable products from the waste.

New this year, innovative technology proposals treating animal waste streams—in addition to animal manure—will be accepted. Examples include dairy wastewater, poultry processing waste, and livestock mortality among others. Refer to the definition and evaluation criteria within the Request for Proposals for additional information.

To be eligible for financial assistance, the project must have strong potential to: (1) improve public health and the environment (e.g., resulting in a reduction of nitrogen and phosphorus transport to waters of the State); (2) preserve the viability of the agricultural industry; and (3) have a positive economic development impact in the State.

### WHO IS ELIGIBLE?

- ▶ Individuals, businesses and non-profits in good standing to do business in Maryland, and State and local government entities.
- ▶ The proposed technology must have been previously implemented and be either commercially available or proven to function as described in the proposal.
- ▶ The technology's net effect must reduce the movement of nitrogen and/or phosphorus that is associated with animal waste produced from Maryland farms.

- ▶ Technologies in the research and development stage are not eligible.
- ▶ Proposed projects must be located in Maryland.
- ▶ Proposals must include verification that a site has been secured to implement the technology.
- ▶ The applicant, identified subcontractors, experts, or partners, shall have at least three years of experience with the proposed animal manure technology.

### AMOUNT

Up to \$3.35 million will be granted. There is no maximum or minimum request.

### PROCESS

Applications will be reviewed by the Evaluation Committee. Awards will be made by the Secretary of Agriculture on advice of the Committee.

### CONTACT

**Alisha Mulkey**  
Maryland Department of Agriculture  
50 Harry S. Truman Parkway  
Annapolis MD 21401  
alisha.mulkey@maryland.gov | 410-841-5873

### CLOSING DATE AND TIME

December 31, 2020 at 5 P.M. Local Time



**Maryland**  
**Department of Agriculture**

*Office of Resource Conservation*

**[mda.maryland.gov/manure](http://mda.maryland.gov/manure)**



## 2021 GRANT PROJECT REQUEST

### Demonstration of Innovative Technologies to Manage Animal Waste

The Maryland Department of Agriculture (“MDA” or the “Department”) issues this Request for Proposals from eligible persons seeking a grant to partially fund the development, implementation, or market development of economically feasible animal waste technology projects in Maryland. The purpose of this request is to encourage the development and implementation of proven and innovative technologies that manage animal waste in a manner that: (1) reduces the amount of nutrients in the waste; (2) changes the product’s form or function for alternative uses; or (3) produces energy or other marketable products from the waste. For purposes of this Request for Proposals, animal waste is defined as “any waste stream generated by an on-farm animal or waste generated through an animal production process involving Maryland livestock.” Examples of the latter could include, but not limited to, dairy wastewater, poultry processing waste, or livestock carcasses. To be eligible for financial assistance, the project must have strong potential to:

- (1) improve the public health and the environment (e.g., resulting in the reduction of nitrogen and phosphorus transport to the waters of the State);
- (2) preserve the viability of the agricultural industry; and
- (3) have a positive economic development impact in the State.

The Department, in consultation with the Animal Waste Technology Advisory Committee and Evaluation Committee, will employ a ranking system to evaluate proposals as described in Section 2. Highest consideration will be given to proposals that demonstrate an innovative technology that manages animal manures.

## SECTION 1 – GENERAL INFORMATION

### Background

Financial Assistance in the form of a grant is being made available through the Animal Waste Technology Fund, which has up to \$3.35 million that may go toward the demonstration of economically feasible animal waste management technology projects that are proven and innovative and may be utilized in Maryland. Persons interested in demonstrating technologies or products in the Maryland market that are already commercialized are eligible. Funding in State Fiscal Year 2021 is supported by the Chesapeake and Atlantic Coastal Bays Trust Fund. There are no minimum or maximum amounts for requests.

### Grant Requirements

The Grantee is expected to perform all necessary work under the Grant Agreement within two years. The Grantee is expected to: (1) Implement/install the proposed animal waste technology project within one year (Year One), and (2) Operate the project and monitor its performance for at least a one-year period (Year Two). **At the sole discretion of the Department and upon request with justification by the grantee, this two-year performance period may be extended for one additional year to address unforeseen delays that the Grantee has incurred in implementing the project.** If the Department grants this extension, it will not be responsible for any additional costs that the Grantee incurs.

