Integrated Research, Education, and Extension Competitive Grants Program – Methyl Bromide Transitions

FY 2011 Request for Applications

APPLICATION DEADLINE: June 22, 2011



U.S. 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 TRANSITIONS**

INITIAL ANNOUNCEMENT

CATALOG OF FEDERAL DOMESTIC ASSISTANCE: This program is listed in the Catalog of Federal Domestic Assistance under 10.303, Integrated Research, Education, and Extension Competitive Grants Program.

DATES: Applications must be received by close of business (COB) on June 22, 2011 (5:00 **p.m.** Eastern Time). Applications received after this deadline will normally not be considered for funding. Comments regarding this request for applications (RFA) are requested within six 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) is requesting comments regarding this RFA from any interested party. These comments will be considered in the development of the next RFA for the program, if applicable, and will be used 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)). This section requires the Secretary to solicit and consider input on a current RFA from persons who conduct or use agricultural research, education and extension for use in formulating future RFAs for competitive programs. Written stakeholder comments on this RFA should be submitted in accordance with the deadline set forth in the DATES portion of this Notice.

Written stakeholder comments should be submitted by mail to: Policy and Oversight Division; Office of Grants and Financial Management; National Institute of Food and Agriculture; USDA; STOP 2299; 1400 Independence Avenue, SW; Washington, DC 20250-2299; or via e-mail to: RFP-OEP@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 Transitions RFA.

EXECUTIVE SUMMARY: NIFA announces the availability of grant funds and requests applications for the Research, Education, and Extension Competitive Grants Program: Methyl Bromide Transitions (MBT) for fiscal year (FY) 2011 to support the discovery and implementation of practical pest management alternatives to methyl bromide uses or that minimize methyl bromide emissions for which the United States is requesting critical use exemptions. Critical Use Nominations for 2012 include the following uses: commodities; cucurbits; eggplant; fruit, nut, and flower nursery; food facilities; forest seedling; ham; orchard replant; ornamental; peppers; post harvest; strawberry fruit; strawberry nursery; sweet potato slips; and tomato (see the "2012 Critical Use Exemption Nominations from the Phaseout of Methyl Bromide" on the following EPA website:

www.epa.gov/ozone/mbr/2012_nomination.html.

The program is focused on integrated commercial or field scale research that targets short- to medium-term solutions and associated extension activity that will foster the adoption of these solutions. The amount available for support of this program in FY 2011 is approximately \$1.9 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. NIFA additionally requests stakeholder input from any interested party for use in the development of the next RFA for this program.

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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), 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.

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.

B. Purpose and Priorities

This RFA solicits applications for the Integrated Research, Education, and Extension Competitive Grants Program, Methyl Bromide Transitions (MBT). The MBT seeks to solve critical agricultural issues, priorities, or problems through the integration of research, education, and extension activities. It is designed to address immediate needs that result from the loss of availability of methyl bromide, a pest and disease control tactic that has been critical to agricultural, industrial, natural resource or urban pest management systems.

The loss of a key management tactic can have devastating impacts on productivity, product quality and profitability. With the pressure to completely phase-out methyl bromide, new pest control tactics are required for growers who depended on the fumigant to control soil-borne and post-harvest pathogens, and for processing and shipping industries striving to meet regulatory standards.

The concept of prevention, avoidance, monitoring, and suppression of pest populations (the PAMS approach) should be considered in proposals submitted to this program. Projects funded by the MBT program area will cover a broad range of new methodologies, technologies, systems and strategies for controlling economically important pests for which methyl bromide has been the only effective pest control option.

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 a low pest pressure soil environment following many years of methyl bromide fumigation. Also, weather conditions have a marked influence on pest pressure. Alternatives that give acceptable efficacy under favorable weather and soil conditions may fail in other years when weather and soil conditions

are less favorable. The potential for emergence of unexpected pests and pathogens, in the absence of methyl bromide, must be determined. Performance must be consistent over several production cycles and be technically and economically feasible when scaled-up from research-scale plots to commercial-scale fields. As alternatives become available, researchers need time to test application methods to gain experience and confidence using an alternative to consistently produce nursery stock that meets certified pest- and pathogen-free requirements.

It is important that project proposals consider: (1) the evolving science and technology; (2) the potential range of pest control practices available to the critical use exemption cases; (3) the risk mitigation and pest management needs of targeted users; (4) the integration of research, education, and extension activities; and (5) a cost/benefit analysis of the new or proposed technology that addresses the economic trade-offs relative to methyl bromide. 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.

Project Director Meeting. If a project is funded, at least one member of the project team will be required to attend an annual International Methyl Bromide Alternatives Conference (www.mbao.org) starting with the second year of funding. For the purposes of budget development, applicants are required to request funds to support participation in at least one MBAO conference. The request for these funds should be clearly indicated in the budget and budget narrative sections of the application.

eXtension

MBT encourages projects that develop content suitable for delivery through eXtension (www.extension.org), if applicable. This content is for end users, as opposed to staff development, and must align with the eXtension Strategic Roadmap (available at http://about.extension.org/wiki/Planning). Applicants establishing new Communities of Practice (CoPs), or enhancing existing ones, must first follow the corresponding steps outlined by eXtension.org (http://about.extension.org/wiki/NIFA_RFA_Information).

C. Program Area Description

The goal of an MBT application should be to support the discovery and implementation of practical pest management alternatives to methyl bromide or elimination of methyl bromide emissions for uses for which the United States is requesting critical use exemptions. Methyl bromide (MeBr) is an odorless, colorless gas that has been used as an agricultural soil and structural fumigant to control a wide variety of pests. However, because MeBr depletes the stratospheric ozone layer and is classified as a Class I ozone-depleting substance, the amount of MeBr produced and imported in the United States is being incrementally reduced. In accordance with the *Montreal Protocol on Substances that Deplete the Ozone Layer* and the Clean Air Act (www.epa.gov/air/caa), the United States was 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 those nominations approved by the United Nations Environment Programme's Methyl Bromide Technical Options Committee (MBTOC), such as the critical use exemptions (CUEs). Critical Use Nominations (CUNs) for an exemption may be

approved when: a) there are no alternatives currently available that are technically and economically feasible; b) there are no alternatives acceptable from a public health standpoint; and c) an active research program is seeking viable alternatives to use of methyl bromide fumigation or seeking reduction in emissions for that nomination.

