

**ANNOUNCEMENT TO SUBMIT PROPOSALS
FOR APPLIED SCIENCE
COOPERATIVE AGREEMENTS**

Fiscal Year 2010

***National Technology Transfer Team
Applied Science Program***

A program of the

United States Department of the Interior
Office of Surface Mining Reclamation & Enforcement

Proposal Application Due Date: January 15, 2010

TABLE OF CONTENTS

Introduction.....	2
Background.....	2
List of High Priority Topics.....	4
Program Funding	5
Proposal Review Process.....	6
Project Selection.....	6
Program Schedule.....	6
Submission of Proposals.....	7
Proposal Requirements	7
Reporting Requirements.....	8
APPENDIX 1 Other topics for consideration.....	9
APPENDIX 2 Instructions for preparing the proposal application.....	11

INTRODUCTION

The United States Department of the Interior Office of Surface Mining Reclamation & Enforcement (OSM) is requesting proposals for projects that develop and demonstrate improved technologies to address environmental issues related to the mining of coal and reclamation of the land after mining. Applicants may request funding, not to exceed \$200,000. The award will be by cooperative agreement (or as an Interagency Agreement if another Federal Agency is involved). Each cooperative agreement will be for a period of time consistent with the proposal but not to exceed two years from date of award. Each cooperative agreement grantee may apply for and be granted non-funded extensions of time as necessary to complete the project. Investigators with proposals that would require additional OSM funding in future fiscal years would have to reapply during the next or other appropriate fiscal year, but there is no guarantee of future funding. Included in this document are instructions for preparing the proposal, including a list of applied science topical priorities and information on the proposal review process.

BACKGROUND

The National Technology Transfer Team (NTTT) of the OSM was established to provide a forum to guide, coordinate, and communicate OSM's national and regional technology transfer activities. To accomplish this, NTTT, in cooperation with technology transfer professionals at all levels throughout OSM, will:

1. identify and recommend OSM technology transfer areas for potential investigation based on national or regional needs and OSM Core Leadership Team initiatives;
2. coordinate national technology transfer activities;
3. ensure that OSM's national technology transfer planning initiatives fully address the current and future needs of the regions and directorates and support OSM's missions, goals and Strategic Plan;
4. identify and analyze requirements, projects, and issues, and provide recommendations to the Core Leadership Team for significant technology transfer concerns and activities; and
5. promote a broader understanding of and support for technology transfer in OSM.

The three principles of the OSM applied science program are:

1. increase technical knowledge and understanding,
2. build/enhance State and Federal working relationships with the academic institutions in the coal fields,
3. Leverage the limited OSM Applied Science funds through outside participation, e.g. promoting participation by others such that OSM funds are utilized to design, monitor and conduct studies while others conduct the earthwork or cover other expenses involved in construction/implementation.

For FY 2010, the goals of the NTTTT Applied Science Program are to develop and demonstrate improved technologies to address environmental issues related to the mining of coal and reclamation of the land after mining and to enhance our ability to complete mission-oriented work by increasing the pool of qualified potential employees for SMCRA programs. Several objectives help us meet this goal. The first objective is to develop technical tools to improve the efficiency and accuracy of the State regulatory authorities in permitting coal mines and enforcing their federally approved State regulatory program. Another objective is to examine the potential for new technologies to protect the public and the environment during mining and reclamation. A third objective is to provide opportunities for college and university students, particularly those at minority higher education institutions, to participate in research projects related to coal mining and reclamation issues in order to build the pool of qualified potential applicants for future implementation of SMCRA.

No new mining and reclamation technology is likely to be adopted by industry or the States unless it is more efficient and cost-effective than the technology it would replace. That is why OSM is looking for applied science projects that have the potential for improving, in a manner that protects the public and the environment, the efficiency with which the coal industry conducts surface coal mining and reclamation activities and the regulatory authorities that regulate these activities.

