

**AGREEMENT
BETWEEN
THE WEST VIRGINIA DEPARTMENT OF HEALTH AND
HUMAN RESOURCES
BUREAU FOR PUBLIC HEALTH
OFFICE OF ENVIRONMENTAL HEALTH SERVICES
and
WEST VIRGINIA UNIVERSITY**

THIS AGREEMENT, by and between the **West Virginia Department of Health and Human Resources, Bureau for Public Health, Office of Environmental Health Services**, hereinafter referred to as the **DEPARTMENT** and **West Virginia University**, hereinafter referred to as **PROVIDER**, is effective **April 1, 2009** and continues through **March 31, 2010** for the purpose of performing the tasks and functions for conducting a Public Health Assessment.

WHEREAS, the West Virginia State Legislature Concurrent Resolution No. 15 (SCR-15) mandated the Department of Environmental Protection (WVDEP) and the DEPARTMENT to jointly design and conduct, or contract to have conducted, a comprehensive study on the effects of underground injection of coal slurry.

WHEREAS, Phase I of this comprehensive study is being conducted by the WVDEP and the federal Office of Surface Mining (OSM), with some assistance from the DEPARTMENT, for the purpose of gathering and presenting environmental and hydrogeological data from Phase I slurry-injection sites.

WHEREAS, the DEPARTMENT is responsible for the oversight of Phase II of the comprehensive study, which is to include analyzing data collected during Phase I and conducting the Public Health Assessment.

WHEREAS, the interagency agreement with the PROVIDER is an excellent example of collaboration between state agencies and the use of the developed facilities at the PROVIDER.

WHEREAS, this collaborative project will allow for the development of a Public Health Assessment necessary to make critical public health decisions.

WHEREAS, the PROVIDER can provide the specialized and unique requirements for developing and conducting a Public Health Assessment.

WHEREAS, the PROVIDER has provided technical support, similar to this request, due to the specialized and unique requirements to other state agencies.

I. Provisions

- A. It shall be mutually understood that should the DEPARTMENT'S funding source for this project not be provided, for any reason, this AGREEMENT shall be declared void with no liabilities on the part of either party.
- B. The PROVIDER shall be responsible for the satisfactory performance of the project goals and accomplishments, and shall submit four (4) written progress reports providing a detailed summary of activities, according to the following schedule:
- June 30, 2009 (Reporting Period: April 1, 2009 - June 30, 2009)
 - September 30, 2009 (Reporting Period: July 1, 2009 - September 30, 2009)
 - December 31, 2009 (Reporting Period: October 1, 2009 - December 31, 2009)
 - March 31, 2010 (Reporting Period: January 1, 2010 - March 31, 2010)
- C. The PROVIDER shall submit an invoice at the end each reporting period for reimbursement of costs incurred during the period. Funds shall be distributed to the PROVIDER based upon invoices approved by the DEPARTMENT, which itemize actual contract accomplishments and associated costs and expenses. The PROVIDER agrees to maintain adequate financial records and shall hold them open for review by the DEPARTMENT. In addition, any and all subcontracts entered into by the PROVIDER to perform work or provide services in furtherance of the successful completion of this contract shall be subject to the review and approval of the DEPARTMENT.
- D. In addition to progress reports, the PROVIDER shall submit monthly status updates to the DEPARTMENT. These monthly status updates will be shown in tabular form providing percentage complete and expected completion dates for all activities expressed in this AGREEMENT. The DEPARTMENT will provide a template to be used for this purpose.

II. Activities:

- A. The DEPARTMENT will provide the Phase I environmental and hydrogeological data. The PROVIDER will be responsible for identifying data gaps and making conclusions and recommendations, based on the data provided to it and other publicly available data.
- B. The PROVIDER will be responsible for gathering public health data related to the general topic of slurry injection from whatever peer review (and potentially non-peer review) sources are available. Public health data may be gathered utilizing the following mechanisms:
1. The PROVIDER will create a website for public data collection.
 2. The PROVIDER will collect any publicly available data.
 3. The PROVIDER will invite federal, state, and local agencies, national foundations, and industry to contribute any human health effects data

that they consider pertinent to the human health effects of slurry injection.