Under the Montreal Protocol and the Clean Air Act, the production and import phase-out for methyl bromide in the United States have followed this schedule:

1993 to 1998	Freeze at 1991 baseline levels (U.S. consumption ~25,500 Metric <i>Tonnes</i> ;
	consumption = production + import - export).
1999 and 2000	25% reduction from baseline levels.
2001 and 2002	50% reduction from baseline levels.
2003 and 2004	70% reduction from baseline levels.
2005	100% phase out, except for allowable exemptions such as critical use
	nominations (CUNs) agreed to by the Montreal Protocol Parties.
2006	32% of baseline levels was authorized for CUNs.
2007	26% of the 1991 baseline levels was authorized for CUNs.
2008	21% of the 1991 baseline levels was authorized for CUNs.
2009	16.7% of the 1991 baseline levels was authorized for CUNs.
2010	12.7% of the 1991 baseline levels was authorized for CUNs.
2011	9.4% of the 1991 baseline levels was authorized for CUNs.
2012	4.6% of the 1991 baseline levels was requested for CUNs.

Current nominations cover exemptions for 15 crops or uses. The 2012 request for reduction in percent of 1991 baseline levels represents a continued reduction from earlier years, due to the introduction of alternatives into the marketplace and other factors. The MBT grant program area seeks proposals to ensure that economically viable and environmentally sound alternatives to methyl bromide are in place and available as soon as possible for the current 2012 Critical Use Nominations. Those submitting applications should consider these specific CUNs, which include the following uses: commodities; cucurbits; eggplant; fruit, nut, and flower nursery; food facilities; forest seedling; ham; orchard replant; ornamental; peppers; post harvest; strawberry fruit; strawberry nursery; sweet potato slips; and tomato. More information on these CUNs is available in an EPA document titled "2012 Critical Use Exemption Nominations from the Phaseout of Methyl Bromide" (www.epa.gov/ozone/mbr/2012_nomination.html). The 2012 CUNs listed in the document include descriptions of alternative controls or application methods evaluated and the barriers or specific limitations such as soil temperature, terrain, buffer zones, economics, etc., that limit alternatives and make continued use of methyl bromide necessary for each of the 15 nominations. Nominations include: names of alternatives, technical and regulatory reasons for alternatives not being feasible or available; cost considerations; current research priorities; pests targeted; and characteristics of production systems. Proposals must include methods/technology to reduce methyl bromide use and/or eliminate emissions that address the specific conditions and factors (seasonal soil temperatures, soil types, cropping systems, industrial fumigation costs, etc.) limiting transition from methyl bromide fumigation to alternative pest management strategies.

The MBT grant program area emphasizes commercial or field scale research targeting short- to medium-term solutions that will develop new alternatives, result in registration and adoption of new alternatives, and/or minimize methyl bromide emissions. Proposals addressing chemical and/or non-chemical methyl bromide alternatives will be evaluated based on their potential to contribute to such solutions. 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. Repeat of research for two or more cropping seasons or trials is encouraged. Comprehensive information on the impact of alternatives on efficacy and methyl bromide emissions and profit margins compared to methyl bromide fumigation is a key objective of the MBT program. Although much of the technology and potential alternatives developed for other crops/issues can be transferred to critical use nominations, adequate evaluation for specific new uses must be completed. Proposals addressing critical use nominations for which there is not an extensive database are encouraged.

The following components must be included in a MBT proposal or it will not be considered for funding:

- 1. Economic analysis with direct comparison of cost effectiveness of proposed alternative with methyl bromide. Comprehensive information on the impact of such alternatives on efficacy and profit margins compared with methyl bromide fumigation is required. Repeat of research for two or more cropping seasons or trials is encouraged. Integrated projects regarding transition to an alternative type of cropping/storage/processing system that avoids the need for dis-infestation with methyl bromide (e.g., transition to a covered system using soil-less culture), will be considered 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.
- 2. Integration of two or more of the three functions (research, extension and education). At least two of the three science functions (research, extension and education) must be included in proposed projects and generally no more than two thirds of the project's budget should be devoted to any one function. Formal extension and/or education programs to expedite adoption of proposed alternatives must be clearly delineated in the proposal and funding for these activities should be clearly outlined in the budget narrative. Research should address the critical use nominations or alternatives to methyl bromide for new critical pest management issues. The expectation is that research will not only result in adoption of techniques and methods to significantly reduce methyl bromide use or emissions, but will also lead to new product registration, if required. The research will result in direct efficacy and economic comparisons of proposed alternatives with methyl bromide fumigation. Extension programs, such as field demonstrations, grower trials, workshops, and distributed information, should result in commercial awareness, understanding and adoption of new technology and methods to reduce methyl bromide emissions and/or adoption of alternatives to methyl bromide fumigation. Applicants are encouraged to submit a logic model that details the activities; outputs; and learning, action, and condition outcomes of the proposed project. This information may be provided as a narrative or formatted into a logic model chart. More information and resources related to the logic model planning process are provided at: www.nifa.usda.gov/funding/integrated/integrated_logic_model.html and

www.ipm.gov/LogicModels/index.cfm.

- 3. Timelines for completion of each major objective in the application.
- **4. Clear statement of specific 2012 CUN and specific limitations being addressed.** MBT applicants must explain how their work is applicable to the 2012 Critical Use Nomination (CUN). Even though the CUN for use of methyl bromide are on specific agricultural crops (e.g., tomato), from specific geographical areas, in specific crop production systems (e.g., open field) or for use in specific post-harvest applications or structural applications for which there are currently no acceptable alternatives, grant applications whose purpose is to alleviate one or more of the limitations for use of alternatives or to reduce methyl bromide emissions may come from any U.S. state or region. Proposals do not have to address all the pests for the 2012 CUN. Proposed projects may provide alternatives for management of one or more pests or limiting situations that may be potentially included in an integrated pest management system.