### Timeline

Request issued: September 30, 2020  
Final proposals due: December 31, 2020  
Grant awards announced: May 1, 2021

## Public Information Act Notice

An applicant should clearly identify those portions of its proposal to be treated as confidential commercial information, confidential financial information, or trade secrets by page number and list them after the Title Page. Applicants should be prepared to provide justification why such materials, upon request, should not be disclosed by the State under the Maryland Public Information Act, Md. Code Ann., General Provisions Article, Title 10, Subtitle 4.

Applicants may be required to make oral presentations to committees advising MDA, including the Animal Waste Technology Advisory Committee and Evaluation Committee. Applicants must confirm in writing any substantive changes or clarifications to their proposals, if warranted, as a result of the presentation and the Applicant's response to written questions or discussions with these committees. Any such written clarifications or changes shall become part of the Applicant's proposal and are binding if the grant is awarded.

## Substitution of Personnel

Key personnel shall be the same personnel proposed in the application and will be incorporated into the Grant by reference. Such identified key personnel shall perform continuously for the duration of the Grant, or such lesser duration as specified in the proposal. Key personnel may not be removed from the project under this Grant without the prior written approval of the Grant Monitor. The applicant shall demonstrate to the Grant Monitor's satisfaction that the proposed substitute key personnel have qualifications and experience at least equal to those of the key personnel for whom the replacement is requested. See Grant agreement, section 5, which is posted on MDA website.

## Application Submission

Please submit your application package as an email attachment (in Microsoft Word or Adobe PDF format) to [alisha.mulkey@maryland.gov](mailto:alisha.mulkey@maryland.gov). While electronic applications are preferred, hardcopy applications will be accepted and must be accompanied by CD (or DVD) of the proposal and mailed to the address below. CD/DVDs must be labeled on the outside with the grant request title, name of the applicant, and project name. CD/DVDs must be packaged with the original copy of the Grant Proposal. All proposals regardless of format must be received by MDA no later than 5 P.M. on December 31, 2020.

*Applications mailed should be addressed to:*

Alisha Mulkey  
Animal Waste Technology Fund—Room 306  
Maryland Department of Agriculture  
50 Harry S. Truman Parkway  
Annapolis, MD 21401

## Right to Cancel and Other Reserved Rights

The State reserves the right to cancel this Grant Request, accept or reject any and all proposals, in whole or in part, received in response to this Grant Request, to waive or permit the cure of minor irregularities, and to conduct discussions with all qualified or potentially qualified applicants in any manner necessary to serve the best interests of the State.

## Verification of Registration

Before a business entity can do business in the State it must be registered with the State Department of Assessments and Taxation ("SDAT"). SDAT is located in the State Office Building, Room 803, 301 West Preston Street, Baltimore, Maryland 21201. The website to register is <https://egov.maryland.gov/businessexpress>

## SECTION 2 – EVALUATION COMMITTEE, CRITERIA, AND SELECTION PROCEDURE

### Evaluation Committee

Evaluation of Proposals will be performed by a committee established for that purpose. The Evaluation Committee will review proposals, participate in applicant oral presentations and discussions, review the applicant's written responses, and provide input to the Department and the Animal Waste Technology Advisory Committee. The Department reserves the right to utilize the services of individuals outside of the established Evaluation Committee for advice and assistance, as deemed appropriate. Leveraged projects will be ranked more highly.

### Evaluation Criteria

The Committee shall evaluate each Proposal to discern whether it meets the goal of the Animal Waste Technology Program—that being, to develop and implement an economically feasible technology that will:

- (a) Help protect the public health and the environment by reducing the amount of nutrients from animal waste to enable farmers to meet nutrient management requirements; and
- (b) Provide alternative waste management strategies for farmers.

**To this end, the Committee, in evaluating each Proposal, shall utilize the five criteria listed immediately below (Note: The importance of each criterion is listed in descending order; and unless stated otherwise, any sub-criteria within a criterion has equal weight.):**