Applied Science Projects are an important component of OSM's Minority Higher Education Program (MHEP). Applied Science Projects contribute to the goal of improving the science and technology capabilities of minority institutions and their graduates. To ensure that OSM builds capacity at minority institutions as well as other universities, OSM may fund the highest scoring, qualified, Applied Science Project proposal from a Minority Higher Education Institution. MHEP projects will receive additional points in the consensus scoring process.

The NTTTT Applied Science Program Structure

There are three elements of the Applied Science Program structure: (1) OSM, (2) NTTTT, and (3) the OSM/State Regional technology transfer teams. Each element is described below.

OSM:

OSM is the sponsoring agency that provides funds for the NTTTT. Through its Core Leadership Team, OSM provides executive direction and oversight to the NTTTT Applied Science Program Team.

NTTT Applied Science Program Team:

The NTTTT Applied Science Program Team is the key element of the Applied Science Program and makes all of its decisions by consensus. The NTTTT Applied Science Program Team is composed of members from OSM, the National Association of Abandoned Mine Land Programs, and from

States that administer coal mining activities. The members from OSM represent: Headquarters; Technical Innovation and Professional Services (TIPS) program; and the three OSM Regions (Appalachian, Mid-Continent, and Western). The States are represented by one each Applied Science Program Member representing the West, Midwest, and Appalachia that are appointed by the Interstate Mining Compact Commission and the Western Interstate Energy Board.

Critical roles and responsibilities of the NTTT Applied Science Program Team include:

- Approving overall NTTT Applied Science Program Team structure and timetables
- Authorizing requests for proposals
- Developing dissemination strategies for making requests for proposals
- Developing a scoring/ranking system to be used by reviewers for evaluating proposals
- Evaluating proposals
- Compiling the results of the proposal reviews
- Making project funding recommendations to the Core Leadership Team
- Facilitating communications between the program elements
- Identifying important national and regional applied science areas for potential investigation.

OSM Regional Technology Transfer Teams (RTTT):

The NTTT Applied Science Program Team recognizes that mining and reclamation technologies often vary from region to region and that State-to-State differences in mining and reclamation programs dictate how each region prioritizes its applied science technical needs. Each regional team is composed of one representative from the OSM region and one from each of the State regulatory authorities within that region. The roles and responsibilities of the regional technology transfer teams are as follows:

- Identify applied science topics for the region for potential investigation
- Identify regional experts and institutions that should receive the applied science announcement
- Review and rank proposals in accordance with regional guidance
- Make recommendations for selection of regional proposals to the NTTT Applied Science Program Team.

LIST OF HIGH PRIORITY TOPICS

For 2010, there will be four high priority topics that will receive additional points in the consensus scoring process, one from each OSM region and one from the OSM Director. High priority topics for FY 2010 include:

1. Develop and apply methods and techniques for interpreting imagery from satellites or other remote sensing to characterize forest recovery on coal-mine lands reclaimed under SMCRA.
2. Advances in Passive Treatment of Acid Mine Drainage that facilitates its use in remote locations including but not limited to the development of aeration devices that do not require power from the grid.
3. Investigate impacts from increased Total Dissolved Solids on aquatic communities from coal mine activities and identify amelioration of the effects: i.e. concentrations, components; and/or associated threshold levels.

4. Reclamation methods to prevent the establishment of cheatgrass and management practices to control cheatgrass invasion.

OTHER TOPICS ELIGIBLE FOR CONSIDERATION

OSM will consider all proposals relating to surface coal mining and reclamation in the USA. A list of other topics eligible for consideration is found in Appendix 1. Proposals addressing topics from this list will not receive high priority points in the consensus scoring process.