The following are the 15 Critical Use Nominations for 2012:

- 1. Post-Harvest Use for Commodities. Includes walnut, dried fruit (prunes, raisins, figs), and dates, all of which are subject to infestation by several insect pests.
- 2. Pre-plant Soil Use for Cucurbits Grown in Open Fields. Covers cucurbits of several types (squash, melons, and/or cucumber) grown in the southeastern United States (except Florida), Maryland, and Delaware. These crops generally are grown in open fields on plastic tarps, often followed by various other crops. Harvest is destined for the fresh market.
- **3. Pre-plant Soil Use for Eggplant Grown in Open Fields**. Covers eggplant grown for fresh market in the states of Florida and Georgia. The crop is generally grown in open fields and followed by various other crops. Harvest is mainly for fresh market.
- **4. Pre-plant Soil Use for Fruit, Nut and Flower Nurseries**. Nursery producers provide pest-free stock plants that are used for the establishment of orchards and gardens. Nurseries in this sector provide plants to commercial growers of rose bush stock plants, and such diverse fruit crops as apricots, peaches, prunes, nectarines, cherries, plums, apples, pears, Asian pears, and ornamental pears. Nut trees produced by these nurseries include almonds, walnuts, pistachios, pecans, and chestnuts. Approximately 95 percent of the trees are fruit and nut varieties sold to commercial producers; the other 5 percent are ornamental types used for landscaping. Deciduous trees are primarily produced in the Sacramento and San Joaquin valleys of California.
- **5. Post-Harvest Use in Structures Food Processing Plants**. This sector includes rice mills, flour mills, and pet food manufacturing facilities. This nomination is for facilities, or portions of facilities, that are unsuitable for the alternatives of methyl bromide, and where the alternatives are not economically feasible.
- **6. Pre-plant Soil Use for Forest Seedlings**. This nomination is for those forest seedling nurseries where registered alternatives are not effective or sufficiently tested to enable commercial use. This comprises much of forest seedling nursery production land. The use of methyl bromide is considered critical where alternatives are not suitable because of regulatory, economic, or technical constraints.

- **7. Post-Harvest Use on Dry Cured Pork Products**. This sector is for the production of cured meat products, such as country hams. These are produced primarily in the southern United States.
- **8. Pre-plant Soil Use for Orchard Replant**. The Orchard Replant nomination includes stone fruit, almond, and walnut orchards; as well as raisin and wine grape vineyards in California.
- **9. Pre-plant Soil Use for Ornamentals Grown in Open Fields**. The ornamental nomination consists of cut flowers, cut greens, and bulbs in California; floriculture in Florida; and herbaceous perennials in Michigan. This nomination does not include other aspects of the ornamental industry, such as Christmas tree nurseries.
- **10. Pre-plant Soil Use for Peppers.** This nomination covers peppers grown in the southeastern United States, Georgia, and Florida. These crops generally are grown in open fields on plastic tarps, often following various other crops. Harvest is destined for the fresh market.
- 11. Post-Harvest Use by NPMA for Facilities and Commodities. This sector includes cheese and food processing plants treated by National Pest Management Association (NPMA) members and are not included in the Commodity or in the Food Facilities Chapters of the U.S. nomination. Food Processing Facilities included in this application are: processed foods (such as chips, crackers, cookies and pasta), spices and herbs, and cheese processing plants.
- **12. Pre-plant Soil Use for Strawberries Grown for Fruit in Open Fields**. This nomination is for methyl bromide for the production of strawberries in California, Florida, and several other states in the southeastern United States. (Alabama, Arkansas, Georgia, Illinois, Kentucky, Louisiana, Maryland, Mississippi, Missouri, New Jersey, North Carolina, Ohio, South Carolina, Tennessee, and Virginia).
- 13. Pre-plant Soil Use for Strawberry Nurseries in Open Fields or in Protected Environments. This nomination is for methyl bromide for the nursery production of strawberries in California.
- **14.** Pre-plant Use on Sweet Potato Slips Grown in Open Fields or Protected Environments. This nomination is for the sweet potato transplant production area only, where plant production of sweet potato slips occurs in California.
- **15. Pre-plant Soil Use for Tomato Grown in Open Fields**. This nomination is for methyl bromide use in the production of tomatoes in Florida, Georgia, the Mid-Atlantic (Maryland and Virginia), and the Southeast.

The following resources may be useful in developing Methyl Bromide Transitions applications:

In addition to the information contained in the 2012 CUNs, a matrix of alternatives identified by the United Nations' technical committees for methyl bromide is available at www.epa.gov/ozone/strathome.html. While not all of the alternatives listed by the United Nations are currently available to the agricultural and structural industries in the United States, some do have potential to control pests currently controlled by methyl bromide. Integration of specific controls into current production systems will depend on availability, efficacy, logistics, economics, and grower acceptance. In all these cases, combinations of chemical and non-chemical materials and methods will likely be the most efficacious. It is unlikely that there will be one alternative for all of the uses of methyl bromide, but there may be several specific pest control tools that can manage specific pests currently controlled with methyl bromide when used as part of an overall integrated pest management program. EPA has published 30 case studies which describe potential alternatives to the use of methyl bromide.

Background information and an overview of the search for alternatives to methyl bromide are available in *Alternatives to Methyl Bromide: A Florida Perspective* (E. N. Rosskopf, et al.), which is available at

www.apsnet.org/publications/apsnetfeatures/Pages/MethylAlternatives.aspx.

PART II—AWARD INFORMATION

A. Available Funding

There is no commitment by USDA to fund any particular application or to make a specific number of awards. In FY 2011, the amount available for support of the Methyl Bromide Transitions program is approximately \$ 1.9 million.

