

**Office of Science
Financial Assistance
Summary of
Funding Opportunity Announcement**

DE-FOA-0000555

Subsurface Biogeochemical Research

Office of Biological and Environmental Research (BER)

SUMMARY: The Office of Biological and Environmental Research (BER) of the Office of Science (SC), U.S. Department of Energy (DOE), hereby announces interest in receiving applications for research grants for Subsurface Biogeochemical Research (SBR). The SBR program is part of the Climate and Environmental Sciences Division (CESD) in BER. The SBR program seeks to advance fundamental science to understand, predict and mitigate the impacts of environmental contamination from past nuclear weapons production and a scientific basis for the long term stewardship of nuclear waste disposal. The activity supports an integrated portfolio of research ranging from molecular to field scales with emphasis on the use of advanced computer models and multidisciplinary, iterative experimentation to understand and predict contaminant transport in complex subsurface environments. The goal of this Funding Opportunity Announcement (FOA) is to support fundamental research to investigate the key physical, chemical, and biological processes affecting the form and mobility of subsurface contaminants found at DOE sites. Research projects should be based on critical knowledge gaps and be hypothesis driven, with an aim to provide the scientific basis for the long term stewardship of contaminated sites across the DOE complex and the development of new remediation concepts and strategies. The environment of interest is the terrestrial subsurface including the vadose zone, the saturated zone and key groundwater-surface water interfaces. The specific radionuclide and heavy metal contaminants and the general science needs for this FOA are outlined in the **Supplementary Information**. Phytoremediation and the study of organic contaminants are NOT addressed in this FOA.

PREAPPLICATIONS:

Preapplications are required.

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Potential applicants are required to submit a brief preapplication, referencing Funding Opportunity Announcement DE-FOA-0000555 for receipt by DOE by **4:30 p.m., Eastern Time, July 15, 2011.**

Preapplications are limited to three pages total, including a prescribed cover page. The cover page should include: the project title, the Lead PI's name and complete contact information, whether a Full or Exploratory application is anticipated, whether the application is a **New or Renewal**, and a table listing the Lead PI and institution and all funded Co-PIs, and their institutions and the approximate amount of funding requested for each year for the project for each funded investigator. A sample cover page is available at http://science.energy.gov/ber/research/cesd/preapp_cover_page_template.

Preapplications must be sent individually as a single PDF file attachment via email to: **david.lesmes@science.doe.gov**. **The subject line of the email must state: "SBR Preapplication to DE-FOA-0000555 – [Full or Exploratory]". Preapplications must be received by DOE by 4:30 PM, Eastern Time, July 15, 2011.** No FAX or mail submission of preapplications will be accepted. Preapplications will be reviewed for conformance with the guidelines presented in this FOA and suitability in the technical areas specified in this FOA. A response to the preapplications encouraging or discouraging formal applications will be communicated to the applicants by August 5, 2011. Applicants who have not received a response regarding the status of their preapplication by this date are responsible for contacting the program office to confirm the status of their preapplications.

All preapplications should describe the research objectives, the technical approach(s), and the proposed team members and their expertise. Applications that have been previously submitted for review and declined should also describe how the applicants have responded to the reviewer comments in this revised and resubmitted application. Renewal Applications should briefly summarize the significant findings and publications resulting from the previous work and explain how such results relate to the activities proposed to be undertaken in the renewal period.

The intent in requesting a preapplication is to save the time and effort of applicants in preparing and submitting a formal project application that may be inappropriate for the program. Preapplications will be reviewed relative to the scope and research needs as outlined in this FOA. Biographical data are not required for preapplications, nor is an institutional endorsement necessary.

APPLICATION DUE DATE: September 19, 2011, 11:59 PM Eastern Time

Formal applications submitted in response to this FOA must be received by September 19, 2011, 11:59 PM Eastern Time, to permit timely consideration of awards in Fiscal Year 2012. **You are encouraged to transmit your application well before the deadline. APPLICATIONS RECEIVED AFTER THE DEADLINE WILL NOT BE REVIEWED OR CONSIDERED FOR AWARD.**

IMPORTANT SUBMISSION INFORMATION:

The full text of the Funding Opportunity Announcement (FOA) is located on FedConnect. Instructions for completing the Grant Application Package are contained in the full text of the FOA which can be obtained at: <https://www.fedconnect.net/FedConnect/?doc=DE-FOA-0000555&agency=DOE>. To search for the FOA in FedConnect click on "Search Public Opportunities". Under "Search Criteria", select "Advanced Options", enter a portion of the title "Subsurface Biogeochemical Research", then click on "Search". Once the screen comes up, locate the appropriate Announcement.