PROGRAM FUNDING

Applicants may request funding not to exceed \$200,000 for FY 2010. The award will be by cooperative agreement (or as an Interagency Agreement if another Federal Agency is involved). Each cooperative agreement will be for a period of time consistent with the proposal but not to exceed two years from date of award. Each cooperative agreement grantee may apply for and be granted non-funded extensions of time as necessary to complete the project. Investigators with proposals that would require additional OSM funding in future fiscal years would have to reapply during the next or other appropriate fiscal year. Cooperative agreements create an appropriate legal relationship between OSM and the performing organization, and provide OSM the opportunity and duty to remain “substantially involved” during the course of the project. OSM recommends a minimum cost-share of 25 percent with the applicant providing some portion of this percentage. The remainder may come from academia, industry, or other sources. OSM requires for those proposals providing cost share that, as part of the full proposal application, include signed letters of support indicating specific actual cash and/or in-kind services meeting the recommended 25 percent cost-share. (For a definition of cost-sharing see Federal Register 59(64) Monday, April 4, 1994, Section 19.23.)

$$\text{Total Project Value} = \text{Amount Requested From OSM} + \text{Cost Share}$$

(Recommended Minimum of 25% Maximum of \$200,000 of Total Project Value)

Example of minimum cost-share recommendation:

Total Project Value	Amount Requested From OSM	25% of Total Project Value
\$93,333	\$70,000	\$23,333
\$63,050	\$47,287	\$15,762

OSM will announce the total amount of available funding at a later date. Total past program funding amounts have ranged from \$900,000 to \$1.3 million. It is expected that funds will be available beginning June 30, 2010. **However, there is no guarantee that any funds will be available.** We will notify applicants as to whether or not their proposal has been approved.

PROPOSAL REVIEW PROCESS

After all proposals are received, they will be distributed to NTTT Applied Science Program Team members for initial review. **There are five steps to the review and selection process as follows:**

- (1) Four top ranked lists of proposals will be produced. One list will be from each of the three regional technology transfer teams plus an average ranking of the OSM team members (HDQ, TIPS, AR, WR, MCR). Each list will rank the top 5 or the top 10% of the proposals (which ever gives the higher number of proposals). All of the top ranked proposals of each of these four groups will be considered by the national team in its consensus scoring.
- (2) In order to provide the best technical advice to the NTTT Applied Science Program Team, at a minimum, all top ranked proposals will be scored by in house technical experts based on guidance criteria below. This pre-decisional information will be provided in preparation for the consensus scoring by the national team.
- (3) The NTTT Applied Science Program Team will meet to conduct a consensus scoring of all of the top ranked proposals.
- (4) The NTTT Applied Science Program Team will provide the highest consensus scored proposals to the grants team for a three week financial adequacy review.
- (5) The NTTT Applied Science Program Team then develops a summary of the highest scored proposals for recommendation to OSM Senior Management.

NTTT Applied Science Program Team reviewers will assign scores to the proposed projects based upon the following criteria: (See blank scoring sheet for details)

- What is the level of external financial support?
- What is the technology transfer potential?
- What is the technical merit?
- What is the Value of proposal to SMCRA programs?
- Is this a High Priority Topic for FY 2010? If so add two points.
- Is the proposal from an MHEP institution? If so add two points.

PROJECT SELECTION

The Core Leadership Team decides which projects to fund based on the recommendations provided by the NTTT Applied Science Program Team as well as other relevant considerations.

The Core Leadership Team may select the highest scored qualified MHEP proposal as one of the funded projects.

NTTT APPLIED SCIENCE PROGRAM SCHEDULE

October 1, 2009
to January 15, 2010

Proposals submitted to the OSM contact as indicated below.

February 26, 2010

Ranking of proposals by Regional State Technology Transfer Teams completed with results forwarded to Applied Science Program Team leader which is then forwarded to the entire NTTT Applied Science Program Team.