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 www.nifa.usda.gov/business/method_of_payment.html.

Grants for this program are for integrated projects up to three years. Budget requests are expected to be multi-investigator and/or multi-institutional. A maximum limit of \$500,000 for a three year period has been set for funding individual research-based MBT proposals; however, specific education-extension proposals have a maximum limit of \$250,000 for a three year period. Please see abstracts of funded projects at: www.nifa.usda.gov/fo/methylbromideicgp.html.

B. Types of Applications

In FY 2011, applications may be submitted to the MBT program as one of the following two types of requests:

- 1. <u>New application</u>. This is a project application that has not been previously submitted to the MBT program. All new applications will be reviewed 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 was not funded. Project directors (PDs) must respond to the previous review panel summary (see Response to Previous Review, Part IV). 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

Two grant types are being solicited in this RFA. Applicants may submit one proposal for each type; however, submissions must be completely independent and not dependent on funding of the second proposal.

1. **Integrated grants.** These grants, including at least two of three functions (research, education, extension) are solicited. For FY 2011, maximum project budget and acceptable project periods for research-based integrated grants in MBT are \$500,000 for projects up to three years duration.

Extension grants. Proposals are solicited that propose practical extension projects that promote new technologies or integrated pest management solutions to assist industry stakeholders to transition from methyl bromide. Extension/outreach objectives should include: a) activities that fill knowledge gaps that are critical to the implementation of practices and programs to address the problem area; and/or b) lead to measurable behavior change in an identified audience or stakeholder group.

The MBT encourages projects that develop content suitable for delivery through eXtension, if applicable. This content is for "end users" as opposed to staff development and must align with the eXtension Guiding Principles, Implementation Plan and other requirements as presented at the site www.extension.org. Funds may be used to contribute to an existing Community of Practice with a methyl bromide alternatives component or to form a new Community of Practice with a focus on methyl bromide alternatives education and outreach activities. Applicants establishing new Communities of Practice (COPs), or enhancing existing ones, must first follow the corresponding steps outlined by eXtension.org

(http://about.extension.org/wiki/NIFA RFA Information).

A maximum of \$250,000 may be requested for up to three years duration.

PART III—ELIGIBILITY INFORMATION

A. Eligible Applicants

Colleges and universities (as defined in section 1404 of NARETPA) (7 U.S.C. 3103) are eligible to submit applications for the Methyl Bromide Transitions (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.

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 (see Part VIII, E.), HSACUs, and research foundations maintained by eligible colleges or universities.

An applicant's failure to meet an eligibility criterion by the time of an 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.

Award recipients may subcontract to organizations not eligible to apply provided such organizations are necessary for the conduct of the project.

B. Hispanic-serving Agricultural Colleges and Universities

Section 7101 of the Food, Conservation, and Energy Act of 2008 amended section 1404 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA) to add a new group of cooperating institutions, Hispanic-serving Agricultural Colleges and Universities (HSACUs). HSACUs are colleges and universities that qualify as Hispanic-serving Institutions (HSIs) and offer associate, bachelors, or other accredited degree programs in agriculture-related fields. HSACUs do not include 1862 land-grant institutions.

Eligibility under the MBT Competitive Grants Program

Pursuant to section 406 of the Agricultural Research, Extension, and Education Reform Act of 1998 (AREERA), 7 U.S.C. 7626, Integrated Research, Education, and Extension Competitive Grant Program, all four year HSIs are eligible to apply for a grant under the MBT Competitive Grants Program. Two year HSIs, however, may be eligible to apply only upon a determination by NIFA that the institution offers an associate or other accredited degree programs in agriculture-related fields. To seek an eligibility determination for grants under this RFA, two year HSIs may submit a one-page request to NIFA certifying that they are a Hispanic-serving

institution, as defined in section 502 of the Higher Education Act of 1965 (20 U.S.C. 1101a), and providing a justification that they do offer associate or other accredited degree programs in agriculture-related fields. Eligibility determinations are valid for FY 2011 only and must be renewed every fiscal year.

HSIs that seek a determination of eligibility may submit a request before the application due date to HSACU@nifa.usda.gov directly or as a PDF attachment to the SF-424-R&R application package submitted through Grants.gov.

Additional questions on HSACU eligibility can be addressed to Office of the Director, Center for International Programs, at HSACU@nifa.usda.gov, (202) 720-1254, or via fax (202) 720-2030.

C. Cost Sharing or Matching

If a grant provides a particular benefit to a specific agricultural commodity, the grant recipient is required to match the USDA funds awarded on a dollar-for-dollar basis from non-Federal sources with cash and/or in-kind contributions. (See Part IV, B., 6. for details.)

NIFA may waive the matching funds requirement for a grant if NIFA determines that: (1) the results of the project, while of particular benefit to a specific agricultural commodity, are likely to be applicable to agricultural commodities generally; or (2) the project involves a minor commodity, the project deals with scientifically important research, and the grant recipient is unable to satisfy the matching funds requirement.

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. **Applicants are advised to submit early to the Grants.gov system.**

New Users of Grants.gov

Prior to preparing an application, it is suggested that the 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 the organization is not prepared (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 much as two weeks to complete the registration process so it is critical to begin as soon as possible. In such situations the AR should go to "Get Registered" on the Grants.gov left navigation bar (or go to http://www.grants.gov/applicants/get_registered.jsp) for information on registering the institution/organization with Grants.gov. A quick reference guide listing the steps is available as a 4-page PDF document at the following website: http://www.grants.gov/section910/Grants.govRegistrationBrochure.pdf.