In order to be considered for award, Applicants must follow the instructions contained in the Funding Opportunity Announcement.

Where to Submit: Applications must be submitted through Grants.gov to be considered for award. You cannot submit an application through Grants.gov unless you are registered. Please read the registration requirements carefully and start the process immediately. Remember you have to update your CCR registration annually. If you have any questions about your registration, you should contact the Grants.gov Helpdesk at 1-800-518-4726 to verify that you are still registered in Grants.gov.

Registration Requirements: There are several one-time actions you must complete in order to submit an application through Grants.gov (e.g., obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number, register with the Central Contract Registry (CCR), register with the credential provider, and register with Grants.gov). Use the Grants.gov Organization Registration Checklist at <http://www.grants.gov/assets/OrganizationRegCheck.pdf> to guide you through the process. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in the CCR registration process. Applicants, who are not registered with CCR and Grants.gov, should allow **at least 21 days** to complete these requirements. It is suggested that the process be started as soon as possible.

IMPORTANT NOTICE TO POTENTIAL APPLICANTS: When you have completed the process, you should call the Grants.gov Helpdesk at 1-800-518-4726 to verify that you have completed the final step (i.e. Grants.gov registration).

Questions: Questions relating to the registration process, system requirements, how an application form works, or the submittal process must be directed to Grants.gov at 1-800-518-4726 or support@grants.gov.

Application Receipt Notices

After an application is submitted, the Authorized Organization Representative (AOR) will receive a series of four E-mails. It is extremely important that the AOR watch for and save each of the emails. It may take up to two (2) business days from application submission to receipt of email Number 2. The titles of the four E-mails are:

Number 1 - Grants.gov Submission Receipt Number

Number 2 - Grants.gov Submission Validation Receipt for Application Number

Number 3 - Grants.gov Grantor Agency Retrieval Receipt for Application Number

Number 4 - Grants.gov Agency Tracking Number Assignment for Application Number

Questions regarding the content of the Funding Opportunity Announcement (FOA) must be submitted through the FedConnect portal. You must register with FedConnect to respond as an interested party to submit questions, and to view responses to questions. It is recommended that you register as soon after release of the FOA as possible to have the benefit of all responses.

More information is available at

https://www.fedconnect.net/FedConnect/PublicPages/FedConnect_Ready_Set_Go.pdf. DOE

will try to respond to a question within 3 business days, unless a similar question and answer have already been posted on the website.

Modifications: Notices of any modifications to this Funding Opportunity Announcement will be posted on Grants.gov and the FedConnect portal. You can receive an email when a modification or an announcement message is posted by registering with FedConnect as an interested party for this FOA. It is recommended that you register as soon after release of the FOA as possible to ensure you receive timely notice of any modifications or other announcements. More information is available at <http://www.fedconnect.net>.

All applications should be in a single PDF file.

GENERAL INQUIRIES ABOUT THIS FOA SHOULD BE DIRECTED TO:

Technical/Scientific Program Contacts:

Program Manager: Dr. David Lesmes

Phone: (301) 903-2977

E-mail: David.Lesmes@science.doe.gov

Merit Review Criteria

Applications will be subjected to scientific merit review (peer review) and will be evaluated against the following evaluation criteria, which are listed in descending order of importance, codified at CFR 605.10(d):

1. Scientific and/or Technical Merit of the Project
2. Appropriateness of the Proposed Method or Approach
3. Competency of Applicant's Personnel and Adequacy of Proposed Resources; and
4. Reasonableness and Appropriateness of the Proposed Budget.

The evaluation process will include program policy factors such as the relevance of the proposed research to the terms of the FOA and the agencies' programmatic needs. Note that external peer reviewers are selected with regard to both their scientific expertise and the absence of conflict-of-interest issues. Both Federal and non-Federal reviewers may be used, and submission of an application constitutes agreement that this is acceptable to the investigator(s) and the submitting institution.

