

# **Integrated Research, Education, and Extension Competitive Grants Program – Methyl Bromide Transition**

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## **FY 2015 Request for Applications (RFA)**

**APPLICATION DEADLINE: May 4, 2015**

**ELIGIBILITY: See Part III, A. of RFA**



**United States  
Department of  
Agriculture**

**National Institute  
of Food and  
Agriculture**

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE; U.S. DEPARTMENT OF AGRICULTURE**

**INTEGRATED RESEARCH, EDUCATION, AND EXTENSION COMPETITIVE GRANTS PROGRAM – METHYL BROMIDE TRANSITION**

**INITIAL ANNOUNCEMENT**

**CATALOG OF FEDERAL DOMESTIC ASSISTANCE:** This program is listed in the Catalog of Federal Domestic Assistance under 10.303.

**DATES:** Applications must be received by **5:00 p.m. Eastern Time on May 4, 2015**. Applications received after this deadline will normally not be considered for funding (see Part IV, C. of this RFA). Comments regarding this request for applications (RFA) are requested within 6 months from the issuance of this notice. Comments received after that date will be considered to the extent practicable.

**STAKEHOLDER INPUT:** The National Institute of Food and Agriculture (NIFA) seeks your comments about this RFA. We will consider the comments when we develop the next RFA for the program, if applicable, and we'll use them to meet the requirements of section 103(c)(2) of the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7613(c)(2)). Submit written stakeholder comments to: [Policy@nifa.usda.gov](mailto:Policy@nifa.usda.gov). (This e-mail address is intended only for receiving comments regarding this RFA and not requesting information or forms.) In your comments, please state that you are responding to the Methyl Bromide Transition RFA.

NIFA offered outreach webinars on its center of excellence implementation February 26th and March 12th, 2015. A recording can be accessed on the [NIFA website](#).

In the coming months, NIFA will be holding additional webinars to collect stakeholder input about our center of excellence implementation strategy. Details and access information will be posted on the [NIFA website](#). Comments and suggestions relative to centers of excellence should be sent to [Policy@nifa.usda.gov](mailto:Policy@nifa.usda.gov) by September 30th, 2015.

**EXECUTIVE SUMMARY:** NIFA requests applications for the Integrated Research, Education, and Extension Competitive Grants Program - Methyl Bromide Transition (MBT) for fiscal year (FY) 2015 to support the discovery and implementation of practical pest management alternatives for commodities and uses affected by the methyl bromide phase-out. This program focuses on integrated projects that use a systems approach to deliver short- to medium-term solutions and economic analyses for all commodities impacted by the loss of methyl bromide. In FY 2015 applications are sought for the following project types:

1. Integrated Projects
2. Extension-Only Projects
3. State of the Commodity Projects

The amount available for support of this program in FY 2015 is approximately \$2 million.

This notice identifies the objectives for MBT projects, the eligibility criteria for projects and applicants, and the application forms and associated instructions needed to apply for a MBT grant.

## Table of Contents

PART I—FUNDING OPPORTUNITY DESCRIPTION.....	5
A. Legislative Authority and Background.....	5
B. Purpose and Priorities.....	5
C. Program Area Description.....	6
PART II—AWARD INFORMATION.....	12
A. Available Funding.....	12
B. Types of Applications.....	12
C. Project Types.....	12
D. Responsible and Ethical Conduct of Research.....	13
PART III—ELIGIBILITY INFORMATION.....	14
A. Eligible Applicants.....	14
B. Cost Sharing or Matching.....	15
C. Centers of Excellence.....	16
PART IV—APPLICATION AND SUBMISSION INFORMATION.....	18
A. Electronic Application Package.....	18
B. Content and Form of Application Submission.....	19
C. Submission Dates and Times.....	25
D. Funding Restrictions.....	26
E. Other Submission Requirements.....	27
PART V—APPLICATION REVIEW REQUIREMENTS.....	28
A. General.....	28
B. Evaluation Criteria.....	28
C. Conflicts of Interest and Confidentiality.....	30
D. Organizational Management Information.....	31
E. Application Disposition.....	31
PART VI—AWARD ADMINISTRATION.....	32
A. General.....	32
B. Award Notice.....	32
C. Administrative and National Policy Requirements.....	33
D. Expected Program Outputs and Reporting Requirements.....	34
PART VII—AGENCY CONTACT.....	35
PART VIII—OTHER INFORMATION.....	36
A. Access to Review Information.....	36
B. Use of Funds; Changes.....	36
C. Confidential Aspects of Applications and Awards.....	37
D. Regulatory Information.....	37
E. Definitions.....	37

## **PART I—FUNDING OPPORTUNITY DESCRIPTION**

### **A. Legislative Authority and Background**

Section 406 of the Agricultural Research, Extension, and Education Reform Act of 1998 (AREERA) (7 U.S.C. 7626), as reauthorized by Section 7306 of the Food, Conservation, and Energy Act of 2008 (FCEA) (Pub. L. 110-246) and by Section 7302 of the Agricultural Act of 2014 (H.R. 2642; Pub. L. 113-79), authorized the Secretary of Agriculture to establish a competitive grants program that provides funding for integrated, multifunctional agricultural research, extension, and education activities. Subject to the availability of appropriations to carry out this program, the Secretary may award grants to colleges and universities (as defined by section 1404 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA) (7 U.S.C. 3103)), as amended, on a competitive basis for projects that address priorities in United States agriculture and involve integrated research, education, and extension activities, as determined by the Secretary in consultation with the National Agricultural Research, Extension, Education, and Economics Advisory Board (NAREEEAB).

Section 7206 of the Farm Security and Rural Investment Act of 2002 amended section 406(b) of AREERA to add the 1994 Land-Grant Institutions as eligible to apply for grants under this authority. Section 7129 of the Food, Conservation, and Energy Act of 2008 (FCEA) (Pub. L. 110-246) amended section 406(b) of AREERA adding Hispanic-serving agricultural colleges and universities (HSACU) as eligible entities for competitive funds awarded under this authority (see Part III, A. for more information).

### **B. Purpose and Priorities**

This RFA solicits applications for the Integrated Research, Education, and Extension Competitive Grants Program, Methyl Bromide Transition (MBT). Methyl bromide is an odorless, colorless gas that is used as an agricultural soil and structural fumigant to control a wide variety of pests. Methyl bromide depletes the stratospheric ozone layer and is classified as a Class I ozone-depleting substance. In accordance with the *Montreal Protocol on Substances that Deplete the Ozone Layer* and the Clean Air Act ([www.epa.gov/air/caa](http://www.epa.gov/air/caa)), the United States government agreed to reduce methyl bromide production and net imports incrementally from the 1991 baseline until the complete phase-out in 2005. Since 2005, the only allowable exemptions are critical use exemptions (CUE), quarantine and pre-shipment exemptions (QPS).

The primary goal of the MBT program is to support the discovery and implementation of practical pest management alternatives to methyl bromide. The MBT program seeks to solve pest problems in key agricultural production and post-harvest management systems, processing facilities, and transport systems for which methyl bromide has been withdrawn or withdrawal is imminent. Proposals must integrate research and extension activities, or be extension only, and be designed to provide transitional alternatives which address immediate needs that have resulted from the loss of availability of methyl bromide. The pressure to completely phase-out methyl bromide has created an urgent need for new economical and effective pest control tactics to control soil-borne and postharvest pests, and pests that must be controlled by the processing and

shipping industries to meet regulatory standards. A description of the economic analysis of costs and efficacy of implementing the new replacement technology must be included in the proposal.

Applications submitted to the MBT program should consider the integrated pest management (IPM) concepts of prevention, avoidance, monitoring, and suppression of pest populations. The projects funded will cover a broad range of new methodologies, technologies, systems (including non-fumigation production systems), and strategies for controlling economically important pests for which methyl bromide has been the only effective pest control option. Applications should only address systems solutions or strategic (multi-tactic) approaches, rather than focus on any single tactic for replacement of methyl bromide. Non-fumigant management options should be considered and evaluated where possible. Promising alternatives to methyl bromide must be evaluated under commercial conditions for multiple years to ensure that positive results are not due, in part, to low pest pressure following many years of methyl bromide fumigation or variable environmental conditions. Performance of alternatives must be consistent over several production cycles and be technically and economically feasible when scaled-up from research-scale plots to commercial scale. Projects should focus on enhancing grower/industrial user knowledge and adoption of appropriate methyl bromide replacement strategies through extension outreach and demonstrations relevant to real-world systems. All proposals must include a description of methods to undertake an economic analysis of the efficacy and affordability of the replacement strategy.