Steps to Obtain Application Package Materials

The steps to access application materials are as follows:

- 1. In order to access, complete and submit applications, applicants must download and install a version of Adobe Reader compatible with Grants.gov. This software is essential to apply for NIFA Federal assistance awards. For basic system requirements and download instructions, please see http://www.grants.gov/help/download_software.jsp. To verify that you have a compatible version of Adobe Reader, Grants.gov established a test package that will assist you in making that determination. Grants.gov Adobe Versioning Test Package: http://www.grants.gov/applicants/AdobeVersioningTestOnly.jsp.
- 2. The application package must be obtained via Grants.gov, go to http://www.grants.gov, click on "Apply for Grants" in the left-hand column, click on "Step 1: Download a Grant Application Package and Instructions," enter the funding opportunity number USDA-NIFA-ICGP-003446 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: A Guide for Preparation and Submission of NIFA Applications via Grants.gov." 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 assistance is needed to access the application package (e.g., downloading or navigating Adobe forms), or submitting the application then refer to resources available on the Grants.gov Web site first (http://www.grants.gov/). Grants.gov assistance is also available as follows:

Grants.gov customer support Toll Free: 1-800-518-4726

Business Hours: 24 hours a day, 7 days a week. Closed on Federal Holidays.

Email: support@grants.gov

See http://www.nifa.usda.gov/funding/electronic.html for additional resources for applying electronically.

B. Content and Form of Application Submission

Electronic applications should be prepared following Part V and VI of the document entitled "A Guide for Preparation and Submission of NIFA Applications via Grants.gov." This guide is part of the corresponding application package (see Section A. of this Part). The following is additional information needed in order 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., portable document format) in Part III section 3. of the Guide. <u>ANY PROPOSALS CONTAINING NON-PDF DOCUMENTS WILL BE AT RISK OF BEING EXCLUDED FROM NIFA REVIEW</u>. Partial applications will be excluded from NIFA review. With documented prior approval, resubmitted applications will be accepted until close of business on the closing date in the RFA.

If you do not own PDF-generating software, Grants.gov provides online tools to assist applicants. Users will find a link to "Convert Documents to PDF" on http://grants.gov/assets/PDFConversion.pdf.

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

- Email: electronic@nifa.usda.gov
- Phone: 202-401-5048
- Business hours: Monday through Friday, 7:00 am − 5:00 pm Eastern Time, 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, 2. of the NIFA Grants.gov Application Guide.

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, 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, 4. of the NIFA Grants.gov Application Guide.

- a. Field 7. Project Summary/Abstract. The summary should also include the relevance of the project to the goals of MBT.
- b. Field 8. Project Narrative.

PLEASE NOTE: The Project Narrative shall not exceed 20 pages of single-spaced written text and up to five additional pages for figures and tables. This maximum (25 pages) has been established to ensure fair and equitable competition. The Project Narrative must include all of the following:

Project Narrative Requirements for Integrated Grants.

- (1) <u>Introduction</u>: Include information on the following in the order identified:
- (a) A concise statement of the long-term goal(s) of the proposed project;
- (b) 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 Use pest management strategy or similar document with identifiable stakeholder input;
- (c) Describe ongoing or recently completed significant activities or publications related to the proposed activity including the work of key project personnel. Include preliminary data/information pertinent to the proposed project;
- (d) Provide estimates of the magnitude of the issues and their relevance to stakeholders and ongoing state-federal food and agricultural research, education, and extension programs. Applicants must identify and review the tactics currently being used in the targeted cropping/industrial use system, then define opportunities for new approaches;
- (e) Describe the stakeholders who have identified the problem, sought the critical use exemption and how they will be involved in the implementation of project results;
- (f) Response to Previous Review. This is only required for applications previously submitted to the MBT program but not funded. Project directors (PDs) must respond to the previous review panel summary on no more than one page. Please include previous proposal number, if possible.

- (2) Objectives:
- (a) Provide a brief review of the goal(s) stated in the Introduction; and
- (b) Present a clear, concise set of project objectives including cost/benefit analysis of new approaches.
- (3) Methods: Explicitly describe the procedures by objective for the proposed effort, include:
- (a) Techniques and methods to be employed, including their efficacy and economic feasibility and rationale for their use in this project;
- (b) Timeline for proposed project. Applicants must provide milestones and verifiable indicators to measure progress;
- (c) Means by which any proposed extension and/or education activities will be evaluated. 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;
- (d) Description of stakeholder involvement in identification of project priorities, their implementation and adoption; and
- (e) Description of anticipated results or 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) <u>Cooperation and institutional involved</u>: 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.

Project Narrative Requirements for Extension Grants.

In addition to the items required for the Integrated Grants with a Research component, [Items (1) through (4) above], within the maximum page limit, the project narrative should clearly articulate:

- The potential for advancing the needs of an industry with replacement technology or management solution;
- The target audience and the level of knowledge provided;
- The long-term benefits to the industry, including how much priority it places on the project;
- An evaluation plan to measure progress toward achieving the specific objectives and program impacts;
- A clear plan is articulated for project management, including time allocated for attainment of objectives and a strategy for recruiting students where appropriate, and a strategy to enhance communication, data sharing, and reporting among members of the project team; and

• A dissemination plan describing the methods that will be used to communicate findings and project accomplishments.

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

Information related to the questions on this form is dealt with in detail in Part V, 5. of the NIFA Grants.gov Application Guide.

Note: You must attach "Current and Pending Support" information for each senior/key person identified. Even if no other funding is currently reported under the "Active" section of this attachment, you must still list information for this grant application under the "Pending" section of the attachment.

5. R&R Personal Data

As noted in Part V, 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, 7. of the NIFA Grants.gov Application Guide.

Matching Funds

If an applicant concludes that matching funds are not required as specified under Part III, C. Cost-sharing or matching, a justification should be included in the budget narrative. NIFA 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 those grants requiring matching funds as specified under Part III, C., 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), which must include: (1) The name, address, and telephone number of the donor; (2) the name of the applicant organization; (3) the title of the project for which the donation is made; (4) the dollar amount of the cash donation (the budget narrative must describe how the cash donation will be used on the project); (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; and
- (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), which must include: (1) The

name, address, and telephone number of the donor; (2) the name of the applicant organization; (3) the title of the project for which the donation is made; (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.

The sources and amount of all matching support from outside the applicant institution should be summarized on a separate page and placed in the proposal as part of the Budget Narrative. All pledge agreements must be placed in the proposal immediately following the summary of matching support.