1. The extent to which the Project demonstrates the following:
  - a. The Project will improve the public health and the environment resulting in the reduction of nitrogen and phosphorus transport to the waters of the State; and
  - b. The Project will help preserve the viability of the agricultural industry by improving animal waste management strategies.
2. The particulars of the animal waste technology project and whether, in descending order of importance, the technology:
  - a. Treats/addresses a majority (by weight or volume) of on-farm generated manures;
  - b. Treats/addresses comingled on-farm generated manures and other animal wastes as defined in the Proposal;
  - c. Treats/addresses a majority (by weight or volume) of animal wastes other than on-farm generated manures, as defined in the Proposal; or
  - d. Provides innovative designs and demonstrations of farm equipment that promote improved nutrient application and nutrient efficiency of animal wastes.
3. The Grantee's readiness to begin implementing the Project and ability to complete it in a timely manner as demonstrated by:
  - a. The expertise of key personnel and, in particular, their expertise in relation to implementing the proposed technology;
  - b. The sufficiency of staffing and, in particular, the employees and/or contractors named to develop/install/construct/implement the proposed technology; and
  - c. The external financing available to develop/install/construct/implement the proposed technology (other than the requested grant sum).
4. The Project will have both a positive economic development impact in the State and demonstrate economic feasibility. Economic impact and feasibility may be demonstrated by one of the following: producing higher value end-products that may offset animal waste disposal costs, improving management of animal wastes, or resulting in on-farm savings (time, utilities, etc.) from the operation and maintenance of the technology.

5. The investment that others, including the Grantee, have in the proposed technology, including its development and implementation.

## **SECTION 3 – MINIMUM QUALIFICATIONS**

### **Minimum Qualifications**

These Minimum Qualifications are requirements that must be met by an applicant:

1. The applicant's proposed technology must have been previously implemented. Technologies must be either commercially available or proven to function as described in the proposal. Technologies in the research and development stage are not eligible. As proof of meeting these requirements, applicants must provide all of the following:
  - a. The location/s where the technology has been implemented and the period of time it was/has been operational.
  - b. The person or entity that purchased and/or has primary management responsibility for the implemented technology.
  - c. The scale of implementation, *i.e.*: the amount and type of waste materials processed/treated per month and per year. Information about implementation should specify whether the technology use has included management or processing of animal manure or other animal waste and at what scale.
2. Proposals must include verification that a site has been secured for implementation of the technology and whether the current zoning allows the intended use. If the technology proposed serves one farm operation, it must be located on that farm. Applicants must identify the site location, include a site map, and provide written verification signed by the owner/operator of the farm confirming the owner's/operator's intent to participate in the project or otherwise allow the construction, installation, and operation of the project on the owner's/operator's land. If the technology is proposed to serve multiple farm operations, the site location(s) must be identified and, as proof of meeting the requirement of serving multiple farms, the applicant must provide written verification from each owner/operator confirming the owner's/operator's intent to participate in the project and the manner in which each owner/operator will be participating in the project. MDA's first payment disbursement to the Grantee will be contingent on the Grantee securing a contractual agreement with the owner/operator of the land on which the project will be installed/ constructed/operated guaranteeing use of site for the project during the entire project period, and any other agreement MDA deems necessary for the project's success.
3. Technologies must have the net effect of reducing nitrogen and/or phosphorus transport to waters of the State and must be associated with animal production from Maryland farms, either from on-farm generated manures or other waste streams generated by livestock production. Applicants must address mitigation for technologies that change the media or pathway for nitrogen movement, for example, from water to air. As proof of meeting this requirement, applicants must provide:
  - a. A narrative description of nutrient content of the animal waste at the beginning and ending stages of the implementation of the proposed technology and the fate or use of any products and co-products that result from use of the technology in relation to their nutrient content, material quantity, and nitrogen and phosphorus reduction in the context of Request objectives, and
  - b. Information from the current and projected (following implementation of technology) nutrient management plan of a subject farm indicating how the technology will improve the ability to manage nutrients, comply with Maryland nutrient management regulations, and reduce nutrient movement to the waters of the State.
4. The applicant and other key personnel working on the project shall have at least three years of relevant and material experience with the technology being proposed in its Proposal. The applicant shall have personnel who possess/have the necessary knowledge, experience, training to successfully

develop/install/manage/operate the proposed technology. As proof of meeting these minimum requirements, the applicant shall provide with its proposal (a) three references from the past five years that attest to the applicant's relevant and material experience managing or implementing the proposed technology; and (b) the applicant's resume and the resumes of key personnel working on this project.