The MBT program aligns with the USDA's Strategic Plan ([www.usda.gov/documents/usda-strategic-plan-fy-2014-2018.pdf](http://www.usda.gov/documents/usda-strategic-plan-fy-2014-2018.pdf)) Goal 3 – Help America Promote Agricultural Production and Biotechnology Exports as America Works to Increase Food Security and with the USDA, Research, Education, and Economics (REE) Action Plan ([www.ree.usda.gov/ree/news/USDA\\_REE\\_Action\\_Plan\\_03-2014.pdf](http://www.ree.usda.gov/ree/news/USDA_REE_Action_Plan_03-2014.pdf)) Goal 1 – Local and Global Food Supply and Security, Subgoals 1A Crop and Animal. The MBT program also directly supports the NIFA Strategic Plan for FY 2014-2018, ([http://nifa.usda.gov/about/pdfs/strat\\_plan\\_2014.pdf](http://nifa.usda.gov/about/pdfs/strat_plan_2014.pdf)) Science Goal 1 – Catalyze exemplary and relevant research, education and extension programs, sub-goal 1.1 Advance our Nation's ability to achieve global food security and fight hunger.

### **C. Program Area Description**

#### **Program Code – 112.C**

**Requested Project Type** – The MBT program supports three project types:

- Integrated projects focus on research and extension to encourage implementation of methyl bromide alternatives.
- Extension-Only projects increase levels of adoption of pest management strategies by producers and growers.
- State of the Commodity projects provide in-depth scientific and economic system review of how commodities have been impacted by the loss of methyl bromide. These projects should address the economic and pest management outcomes resulting from the transition from methyl bromide for a given commodity or process (from those among the Critical Uses between 2006 and 2015). Projects should be integrated.

### **Proposed Budget Requests**

- Integrated projects must not exceed \$500,000 total (including indirect costs) for a project period of up to three years.
- Extension-Only projects must not exceed \$250,000 total (including indirect costs) for a project period of up to three years.
- State of the Commodity project grants must not exceed \$250,000 total (including indirect costs) for a project period of up to three years.
- Requests exceeding the budgetary guidelines will not be reviewed.

### **Program Area Priority**

In FY 2015, the MBT program seeks applications for projects to ensure that economically viable and environmentally sound alternatives to methyl bromide are in place and available as soon as possible for commodities that have been impacted by the phase-out of methyl bromide.

Applications will be accepted to find alternatives for commodities that have current Quarantine and Pre-shipment (QPS) Exemptions. All applications must include an economic analysis of the alternative methodology.

NIFA will consider projects supporting the transition to an alternative type of cropping/storage/processing system that avoids the need for disinfestation with methyl bromide (e.g., transition to a covered system using soilless culture) if the alternative has the potential to serve as a viable short to medium-term solution for operations that are currently dependent on methyl bromide or have been impacted by the phase-out of methyl bromide.

NIFA encourages applicants with projects that address pest management issues in commodities not affected by the phase-out of methyl bromide or research-only based proposals to apply to the Applied Research and Development Program Area of the Crop Protection and Pest Management program ([www.nifa.usda.gov/fo/cropprotectionandpestmanagement.cfm](http://www.nifa.usda.gov/fo/cropprotectionandpestmanagement.cfm)).

### **Applicants must address at least one or more of the following priorities:**

- How can non-fumigant management options be developed and/or improved as part of a systems-based integrated pest management strategy?
- What integrated strategies could be used to improve soil health, resulting in improved pest management in crops impacted by the loss of methyl bromide in the pre-harvest environment?
  - Examples include altering the microbial community of the soil to favor beneficial microorganisms that could inhibit pests and pathogens; soil amendments to reduce pests; and use of cover crops and rotations to reduce pest populations.
- What strategies could be used in a systems-based integrated pest management approach to improve pest management in the post-harvest environments impacted by the loss of methyl bromide?
- How can current methyl bromide alternatives be improved or combined to improve pest management and the economic viability of the producers?

- In all cases, the application must describe the methods to evaluate the cost/benefit of making the transition to adoption of the new strategy, providing a clear economic analysis of all aspects of implementation of the new strategies.

### Integrated Projects

If you are submitting an application for an integrated grant (see Part II, Section C. for more information) research and extension goals must be incorporated into the proposed project and (as a general rule) no more than two thirds of the project's budget should be devoted to either function. Extension programs, such as field demonstrations, grower trials, workshops, and distributed information, should result in commercial awareness, understanding and adoption of new technology and alternatives to methyl bromide fumigation. Economic analysis of the proposed new strategy must be an integral part of the project.

### Extension-Only Projects

Extension-only projects should facilitate implementation of practices to optimally manage pests in the absence of methyl bromide, leading to measurable behavior changes in the identified audience or stakeholder group. Projects may be proposed to develop extension materials and information delivery systems for outreach efforts, conduct field-scale or on-farm demonstrations, or deliver IPM extension outreach and training. The existence of a research base relevant to the extension effort should be documented. Analysis of target population risk perception and economic constraints to adoption are critical to all extension-only projects.

### **Requirements for Integrated and Extension-Only projects:**

- **Scalability.** Research on alternatives must be at the commercial or field-scale over multiple season/cycles. Large scale trials will be a key component of successful proposals, as they may identify variability, technical problems, and pest relationships to marketable yields that are not evident in small plot trials.
- **Economic Analysis.** Integrated and Extension-only projects must include an economic analysis with direct comparison of cost effectiveness of proposed alternatives in the absence of methyl bromide to no treatment. Additionally, an analysis of overall transition cost to a new technology, from acquisition of materials and knowledge to efficacy metrics, is required.
  - Analyses of profit margins should include information on the cost calculation, the cost/amount of the new technology and the value of the labor used, and any equipment needed for the application.
  - Changes in revenues should also be identified (e.g., changes in the commodity price or more importantly, changes in quantity of the available commodity for marketing).
  - Appropriate expertise to conduct economic analysis should be included as part of the team submitting the application.

### State of the Commodity Projects

NIFA requests proposals for state of the commodity projects evaluating current pest management challenges and the economics of pest management for commodities/processes that have lost the

ability to use methyl bromide. For the listing of commodities and industries that were registered for methyl bromide use, please see [www.epa.gov/ozone/mbr/cueinfo.html](http://www.epa.gov/ozone/mbr/cueinfo.html). State of the commodity proposals should document current conditions, successful coverage or gaps in pest management, yield changes and cost of management changes (positive, negative, or neutral) resulting from the phase out of methyl bromide for any specific commodity or industry. The successful grants of this type must be as inclusive as necessary to address the overall situation in the United States or regionally.

#### **Requirements for State of the Commodity projects:**

- A publically-accessible report must be created within a year of the project end date and presented, for example, at the annual International Methyl Bromide Alternatives Outreach Conference.
- Proposals should describe how commodity stakeholders will be recruited into the study, the methods of data collection and analysis, and where the data will be presented and published.

#### **Requirements for all projects:**

- **Justification.** Applicants must provide a justification statement in the Project Narrative (see Part IV, Section B. for more information) to explain the issues and economic losses faced by their commodity since the phase-out of methyl bromide, and how their work could result in economically feasible methyl bromide alternatives.
- **Extension.** Extension personnel should be clearly identified. Formal extension programs to expedite adoption of proposed alternatives must be clearly delineated in the proposal and funding for these activities must be clearly outlined in the Budget Narrative.
- **Timeline.** Timelines for completion of the major objectives in the application must be explicitly described for the entire project period, ranging from one to three years from the start date. Experiments are expected to be replicated in at least two separate trials and results are to be extended to the relevant user community as part of the program within the program time period.
- **Logic model.** All applicants are required to: (1) submit a project-specific logic model chart as part of each application and (2) show how the proposed work will be represented in the programmatic logic model provided in Figure 1. The logic model should detail the inputs, outputs (activities and participants), outcomes, situation, assumptions, and external factors of the proposed project. This information should be formatted into a logic model chart. See Program Area Descriptions (Part I, Section C.) and Application and Submission Information (Part IV, Section B, item 3b, field 8) for specific requirements for the inclusion of the logic model within the application. More information and resources related to the logic model planning process are provided at: [www.nifa.usda.gov/funding/integrated/integrated\\_logic\\_model.html](http://www.nifa.usda.gov/funding/integrated/integrated_logic_model.html) and [www.ipm.gov/LogicModels/index.cfm](http://www.ipm.gov/LogicModels/index.cfm).

Please note: The logic model for the MBT program (Figure 1) incorporates stakeholder input, anticipated outcomes, and appropriate elements. NIFA will use the logic model to guide the development of future funding priorities and to document the impact of investments made by the MBT program.

### Figure 1. Methyl Bromide Transition Logic Model

**Situation:** Re-emerging diseases, insects, weeds and other pests continue to negatively impact U.S. agricultural commodities and industries impacted by the phase-out of methyl bromide. System-based methyl bromide alternatives that involve science-based IPM knowledge are needed to address the pest management needs in these communities.