The value of applicant contributions to the project shall be established in accordance with applicable cost principles. Applicants should refer to OMB Circular A-21 (2 CFR Part 220), Cost Principles for Educational Institutions, for further guidance and other requirements relating to matching and allowable costs. All contributions, including cash and third party in-kind, must meet the criteria included in section 23 of 7 CFR 3019, "Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-profit Organizations."

7. Supplemental Information Form

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

a. Field 2. Program Code. Enter the program code name "Methyl Bromide Transitions" and the program code "112.C".

b. Field 8. Conflict of Interest List. Conflict of interest information is required for each senior/key person included in the R&R Senior/Key Person Profile. Please find the suggested Conflict of Interest Template at: www.nifa.usda.gov/home/faq_apply.html#coi.

C. Submission Dates and Times

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 COB on **June 22, 2011 (5:00 p.m. Eastern Time)**. Applications received after this deadline will normally not be considered for funding.

Applicants who have problems with the submission of an application to Grants.gov are encouraged to 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.

Correspondence regarding submitted applications will be sent using e-mail. 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, please contact the Program 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

NIFA has determined that grant funds awarded under this authority may not be used for the renovation or refurbishment of research, education, or extension space; the purchase or installation of fixed equipment in such space; or the planning, repair, rehabilitation, acquisition, or construction of buildings or facilities.

Section 7132 of the Food, Conservation, and Energy Act of 2008, amended the National Agriculture Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3310(a)), limiting indirect costs to 22 percent of the total Federal funds provided under each award. Therefore, when preparing budgets, applicants should limit their requests for recovery of indirect costs to the lesser of their institution's official negotiated indirect cost rate or the equivalent of 22 percent of total Federal funds awarded. If no rate has been established the applicant may indicate "None—will negotiate" and a reasonable dollar amount for indirect costs may be requested, which will be subject to approval by USDA. In the latter case, if a proposal is recommended for funding, an indirect cost rate proposal must be submitted prior to award to support the amount of indirect costs requested. NIFA will request an indirect cost rate proposal and provide instructions, as necessary. An applicant may elect not to charge indirect costs and, instead, use all grant funds for direct costs. If indirect costs are not charged, the phrase "None requested" should be written in this space.

The maximum allowed indirect cost of 22 percent may be claimed under the Federal portion of the award, or the maximum allowed indirect cost of 22 percent may be claimed as matching contributions (if no indirect costs are requested). However, the maximum allowed indirect cost of 22 percent may not be claimed on both the Federal portion of the award and as matching contributions. (Note: An awardee may, as an example, request 11 percent of indirect costs on both the Federal portion of the award and as matching contributions. Or, an awardee may request any other, similar percentage combination that, when combined, does not exceed the 22 percent maximum indirect cost allowed.) **Nevertheless, the total combined percent of requested and contributed matching indirect costs cannot exceed 22 percent.**

E. Other Submission Requirements

The applicant should follow the submission requirements noted in the document entitled "A Guide for Preparation and Submission of NIFA Applications via Grants.gov."

Described below are the requirements for successful submission of an application, all of the following steps must be met for an application to be considered for peer review:

- 1) Meeting the deadline: To electronically send the application to Grants.gov the submit button is hit, which triggers a date and time stamp on the application. The date and time stamp is used to determine whether the application was received by Grants.gov before the deadline, which is prior to close of business (5:00 p.m. Eastern Time) on **June 22, 2011**. An application submitted or resubmitted after the deadline is late. Consideration of late applications is only given in extenuating circumstances (e.g., natural disasters, confirmed Grants.gov outage) with proper documentation and support of the Agency Contact (see Part VII). The occurrence of one of these situations does not automatically ensure that a late application will be accepted. If an applicant wants a late application considered under an extenuating circumstance, the applicant should contact the Agency Contact accordingly.
- 2) Successful Grants.gov validation: The Grants.gov system performs a limited check of the application, and applicants are notified by Grants.gov of the outcome of the initial review. Applications meeting Grants.gov requirements are made available to the funding agency for further processing. Applications that fail Grants.gov validation may be resubmitted to Grants.gov if the original agency deadline has not passed. (Note that the Grants.gov system may allow applications to be submitted after the deadline has passed, but the application is considered late by NIFA.)
- 3) Successful Agency validation: NIFA staff perform precursory review of the application. The agency validation process includes, for example, meeting eligibility requirements and following agency application guidelines (e.g., formatting, page limitations, limits on budget requests). Applicants are notified by NIFA of the outcome of this review.

PART V—APPLICATION REVIEW REQUIREMENTS

A. General

Each application will be evaluated in a 2-part process. First, each application will be screened to ensure that it meets the administrative requirements as set forth in this RFA. Second, applications that meet these requirements will be technically evaluated by a review panel.

Reviewers will be selected based upon 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, 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 to producers and the general public of each application.

B. Evaluation Criteria

The (100 point) evaluation criteria below will be used in reviewing integrated grant applications with research components submitted in response to this RFA:

Proposals addressing chemical and/or non-chemical methyl bromide alternatives will be evaluated based on their potential to develop new alternatives, result in registration and adoption of new alternatives, and/or minimize methyl bromide emissions in the short or medium term. The potential in fulfilling this larger goal will be evaluated based on: 1) Proposal merit and quality; 2) Qualifications of proposed project personnel, adequacy of facilities and budget; and 3) Proposal relevance and effectiveness.