## **SECTION 4 – SCOPE OF WORK**

### **Requirements**

#### **I. General Requirements**

The Applicant shall install and implement the animal waste technology in the following manner:

1. Provide technical and administrative support as well as construction oversight for installation, demonstration and operation, during a period of time established in the Grant Agreement, for an innovative technology to process animal waste in a manner that improves its handling, on-farm management or utility for conversion to other uses such as energy production and alternative fertilizer products, or field applications of animal waste in a manner that promotes improved nutrient cycling.
2. Address all aspects of assuring any products or co-products generated by the technology result in their safe use or manage their fate, including permitting, marketing, and sale.
3. Adhere to the project's implementation timetable and meet identified milestones as established in the proposal.
4. Contribute to a reduction in Maryland's contribution of nitrogen and phosphorus runoff from animal agriculture to the Chesapeake Bay and its tributaries.
5. Implement the technology in a manner that helps support, promote, and sustain the animal agriculture industry in Maryland.
6. Cooperatively work with individuals or institutions, approved by MDA, with recognized expertise, to establish protocols and collect data to conduct performance monitoring for a minimum of one year of operation after installation:
  - a. MDA may facilitate and provide support for third party performance monitoring expertise as needed, including evaluation of economic and environmental performance. Award recipients will be required to collaborate and be responsible for on-site performance documentation as a condition of accepting an award.
  - b. Environmental or performance monitoring to include installation of appropriate monitoring equipment and laboratory analysis as applicable shall be included in projects in order to qualify for an award under this Request.
  - c. Performance results will be shared with interested stakeholders and posted in publically available reports.
  - d. Projects will be made accessible for scheduled tours.
  - e. Performance results are not required to include a farm specific nutrient management plan.
  - f. Performance results are not required to include confidential business information.
7. Meet all necessary local, state or federal requirements and obtain necessary permits to install and implement the animal manure or waste technology and fully comply with all local and state requirements and permits.

#### **II. Reports**

See Grant Agreement, Section 6, which is posted on MDA's website. Address:

[https://mda.maryland.gov/resource\\_conservation/Pages/innovative\\_technology.aspx](https://mda.maryland.gov/resource_conservation/Pages/innovative_technology.aspx)

#### **III. Insurance Requirements**

1. For all work performed by the Grantee that is to be funded in whole or in part with grant funds provided by MDA, the Grantee shall purchase and maintain comprehensive third-party legal liability insurance or its equivalent with limits sufficient to cover losses resulting from, or arising out of, action or inaction in the performance of the Grant Agreement by the Grantee, its agents, servants,

employees, or subcontractors, but no less than a Combined Single Limit for Bodily Injury, Property Damage, and Personal Injury Liability of \$1,000,000 per occurrence and \$3,000,000 aggregate. Grantee shall also maintain other such insurance as is appropriate for the work to be performed. For a Maryland State or local government entity that is self-insured, a document detailing the statutory basis for self-insurance may be accepted by MDA as an equivalent form of insurance under this paragraph.

2. All insurance must name the State of Maryland as an additional insured. The insurance provided shall include, but not be limited to, insurance protecting the State of Maryland from bodily injury and property damage, including, but not limited to all workers' compensation insurance, and errors and omissions. Grantee shall maintain insurance documentation in a Grantee-owned facility and shall provide to MDA, upon demand, a certificate or other documentation deemed appropriate by MDA, evidencing MDA's status as an additional insured. All insurance policies shall be endorsed to include a clause that requires the insurance carrier to provide the MDA monitor, by certified mail, not less than 45 days' advance notice of any non-renewal, cancellation, or expiration. In the event that the MDA monitor receives a notice of non-renewal, the Grantee shall provide the MDA monitor with an insurance policy from another carrier at least 30 days prior to the expiration of the insurance policy then in effect. All insurance policies shall be with a company licensed by the State of Maryland to do business and to provide such policies. Within five (5) business days of recommendation for the Grant award, the Grantee shall provide the MDA Monitor with current certificates of insurance showing compliance with this Insurance Requirement, and shall update such certificates from time to time but no less than annually in multi-year contracts, as directed by the MDA Monitor.
3. Insurance requirements may be waived or modified by MDA in writing for good cause shown. Any such written waiver or modification shall be signed by the parties and attached hereto and incorporated herein as part of this Agreement.
4. The Grantee shall include in all of its contracts for work that is to be funded in whole or part with grant funds provided by MDA a provision or provisions requiring all contractors to purchase and maintain comprehensive third-party legal liability insurance and other such insurance as is appropriate for the work to be performed. All insurance provided by the contractor must name the State of Maryland as an additional insured. The insurance provided shall include, but not be limited to, insurance protecting the State of Maryland from bodily injury and property damage, including, but not limited to all workers' compensation insurance, and errors and omissions.

## SECTION 5 – PROPOSAL FORMAT

### Proposals

**The Proposal** shall include the following documents and information in the order specified. All pages of proposal shall be consecutively numbered from beginning (Page 1) to end (Page "x").