Inputs	Outputs		Outcomes -- Impact		
	Participants	Activities and Products	Short	Medium	Long
Annual appropriations USDA coordination USDA intra-agency coordination U.S. government interagency coordination Program Directors Support Staff Panel Managers Review Panel members Stakeholder and partner comments	Stakeholders Producers and processors Commodity groups General public Colleges and universities Cooperative extension University scientists and extension specialists State agencies Federal agencies USDA-NIFA	Respond to authorization and appropriation Publish RFA Recruit panel managers and peer review panelists Conduct peer review panel meetings Award funds to meritorious applications Promote the development of alternatives to methyl bromide Communicate positive outcome to key stakeholders Collect and communicate impact data State of the commodity reports	Gap analysis reveals research needs New options for management of commodity pests developed Existing knowledge adapted to commodity systems Current knowledge is applied to a strategic plan to eliminate methyl bromide between commodity producer and processors and researchers Best management practices available for Extension to communicate to stakeholders New knowledge applied to an evolving strategic plan	New alternatives to methyl bromide, both chemical and nonchemical, increasing in usage Best management practices for pest management adopted New technologies and innovations for producers and processors being implemented Economic feasibility and effective methyl bromide alternatives in use	Pests are controlled economically without the use of methyl bromide, complying with the Montreal Protocol and Clean Air Act No further Critical Use Nominations (CUNs)/Critical Use Exemptions (CUE) are needed Increased production due to reduced pest losses Reduced environmental risks from environmentally damaging pest control methods Continued production of safe, affordable, and high-quality commodities U.S. production practices adopt appropriate alternatives to methyl bromide, assuring U.S. producers a competitive place in the global marketplace
<b>Assumptions</b> Proposals will address commodities and industries negatively impacted by the phase-out of methyl bromide. Multidisciplinary teams include economic analysis of the tested alternative. Integrated projects provide best management practices to producers and processors.			<b>External Factors</b> Congressional funding/appropriations. EPA Pesticide Registration. Montreal Protocol and Clean Air Act. MBTOC decisions.		

- **Project Director Meeting.** For all funded projects, at least one member of the project team will be required to attend the annual International Methyl Bromide Alternatives Outreach Conference (MBAO) ([www.mbao.org](http://www.mbao.org)) starting with the second year of funding, or another relevant conference, if applicable. For the purposes of budget development, applicants are required to request funds to support participation in at least one MBAO conference or an approved alternative. The request for these funds should be clearly indicated in the budget and budget narrative sections of the application.

The MBT program encourages projects that develop content and programs suitable for delivery through the Cooperative Extension System's eXtension Initiative. You may use funds to contribute to existing Communities of Practice (CoP) or to form a new CoP focused on methyl bromide alternatives extension and outreach activities. Projects must align with the eXtension vision, mission, and values. You must have a letter of acknowledgement from eXtension. Letters of support are also encouraged from the relevant CoPs. For detailed guidance on how to partner with eXtension, go to <http://create.extension.org/node/2057>.

## **PART II—AWARD INFORMATION**

### **A. Available Funding**

The amount available for support of this program in FY 2015 is approximately \$2 million. The funds will be awarded through grants. There is no commitment by USDA to fund any particular application or to make a specific number of awards.

Awards issued as a result of this RFA will have designated the Automated Standard Applications for Payment System (ASAP), operated by the Department of Treasury's Financial Management Service, as the payment system for funds. For more information see <http://fms.treas.gov/index1.html>.

### **B. Types of Applications**

In FY 2015, you may only submit an application to the MBT Program as one of the following two types of requests:

- (1) **New application.** This is a project application that has not been previously submitted to the MBT Program. We will review all new applications competitively using the selection process and evaluation criteria described in Part V, Application Review Requirements.
- (2) **Resubmitted application.** This is an application that had previously been submitted to the MBT Program but not funded. Project Directors (PDs) must respond to the previous review panel summary (see Response to Previous Review, Part IV, B. 3. b.). Resubmitted applications must be received by the relevant due dates, will be evaluated in competition with other pending applications in the appropriate area to which they are assigned, and will be reviewed according to the same evaluation criteria as new applications.

### **C. Project Types**

Three project types are being solicited in this RFA: Integrated, Extension-Only, and State of the Commodity. Applicants may submit a proposal for each type; however, when applicants submit three applications they must be completely independent of one another and execution of the project should not rely on funding from another application. Applicants should not submit duplicate applications to this program and the Crop Protection and Pest Management Program (<http://nifa.usda.gov/funding-opportunity/crop-protection-and-pest-management>).

All grants must include specifics about how economic analyses will be conducted and how the project will be relevant to the needs of the commodities that are/have transitioned from methyl bromide.

#### **D. Responsible and Ethical Conduct of Research**

The responsible and ethical conduct of research (RCR) is critical for excellence, as well as public trust, in science and engineering. Consequently, we consider education in RCR essential to the preparation of future scientists. In accordance with sections 2, 3, and 8 of 2 CFR Part 422, institutions that conduct USDA-funded extramural research must foster an atmosphere conducive to research integrity, bear primary responsibility for prevention and detection of research misconduct, and maintain and effectively communicate and train their staff regarding policies and procedures. In the event an application to NIFA results in an award, the Authorized Representative (AR) assures, through acceptance of the award that the institution will comply with the above requirements. Per award terms and conditions, grant recipients shall, upon request, make available to NIFA the policies, procedures, and documentation to support the conduct of the training.

Note that the training referred to herein shall be either on-campus or off-campus training. The general content of the ethics training will, at a minimum, emphasize three key areas of research ethics: authorship and plagiarism, data and research integration, and reporting misconduct. Each institution will be responsible for developing its own training system, as schools will need flexibility to develop training tailored to their specific student needs. Grantees should consider the Collaborative Institutional Training Initiative (CITI) program for RCR (<https://www.citiprogram.org/rcrpage.asp>). Typically this RCR education addresses the topics of: Data Acquisition and Management - collection, accuracy, security, access; Authorship and Publication; Peer Review; Mentor/Trainee Responsibilities; Collaboration; Conflict of Interest; Research Misconduct; Human Subject Research; and Use of Animals in Research.

## **PART III—ELIGIBILITY INFORMATION**

### **A. Eligible Applicants**

Applications may only be submitted by colleges and universities (as defined in section 1404 of NARETPA) (7 U.S.C. 3103) to the MBT Competitive Grants Program. Section 1404 of NARETPA was amended by section 7101 of the Food, Conservation, and Energy Act of 2008 (FCEA) to define Hispanic-serving Agricultural Colleges and Universities (HSACUs) (see Part III, B. and Part VIII, E. for more information), and to include research foundations maintained by eligible colleges or universities. Section 406(b) of AREERA (7 U.S.C. 7626), was amended by section 7206 of the Farm Security and Rural Investment Act of 2002 to add the 1994 Land-Grant Institutions as eligible to apply for grants under this authority.

For the purposes of this program, the terms “college” and “university” mean an educational institution in any state which (1) admits as regular students only persons having a certificate of graduation from a school providing secondary education, or the recognized equivalent of such a certificate; (2) is legally authorized within such state to provide a program of education beyond secondary education; (3) provides an educational program for which a bachelor’s degree or any other higher degree is awarded; (4) is a public or other nonprofit institution; and (5) is accredited by a nationally recognized accrediting agency or association. Applications also may be submitted by 1994 Land-Grant Institutions (defined in 7 CFR 3430 and referred to in Part VIII, E.), HSACUs, and research foundations maintained by eligible colleges or universities.

The 2014 Farm Bill required NIFA to establish an ongoing process allowing public colleges and universities that offer 4-year or advanced degrees in the food and agricultural sciences to apply for designation as Non Land Grant Colleges of Agriculture (NLGCA) institutions. HSACUs are given the opportunity to opt out of their status to be considered for designation as a NLGCA; however, this decision will be binding on them until September 30, 2018.

Pursuant to section 406 of the Agricultural Research, Extension, and Education Reform Act of 1998 (AREERA) (7 U.S.C. 7626) which authorized the Integrated Research, Education, and Extension Competitive Grant Program, all four year HSIs are eligible to apply for Integrated Projects as identified in this RFA. Two year HSIs may be eligible to apply only if the institution has been certified as a HSACU for the fiscal year in which funding is being provided.

Approximately by January 2014, a list of the institutions certified and therefore eligible to apply as HSACUs for grants under FY 2015 RFAs, including this RFA, will be made available at [www.nifa.usda.gov/nea/education/in\\_focus/hispanic\\_if\\_hispanic\\_HSACU.html](http://www.nifa.usda.gov/nea/education/in_focus/hispanic_if_hispanic_HSACU.html). Institutions appearing on this list are granted HSACU certification by the Secretary for the period starting October 1, 2014, and ending September 30, 2015. Certifications are valid for FY 2015 only. Additional questions on HSACU eligibility can be addressed to Ms. Lisa DePaolo, Policy Specialist, by email at [ldepaolo@nifa.usda.gov](mailto:ldepaolo@nifa.usda.gov) or phone at (202) 401-5061.

