

Proprietary and Trade Secret Information

The Ohio Coal Development Office (OCDO) has the authority and responsibility to protect and keep confidential trade secrets and other proprietary information. In the event that the materials or data submitted are deemed to consist of trade secrets or other proprietary information, as defined by the ORC 1333.61 and as set forth in ORC 1555, then only those portions of the document can be kept confidential by OCDO. It is solely the applicant's responsibility to conspicuously mark such items. A proposal may be submitted with certain sections labeled as confidential. However, only that information that is deemed to be trade secret under the aforementioned ORC sections shall be required to be kept confidential. Entire proposals or entire pages so labeled shall not be deemed as proprietary and confidential. The public abstract must not contain any trade secret information. Please note OCDO cannot, and does not, provide confidentiality for any material transmitted via e-mail.

We respect the privacy of your data. Proprietary, business confidential information should not be submitted on-line. It should be submitted in hard copy and an electronic copy on a CD with the confidential information clearly marked. Ohio law does not contemplate designation of an entire proposal as confidential. It is the responsibility of the applicant to precisely and clearly identify information to be held confidential.

Your full application must include the information outlined below. In submitting your application, you agree that you have reviewed and understand the application process, the program guidelines and award criteria – including any exceptions to the OCDO grant terms and conditions. You may review this information at:

http://ohioairquality.org/advanced_energy_program/coal_applicant_process.asp.

Please remember that in addition to uploading the completed full application, you must upload a total project budget, financial statement and project timeline and GANTT chart.

Proposal Submittal

1. **Full Application** Following notification that OCDO has received the application fee, applicants will download the full application, complete it and upload the completed application to the website for comment and review. The Full Application must include the following items:
 - a. **Public Abstract** A public abstract of approximately 500 words must be included. The abstract must contain the project objective, the specific technology/technique to be studied, a description of the project (including the size and location), the type(s) and tonnage per year of Ohio coal to be used, the sponsoring organization(s), the project duration, the total cost and the anticipated contributions of each project participant and number and level of jobs created. This abstract may be released to the public in whole or in part at any time. It is therefore required that the abstract contains no trade secret data or confidential business information.
 - b. **Project Objective(s)** The specific technical objective(s) of the proposed project, its expected results and overall benefits to Ohio coal, to the environment, to the user and/or ratepayer and to the state of the art, must be clearly and logically detailed. The relevance to OCDO objectives and the potential for increased use/markets for Ohio coal (in tons per year) because of this process or technology must be discussed. The estimated number of jobs created or retained must be discussed.
 - c. **Technical Approach** The proposal must contain a full description of the technology or technique(s) and the proposed project. At a minimum, the detailed technical discussion must contain:
 - i. process flow diagrams;
 - ii. energy and mass balances;
 - iii. equipment layout schematics;
 - iv. general and unique design specifications;
 - v. a detailed description of quality assurance/quality control procedures to be followed in the project;

- vi. a detailed description of the monitoring and sampling procedures to be followed; and
- vii. a discussion of procedures for establishing baseline data, where appropriate.

The proposal must include a discussion of the unresolved technical, economic and environmental factors that are proposed for investigation in this project and the target goals this project anticipates answering. This must include a discussion of the wastes or products generated by the process and their disposal or reuse. The identified specific technical risks inherent in the project must be described, along with a discussion of the specific evaluation criteria for determining their resolution.

Finally, this section must include a discussion, where appropriate, of the scale-up required in order to move to a larger-sized application. The market commercialization significance of data (technical performance, environmental and economic) obtained in this project should be discussed.