#### 1. Title Page

#### 2. Claim of Confidentiality

Any information that the Applicant claims is confidential and not subject to public inspection shall be noted by reference and included after the Title Page. An explanation for each claim of confidentiality shall be included such as a trade secret or constituting confidential, commercial or financial information. The entire Proposal cannot be given a blanket confidentiality designation. Any confidentiality designation must apply to specific sections, pages, or portions of pages of the proposal. The Applicant shall do the same with information taken directly from the operator's nutrient management plan that the operation claims is not subject to public inspection.

#### 3. Transmittal Letter

The Transmittal letter should be brief and signed by an individual who is authorized to commit the

Applicant to the services and requirements as stated in this Request. The Transmittal Letter should include the following:

- Name and address of the Applicant;
- Name, title, e-mail address, and telephone number of primary contact for the Applicant;
- Request Title;
- Title of the Project;
- Signature, typed name, and title of an individual authorized to commit the Applicant to its Proposal;
- Federal Employer Identification Number (FEIN) of the Applicant, or if a single individual, that individual's Social Security Number (SSN)

#### **4. Executive Summary**

The Applicant shall condense and highlight the contents of the Proposal in a separate section titled "Executive Summary." This should be no more than one page.

#### **5. Minimum Qualifications Documentation**

The Applicant shall submit any Minimum Qualifications documentation that may be required, as set forth in Section 3, "Minimum Qualifications."

#### **6. Applicant Technical Response to Request Requirements and Proposed Work Plan**

- a. The Applicant shall address each Scope of Work requirement and describe how its proposed services, including the services of any proposed subcontractor(s), will meet or exceed the requirement(s). Any paragraph in the Proposal that responds to a Scope of Work requirement shall include an explanation of how the work will be accomplished and identify responsible parties.
- b. The Applicant shall give a definitive description of the proposed plan to meet the requirements of the Request, *i.e.*, a Work Plan. The Work Plan shall include the specific methodology and techniques to be used by the Applicant in providing the required services as outlined in Request, Scope of Work. Project deadlines considered grant milestones or deliverables must be included in the Work Plan.
- c. The Applicant must provide an installation/construction timetable identifying the various milestones or deliverables to be achieved to build the technology and achieve operational status.
- d. The Applicant must identify the site and responsible farm operator/s, partner/s, subcontractors and staff expertise (including key personnel) for implementing and operating the technology.
  1. Provide location map and site plan.
  2. Address whether the location of the project site is in a region of Maryland where soils are high in phosphorus or manure is produced in excess of crop production requirements.
  3. For projects that propose to serve multiple farms, provide written verification from each owner/operator confirming the owner's/operator's intent to participate in the project and the manner in which each owner/operator will be participating in the project, including addressing feedstock supply as applicable.
  4. If the project site is on land not owned by applicant, provide written verification signed by the owner/operator (or both, if the land is titled in a person's name other than the operator) of the farm confirming the owner's/operator's intent to participate in the project or otherwise allow the construction, installation, and operation of the project on the owner's/operator's land for the entire project period.
  5. Address the current zoning designation of site and whether it's suitable for proposed project.
- e. The Applicant must describe the operation and maintenance requirements for the technology.
  1. Identify responsible persons (including key personnel) for conducting operation and maintenance (O&M) of the project and length of time O&M requirements will be in place.
  2. Estimate and itemize approximate cost and timeframes for O&M of the project.
  3. Identify funding sources for covering O&M costs.