A key consideration in the evaluation of research applications will be the potential impact of the proposed research project on the SBR mission to advance fundamental science to understand, predict and mitigate the impacts of environmental contamination from past nuclear weapons production and a scientific basis for the long term stewardship of nuclear waste disposal. All applications submitted in response to this FOA must explicitly state in the Executive Summary how the proposed research will advance DOE's environmental cleanup and stewardship missions. Applicants should address the relevance and impact of their proposed research project to a broad scientific audience because all applications will be reviewed by an interdisciplinary panel as well as DOE staff with a wide range of technical backgrounds. DOE program managers will use all of this information as well as programmatic factors such as the balance among the program areas, research already in progress and risk-reward balance to make the final funding decisions.

Funding

It is anticipated that up to **\$5,000,000 will be available for approximately 15 to 20 awards** to be made in Fiscal Year 2012, contingent on the availability of appropriated funds. Funds for this research will come from SBR. DOE is under no obligation to pay for any costs associated with preparation or submission of applications. DOE reserves the right to fund, in whole or in part, any, all, or none of the applications submitted in response to this FOA.

For a **Full Application** (narrative limited to 20 pages), applicants may request project support up to three years, with out-year funding contingent on the availability of appropriated funds, progress of the research and programmatic needs. Annual budgets for single investigator projects may not exceed \$250,000/year total costs. Annual budgets for multi investigator projects may not exceed \$450,000/year total costs.

For an **Exploratory Application** (narrative limited to 10 pages), applicants may request project support for up to two years with a total budget of up to \$150,000. All Exploratory Research applications should have a single budget period which is either 12 months or 24 months depending on the duration of the project, and all Exploratory Research awards will be funded in full at the start of the project.

Applications that are not compliant with either the page or budget limitations described above may be declined administratively without review.

SUPPLEMENTARY INFORMATION:

Contaminants of Concern

Key contaminants (and their mixtures) of interest for this FOA are:

- Radionuclides: uranium, technetium-99, strontium-90, plutonium, cesium-137, iodine-129, and neptunium-237;
- Non-Radioactive Metals: mercury and chromium(VI); and
- Nitrate and complexing agents as co-contaminants with the listed radionuclides or non-radioactive metals.

Non-Aqueous Phase Liquid (NAPL) contaminants are NOT a focus for this FOA. Applications addressing NAPL or organic contaminants will not be considered at this time.

The fundamental research program supported by SBR provides a scientific foundation that supports the Office of Environmental Management's (EM) cleanup decisions and complements the applied research activities of EM's Groundwater and Soil Remediation (GSR) program (http://www.em.doe.gov/pdfs/GWandS_Science%20Opp_Final_Rev%200.pdf). A description of the GSR applied research program as well as the nature and extent of contamination at the principal DOE sites is available at:
<http://www.em.doe.gov/Pages/GroundwaterSoilCleanup.aspx>.

The following links provide additional information about the nature and extent of contamination at the principal DOE sites:

- Groundwater Contamination and Treatment at DOE Sites:
http://emdev.apps.em.doe.gov/emdev/pdfs/Groundwater_Booklet-2008.pdf
- Hanford Site: <http://www.hanford.gov>
- Idaho National Laboratory Site:
<http://www.inl.gov/subsurface/environmentalissues/vadosezone.shtml>
- Oak Ridge Reservation:
<http://www.oro.doe.gov/external/Programs/EnvironmentalManagement/tabid/42/Default.aspx>
- Savannah River Site: <http://www.srs.gov/general/srs-home.html>,
<http://www.srs.gov/general/programs/soil/extpage.html>

Research Applications: Full and Exploratory

SBR seeks to advance fundamental science to understand, predict and mitigate the impacts of environmental contamination from past nuclear weapons production and a scientific basis for the long term stewardship of nuclear waste disposal. Applications submitted in response to this FOA should address the basic science needs for SBR outlined in the **Science Needs** section and should address at least one of the contaminants of interest. Applications must identify whether the application is a **Full Application** or an **Exploratory Application** as defined in the **Estimated Funding** section. Both single investigator projects and multi-investigator projects are encouraged. Multi-investigator projects are expected to integrate the efforts of a multi-disciplinary team to tackle problems that cannot be effectively addressed by a single investigator. All projects should clearly delineate an integrative, hypothesis-driven research approach and describe how the results of the research would ultimately improve the understanding of processes affecting the mobility of contaminants at the field scale in the context of DOE's environmental cleanup and stewardship missions.

A small but critical element of the SBR portfolio is the development of enabling scientific tools for characterizing the spatial and temporal evolution of complex subsurface systems. Applications proposing to develop enabling scientific tools for subsurface science should clearly indicate this in the Executive Summary. Applications to develop enabling scientific tools are NOT required to motivate the proposed research with specific hypotheses; however, these applications MUST justify both the novelty and technical merit of the proposed scientific tools as well as explain the potential to improve the understanding of subsurface processes and the monitoring of contaminated sites.