- d. **Statement of Work for Projects** A detailed statement of work is critical to a successful review of a proposal. This is a logically sequenced, detailed step-by-step presentation of the project phases and their work tasks, including major milestones that are necessary in order to successfully complete the work. It is also the basis for negotiations of a legal agreement, should the proposal be accepted for funding. Thorough, complete statements of work will hasten the legal agreement process and therefore the project's start date.
 - i. **Proposals Requesting Grants** The Statement of Work for proposals requesting a grant from OCDO should include the following:
 1. The quantified goal and objective(s) and the general nature of the work to be performed, including the location and the responsible party (ies);
 2. The sequence and timeline (Gantt) chart showing the tasks, phases and significant milestones, by month (Describe these as "Month 1," "Month 2," not "November," "December") The timeline/Gantt chart should show all work tasks and all reporting deliverables, including a draft final report due 60 days prior to the Project Completion Date and a revised final report by the Project Completion Date;
 3. A detailed description of the major tasks which comprise the phase, and, where applicable, a description of the diagnostic and data collection equipment and techniques which are part of the task. Test matrices should be included where appropriate;
 4. A discussion of the evaluation parameters that are proposed for assessing the results and success of the work in the phase;
 5. A description of the deliverables and accomplishments resulting from the completion of the phase;
 6. The estimated cost of the phase; and
 7. A list of major equipment items to be purchased, the estimated cost of each piece, and a justification for each piece.
 - ii. **Proposals Requesting Loans or Loan Guarantees** If the project involves construction of a facility for a commercial business activity, this discussion should identify major steps in the construction project, schedules for completion, schedules for hiring employees and schedules for bringing the new facility online as a commercial enterprise. Also, the statement of work should present a business plan showing when and how the loan will be repaid.
- e. **Management and Budget Discussion** This section of the proposal must include the following elements:
 - i. **Project Participants** All institutional and corporate participants in the proposed project must be identified. For each, the institution or company name, address, contact person, telephone number and email address must be specified. The role and extent of participation of each party, both technical and financial, including all co-applicants and major sub-contractors must be described. For each co-applicant, documentation of contributions (financial, personnel, equipment, etc.)

must be included, along with a letter-of-intent signed by an authorized official validating such contributions.

- ii. **Project Personnel** The proposal must include for the prime applicant and each of the co-applicants, key project personnel, their general duties and responsibilities and their qualifications relative to this project (e.g., résumé or *curriculum vitae*). Extensive CVs are discouraged.
- iii. **Project Management Experience and Capability** The experience (including results) of the prime sponsor with projects involving similar or related technologies or techniques, and other projects of similar complexity and scale must be described. This should include relevant experience in the development of commercial technologies preceded by pilot or demonstration plant work. Applicants must describe the capability of their organization to manage a project or technology of the scale and complexity proposed technically, fiscally and financially, as well as to ultimately market it commercially.
- iv. **Detailed Project Budget** All applicants and project participants are expected to provide significant cost-sharing in the project. The budget discussion must describe the type and amount of participation of the prime applicant and each co-applicant. To the extent that in-kind contributions (such as existing equipment) are included, the source, percentage of use in the project, date of acquisition, original cost, present value and depreciation status must be included. Zero value must be ascribed to fully amortized or expensed facilities and equipment.

A full, detailed project budget must be included with the proposal. It must show the total project budget, the prime applicant's (awardees) budget, each co-applicant's budget and the proposed OCDO budget. The summary format shown in Attachment 1 must be used, although additional pages providing further detail to aid in review and understanding of the budget are encouraged. The budget must be prepared in line-item (e.g., personnel, overhead, equipment, supplies, etc.) detail. OCDO will not reimburse a fee or a profit, nor will it reimburse any costs incurred due to lobbying or proposal preparation. Overhead and general/administrative charge rates will be carefully scrutinized and should be kept to a minimum.

Applicants must also submit an OCDO Cash Drawdown projection by month. OCDO requires this of all its projects in order to have sufficient cash on hand to support its full census of projects and so that the State can better manage its overall bond debt. Invoices are paid on a cost reimbursable basis, so cash projections must closely integrate with the project time line and overall project budget, including cost share.