1. Proposal Merit and Quality (37 points):

- (a) Proposed project goal, approach, or hypothesis is conceptually adequate and addresses a stated program priority. Application includes documentation substantiating that the proposed project is directed to methyl bromide critical use nominations. (6 points)
- (b) Need for the proposed project is demonstrated and target audience(s) identified. (5 points)
- (c) Objectives are clearly described, adequate, and appropriate for research, education, and extension. Two or more project functions (i.e., research, education, extension) are reflected in the project objectives. (5 points)

- (d) Proposed techniques, procedures, or methodologies are clearly described, suitable, and feasible for proposed project, including how the cost/benefit analysis of the transition will be evaluated. (4 points)
- (e) Time allotted for attainment of objectives is reasonable. (4 points)
- (f) Expected results or outcomes are clearly stated, measurable, and achievable within the time frame of the project. State the potential commercial application of the proposed alternative methods and quantify methyl bromide use that might be replaced by the alternative methods. The proposal must include the potential timeline for replacement of the current critical use by the alternative methods proposed. (5 points)
- (g) Articulation of a clear plan for managing the project, including how communication among members of the project team will be handled. (4 points)
- (h) The project's implementation plan is clearly defined with appropriate educational activities for encouraging implementation of research results. This includes an appropriate mix of educational experiences ranging from awareness building to in-depth educational programs. Formal extension and/or education programs to expedite adoption of proposed alternatives must be delineated in the form of a measurable, outcome oriented plan in the proposal. Such programs must take place within the life of the project. (4 points)

2. Qualifications of Proposed Project Personnel, Adequacy of Facilities and Budget (27 points):

- (a) Roles of project personnel are clearly defined. (5 points)
- (b) Evidence that project personnel have sufficient expertise to complete the proposed project is provided. Necessary expertise includes individuals with experience in technology transfer and educational program delivery. (4 points)
- (c) Evidence of quality partnerships with other disciplines and institutions is provided, where appropriate. (5 points)
- (d) Evidence is provided of institutional experience and competence in the proposed area of work. (4 points)
- (e) Support personnel, facilities, and instrumentation are adequate. (4 points)
- (f) Proposed budget is appropriate for the scope of the proposed project and allocates reasonable resources to at least two of the three functional areas (research, education, extension). Generally, in integrated projects, no more than two thirds of the project's budget should be devoted to any one function. If a 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). Reasonable travel expenses may be claimed as part of the project budget. (5 points)

3. Proposal Relevance and Effectiveness (36 points)

(a) Degree to which project functions (research, education, extension) are integrated and necessary to address the stated problem or issue and achieve measurable outcomes. (5 points)

Integrated MBT projects should include research, education, and extension/outreach objectives (at least two of three). These include: a) hypothesis-driven research to fill knowledge gaps that are critical to the development of practices and programs to address the problem area; b) educational deliverables (e.g., interdisciplinary curricula and/or experiential learning for graduate and undergraduate students) that will train the next generation of scientists and educators who will work in the problem area; and/or c) an effective extension/outreach program that will lead to measurable behavior change in an identified audience or stakeholder group. The MBT encourages projects that develop content suitable for delivery through eXtension, if applicable. This content is for "end users" as opposed to staff development and must align with the eXtension Guiding Principles, Implementation Plan and other requirements as presented at the site www.extension.org. Funds may be used to contribute to an existing Community of Practice with a methyl bromide alternatives component or to form a new Community of Practice with a focus on methyl bromide alternatives education and outreach activities. Applicants establishing new Communities of Practice (COPs), or enhancing existing ones, must first follow the corresponding steps outlined by eXtension.org (http://about.extension.org/wiki/NIFA RFA Information).

- (b) Extent to which the proposed work addresses identified stakeholder needs. Focus on commercial or field scale research targeting short- to medium-term solutions that will develop new alternatives or result in registration and application of new alternatives or that minimize methyl bromide emissions, and contain comprehensive information on the impact of alternatives on crop yields, sanitation efficacy, and profit margins. Repeat of research for two or more cropping seasons or trials is encouraged. (5 points)
- (c) Extent to which stakeholders and/or end users were/will be involved in problem identification, planning, implementation, and evaluation. Project should include a management plan (developed with input from stakeholder advisory groups) that leads to measurable improvements in the problem area. Documentation of interaction is expected in the proposal. (5 points)
- (d) Suitability and feasibility of plan and methods for evaluating success of project activities (i.e., measurable outcomes) and documenting potential impact. (5 points)
- (e) Probability that project results will reach beyond the project scale and duration, producing sustained education/extension initiatives. (4 points)
- (f) For research, likelihood that it will fill knowledge gaps that are critical to the development of practices and programs to address the stated problem or issue. (4 points)

- (g) For extension, assessment of the degree to which the project will lead to measurable behavior change in an identified audience or stakeholder group in the problem area. (4 points)
- (h) For education, likelihood that the project will have an impact upon and advance the quality of food and agricultural sciences by strengthening institutional capacities to meet clearly delineated needs and train the next generation of scientists and educators who will work in the problem or issue area. (4 points)

The (100 point) evaluation criteria below will be used in reviewing specific extension MBT grant applications submitted in response to this RFA:

1. Proposal Merit and Quality(40 points)

- (a) Proposed project goal, approach, or hypothesis is conceptually adequate and addresses a stated program priority. Application includes documentation substantiating that the project is designed to address the particular challenges faced by pest managers affected by the phase-out of methyl bromide; (15 points)
- (b) Objectives are clearly described, adequate, and measurable. An evaluation component is included; (10 points)
- (c) How the proposed outreach program would broaden stakeholder options and provide valuable pest management information is clearly and convincingly presented; (10 points) and
- (d) Encourages participation by under-represented groups, as appropriate (5 points).