Award recipients may subcontract to organizations not eligible to apply provided such organizations are necessary for the conduct of the project. Failure to meet an eligibility criterion by the time of application deadline may result in the application being excluded from consideration or, even though an application may be reviewed, will preclude NIFA from making an award.

## **B. Cost Sharing or Matching**

In accordance with section 1492 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3371), as added by section 7128 of the Agricultural Act of 2014 (Pub. L. 113-79), for grants awarded after October 1, 2014, the recipient of an award from the MBT program must provide funds, in-kind contributions, or a combination of both, from sources other than funds provided through such grant in an amount that is at least equal to the amount awarded by NIFA. The matching funds requirement does not apply to grants awarded:

1. To a research agency of the United States Department of Agriculture (USDA); or
2. To an entity eligible to receive funds under a capacity and infrastructure program (as defined in section 251(f)(1)(C) of the Department of Agriculture Reorganization Act of 1994, 7 U.S.C. 6971(f)(1)(C)), including a partner (see Part VIII, E. Definitions for definition of partnership) of such an entity.

Entities eligible to receive funds under a capacity and infrastructure program and exempt from the matching funds requirement include:

- a. 1862 Land-grant Institutions, including State Agricultural Experiment Stations receiving funding under the Hatch Act of 1887;
- b. 1890 Land-grant Institutions;
- c. 1994 Land-grant Institutions;
- d. Recipients of Continuing Animal Health and Disease, Food Security, and Stewardship Research, Education, and Extension Program Funds — Capacity and Infrastructure Program (CIP);
- e. Hispanic-Serving Agricultural Colleges and Universities (HSACU);
- f. Insular Area Schools Eligible to Receive Funds from the Distance Education/Resident Instruction Grant Programs;
- g. Recipients of McIntire-Stennis Cooperative Forestry Program Funds;
- h. Non-Land Grant Colleges of Agriculture (NLGCA) – (for exemption from the new matching requirement, these applications must include NLGCA certification. Instructions for requesting certifications are available at: <http://www.nifa.usda.gov/form/form.html>, and for attaching the certification to the application in Part IV, B. 3. d. of this RFA.
- i. Recipients of funds under a program established under section 1417(b) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3152(b)), including: (1) 1890 Institution Teaching, Research, and Extension Capacity Building Grants Program; (2) Higher Education Challenge Grants Program; (3) Higher Education

Multicultural Scholars Program; and (4) Food and Agricultural Sciences National Needs Graduate and Postgraduate Fellowship Grants Program

- j. Individual public or private, nonprofit Alaska Native-Serving and Native Hawaiian-Serving Institutions of higher education (see 20 U.S.C. 1059d).

A proposal submitted in response to this RFA may indicate that the work will be completed by multiple entities as a collaborative partnership. All partners must have a substantial involvement in the project throughout the life of the project. If a partnership among multiple entities is proposed, the proposal must clearly identify the following:

- 1) A narrative of each entity's clearly established role in the project;
- 2) How each entity involved as a partner on the project will contribute to execution of project objectives, determination of experimental design, development of the project work plan and time table, and submission of collaborative, timely reports; and
- 3) A comprehensive project budget that reflects each entity's financial or third party in-kind contribution (see section 2 of 7 CFR 3430 or section 96 of 2 CFR part 200) to the total project budget costs.

If a proposal indicates that the work on the project will be completed by multiple entities as partners, and at least one entity is exempt from the matching requirement under #2 above, the entire project will be exempt from the matching requirement regardless of whether all entities involved are otherwise exempt. Any partner entity can serve as the lead entity on the project. All partners must be significantly involved in the project.

After proposals have been recommended for award, NIFA will determine if the submitted proposal and proposed division of work reflects substantial involvement of all entities involved. If a proposal is recommended for award to a lead entity not otherwise exempt from the matching requirement and the proposal does not reflect substantial involvement of at least one partner that is exempt under #2 above, then the matching requirement will apply. Exemption from the matching requirement for an entity not otherwise exempt is limited to the project for which it is a partner.

Waiver of Match - NIFA may waive the matching funds requirement for a recipient for one year with respect to a competitive grant that involves research or extension activities that are consistent with the priorities established by the National Agricultural Research, Education, Extension and Economics Advisory Board (NAREEEAB) for the year involved. To determine whether proposed activities are consistent with the priorities of the NAREEEAB, please refer to the 2014 Research, Education and Economics Action Plan. Instructions for requesting a waiver are included in Part IV, B. of this RFA.

### **C. Centers of Excellence**

Pursuant to Section 7214 of the Agricultural Act of 2014 (Pub. L. 113-79), beginning in Fiscal Year 2015, for applicable competitive research and extension programs, NIFA will be recognizing and providing priority in the receipt of funding to applications from "centers of

excellence” that have been established for purposes of carrying out research, extension, and education activities relating to the food and agricultural sciences. In July of 2014, NIFA held listening sessions and accepted written comments from stakeholders to inform NIFA’s implementation of the centers of excellence provision. Information from the webinars and a summary of the input gathered are available on NIFA’s website at [http://www.nifa.usda.gov/about/offices/legis/cntr\\_ex\\_webinar\\_documents.html](http://www.nifa.usda.gov/about/offices/legis/cntr_ex_webinar_documents.html)

A center of excellence is composed of 1 or more of the following entities that provide financial or in-kind support to the center of excellence. Therefore, an eligible applicant who wishes to be considered as a center of excellence must be one of the following entities that provides financial or in-kind support to the center being proposed, as described in the grant application.

- (A) State agricultural experiment stations;
- (B) colleges and universities;
- (C) university research foundations;
- (D) other research institutions and organizations;
- (E) Federal agencies;
- (F) national laboratories;
- (G) private organizations, foundations, or corporations;
- (H) individuals; or
- (I) any group consisting of 2 or more of the entities described in (A) through (H).

Only standard and priority grant applicants may be considered for COE designation. See Part IV, C. of this RFA for additional requirements that eligible applicants must meet to be considered a center of excellence.

## **PART IV—APPLICATION AND SUBMISSION INFORMATION**

### **A. Electronic Application Package**

Only electronic applications may be submitted via Grants.gov to NIFA in response to this RFA. We urge you to submit early to the Grants.gov system. For an overview of the Grants.gov application process see <http://www.grants.gov/web/grants/applicants/grant-application-process.html>.

#### **New Users of Grants.gov**

Prior to preparing an application, we recommend that the Project Director/Principal Investigator (PD/PI) first contact an Authorized Representative (AR, also referred to as Authorized Organizational Representative or AOR) to determine if the organization is prepared to submit electronic applications through Grants.gov. If not (e.g., the institution/organization is new to the electronic grant application process through Grants.gov), then the one-time registration process must be completed PRIOR to submitting an application. It can take as long as 2 weeks to complete the registration process so it is critical to begin as soon as possible. In such situations, the AR should go to **“Register” in the top right corner of the Grants.gov web page (or go to <http://www.grants.gov/web/grants/register.html>) for information on registering the institution/organization with Grants.gov.** Part II., Section 1. of the NIFA Grants.gov Application Guide contains detailed information regarding the registration process. Refer to item 2. below to locate the “NIFA Grants.gov Application Guide”.

#### **Steps to Obtain Application Package Materials**

To receive application materials:

1. You must download and install a version of Adobe Reader compatible with Grants.gov to access, complete, and submit applications. For basic system requirements and download instructions, see <http://www.grants.gov/web/grants/support/technical-support/software/adobe-reader-compatibility.html>. Grants.gov has a test package that will help you determine whether your current version of Adobe Reader is compatible.
2. To obtain the application package from Grants.gov, go to <http://www.grants.gov/web/grants/applicants/apply-for-grants.html>. Under Step 1 click on “Download a Grant Application Package,” and enter the funding opportunity number

#### **Funding Opportunity Number: USDA-NIFA-ICGP-004997**

in the appropriate box and click “Download Package.” From the search results, click “Download” to access the application package.

Contained within the application package is the “NIFA Grants.gov Application Guide.” This guide contains an introduction and general Grants.gov instructions, information about how to use a Grant Application Package in Grants.gov, and instructions on how to complete the application forms.

**If you require assistance to access the application package** (e.g., downloading or navigating Adobe forms) **or submitting the application**, refer to resources available on the Grants.gov website (<http://www.grants.gov/web/grants/applicants/applicant-resources.html>). Grants.gov assistance is also available at:

Grants.gov customer support

800-518-4726 Toll-Free or 606-545-5035

Business Hours: 24 hours a day, 7 days a week. Closed on [federal holidays](#).