- v. **Financial History** If the prime sponsor is other than an institution of higher learning, certified financial statements for the past two years must be included. Financial statements for the past two years must also be included for each major contributor to the project also, if other than an institute of higher learning.
 - vi. **Audit** A copy of the latest audit for each major participant must be included as an attachment to the proposal.
- f. **Marketability Discussion** The final section of the proposal must include the following.
- i. **Environmental, Health and Safety Aspects** This section must contain a discussion of the anticipated environmental benefits of the proposed project, including a comparative risk assessment with currently available technology. This comprehensive discussion should address not only the pilot or demonstration project, but also subsequent commercial applications. The following topics should be included in the discussion:
 - 1. identification of hazardous or toxic gaseous, liquid or solid substances integral to the process and the safeguards proposed for their containment and ultimate disposal;

2. the compatibility of the proposed process with existing and anticipated environmental laws and rules;
 3. identification of all process products, their classification with respect to environmental and health and safety rules and methods proposed for their disposition; and
 4. compatibility of the technology/technique with other emission control technologies and the anticipated emission reduction performance when combined with such technologies.
- ii. **Technology/Process Economics** The anticipated cost of the commercial application of the technology or process must be estimated, in dollars per ton of pollutant reduced at the source (power plant or other end producer/user). Product or reuse credits and energy efficiency improvement credits, where applicable, should be specifically identified. The calculated costs should be compared to competing existing or emerging technologies. Also, where appropriate, the levelized busbar cost (mills/kilowatt-hour) must be estimated. All cost-estimation assumptions and procedures must be clearly detailed.
- iii. **Market Application, Penetration, and Ohio Applicability** The proposal must include a quantified discussion of the proposed technology's marketability and commercialization, particularly in Ohio, and how the technology's application will affect the continued and increased use of Ohio coal on an estimated tonnage per year basis. Items to be discussed include the following (if applicable):
1. a description of the subject technology's competitive advantage; for example, competing technologies and fuels that will be displaced by the proposed technology, including cost comparisons of the technologies;
 2. the potential total market geographic distribution of the market, with particular emphasis on Ohio. Specific attention should be given to Ohio's end users, and to existing Ohio sources using high-sulfur Ohio coal, identifying equipment types amenable for retrofit or repower applications with this technology;
 3. the expected technology characteristics that will facilitate commercial plant construction, such as use of shop fabrication, modular construction, siting flexibility, etc;
 4. the projected penetration of the proposed technology into the market described above, including a time-phased estimate in terms of relative penetration (percent) and absolute penetration (e.g., tons of Ohio coal per year, MWe generated per year, etc.);
 5. a discussion of how the Clean Air Act (as amended) and other federal and state air quality rules and regulations will affect the commercial adoption of the technology;
 6. a discussion of how the technology addresses the control, capture and storage of green house gases, particularly carbon dioxide;
 7. the types of Ohio coal that can be commercially utilized by this technology and the potential increase in the use of Ohio coal in tons per year;
 8. a characterization of the energy or clean fuel product;
 9. the amount and characteristics of products and by-products, and how they will affect the marketability of the technology; and
 10. a discussion of the participant's marketing plan for the technology.
- iv. **On-going Commitment to Ohio Coal Use** The proposal must include a description of the long-term commitment to Ohio coal at the host site, including estimated life of the unit and anticipated annual tonnage of Ohio coal to be used.
- g. **Tables, Figures and Charts**

2. **Part B Requested Exemptions to OCDO Grant Agreement**

Upon receipt of the proposal, Part B – if applicable – will be reviewed first.

Exceptions deemed by OCDO to be major will be reviewed by OAQDA legal counsel before any technical review commences. A diligent and quick attempt will be made to resolve any differences. If, after advice of legal counsel, resolution is not possible, OCDO reserves the right to reject the proposal without further review.

Exceptions deemed by OCDO to be minor will not delay technical review and will be addressed during that review process.

All exception issues (major or minor) must be resolved before any proposal is presented to a meeting of the OAQDA. After thorough discussion with the applicant, OCDO will identify in writing exceptions that have been accepted, modified or rejected. If the applicant wishes to continue, the proposal will proceed through the usual review and approval process.