4. If known, describe the estimated payback period for the technology using the proposed/estimated project cost as the basis for the estimate.
- f. The Applicant must document that all persons who are party to the proposal, including farm owners/operators, are willing to support third-party performance monitoring where results will be shared with interested stakeholders and posted in publically available reports and project sites will be made accessible for scheduled tours.
- g. The Applicant must describe how the technology proposed:
  1. Will be implemented and applied to address requirements of this Request.
  2. Will be suitable or replicable for use on similar farm operations in Maryland or farm operations in Maryland with different types of animals or production systems.
  3. Can be expanded for use by other farms and describe the proposed business model to achieve this outcome.
- h. The Applicant must describe readiness to install a project utilizing proposed technology within one year of the award, including:
  1. Source/s of technology's components, materials or parts.
    - a) Identify commercially available sources for components/parts
    - b) Identify components that need to be fabricated and companies that can fulfill this requirement.
  2. Describe maintenance requirements.
    - a) Estimate lifespan of major and minor components/parts.
    - b) Provide information about product warranties.
    - c) Address qualifications or training needed for ongoing operation and maintenance of the project.
- i. The Applicant must describe how the technology manages animal waste in a manner that results in reduced nitrogen and/or phosphorus transport to waters of the State including:
  1. Changing the form, characteristics, or nutrient content of animal waste to improve ability to utilize it in a cropping system in accordance with Maryland nutrient management requirements.
  2. Providing alternative uses for animal wastes.
  3. Any other methodologies responsive to Request.
- j. The Applicant must describe what the outcome of technology will be, its use/s and how this provides value or is cost effective, including:
  1. If the technology produces:
    - a) Energy:
      - i) Identify how infrastructure needs will be addressed: *i.e.*, delivery to grid.
      - ii) Identify projected quantity produced.
      - iii) Identify how energy produced will be used in the project.
    - b) Heat:
      - i) Identify how heat will be used in the project.
      - ii) Identify projected quantity produced.
    - c) Fertilizer products:
      - i) Identify characteristics of fertilizer products produced.
      - ii) Identify projected quantity produced.
      - iii) Identify how fertilizer products will be used.
    - d) Identify any other products or co-products:
      - i) Identify characteristics of products or co-products produced.
      - ii) Identify projected quantity of products or co-products.
      - iii) Identify how the products or co-products will be used or their fate.
  2. If the technology changes the form, characteristics, or nutrient content of the animal waste to improve on-farm management or to facilitate alternative uses, including:
    - a) Changing the nitrogen to phosphorus ratio to make the animal waste a more valuable crop nutrient;
    - b) Improving transportability of waste or co-products; or
    - c) Improving market value of waste or co-products.

- k. The Applicant must describe how the technology addresses the mass balance of animal waste nutrients (specifically nitrogen and phosphorus) treated or managed including the ultimate fate of the nutrients in the context of the technology.
  1. The description should specify the scale of the mass balance of nutrients (farm, county, regional, *etc.*) or use the anticipated change in the pre and post nutrient management plans for participating farm(s) to demonstrate nutrient reductions. Chosen method should address:
    - a) The quantity of animal waste processed or managed by technology.
    - b) The estimated/average nutrient content of animal waste during all stages of the process.
    - c) Any nutrient containing co-products that result from the process.
    - d) The fate of these all nutrients and nutrient containing products or co-products.
  2. The description addressing how products or co-products are managed shall include:
    - a) Proven markets or market potential for products and co-products.
    - b) Use within the farm production system.
- l. The Applicant must describe the economic viability of the technology in the context of both the scale at which it is proposed and the scale for its use in the future as anticipated by the business plan. Applicants should have a well-vetted business model and strategy and provide detailed information in a business plan.
  1. Applicants shall provide up to three examples of financial outcomes which will be the result of successful implementation and operation of the project.
  2. Applicants shall explain the current status of product and co-product development and use.
  3. Applicants shall explain markets for products and co-products, current and future marketing plans and identify if additional efforts would be required to scale-up or expand adoption of the technology.
- m. The Applicant must identify how much of project cost is shared or matched by other funding sources (if any). An Applicant must document and identify funds that have been secured or committed, their source/s, and how they are to be applied toward activities and materials supporting this project. This information should be included on the budget form. Applicants shall also provide a balance sheet showing assets, including any grants, matching funds, or in-kind funds, and liabilities. Higher evaluation will be given to Applicants that document other/additional funding sources. See Financial Information and Budget below.
- n. The Applicant must describe outcomes from previously implemented projects that are employing the proposed technology. Specifically address:
  1. Characterization of site/s including size, geographic location, land use, *etc.*
  2. Quantity and type of inputs and outputs (products and co-products).
  3. Timeframes:
    - a) Timeframe for installation of technology; address whether components readily available or site adaptation or project/equipment fabrication was required.
    - b) Timeframe from installation to functional operation.
    - c) How long this technology successfully operated on a particular site.
  4. What permits were required for these previously implemented projects.
- o. The Applicant must describe the following in relation to permits:
  1. Whether permits are required for construction or operation of the project.
  2. Whether information exists or is it readily obtainable to secure necessary permits.
  3. Which permits are anticipated for implementation and operation of the proposed project. The following list of State permits may not be all-inclusive of those required. Applicants who are not experienced with Maryland requirements are encouraged to contact the permitting entity to get preliminary feedback and all applicants should indicate how permit information was obtained.
    - a) Surface Water (NPDES) discharge permit/Groundwater discharge permit (410-537-3599);
    - b) Air Quality Permit (410-537-3620);
    - c) Water Appropriation and Use Permit (410-537-3702);

- d) General Permit for Stormwater Related to Construction Activities (one or more acres of disturbance (410-537-3510)
  - e) Wetlands and Waterways (including work in the 100-year floodplain (410-537-3745)
4. Estimate the timeframe required to secure permits.