April 8, 2010	Final consensus scoring of the proposals completed by NTTT Applied Science Program Team.
April 12, 2010	Begin three week review by Grants Team and Project Technical Representatives of highest scored proposals for financial assistance and technical adequacy.
May 3, 2010	NTTT reports the results of its evaluation process to the OSM Core Leadership Team
May 17, 2010	Funding decisions are made by OSM Core Leadership Team
June 30, 2010	OSM begins making awards

SUBMISSION OF PROPOSALS

The proposal application must be received by **January 15, 2010**. Each proposal must be submitted as: (1) a paper copy and (2) an electronic copy in PDF format by e-mail or on a CD in PDF format. Letters of support and letters of endorsement must be signed originals on appropriate letter head that have been scanned and included as PDF files. Send proposal applications to the following address:

Kimery C. Vories (NTTT Team Leader)
Office of Surface Mining
501 Belle St.
Alton, IL 62002
(618) 463-6463 x 5103
kvories@osmre.gov

Proposers may address questions concerning proposal submission to Kimery Vories (above); Lois Uranowski (412) 937-2805 luranowski@osmre.gov; or Duane Matt (303) 293-5072 dmatt@osmre.gov.

Please note that misdirected proposal applications will be deemed late and returned to the applicant. All proposal applications must be complete at the time of submission. Later changes or addendums will not be accepted. The paper copy of the proposal may be mailed or delivered. The electronic copy may be e-mailed, mailed, or delivered.

FAXED PROPOSAL APPLICATIONS WILL NOT BE ACCEPTED.

PROPOSAL REQUIREMENTS

See Appendix 2 for Detailed Proposal Requirements.

- (1) All proposals must support activities in one of OSM's three regions although it may apply to more than one region.
- (2) Each proposal may include salaries, travel, equipment, materials, and services not including fees or profit.

- (3) **All proposals must include a letter of endorsement, (on official letterhead) by an appropriately authorized management official representing a State, Indian, or Federal Title IV Abandoned Mine Land or Title V SMCRA Regulatory Authority (see list at <http://www.osmre.gov/contacts/map/map.shtm>.) Proposals without such an endorsement will not be considered for funding.**
- (4) Proposals will not be accepted that propose to provide salary or other compensation to Federal Employees.
- (5) Proposals will not be accepted that constitute quality control or consumer evaluations for commercial products.
- (6) OSM reserves the right to reject, in whole or in part, any and all proposals.

In summary, in order for a proposal to be considered, it must include the following:

- Each proposal should be submitted as a paper copy and as an electronic copy in PDF format by e-mail or on a CD in PDF format. Letters of support and letters of endorsement must be submitted as signed originals on appropriate letter head that have been scanned and included as PDF files. Proposal must be received on or before the due date.
- A proposal addressing all items under “Instructions for Preparation of a Proposal”
- The proposal must include completed forms SF 424, Certifications and Assurances, and OSM 47.
- The proposal must include a statement that any data collected as a part of this program must be accessible to the public.
- The proposal must include a summary statement addressing the value of the proposal to OSM and the coal mining State(s).
- A copy of the letter of endorsement from an appropriate State, Indian, or Federal Title IV Abandoned Mine Land or Title V SMCRA Regulatory Authority (**see list at <http://www.osmre.gov/contacts/map/map.shtm>**).

REPORTING REQUIREMENTS

Funded projects will have the following reporting requirements:

- # Quarterly progress reports
- # Quarterly financial reports
- # Draft final report for review and approval by OSM
- # Comprehensive final report
- # One 2-3 page summary write-up for publication for use by OSM in its technology transfer efforts.

APPENDIX 1

OTHER TOPICS ELIGIBLE FOR CONSIDERATION

Blasting Issues: Develop innovative and improved methods for: (1) assessing and controlling ground vibration and air-blast; (2) monitoring blasting characteristics and their effects; (3) assessing structure response and damage caused by blasting; and (4) assessing the impacts of vibration on water wells.

Carbon Dioxide Gas Intrusion: Evaluate potential causes for carbon dioxide gas intrusion into houses and other manmade structures built on reclaimed coal mine spoils; identify practical solutions for its prevention; and develop methods for remediating and/or eliminating it.