Email: [support@grants.gov](mailto:support@grants.gov)

Grants.gov iPortal (see <https://grants-portal.psc.gov/Welcome.aspx?pt=Grants>):

Top 10 requested help topics (FAQs), Searchable knowledge base, self-service ticketing and ticket status, and live web chat (available 7 a.m. - 9 p.m. ET). Get help now!

Have the following information available when contacting Grants.gov:

- Funding Opportunity Number (FON)
- Name of agency you are applying to
- Specific area of concern

## **B. Content and Form of Application Submission**

You should prepare electronic applications following Parts V and VI of the NIFA Grants.gov Application Guide. This guide is part of the corresponding application package (see Section A. of this Part). The following is **additional information** needed to prepare an application in response to this RFA. **If there is discrepancy between the two documents, the information contained in this RFA is overriding.**

**Note the attachment requirements (e.g., PDF) in Part III Section 3. of the guide. ANY PROPOSALS THAT ARE NON-COMPLIANT WITH THE REQUIREMENTS (e.g., content format, PDF file format, file name restrictions, and no password protected files) WILL BE AT RISK OF BEING EXCLUDED FROM NIFA REVIEW. Grants.gov does not check for NIFA required attachments or that attachments are in PDF format; see Part III Section 6.1 of the guide for how to check the manifest of submitted files. Partial applications will be excluded from NIFA review. We will accept subsequent submissions of an application until close of business on the closing date in the RFA (see Part V, Section 2.1 of the NIFA Grants.gov Application Guide for further information).**

**For any questions related to the preparation of an application**, review the NIFA Grants.gov Application Guide and the applicable RFA. If assistance is still needed for preparing application forms content, contact:

- Email: [electronic@nifa.usda.gov](mailto:electronic@nifa.usda.gov)
- Phone: 202-401-5048
- Business hours: Monday through Friday, 7 a.m. – 5 p.m. ET, excluding federal holidays.

### **1. SF 424 R&R Cover Sheet**

Information related to the questions on this form is dealt with in detail in Part V, Section 2. of the NIFA Grants.gov Application Guide.

**a. Field 12. Proposed Project** – For the start date of the project, please select 09/01/2015.

**2. SF 424 R&R Project/Performance Site Location(s)**

Information related to the questions on this form is dealt with in detail in Part V, Section 3. of the NIFA Grants.gov Application Guide.

**3. R&R Other Project Information Form**

Information related to the questions on this form is dealt with in detail in Part V, Section 4. of the NIFA Grants.gov Application Guide.

**a. Field 7. Project Summary/Abstract.** The project summary must list the names and institutions of the PD and co-PDs. In the first line of the summary, state the type of project you are submitting; for example, “This is an Integrated project” or “This is an Extension-Only project” or “This is a State of the Commodity project.” The summary should include the relevance of the project to the goals of the MBT program. See Part V., Section 4.7 of NIFA Grants.gov Application Guide for further instructions and a link to a suggested template.

**b. Field 8. Project Narrative.**

NOTE: The Project Narrative shall not exceed a total of **18** single-spaced pages, and up to **5** additional pages for figures and tables with font size no smaller than 12 point. All pages, including those with figures and tables, should be numbered sequentially. We have established this maximum (**23** pages) to ensure fair and equitable competition. A logic model chart should be attached as an appendix and will not count toward the 18 page limit. Font sizes in the logic model chart can be smaller than 12 point. Applications exceeding the applicable page limitation will be at risk of being excluded from review. The Project Narrative must include all of the following:

**1) Response to Previous Review (if applicable):** This requirement only applies to Resubmitted Applications as described in Part II, Section B. PDs must respond to the previous review panel summary on no more than one page, titled “Response to Previous Review”. This will not be counted against the page limit of the project narrative. Please provide the proposal number of the previous submission.

**2) Project Narrative**

**a) Introduction:**

1. Must state the project type (Integrated, Extension-Only, State of the Commodity).
2. Include a clear statement of the long-term goal(s) and supporting objectives of the proposed project.
3. Summarize the body of knowledge or past activities that substantiate the need for the proposed project including information about or reference to the specific

critical issue pest management strategy or similar document with identifiable stakeholder input.

4. Describe ongoing or recently completed activities significant to the proposed project including the work of key project personnel. Include preliminary data/information pertinent to the proposed project.
5. All works cited should be referenced (see Bibliography & References Cited in section c. below).

**b) Rationale and Significance:**

1. Concisely present the rationale behind the proposed project.
2. Include the economic and yield losses faced by the commodity or industry due to the loss of methyl bromide.
3. Present a clear, concise set of project objectives including cost/benefit analysis of new approaches. For Extension projects: what is the value of adopting the new technology? Any novel ideas or contributions that the proposed project offers should also be discussed in this section.

**c) Approach:** The activities proposed or problems being addressed must be clearly stated and the approaches applied must be clearly described. Specifically, this section must include:

1. A description of the activities proposed and the sequence in which the activities are to be performed.
2. Methods to be used in carrying out the proposed project, including the feasibility of the methods.
3. Expected outcomes. Applicants must provide milestones and verifiable indicators to measure impact across a broad range of criteria (e.g., a timeline for grower adoption of techniques that lead to production, economic, and environmental benefits).
4. Means by which results will be analyzed, assessed, or interpreted. Applicants must describe plans to evaluate the outreach component, including means by which data will be analyzed and interpreted, and details of plans to communicate results to stakeholders and the public.
5. Pitfalls that may be encountered.
6. Limitations to proposed procedures.
7. Description of stakeholder involvement in identification of project priorities, their implementation and adoption.

**d) Project Timeline:** Provide a timeline for attainment of objectives and for production of deliverables that includes annual milestones with specific, measurable outcomes. Outline all important phases as a function of time, year by year, for the entire project, including periods beyond the grant funding period.

**e) Cooperation and institutional involvement:** Cooperative, multi-institutional and multidisciplinary applications are encouraged. Where applicable, identify each institutional unit contributing to the project and designate the lead institution or

institutional unit. Clearly define the programmatic roles, responsibilities and budget for each institutional partner.

**f) Logic Model: Required. Two-Page Limit. All applications require submission of a logic model chart. See the specific requirements for logic models in Part I, Section C.** The project-specific logic model must provide details for the inputs, outputs (activities and participants), and outcomes, situation, assumptions, and external factors of the proposed project. The logic model planning process is a tool that should be used to develop your project before writing your application. This information should be formatted into a logic model chart. Refer to the logic model in your project description, evaluation plans, and elsewhere, as applicable. Title the attachment as 'Logic Model' and save file as 'LogicModel' and attach at Field 12. Other Attachments. For samples and templates see [www.ipm.gov/LogicModels](http://www.ipm.gov/LogicModels); additional information is available on the NIFA and University of Wisconsin web sites: [www.nifa.usda.gov/about/strat\\_plan\\_logic\\_models.html](http://www.nifa.usda.gov/about/strat_plan_logic_models.html); [www.nifa.usda.gov/funding/integrated/integrated\\_logic\\_model.html](http://www.nifa.usda.gov/funding/integrated/integrated_logic_model.html) and [www.uwex.edu/ces/pdande/index.html](http://www.uwex.edu/ces/pdande/index.html).

**g) Summary of Previous Work on Methyl Bromide Alternatives:** Provide a summary of your work on methyl bromide alternatives that was **previously funded** from all sources (if applicable), progress toward completion, general conclusions and remaining funds balances.

### **Center of Excellence Justification**

Only standard and priority grant applicants may be considered for COE designation.

In addition to meeting the other requirements detailed in Part IV, C., of this Request for Application (RFA), eligible applicants who wish to be considered as centers of excellence must provide a brief justification statement, as part of their Project Narratives and within the page limits provided, describing how they meet the standards of a center of excellence, based on the following criteria:

(A) the ability of the center of excellence to ensure coordination and cost effectiveness by reducing unnecessarily duplicative efforts regarding research, teaching, and extension in the implementation of the proposed research and/or extension activity outlined in this application;

(B) in addition to any applicable matching requirements, the ability of the center of excellence to leverage available resources by using public-private partnerships among agricultural industry groups, institutions of higher education, and the Federal Government in the implementation of the proposed research and/or extension activity outlined in this application. Resources leveraged should be commensurate with the size of the award;

(C) the planned scope and capability of the center of excellence to implement teaching initiatives to increase awareness and effectively disseminate solutions to target audiences through extension activities in the implementation of the proposed research and/or extension activity outlined in this application; and

(D) the ability or capacity of the center of excellence to increase the economic returns to rural communities by identifying, attracting, and directing funds to high-priority agricultural issues in support of and as a result of the implementation of the proposed research and/or extension activity outlined in this application.