**7. Experience and Qualifications of Proposed Staff, Including Key Personnel**

- a. The Applicant shall identify the number and types of staff proposed (and, in particular, key personnel) to be utilized under the Grant.
- b. The Applicant shall describe in detail how the proposed staff's experience and qualifications relate to their specific responsibilities, including any staff of proposed subcontractor(s), as detailed in the Work Plan. The Applicant shall include individual resumes for the key personnel, including key personnel for any proposed subcontractor(s), who are to be assigned to the project if the Applicant is awarded the Grant. Each resume should include the amount of experience the individual has had relative to the Scope of Work set forth in this Request. Letters of intended commitment to work on the project, including letters from any proposed subcontractor(s), shall be included.

**8. Applicant Qualifications and Capabilities**

The Applicant shall include information on past experience with similar projects and/or services. The Applicant shall describe how its organization can meet the requirements of this Request and shall also include the following information:

- a. The number of years the Applicant has provided similar services or implemented the technology;
- b. The number of clients/customers and geographic locations that the Applicant currently serves;
- c. The names and titles of headquarters or regional management personnel who may be involved with supervising the services to be performed under this Grant;
- d. The Applicant's process for resolving billing errors; and
- e. An organizational chart that identifies the complete structure of the Applicant business including any parent company, headquarters, regional offices, and subsidiaries of the Applicant.

**9. References**

At least three (3) references are requested from customers who are capable of documenting the Applicant's ability to provide the services specified in this Request. References used to meet any "Minimum Qualifications" (see Section 2) may be used to meet this request. Each reference shall be from a client for whom the Applicant has provided services related to the proposed technology within the past five (5) years and shall include the following information:

- a. Name of client organization;
- b. Name, title, telephone number, and e-mail address, if available, or point of contact for client organization; and
- c. Value, type, duration, and description of services provided.

The Department reserves the right to request additional references or utilize references not approved by an Applicant.

**10. Certificate of Insurance**

The Applicant shall provide a copy of its current certificate of insurance showing the types and limits of insurance in effect as of the Proposal submission date.

## Financial Information

1. The Proposal shall contain all price information in the format specified. The Applicant shall provide information as provided in instructions for financial information and complete the Budget Form itself.
2. An Applicant must document and identify funds that have been secured or committed and their source/s, and how they are to be applied for activities and materials supporting this project. This information should be included on the budget form and a balance sheet of vendor assets, including any grants, matching funds, or in-kind funds, and liabilities should be included.
3. A certificate of good standing from the Maryland Department of Assessments and Taxation is required.

## Budget Instructions

Applicants shall submit their budget information on the Budget Form in accordance with the instructions on the Budget Form and as specified herein. Additional budget items/lines may be added if required to implement the project. The Budget Form is to be signed and dated, where requested, by an individual who is authorized to bind the Applicant to the prices entered on the Financial Proposal Form.

The Budget Form is used to calculate the Applicant's TOTAL PROPOSAL GRANT SUM REQUEST. The form in its current format must be used. However, applicants may add other funding categories as needed. Follow these instructions carefully when completing your Financial Proposal Form:

1. All calculations shall be rounded to the nearest dollar, *i.e.*, anything \$.50 or above rounded up and below \$.50 rounded down
2. Any goods or services required through this Request and proposed by the vendor at **No Cost to the State** must be clearly entered in the column "other fund sources." Projects that utilize other funding sources will be given higher ranking.
3. Funding requested for costs associated with Year 2 should address time spent to monitor and report on the operation of the project during one (1) year's operation as required in the Proposal package including costs associated with equipment needed for monitoring, laboratory analysis, *etc.* It should not include the cost of operation and maintenance of the project.
4. If the option year is included, Applicants must submit pricing only related to fully implementing and operating the proposed technology for one year. Any option to extend the project period will be exercised at the sole discretion of the State and will comply with all terms and conditions in force at the time the option is exercised. If exercised, the option period shall be for a period of no longer than one year at no additional cost and consistent with the cost entered in the Financial Proposal Form for the implementation of the project (Year 1).
5. All Financial Proposal prices entered below are to be fully loaded prices that include all costs/expenses associated with the provision of services as required by the Request. The Financial Proposal price shall include, but is not limited to, all: labor, overhead, general operating, administrative, and all other expenses and costs necessary to perform the work set forth in the Request. No other amounts will be paid to the Grantee. If labor rates are requested, those amounts shall be fully-loaded rates; no overtime amounts will be paid.