The intent of **Full Applications** is to make a significant contribution to the SBR research challenges, based on either individual or team based efforts, and with a duration of up to three years. The intent of the **Exploratory Research** component of SBR is to catalyze the study of new concepts, tools and approaches that could lead to breakthroughs in subsurface remediation science as well as to broaden the pool of researchers in SBR. Eligible areas are included in the **Science Needs** section. **Exploratory Applications** will have a shorter duration and less funding than **Full Applications**. These projects are intended to provide opportunities to conduct preliminary research and to develop novel ideas for later, more substantial funding opportunities within SBR (i.e., Full Applications). **Exploratory Applications** should address topics that could lead to breakthroughs in one or more of the science areas in the program and align with the SBR focus on processes occurring in the subsurface including the vadose zone, the saturated zone and key groundwater-surface water interfaces. The contaminants of interest for **Exploratory Applications** are the same as those listed in the **Contaminants of Concern** section.

Both **Full and Exploratory Applications** are intended to fill critical knowledge gaps, including the exploration of some high-risk approaches. BER encourages the submission of innovative "high-risk" applications with potential for future high impact on subsurface processes affecting contaminant transport. The probability of success and the risk-reward balance will be considered when making funding decisions.

Science Needs

SBR seeks to develop a fundamental and quantitative understanding of the physical, chemical and biological processes affecting contaminant transport in the subsurface and at key groundwater-surface water interfaces at DOE sites. Critical to this objective is a better understanding of how these coupled processes affect contaminant mobility, reactivity and stability in subsurface environments. Although the emphasis is on an integrative understanding of the relationships among the coupled physical, chemical and biological processes, applications submitted to SBR need not necessarily incorporate an investigation of all three processes for situations where contaminant transport is dominated unequally by one process or another, but should describe the rationale for the overall focus of the research. These science needs are inherently multidisciplinary, but do not preclude single investigator projects of strong DOE environmental relevance. Coordination with an SBR field project is encouraged where appropriate but not required.

The following resources are intended to help prospective applicants understand the current scope and direction of the SBR research activity:

The SBR Strategic Plan is available on the SBR website at:

http://science.energy.gov/~media/ber/pdf/Subsurface_biogeochemical_research_strategic_plan.pdf. Additional information on approaches to understanding DOE's contamination issues are detailed in an August 2009 workshop report on "Complex Systems Science for Subsurface Fate and Transport" and can be found at http://science.energy.gov/~media/ber/pdf/Subsurface_complexity_03_05_10.pdf. The website for the SBR program can be found at <http://science.energy.gov/ber/research/cesd/subsurface-biogeochemical-research/>, along with links to the annual SBR PI Meeting which contains plenary presentations, summaries of breakout sessions and abstracts for all funded projects: http://esd.lbl.gov/research/projects/ersp/generalinfo/PI_ann_mtgs.html.

Related Programs

The SBR activity strongly encourages investigators to familiarize themselves with the resources and potential partnering opportunities provided within SBR. The SBR activity funds basic research on subsurface contaminant transport and remediation processes ranging from molecular-scale processes to field-scale processes via a unique set of program resources and leveraging of these resources is strongly encouraged. Applicants should familiarize themselves with the following resources and potential partnering opportunities:

The SBR activity initiated three large multidisciplinary Integrated Field Research Challenge (IFRC) projects in FY 2007. The IFRCs are located at Oak Ridge, Tennessee; Rifle, Colorado; and the Hanford 300 Area in Richland, Washington. In addition, the SBR activity supports a project at the Hanford 100H area to perform field investigations to assess the potential for immobilizing and detoxifying chromium-contaminated soils and groundwater using bioremediation. These research sites enable the testing of hypotheses under natural conditions at the field scale and provide SBR investigators with opportunities to obtain samples of environmental media for experimental purposes. Applicants interested in using these resources

must contact the respective Lead Scientist and must include a letter of support from the Lead Scientist in the full application. Programmatic and contact information for these projects can be found at: http://www.lbl.gov/ERSP/generalinfo/field_scale.html.