Additionally, where practicable (not required), center of excellence applicants should describe proposed efforts to improve teaching capacity and infrastructure at colleges and universities (including land-grant colleges and universities, cooperating forestry schools, certified Non-Land Grant Colleges of Agriculture (NLGCA) (list of certified NLGCA is available at [http://www.nifa.usda.gov/funding/pdfs/nlgca\\_colleges.pdf](http://www.nifa.usda.gov/funding/pdfs/nlgca_colleges.pdf)), and schools of veterinary medicine).

**c. Field 9. Bibliography & References Cited:**

PDF Attachment. No Page Limit. Title the attachment as ‘Bibliography & References Cited’ in the document header and save file as ‘BibliographyReferencesCited’.

All work cited in the text should be referenced in this section of the application. All references must be complete; include titles and all co-authors; conform to an acceptable journal format; and be listed in alphabetical order using the last name of the first author or listed by number in the order of citation.

**d. Field 12. Other Attachments:**

Logic Model. See instructions above.

Non-Land Grant College of Agriculture (NLGCA) Certification. PDF Attachment. Applicants claiming exemption from the new matching requirement as NLGCA, must attach the NLGCA certification letter they requested and received from NIFA. Title the attachment 'NLGCA Certification' and save file as 'NLGCACertification'. To request certification as an NLGCA, complete the form at <http://www.nifa.usda.gov/form/form.html>. Note that certification can take up to 30 days from submission of request form.

**4. R&R Senior/Key Person Profile (Expanded)**

Information related to the questions on this form is dealt with in detail in Part V, Section 5 of the NIFA Grants.gov Application Guide. This section of the Guide includes information about the people who require a Senior/Key Person Profile, and details about the Biographical Sketch and the Current and Pending Support, including a link to a suggested template for the Current and Pending Support.

**a. Attach Biographical Sketch Field** –Two-Page Limit (excluding publications listings) per PD, co-PD, senior associate, and other professional personnel. Title the attachment as ‘Biographical Sketch’ in the document header and save file as ‘BiographicalSketch’.

**b. Attach Current and Pending Support Field** – PDF Attachment. No Page Limit. Title the attachment as ‘Current and Pending Support’ in the document header and save file as ‘CurrentPendingSupport’. Current and Pending Support information is only required for personnel with PD or co-PD indicated as their Project Role on the R&R Senior/Key Person Profile. All applications must contain a list of all Current and Pending Support detailing public or private support (including in-house support) to which personnel identified in the application have committed portions of their time, whether or not salary support for person(s) involved is included in the budget. Please note that the project being proposed should be included in the pending section of the form. Total projects listed for each PD should be indicated as percent effort and not exceed 100% for concurrent (Current and Pending) projects.

**5. R&R Personal Data** – As noted in Part V, Section 6 of the NIFA Grants.gov Application Guide, the submission of this information is voluntary and is not a precondition of award.

## **6. R&R Budget**

Information related to the questions on this form is dealt with in detail in Part V, Section 7 of the NIFA Grants.gov Application Guide.

### **Additional Budget Information:**

#### **Matching Funds**

If you conclude that matching funds are not required as specified under Part III, Section B. Cost-Sharing or Matching, you must include a justification in the Budget Narrative. We will consider this justification when ascertaining final matching requirements or in determining if required matching can be waived. NIFA retains the right to make final determinations regarding matching requirements.

For grants that require matching funds as specified under Part III, Section B., the Budget Narrative should include written verification of commitments of matching support (including both cash and in-kind contributions) from third parties. Written verification means:

- (a) For any **third party cash contributions**, a separate pledge agreement for each donation, signed by the authorized representatives of the donor organization (and the applicant organization ONLY if provided after submission of the application), must include: (1) The donor’s name, address, and telephone number; (2) the name of the applicant organization; (3) the title of the project; (4) the dollar amount of the cash donation (the budget narrative must describe how the cash donation will be used); (5) a statement that the donor will pay the cash contribution during the grant period; and (6) whether the applicant can designate cash as the applicant deems necessary or the cash contribution has been designated to a particular budget item.

- (b) For any **third party in-kind contributions**, a separate pledge agreement for each contribution, signed by the authorized representatives of the donor organization (and the applicant organization ONLY if provided after submission of the application), must include: (1) The donor's name, address, and telephone number; (2) the name of the applicant organization; (3) the title of the project; (4) a good faith estimate of the current fair market value of the third party in-kind contribution and a description of how the fair market value was determined; and (5) a statement that the donor will make the contribution during the grant period. .

Summarize on a separate page the sources and amount of all matching support from outside the applicant institution and place that information in the proposal as part of the Budget Narrative. You must place all pledge agreements in the proposal immediately following the summary of matching support.

Establish the value of applicant contributions in accordance with applicable cost principles. Refer to 2 CFR Part 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards", for further guidance and other requirements relating to matching and allowable costs.

**Project Director Workshop.** The MBT program requires successful applicants (or a designee) to attend at least one projector director workshop during the term of their project. For the purposes of budget development, applicants are required to request funds for travel for attending at least one such workshop. The request for these funds should be clearly indicated in the budget narrative section of the application.

#### **7. Supplemental Information Form**

Information related to the questions on this form is dealt with in detail in Part VI, Section 1 of the NIFA Grants.gov Application Guide.

**a. Field 2. Program to which you are applying.** Enter the program code name "**Methyl Bromide Transition**" and the program code "**112.C**". Note that accurate entry of the program code is very important for proper and timely processing of an application.

**b. Field 8. Conflict of Interest List.** See Part VI, Section 1.8 of the NIFA Grants.gov Application Guide for further instructions and a link to a suggested template.

#### **C. Submission Dates and Times**

Prior to electronic submission of the application via Grants.gov, it is strongly recommended that an administrative review be conducted to ensure that an application complies with all application preparation instructions. An application checklist is included in Part VII of the NIFA Grants.gov Application Guide to assist with this review.

While the checklist should be used to check the application for completeness, the application should be checked for the following required items. This is not an exhaustive list of required items; it only serves to highlight items that may be overlooked. The list includes:

- Logic Model
- Current and Pending Support for all relevant personnel (listing this proposal)
- Biographical Sketch for all relevant personnel (two-page limit)
- Conflict of Interest List for all relevant personnel

**Instructions for submitting an application are included in Part IV, Section 1.9 of the NIFA Grants.gov Application Guide.**

Applications must be received by Grants.gov by **5:00 p.m. Eastern Time on May 4, 2015**. Applications received after this deadline will normally not be considered for funding.

**If you have trouble submitting an application to Grants.gov, you should FIRST contact the Grants.gov Help Desk to resolve any problems. Keep a record of any such correspondence. See Part IV. A. for Grants.gov contact information.**

We send email correspondence to the AR regarding the status of submitted applications. Therefore, applicants are strongly encouraged to provide accurate e-mail addresses, where designated, on the SF-424 R&R Application for Federal Assistance.

If the AR has not received correspondence **from NIFA** regarding a submitted application within 30 days of the established deadline, contact the Agency Contact identified in Part VII of the applicable RFA and request the proposal number assigned to the application. **Failure to do so may result in the application not being considered for funding by the peer review panel. Once the application has been assigned a proposal number, this number should be cited on all future correspondence.**

#### **D. Funding Restrictions**

Section 715 of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235) limits indirect costs to 30 percent of the total Federal funds provided under each award. When preparing budgets, you should limit your request for the recovery of indirect costs to the lesser of your institution's official negotiated indirect cost rate or the equivalent of 30 percent of total Federal funds awarded. See Part V section 7.9 of the NIFA Grants.gov Application Guide for further indirect cost information.

You may not use grant funds awarded under this authority to renovate or refurbish research, education, or extension space; purchase or install fixed equipment in such space; or the plan, repair, rehabilitate, acquire, or construction of buildings or facilities.

Statutory language or agency policy limits the maximum potential funding period (including any awards transferred from another institution or organization) to five years in duration. The

funding period will commence on the effective date cited in the award instrument. Any such limitation also applies to subcontracts made under awards subject to a funding period limitation.

#### **E. Other Submission Requirements**

**You should follow the submission requirements noted in Part IV, Section 1.9 in the document entitled “NIFA Grants.gov Application Guide.”**

For information about the **status of a submitted application**, see Part III., Section 6. of the NIFA Grants.gov Application Guide.

## **PART V—APPLICATION REVIEW REQUIREMENTS**

### **A. General**

We evaluate each application in a 2-part process. First, we screen each application to ensure that it meets the administrative requirements as set forth in this RFA. Second, a technical review panel will evaluate applications that meet the administrative requirements.