## BUDGET FORM

The Budget Form shall contain all price information in the format specified on these pages. Complete the Budget Form only as provided in the Budget Instructions. Lines may be added to fully itemize costs. Failure to adhere to any of these instructions may result in the Proposal being determined not reasonably susceptible of being selected for award.

<b>(A) Year 1: Project Implementation</b>		<b>MD Grant Request</b>	<b>Other Fund Sources</b>
<b>1.Design Services</b>			
	Personnel Costs (itemize)		
		+	+
		+	+
	Contractual Services costs (Itemize)		
		+	+
		+	+
		+	+
<b>2.Permitting Costs</b>	Itemize listed & other costs as appropriate; if there is more than one permit, identify & address costs separately for each.		
		<b>MD Grant Request</b>	<b>Other Fund Sources</b>
	Sampling (type, number, costs)		
		+	+
		+	+
		+	+
	Laboratory analysis (type, number, cost)		
		+	+
		+	+
		+	+
		+	+
<b>3.Site Preparation</b>	Mobilization, adaptation or retrofit requirements, itemize listed and other costs		
		<b>MD Grant Request</b>	<b>Other Fund Sources</b>
	Personnel costs (itemize)		
		+	+
		+	+
		+	+
		+	+
		+	+
	Contractual Services Costs (Itemize)		

		+	+
		+	+
		+	+
		+	+
		+	+
	Consultation Costs (Itemize)		
		+	+
		+	+
		+	+
		+	+
		+	+
	Material Costs (Itemize)		
		+	+
		+	+
		+	+
		+	+
		+	+
<b>4. Construction Costs</b>	Assembly, HVAC, Electric, plumbing, etc., itemize listed and other costs as appropriate.		
		<b>MD Grant Request</b>	<b>Other Fund Sources</b>
	Personnel costs (Itemize)		
		+	+
		+	+
		+	+
		+	+
		+	+
	Contractual Service costs (Itemize)		
		+	+
		+	+
		+	+
		+	+
		+	+
	Consultation Costs (Itemize)		
		+	+
		+	+
		+	+
		+	+
		+	+

	Material Costs (Identify and itemize, may include equipment & shipping costs)		
		+	+
		+	+
		+	+
		+	+
		+	+
		+	+
		+	+
		+	+
		+	+
		+	+
5. Other costs	Such as monitoring equipment installed during construction, electrical connection to grid, etc.	+	+
		+	+
		<b>MD Grant Request</b>	<b>Other Fund Sources</b>
<b>Year 1 (Implementation costs) : SUBTOTAL (A)</b>			
<b>(B) Year 2 Monitoring &amp; Evaluation</b>			
All costs must be associated with collection of monitoring information, evaluation of data and project performance (environmental, economic or physical) and preparing required reports. Please itemize and identify costs as listed and additional items if appropriate; monitoring costs relate to sample and laboratory costs; itemize as necessary. Operation and maintenance costs are NOT eligible.			
		<b>MD Grant Request</b>	<b>Other Fund Sources</b>
<b>1. Monitoring &amp; Evaluation</b>			
	Personnel costs		
	Monitoring	+	+
	Analysis	+	+
	Reporting	+	+
		+	+
	Monitoring (Sampling & Lab analysis)	+	+
	Supplies/Equipment	+	+
		+	+

		+	+
		+	+
	Lab Analysis	+	+
		+	+
		+	+
		+	+
<b>Year 2 (Monitoring &amp; Evaluation) SUBTOTAL (B)</b>			
<b>MD Grant Request</b>			<b>Other Fund Sources</b>
<b>PROJECT TOTAL (Subtotal A + Subtotal B)= TOTAL PROPOSAL GRANT SUM REQUEST</b>			
Submitted by (authorized signature):			
Printed name & title			
Company Name			
Company Address			
Location from which Service performed (city/date)			
FEIN			
Telephone			
Fax			
Email			