The SBR activity supports focused research programs at DOE's National Laboratories and a diverse portfolio of research projects led by University PIs. While National Laboratory support is primarily provided to multidisciplinary teams within Science Focus Areas (SFAs), university led research projects are selected and funded through this FOA. All SBR PIs and key Co-PIs of both University and Laboratory projects are required to attend the annual SBR Principal Investigator's Meeting.

Programmatic resources in BER also include the Environmental Molecular Sciences Laboratory (EMSL, <http://www.emsl.pnl.gov/emslweb/>) located at the Pacific Northwest National Laboratory. EMSL is a National Scientific User Facility that supports an array of co-located experimental and computational capabilities for molecular-level research that are made available to the scientific community. Investigators are strongly encouraged to consider making use of EMSL capabilities in developing applications.

Biological processes profoundly influence contaminant transport at a variety of scales in the subsurface. The SBR activity maintains a close relationship with the Genomic Science program (<http://genomicscience.energy.gov/>) and the microbial genome sequencing efforts at the Joint Genome Institute (JGI, <http://www.jgi.doe.gov/>) in order to take advantage of revolutionary genome-enabled and systems biology techniques that promise a more mechanistic understanding of subsurface microbial metabolism affecting contaminant transport. Through its Community Sequencing Program (CSP), the JGI solicits proposals related to the DOE missions of bioenergy, global carbon cycling and biogeochemical processes influencing contaminant transport. More information can be found at <http://www.jgi.doe.gov/programs/index.html>. Studies requiring metagenomic or other genome sequencing analyses are encouraged to seek support via the community sequencing program at the JGI. Projects seeking alternative sequencing support to meet project sequencing needs will need to budget accordingly.

DOE's substantial computational resources are now being applied to simulations of subsurface reactive transport through SBR participation in the SciDAC (Scientific Discovery through Advanced Computing, <http://www.osti.gov/scidac/>) program. The SciDAC program funds computationally intensive research on fundamental science questions using some of the world's most powerful computers. SBR, in conjunction with DOE's Office of Advanced Scientific Computing, is supporting the following two SciDAC projects (<http://www.lbl.gov/ERSP/generalinfo/modeling.html>): "Modeling Multiscale-Multiphase-Multicomponent Subsurface Reactive Flows using Advanced Computing" and "Hybrid Numerical Methods for Multiscale Simulations of Subsurface Biogeochemical Processes". Additionally, EM has recently initiated the Advanced Simulation Capability for Environmental Management (ASCEM) project (<http://ascemdoe.org/>). ASCEM is a modular and open source high performance computing tool (a DOE-led community model) that will facilitate integrated approaches to modeling and site characterization and enable robust and standardized assessments of performance and risk for EM cleanup and closure activities.

DOE also provides compute cycles to the scientific user community at high performance computing centers, including the National Energy Research Scientific Computing Center (NERSC) at the Lawrence Berkeley National Laboratory (<http://www.nersc.gov>), the National Center for Computational Sciences (NCCS) at the Oak Ridge National Laboratory (<http://nccs.gov/>), and at EMSL (<http://www.emsl.pnl.gov/capabilities/computing/>).

DOE funded synchrotron light sources are capable of providing structural and chemical information often unavailable with conventional sources of x-rays. DOE laboratories with synchrotron scientific user facilities include: Argonne National Laboratory (<http://www.aps.anl.gov/>); Lawrence Berkeley National Laboratory (http://esd.lbl.gov/als_environmental_program/); and Stanford Synchrotron Radiation Laboratory (<http://www-ssrl.slac.stanford.edu/mes/remedi/index.html>). Use of the synchrotron light sources requires a separate approval process.

Collaboration

Multi-disciplinary and inter-institutional collaborations are strongly encouraged to enhance and strengthen research capabilities as needed. Collaboration could include institutions such as universities, industry, non-profit organizations, federal agencies and Federally Funded Research and Development Centers (FFRDCs). All collaborative applications should include letters of agreement from each collaborator who would receive funding. These letters should specify the contributions the collaborators intend to make if the application is accepted and funded. Applications for multi-investigator projects should present a management structure for integrating collaborating investigators. Involvement of students and post doctoral scientists is encouraged. Refer to <http://www.sc.doe.gov/grants/colab.asp> for details. Only the Lead Institution and PI need submit an application to this FOA at this time but the submission **must** include all budgetary information for all funded Co-PIs.