We select reviewers based upon their training and experience in relevant scientific, extension, or education fields, taking into account the following factors: (a) The level of relevant formal scientific, technical education, or extension experience of the individual, as well as the extent to which an individual is engaged in relevant research, education, or extension activities; (b) the need to include as reviewers experts from various areas of specialization within relevant scientific, education, or extension fields; (c) the need to include as reviewers other experts (e.g., producers, range or forest managers/operators, and consumers) who can assess relevance of the applications to targeted audiences and to program needs; (d) the need to include as reviewers experts from a variety of organizational types (e.g., colleges, universities, industry, state and federal agencies, and private profit and non-profit organizations) and geographic locations; (e) the need to maintain a balanced composition of reviewers with regard to minority and female representation and an equitable age distribution; and (f) the need to include reviewers who can judge the effective usefulness of each application to producers and the general public.

When each peer review panel has completed its deliberations, the responsible program staff of MBT will recommend that the project: (a) be approved for support from currently available funds or (b) be declined due to insufficient funds or unfavorable review.

MBT reserves the right to negotiate with the PD/PI and/or with the submitting organization or institution regarding project revisions (e.g., reductions in the scope of work, funding level, period, or method of support) prior to recommending any project for funding.

### **B. Evaluation Criteria**

We will use the evaluation criteria below to review applications submitted in response to this RFA:

#### **Integrated and Extension-Only Proposals**

##### **1. Proposal Merit and Quality**

- a. Project objectives and outcomes are clearly described and adequate. The needs of the commodity, industry or regulatory sector, and the problems faced because of the loss of methyl bromide, are clearly stated.
- b. Implementation of methyl bromide alternatives is clearly defined and appropriate extension activities to encourage adoption of alternatives are described. Formal extension and economic analysis to expedite the adoption of proposed alternatives are clearly delineated in the form of a measurable, outcome-oriented plan in the proposal.

- c. Proposed research is conceptually sound and research hypotheses are applicable and appropriate.
- d. Proposed approach, procedures, or methodologies are innovative, original, clearly described, suitable, and feasible. The potential commercial application is clearly stated and the costs (both fixed and recurring) are described for the transition to the proposed alternative methods. A comparison of the costs and efficacy of the commercially-used quantity of methyl bromide that might be replaced by the alternative methods is included.
- e. Preliminary data demonstrate feasibility of the proposed research.
- f. Probability of project success is high given the level of scientific originality and risk-reward balance. Economic analysis with methodology is included and will clearly demonstrate the cost of methyl bromide alternatives. Simply stating that an economic analysis will be conducted without methodology or appropriate personnel will be considered inadequate.

### **State of Commodity Proposals**

#### **1. Proposal Merit and Quality**

- a. Project objectives and outcomes are clearly described and adequate. Objectives and need for scientific and economic system review are clearly stated.
- b. Current conditions, successful coverage or gaps in pest management, yield changes and cost of management changes (good, bad or neutral) resulting from the phase out of methyl bromide for any specific commodity are clearly documented.
- c. Proposed research is conceptual sound and research hypotheses are applicable and appropriate.
- d. Proposed approach, procedures, or methodologies are innovative, original, clearly described, suitable, and feasible.
- e. Preliminary data demonstrate feasibility of proposed research.
- f. Evaluation of economics of Methyl Bromide transition and the replacement technology is mandatory.

### **All Proposals**

#### **2. Qualifications of Project Personnel, Adequacy of Facilities, and Project Management**

- a. Applicants (individual or team) are qualified to conduct the proposed project and have the performance record and potential necessary to achieve research.
- b. Application demonstrates awareness of previous and alternative approaches to the identified problem.
- c. Evidence of institutional capacity and competence in the proposed area of work is provided.
- d. Support personnel, facilities, and instrumentation are sufficient.
- e. Project timelines allow sufficient time to complete objectives on schedule, administer and manage the project partnerships/collaborations, translate outcomes, and coordinate project participants and institutions.
- f. Extension and economic analysis activities are clearly delineated in the budget and budget narrative.

- g. If an integrated or extension project is funded, beginning in the second year of funding, at least one member of the project team will be required to attend an annual International Methyl Bromide Alternatives Conference ([www.mbao.org](http://www.mbao.org)) or an approved alternative. Reasonable travel expenses are claimed as part of the project budget.

### **3. Relevance**

- a. Documentation is adequate that the project is directed toward specific research program area priorities identified in this RFA.
- b. The proposed work addresses identified stakeholder needs.
- c. The plan and methods for evaluating success of project activities and documenting potential impact against measurable short and mid-term outcomes are suitable and feasible.
- d. The application adequately describes a plan for implementation of results generated by the project. The application must provide cost effective approaches and criteria to measure and assess implementation, adoption and potential impact.

### **Center of Excellence Status**

All eligible applicants will be competitively peer reviewed (as described in Part V, A. and B. of this RFA), and ranked in accordance with the evaluation criteria. Those that rank highly meritorious and requested to be considered as a center of excellence will be further evaluated by the peer panel to determine whether they have met the standards to be centers of excellence (Part III C. and Part IV B.). In instances where they are found to be equally meritorious with the application of a non-center of excellence, based on peer review, selection for funding will be weighed in favor of applicants meeting the center of excellence criteria. NIFA will effectively use the center of excellence prioritization as a “tie breaker”. Applicants that rank highly meritorious but who did not request consideration as a center of excellence or who are not deemed to have met the centers of excellence standards may still receive funding.

In addition, the applicant’s Notice of Award will reflect that, for the particular grant program, the applicant meets all of the requirements of a center of excellence. Entities recognized as centers of excellence will maintain that distinction for the duration of their period of performance or as identified in the terms and conditions of that award.

### **C. Conflicts of Interest and Confidentiality**

During the peer evaluation process, we take extreme care to prevent any actual or perceived conflicts of interest that may impact review or evaluation. For the purpose of determining conflicts of interest, we determine the academic and administrative autonomy of an institution by reference to the current Higher Education Directory, published by Higher Education Publications, Inc., 1801 Robert Fulton Drive, Suite 555, Reston, VA, 20191. Phone: (888) 349-7715. Web site: <http://www.hepinc.com>.

Names of submitting institutions and individuals, as well as application content and peer evaluations, are kept confidential, except to those involved in the review process, to the extent permitted by law. In addition, the identities of peer reviewers will remain confidential throughout the entire review process, to the extent permitted by law; therefore, the names of the reviewers will not be released to applicants.

#### **D. Organizational Management Information**

Specific management information relating to an applicant shall be submitted on a one time basis, with updates on an as needed basis. This requirement is part of the responsibility determination prior to the award of a grant identified under this RFA, if such information has not been provided previously under this or another NIFA program. We will provide you copies of forms recommended for use in fulfilling these requirements as part of the preaward process. Although an applicant may be eligible based on status as one of these entities, there are factors that may exclude an applicant from receiving federal financial and nonfinancial assistance and benefits under this program (e.g., debarment or suspension of an individual involved or a determination that an applicant is not responsible based on submitted organizational management information).

#### **E. Application Disposition**

An application may be withdrawn at any time before a final funding decision is made regarding the application; however, withdrawn applications normally will not be returned. One copy of each application that is not selected for funding, including those that are withdrawn, will be retained by MBT for a period of three years.

## **PART VI—AWARD ADMINISTRATION**

### **A. General**

Within the limit of funds available for such purpose, the NIFA awarding official shall make grants to those responsible, eligible applicants whose applications are judged most meritorious under the procedures set forth in this RFA. The date specified by the NIFA awarding official as the effective date of the grant shall be no later than September 30 of the federal fiscal year in which the project is approved for support and funds are appropriated for such purpose, unless otherwise permitted by law. The project need not be initiated on the grant effective date, but as soon thereafter as practical so that project goals may be attained within the funded project period. All funds granted by NIFA under this RFA may be used only for the purpose for which they are granted in accordance with the approved application and budget, regulations, terms and conditions of the award, applicable federal cost principles, USDA assistance regulations, and NIFA General Awards Administration Provisions at 7 CFR part 3430, subparts A through E.

### **B. Award Notice**

The award document will provide pertinent instructions and information including, at a minimum:

- (1) Legal name and address of performing organization or institution to which the director has issued an award under the terms of this request for applications;
- (2) Title of project;
- (3) Name(s) and institution(s) of PDs chosen to direct and control approved activities;
- (4) Identifying award number and the Federal Agency Identification Number assigned by NIFA;
- (5) Project period, specifying the amount of time NIFA intends to support the project without requiring recompetition for funds;
- (6) Total amount of financial assistance approved for the award;
- (7) Legal authority(ies) under which the award is issued;
- (8) Appropriate Catalog of Federal Domestic Assistance (CFDA) number;
- (9) Applicable award terms and conditions (see <http://www.nifa.usda.gov/business/awards/awardterms.html> to view NIFA award terms and conditions);
- (10) Approved budget plan for categorizing allocable project funds to accomplish the stated purpose of the award; and

(11) Other information or provisions deemed necessary by NIFA to carry out its respective awarding activities or to accomplish the purpose of a particular award.