Coal Mine Void Detection: Develop reliable techniques and methods for detecting, and characterizing coal mine voids and fires. This can include non-drilling type methodologies (note: not duplicative of previous studies (see <http://www.msha.gov/VoidDetection/VoidDetection.asp>).

Energy Efficiency and CO₂ Mitigation: Develop practices during mining and reclamation to minimize energy use.

Hydrology Issues:

- Develop innovative and improved methods for: (1) preventing, minimizing the extent and duration of impacts, and restoring stream loss associated with underground mines; (2) predicting outfalls, water quality and quantity associated with mine pools, and the potential for mine blow-outs; (3) predicting, preventing, and treating mine drainage from abandoned or active mines; and (4) assessing water quality parameters;
- Potential Hydrologic Impacts--assessment through probable hydrologic consequences/cumulative hydrologic impact assessments (PHC/CHIA)

Impoundments: Long-term stability of both active and reclaimed impoundments, stability under dynamic loading, dewatering and spatial distribution of viscosity, reclamation.

Invasive Species: Develop innovative and improved methods for identifying, assessing, and managing invasive species.

Mine and Coal Refuse Fires: Characterization, abatement, and control I

Reforestation Issues: Develop innovative and improved methods for: (1) cost effectiveness; (2) forest productivity; and (3) erosion control and hydrologic impacts.

Slurry Impoundments: Determine long term flowability and viscosity within the fine coal refuse slurry, and it's impact on breakthrough and stability

Soils-based Crop Yield Predictor: Develop and demonstrate an accurate soils-based predictor of crop yield to be used to determine revegetation success without actually growing crops.

Steep Slope Mining and Reclamation:

- Rock Durability--testing methods and standards
- Valley Fill Stability--design and standards to ensure stable fills
- Evaluate stability of steep slopes, including highwalls and endwalls, needed to meet reclamation objectives for the various conditions and materials found in disturbed areas – guidelines, standards, and methods
- Vegetation/Woody Stems/Topographic/Relative Slope Stability Issues – achieving bond release

Use of Recycled Materials: Coal Combustion By-Product--placement at mines**Landscape Stability:**

- Applicability of using a geomorphic approach to reclamation at coal mined lands
- Long-term stability of reclaimed land surfaces
- Surface stabilization using slope complexity instead of treating with mulch, tackifiers,
- Engineered fill terraces, and other historical treatments – generate slope complexity
- Parameters as guidelines
- Mine subsidence and long-term stability issues associated with underground mines,
- Establishing criteria to assess structural damage due to mine subsidence

Soil Development on Reclaimed Lands:

- Characterization, classification and land use interpretations for reclaimed soils
- Microbiological (Mycorrhizae, etc.) assessment and management of reclaimed soils
- Alleviation of compaction on reclaimed soils

Vegetation Assessment: Use of remote sensing for pre- and post-mine vegetation assessments**Wildlife Conservation, Revegetation, and Reforestation:**

- Reforestation--improving survival and quality, and encouraging reforestation
- Bat Conservation—improving protection through bat friendly mine closures and permitting and reclamation technologies
- Vegetation/Woody Stems/Topographic Issues--achieving bond release
- Fluvial Geomorphology--assessment for revegetation
- Development of guidelines for engineering design - for the installation of a type of bat compatible closures in shafts or steep declines, using polyurethane foam and riser pipe; based on theoretical analysis (such as computerized finite element analysis) and/or model testing.
- Wildlife use and other ecological considerations involving reclaimed wetlands
- Assessment of Plant Diversity
- Control of Invasive Species

Cropland Reclamation: Prime Farmland and Other Cropland Land Uses--soil capability assessment and restoration of productivity.

APPENDIX 2

DETAILED INSTRUCTIONS FOR PREPARING THE PROPOSAL

We have developed a proposal application format which is to be followed in preparing your application. Each of the following items must be completely addressed. The NTTT Applied Science Program Team may require enhancements to the proposal prior to funding. Please include the following sections in your proposal applications in the order in which they are listed. Items 1 through 7 must not exceed a total of 30 pages not including the required forms. Use 12 pitch type and 1 inch margins.