Data Sharing Policy

Research data obtained through public funding are a public trust. As such, these data should be publicly accessible. However, for these data sets to be most useful to the SBR program and the broader scientific community, more effective tools are needed for developing and managing these community data bases. Towards this goal, the SBR program held a workshop on Data Management Needs for Subsurface Science on April 28 and 29, 2011, in Washington, D.C. Over the next year the SBR program intends to develop a more unified approach to supporting the development of community data bases and to work with partners within the DOE and other federal agencies to develop tools for better managing these community data bases. The workshop report and more information about this effort will be made available through the SBR website (<http://science.energy.gov/ber/research/cesd/subsurface-biogeochemical-research/>).

Applications submitted in response to this FOA must include a description of the applicant's current data sharing plans and their commitment to contribute their data to a more unified SBR community data base as the appropriate archives and data management tools become available. Applicants are allowed an initial period of exclusive use of the acquired data to quality assure it and to publish papers based on the data, but they are strongly encouraged to make the data

openly available as soon as possible after this period. DOE's Office of Biological and Environmental Research defines the exclusive use period to be one year after the end of the data acquisition period for the proposed performance period of the grant application but exceptions to extend this period may be justified for unique or extenuating circumstances.

REFERENCES

National Research Council, 2000. Research Needs in Subsurface Science, U.S. Department of Energy's Environmental Management Science Program. National Academy Press, Washington, DC. <http://www.nap.edu/browse.html>

National Research Council, 2003. Long-Term Stewardship of DOE Legacy Waste Sites: A Status Report. National Academies Press, Washington DC. http://books.nap.edu/openbook.php?record_id=10703&page=R1

Davis, J.A.; S.B. Yabusaki; C.I. Steefel; J.M. Zachara; G.P. Curtis; G.D. Redden; L.J. Criscenti; B.D. Honeyman 2004. Assessing Conceptual Models for Subsurface Reactive Transport of Inorganic Contaminants EOS 85, 449-455.

Department of Energy, 2007. Basic Research Needs for Geosciences: Facilitating 21st Century Energy Systems. DOE Office of Science, Basic Energy Sciences, Washington, DC, 186p. (<http://www.science.energy.gov/bes/news-and-resources/reports/basic-research-needs/>)

Department of Energy, 2006. EMSL Strategic Plan 2006. Prepared for DOE under contract DE-AC06-76RL01830 by Pacific Northwest National Laboratory (PNNL-15578), http://www.emsl.pnl.gov/docs/strategic_plan_01_06.pdf)

Any Other Special Requirements:

Only the Lead Institution and PI need submit an application to this FOA; however, the submission must include all budgetary information for all Co-PIs. The application narrative should begin with the same cover page as the pre-application and include: the project title, the Lead PI's name and complete contact information, whether the application is for a **Full or Exploratory** project, whether the application is a **New or Renewal** application and a table listing the Lead PI and institution and all Co-PIs, their institutions and the amount of funding requested for each year for the project for each investigator.

The one-page Executive Summary (separate from the Project Summary/Abstract) should be one-page that identifies the name of the applicant, the project director/principal investigator(s), the project title, the objectives of the project, the hypotheses to be tested and/or the enabling capabilities to be developed, the proposed experimental design, the names of all investigators and their affiliations, and the potential impact of the project to DOE (i.e., benefits, outcomes). Applicants should include an Executive Summary after the Title page as part of the Narrative section. The Executive Summary does not count toward the narrative page limits. Applicants proposing to develop enabling scientific tools for subsurface science should clearly indicate this in the Executive Summary.

Attachments should include short (2 pages) curriculum vitae, a listing of all current and pending federal support and Letters of Intent for proposed collaborators, including use of IFRC sites or samples (when applicable). These attachments do not count toward the narrative page limits.

Applications that include funded DOE National Laboratory Co-PIs from BER Science Focus Area (SFA) programs should include a letter of support from the SFA Laboratory Research Manager.

Grantees must comply with federal and state laws and regulations as appropriate. Although compliance with the National Environmental Policy Act (NEPA) is the responsibility of DOE, grantees proposing to conduct field-related research should expect to provide information necessary for the DOE to complete the NEPA review and documentation.

All Lead PI's are required to attend an annual SBR PI meeting (generally a 3-day meeting held in the Washington DC area). Travel funds should be budgeted to allow at least the lead PI to attend this meeting.

The Catalog of Federal Domestic Assistance number for this program is 81.049, and the solicitation control number is ERFAP 10 CFR Part 605.

Posted on the Office of Science Grants and Contracts Web Site
June 10, 2011.