### **C. Administrative and National Policy Requirements**

Several federal statutes and regulations apply to grant applications considered for review and to project grants awarded under this program. These include, but are not limited to the ones listed below.

2 CFR Part 200—Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

2 CFR Part 400 —USDA implementation of 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

2 CFR Part 415—USDA General Program Administrative Regulations.

7 CFR Part 1, subpart A—USDA implementation of the Freedom of Information Act.

7 CFR Part 3—USDA implementation of OMB Circular No. A-129 regarding debt collection.

7 CFR Part 15, subpart A—USDA implementation of Title VI of the Civil Rights Act of 1964, as amended.

2 CFR Part 180 and Part 417—OMB Guidelines to Agencies on Government-Wide Debarment and Suspension (Nonprocurement) and USDA Nonprocurement Debarment and Suspension.

7 CFR Part 331 and 9 CFR Part 121—USDA implementation of the Agricultural Bioterrorism Protection Act of 2002.

2 CFR Part 416—USDA General Program Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.

2 CFR Part 418—USDA implementation of Restrictions on Lobbying. Imposes prohibitions and requirements for disclosure and certification related to lobbying on recipients of federal contracts, grants, cooperative agreements, and loans.

2 CFR Part 421—USDA Implementation of Governmentwide Requirements for Drug-Free Workplace (Grants).

2 CFR Part 422—Research Institutions Conducting USDA-Funded Extramural Research; Research Misconduct.

7 CFR Part 3407—USDA procedures to implement the National Environmental Policy Act of 1969, as amended.

7 CFR 3430—Competitive and Noncompetitive Non-formula Financial Assistance Programs--General Award Administrative Provisions.

29 U.S.C. 794 (section 504, Rehabilitation Act of 1973) and 7 CFR Part 15b (USDA implementation of statute)—prohibiting discrimination based upon physical or mental handicap in federally-assisted programs.

35 U.S.C. 200 et seq.—Bayh Dole Act, controlling allocation of rights to inventions made by employees of small business firms and domestic nonprofit organizations, including universities, in federally-assisted programs (implementing regulations are contained in 37 CFR Part 401).

44 U.S.C. 3541 et seq. (Pub. L. 107-347)—Federal Information System Security Management Act of 2002 (FISMA), to improve computer and network security within the Federal Government. Applies to awardees if it will collect, store, process, transmit, or use information on behalf of NIFA.

#### **D. Expected Program Outputs and Reporting Requirements**

Grantees are to use REEport, NIFA's electronic, web-based inventory system to submit an initial project initiation which documents expected products and outcomes of the project. Additionally, annual progress report documenting realized project outcomes must be submitted to the electronic system. The web-based system facilitates an electronic workflow between grantees and NIFA for project accomplishments to be easily searchable and allows for public access to information on Federally-funded projects. The details of these reporting requirements, including those specific to the annual and final technical reports, are included in the award terms and conditions.

## **PART VII—AGENCY CONTACT**

Applicants and other interested parties are encouraged to contact:

### **Programmatic Contact –**

**Kitty Cardwell**

**Title:** National Program Leader

**Unit:** IBCE, Division of Global Climate Change

**Location:** 3277 Waterfront Centre

[Full Address and Directions](#)

**Phone:** (202) 401-1790

**Email:** [kcardwell@nifa.usda.gov](mailto:kcardwell@nifa.usda.gov)

### **Administrative/Business Contacts –**

**Duane Alphas**

**Title:** Team Leader

**Unit:** Office of Grants and Financial Management

**Location:** 2152 Waterfront Centre

[Full Address and Directions](#)

**Phone:** (202) 401-4326

**Email:** [dalphas@nifa.usda.gov](mailto:dalphs@nifa.usda.gov)

**Rochelle McCrea**

**Title:** Team Leader

**Unit:** Office of Grants and Financial Management

**Location:** 2160 Waterfront Centre

[Full Address and Directions](#)

**Phone:** (202) 401-2880

**Email:** [rmccrea@nifa.usda.gov](mailto:rmccrea@nifa.usda.gov)

## **PART VIII—OTHER INFORMATION**

### **A. Access to Review Information**

We will send copies of reviews, not including the identity of reviewers, and a summary of the panel comments to the applicant PD after the review process has been completed.

### **B. Use of Funds; Changes**

#### **1. Delegation of Fiscal Responsibility**

Unless the terms and conditions of the award state otherwise, awardees may not in whole or in part delegate or transfer to another person, institution, or organization the responsibility for use or expenditure of award funds.

#### **2. Changes in Project Plans**

a. The permissible changes by the awardee, PD(s), or other key project personnel in the approved project shall be limited to changes in methodology, techniques, or other similar aspects of the project to expedite achievement of the project's approved goals. If the awardee or the PD(s) is uncertain as to whether a change complies with this provision, the question must be referred to the Authorized Departmental Officer (ADO) for a final determination. The ADO is the signatory of the award document, not the program contact.

b. The awardee must request, and the ADO must approve in writing, all changes in approved goals or objectives prior to effecting such changes. In no event shall requests be approved for changes that are outside the scope of the original approved project.

c. The awardee must request, and the ADO must approve in writing, all changes in approved project leadership or the replacement or reassignment of other key project personnel, prior to effecting such changes.

d. The awardee must request, and the ADO must approve in writing, all transfers of actual performance of the substantive programmatic work in whole or in part and provisions for payment of funds, whether or not federal funds are involved, prior to instituting such transfers, unless prescribed otherwise in the terms and conditions of the award.

e. The project period may be extended without additional financial support, for such additional period(s) necessary to complete or fulfill the purposes of an approved project, but in no case shall the total project period exceed any applicable statutory limit or expiring appropriation limitation. The terms and conditions of award include information about no-cost extensions of the award and when ADO's prior approval is necessary.

f. Changes in Approved Budget: Unless stated otherwise in the terms and conditions of award, changes in an approved budget must be requested by the awardee and approved in writing by the

ADO prior to instituting such changes, if the revision will involve transfers or expenditures of amounts requiring prior approval as set forth in the applicable Federal cost principles, Departmental regulations, or award.

### **C. Confidential Aspects of Applications and Awards**

When an application results in an award, it becomes a part of the record of NIFA transactions, available to the public upon specific request. Information that the Secretary determines to be of a confidential, privileged, or proprietary nature will be held in confidence to the extent permitted by law. Therefore, any information that the applicant wishes to have considered as confidential, privileged, or proprietary should be clearly marked within the application. The original copy of an application that does not result in an award will be retained by the Agency for a period of three years. Other copies will be destroyed. Such an application will be released only with the consent of the applicant or to the extent required by law. An application may be withdrawn at any time prior to the final action thereon.

### **D. Regulatory Information**

For the reasons set forth in the final Rule related Notice to 2 CFR part 415, subpart C, this program is excluded from the scope of the Executive Order 12372 which requires intergovernmental consultation with State and local officials. Under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 35), the collection of information requirements contained in this Notice have been approved under OMB Document No. 0524-0039.

### **E. Definitions**

Please refer to [7 CFR 3430, Competitive and Noncompetitive Non-formula Financial Assistance Programs--General Award Administrative Provisions](#), for applicable definitions for this NIFA grant program.

For the purpose of this program, the following additional definitions are applicable.

Integrated Pest Management (IPM) is “a sustainable approach to managing pests by combining biological, cultural, physical and chemical tools in a way that minimizes economic, health and environmental risks.” (Food, Conservation, and Energy Act of 2008). The National IPM Roadmap (2013) provides further description of IPM (see [www.nifa.usda.gov/nea/pest/pdfs/ipm\\_roadmap.pdf](http://www.nifa.usda.gov/nea/pest/pdfs/ipm_roadmap.pdf)).

Integrated project means a project incorporating two or three functions of the agricultural knowledge system (research, education, and extension) around a problem or activity. For the MBT program, research and extension must be included in integrated projects.

Multidisciplinary project means a project in which investigators from two or more disciplines collaborate to address a common problem. These collaborations, where appropriate, may integrate the biological, physical, chemical, or social sciences.

Partnership requires that all partners have a substantial involvement in the project throughout the life of the project. If a partnership between multiple entities is proposed, the proposal should clearly identify the following:

- 1) A narrative of each entity's clearly established role in the project;
- 2) How each entity involved as a partner on the project will contribute to execution of project objectives, determination of experimental design, development of the project work plan and time table, and submission of collaborative, timely reports; and
- 3) A comprehensive project budget that reflects each entity's financial or in-kind contribution to the total project budget costs.

State of the Commodity projects are integrated projects (research and extension) that evaluate current pest management challenges and the economics of pest management in the absence of methyl bromide for those commodities phased off of methyl bromide (i.e., had a critical use exemption in 2006- 2015).