- 1) Application for Federal Assistance (Form SF 424), OSM Form 47, and Certifications and Assurances: You must complete all sections on these forms and obtain signatures of appropriate officials on the forms.
- 2) Table of Contents: Please include major sections and the corresponding page numbers.
- 3) Project Abstract (limit to one page single-spaced): Include appropriate Topic of Interest centered and two (2) lines beneath the abstract.
- 4) Proposals from previous funded projects must provide a complete history of projects funded including their current status in terms of their stage of completion.
- 5) Project Description (15-20 pages)
 - a) Objectives: List the specific objectives of the project including a summary statement addressing the value of the proposal to OSM and the coal mining State(s).
 - b) Background: Provide a comprehensive description of the relevance of the project.
 - c) Preliminary Studies (if applicable): Describe any precursory research that applies to the project topic and what was determined from those preliminary results.
 - d) Experimental Procedures/Methodologies: Describe any laboratory or field testing to be performed referencing analytical methods used.
 - e) Significance of the project to the OSM Applied Science Program: Give a description of the need for this project, its technical merits, and how the project will be of significance to the research special interest topics. Provide a plan for technology transfer of the project results. Also, describe the extent of involvement in the project by the ultimate end users of the technology. Note if any cost-sharing in the project is by end users of the technology and the potential for other end users to adopt project results.
 - f) Description of resources (i.e., laboratory facilities): Describe the laboratory facilities, testing equipment, field sites, etc. available for conducting the tasks associated with this project.

- g) Literature Cited: List all sources used.
- 6) Statement of Work (3-5 pages)
- a) Issue Identification: Identify and briefly describe the issue this project is addressing.
 - b) Work Tasks: Break the project into specific work tasks and describe each work task individually.
 - c) Time Allocation: Describe how much time (by months) is to be allotted for each work task and when each task is to begin and end.
 - d) Resource Allocation: For each work task, list the personnel who will be working on that task and specifically what each person will be doing.
 - e) Quality Assurance/Quality Control: List measures planned to ensure that high quality results are achieved such as descriptions of statistics to be used to evaluate data and to compare data to controls.
 - f) Determination of Goals: Identify the means to be used to determine that project goals are met
 - g) Deliverables must include a final report with executive summary, a power point presentation, and a plan for Technology Transfer such as a publication in a peer reviewed technical publication or presentation at technical meetings.
 - h) Public access to data: A statement is required that all data collected as part of this program must be accessible to the public.
 - i) Number of Students working on the project
- 7) Budget for which funding is requested (Form OSM-47): Complete the appropriate sections of this form. Each cooperative agreement will be for a period of time consistent with the proposal but not to exceed two years from date of award. Each cooperative agreement grantee may apply for and be granted non-funded extensions of time as necessary to complete the project.
- 8) Explanation of Budget: The budget may include salaries, fringe benefits, travel, equipment, materials, and services not including fees or profit. It is imperative that you specify any overhead, indirect costs, or benefits rates as well as which budget categories are affected by those rates. (For example, Indirect Costs defined as “Facilities and Administration” = 10% of Total Direct Cost less tuition and equipment.) In addition, salaries must include personnel descriptions (i.e. faculty, graduate student, hourly worker, etc.), the number of hours expended on the project, and the hourly rate. Fringe benefits may include tuition or tuition remission in accordance with institutional policies. Supplies must be listed in general terms (i.e. field supplies, general office supplies, etc.). Travel must include a description (trips to field site, conference, etc.), estimated number of hours for travel, and estimated cost per trip. In addition, for travel to conferences, estimate proposed expenses in the budget. For travel to conferences, specific information on conference title, dates of conference, and purpose in attending (i.e. presenting paper, poster session, etc.) must be supplied to the OSM for approval prior to travel. Other Direct Costs must include a general description (i.e., chemical analysis) and include units and unit cost. Indirect Costs must include a breakdown of indirect cost rates and a brief description such as “proposer’s rate” or “facilities and administration.”