2. Qualifications of Project Personnel, Adequacy of Facilities, and Project Management (20 points)

- (a) Roles of key personnel are clearly defined and key personnel have sufficient expertise to complete the proposed project, and where appropriate, partnerships with other disciplines (e.g., social science or economics) and institutions are established; (5 points)
- (b) Evidence of institutional capacity and competence in the proposed area of work is provided, indicating presence of sufficient support personnel, facilities, and instrumentation; (5 points)
- (c) A clear plan is articulated for project management, including time allocated for attainment of objectives and a strategy for recruiting students where appropriate, and a strategy to enhance communication, data sharing, and reporting among members of the project team; (5 points) and
- (d) Proposed budget is appropriate for the scope of the proposed project. If a 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). Reasonable travel expenses may be claimed as part of the project budget. (5 points)

3. Project Relevance and Effectiveness (40 points)

- (a) The project clearly identifies a stated program priority of MBT and the degree to which the project is necessary to address the stated problem or issue and achieve measurable outcomes. (10 points)
- (b) Project plan addresses the problem or issue identified and the suitability and feasibility of the plan and methods for evaluating success of project activities (i.e., measurable outcomes) and documenting potential impact. (10 points)
- (c) The proposed work addresses identified stakeholder needs and describes the extent to which stakeholders and/or end users were/will be involved in problem identification, planning, implementation, and evaluation. Project should include a management plan (developed with input from stakeholder advisory groups) that leads to measurable improvements in the problem area. Documentation of interaction is expected in the proposal, where appropriate. (10 points)
- (d) Probability that project results will reach beyond the project scale and duration, producing sustained education/extension initiatives. (5 points)
- (e) Assessment of the degree to which the extension outreach will lead to measurable behavior change in an identified audience or stakeholder group in the problem area. (5 points)

C. Conflicts of Interest and Confidentiality

During the peer evaluation process, extreme care will be taken to prevent any actual or perceived conflicts of interest that may impact review or evaluation. For the purpose of determining conflicts of interest, the academic and administrative autonomy of an institution shall be determined by reference to the current Higher Education Directory, published by Higher Education Publications, Inc., 6400 Arlington Boulevard, Suite 648, Falls Church, Virginia 22042. Phone: (703) 532-2300. Web site: http://www.hepinc.com.

Names of submitting institutions and individuals, as well as application content and peer evaluations, will be 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. 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, as 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. NIFA will provide copies of forms recommended for use in fulfilling these requirements as part of the preaward process. Although an applicant may be eligible based on its status as one of these entities, there are factors which 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).

PART VI—AWARD ADMINISTRATION

A. General

Within the limit of funds available for such purpose, the awarding official of NIFA 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 awarding official of NIFA 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. It should be noted that 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 shall be expended solely for the purpose for which the funds are granted in accordance with the approved application and budget, the regulations, the terms and conditions of the award, the applicable Federal cost principles, and the Department's assistance regulations (parts 3015 and 3019 of 7 CFR).

B. Award Notice

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

- (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 assigned by the Department;
- (5) Project period, specifying the amount of time the Department intends to support the project without requiring recompetition for funds;
- (6) Total amount of Departmental financial assistance approved by the Director during the project period;
- (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:

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.

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

7 CFR Part 3015—USDA Uniform Federal Assistance Regulations, implementing OMB directives (i.e., OMB Circular Nos. A-21 and A-122 (2 CFR Parts 220 and 230), and incorporating provisions of 31 U.S.C. 6301-6308 (formerly the Federal Grant and Cooperative Agreement Act of 1977, Pub. L. No. 95-224), as well as general policy requirements applicable to recipients of Departmental financial assistance.

7 CFR Part 3017—USDA implementation of Governmentwide Debarment and Suspension (Nonprocurement).

7 CFR Part 3018—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.

7 CFR Part 3019—USDA implementation of OMB Circular A-110, Uniform Administrative Requirements for Grants and Other Agreements With Institutions of Higher Education, Hospitals, and Other Nonprofit Organizations (2 CFR Part 215).

7 CFR Part 3021—Governmentwide Requirements for Drug-Free Workplace (Financial Assistance).

7 CFR Part 3052—USDA implementation of OMB Circular No. A-133, Audits of States, Local Governments, and Nonprofit Organizations.

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

7 CFR 3430—Competitive and Noncompetitive Non-formula Grant Programs--General Grant 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).

D. Expected Program Outputs and Reporting Requirements

Grantees are to submit initial project information and annual summary reports to NIFA's electronic, Web-based inventory system that facilitates both grantee submissions of project outcomes and public access to information on Federally-funded projects. The details of these reporting requirements are included in the award terms and conditions.

For informational purposes, the "Federal Financial Report," Form SF-425, consolidates into a single report the former Financial Status Report (SF-269 and SF-269A) and the Federal Cash Transactions Report (SF-272 and SF-272A). The NIFA Agency-Specific Terms and Conditions include the requirement that Form SF-425 is due on an annual basis no later than 30 days following the end of each reporting period. A final "Federal Financial Report," Form SF-425, is due 90 days after the expiration date of this award.

PART VII—AGENCY CONTACTS

Applicants and other interested parties are encouraged to contact Dr. Kitty Cardwell; National Program Leader; Division of Plant Systems – Protection; Institute of Food Production and Sustainability; National Institute of Food and Agriculture; USDA; STOP 2240; 1400 Independence Ave., SW; Washington, DC 20250-2240; telephone: (202) 401-1790; fax: (202) 401-1782; e-mail: kcardwell@nifa.usda.gov.

PART VIII—OTHER INFORMATION

A. Access to Review Information

Copies of reviews, not including the identity of reviewers, and a summary of the panel comments will be sent 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, the awardee 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. Changes in approved goals or objectives shall be requested by the awardee and approved in writing by the ADO prior to effecting such changes. In no event shall requests for such changes be approved which are outside the scope of the original approved project.
- c. Changes in approved project leadership or the replacement or reassignment of other key project personnel shall be requested by the awardee and approved in writing by the ADO prior to effecting such changes.
- d. 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, shall be requested by the awardee and approved in writing by the ADO prior to effecting such transfers, unless prescribed otherwise in the terms and conditions of the award.
- e. The project period may be extended by NIFA without additional financial support, for such additional period(s) as the ADO determines may be 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. Any extension of time shall be conditioned upon prior request by the awardee and approval in writing by the ADO, unless prescribed otherwise in the terms and conditions of award.
- 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 7 CFR part 3015, subpart V (48 FR 29114, June 24, 1983), 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 <u>7 CFR 3430</u>, Competitive and Noncompetitive Non-formula Grant Programs-General Grant Administrative Provisions, for the applicable definitions for this NIFA grant program.