Finally, you must differentiate between funding sources in terms of total amounts and percentages requested from: (1) OSM, (2) the applicant, and (3) other (industry, etc.). In-kind contributions provided by industry, government agencies, and university department should be included.

Allowable Costs - Subcontractor and In-Kind Participants

Note: Allowable costs for federal agreements are determined by the type of recipient organization. All subcontractor or in-kind participant costs must be allowable under federal guidelines in order to be paid with federal funds or used as cost share. Allowable costs include both direct and indirect costs. Commercial organizations are governed by the Federal Acquisition Regulations part 31.2 (Contracts with commercial organizations). FAR part 42.7 (Indirect Cost Rates) prescribes policies and procedures for establishing Indirect Cost Rates.

Actual salaries must be used allowing for reasonable escalation the second year. Fringe benefits must be based on actual cost (an average percentage rate may be used for estimating purposes) or an approved rate. Fringe benefits, indirect costs, G&A, overheads, and other rates must be federally approved. In the absence of actual federal approval (DCAA, HHS or other federal agency) documentation that these rates were previously accepted by a federal agency should be submitted. The name of the agency, address, contact person, and federal agreement number where the rates were accepted should be provided. Copies of any correspondence accepting the purposed rates should be provided.

- 9) Identification of Proprietary Information: Technical data or other data such as trade secrets, confidential financial or commercial information, or other privileged information which the applicant prefers to withhold from public disclosure or use by OSM for any purpose except for proposal evaluation may be included in this application. To protect any confidential data, each page must be specifically identified indicating each paragraph or line that contains confidential data the applicant wishes to protect. The applicant must also include a page following the budget which states the following:

TRADE SECRET INFORMATION

In order to explain properly the proposed work, it may be necessary to disclose within the proposal document trade secret information. If such is disclosed, the OSM wishes to take steps to keep such information confidential. However, it must be aware that such information does or does not exist within a given proposal. Therefore, please complete the following:

_____ There is NO trade secret information contained in this proposal package.
_____ There IS trade secret information contained in this proposal package. Such information is noted on pages _____.

NOTE: Please REDACT those pages which contain trade secret information. In other words, conspicuously highlight or mark those passages, diagrams, drawings, etc. that contain trade secret information.

Also note that the Project Abstract may be released to the public. Therefore, the abstract must not contain any trade secret information.

- 10) Signed Letters of Commitment meeting the recommended minimum 25 percent cost-share requirement: Signed letters of commitment from all cost-share supporters for actual cash contributions or for in-kind services provided during the period of time for which the project is to be funded are required with the proposal application. **Letters arriving under separate cover (after the proposal due date) or faxed letters of commitment will not be accepted.** Letters of commitment must include the type of contribution to be provided (cash contribution or in-kind service), the dollar amount committed, and/or the estimated dollar value of the service. Letters of commitment must be on letterhead and signed by a duly authorized individual. Cost-share commitments are contingent upon selection and funding of the submitted proposal.
- 11) Resumes of each senior investigator: Please limit resumes to one (1) page for each senior investigator involved in the proposed project focusing on relevant training and experience to the proposal. Senior investigators include the principal investigator and any other faculty or senior-level personnel involved in the project.

- 12) **All proposals must include a letter of endorsement, (on official letterhead) by an appropriately authorized management official representing a State, Indian, or Federal Title IV Abandoned Mine Land or Title V SMCRA Regulatory Authority (see list at <http://www.osmre.gov/contacts/map/map.shtm>.) Proposals without such an endorsement will not be considered for funding.**
- 13) Please provide the e-mail address or mailing address where you want to receive notice of the results of the selection process.