4. The PROVIDER will create and make available a news story to the Central Appalachian media about the effort, and invite public or private submission of data. (Accept all materials submitted, and focus on data.)
- C. The PROVIDER may visit federal and state agencies and up to three foundations as needed for input into report creation.
- D. The PROVIDER may invite stakeholder visits.
- E. The PROVIDER will consult with leaders at the Environmental Protection Administration, the Agency for Toxic Substances and Disease Registry, the US Geological Survey, and other relevant federal agencies, and independent risk-assessment experts, as appropriate, to identify reviewers to participate on a expert panel:
 1. The PROVIDER will invite no fewer than three and no more than six reviewers to participate on the expert panel.
 2. The PROVIDER will submit the names of the expert panel to the DEPARTMENT, but the right to request the review and to choose the reviewers remains with the PROVIDER.
- F. The PROVIDER and affiliated consultants will analyze the Phase I environmental and hydrogeological data and the public health data to draft a Public Health Assessment Report addressing the following five issues.
 1. What are the known health hazards of the components of coal slurry (its major constituent contaminants) on human health? This assessment will be useful in the event that human exposure occurs following slurry underground injection. This component of the review does not presume that sufficient exposures to cause health hazards actually exist. It simply reviews what are the population health hazards should such exposure occur.
 2. What data already exist about human community health hazards from exposures to coal slurries contaminating water, soil, or air? This part of the Phase II study will review existing local, national, or international literature to determine what is currently known about data to determine the actual known or reported effects of coal slurry and its constituent contaminants on public health in communities, where it is determined that coal slurry or its constituent contaminants have migrated from injection sites into ground waters currently or historically used for domestic purposes, or habitated soils, and then into humans, or into air in breathing zones of communities and then into humans.
 3. The study will briefly recapitulate what is known about effects of coal slurry injection on surface water and aquatic ecosystems. This phase of the assessment project is directed at known human health effects, whereas this Phase II study is designed primarily as a human health risk

assessment. Therefore, this section will be a brief overview, and is structured primarily as a human health assessment.

4. Coal slurry injection is not the only choice for disposing of coal slurry. Therefore, a relevant question is, How do the known or suspected hazards of injection compare to other means of dealing with slurry from coal operations? This section of the document will briefly describe and compare what is known about coal slurry injection compared to hazards of coal slurry as surface impoundments.
 5. The Phase II report will enumerate and describe data gaps and their relative significance to the study.
- G. The PROVIDER will format the draft and final Public Health Assessment Report based on the United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), Agency for Toxic Substances and Disease Registry (ATSDR) Public Health Assessment Guidance Manual. The DEPARTMENT must approve any significant deviation from the ATSDR, PHA guidance.
- H. The PROVIDER will create an initial draft report based on preliminary findings.
1. The PROVIDER will schedule meeting date, time, and location to present the initial draft report to the DEPARTMENT.
 2. The PROVIDER will schedule meeting date, time, and location to present the initial draft report to other interested parties as approved by the DEPARTMENT.
 3. The PROVIDER will invite additional feedback from the DEPARTMENT and other interested parties and revise the draft report based on the feedback, if necessary.
- I. The PROVIDER will be available to present preliminary findings to the West Virginia State Legislature, if requested.
- J. Upon completion of the draft report, the PROVIDER will submit the draft report to the DEPARTMENT and to the independent expert panel for an external review that may take no more than four weeks.
- K. The PROVIDER will revise the draft report based on comments from the expert panel and the DEPARTMENT. In the event of any final disagreements concerning contents between the PROVIDER and the expert panel, the concerns of the expert panel will be included as an appendix to the report.
- L. The PROVIDER will submit the final Public Health Assessment Report to the DEPARTMENT no later than **December 31, 2009**. A minimum of forty (40) original bound final Public Health Assessment Reports will be required. In addition the PROVIDER will submit the final report in electronic format.
- M. The PROVIDER shall not distribute the final Public Health Assessment Report prior to the DEPARTMENT'S submittal to the West Virginia State Legislature.

- N. The PROVIDER will participate in presentation of the final Public Health Assessment Report to the West Virginia State Legislature, if requested.

III. Timeline

A. April 01, 2009-June 30, 2009

1. Receive and review Phase I and any other environmental and hydrogeological data.
2. Gather public health data from all sources.
3. Form expert panel.

B. July 1, 2009-September 30, 2009

1. Analyze data.
2. Identify data gaps, if present.
3. Create an initial draft report based on preliminary findings.
4. Schedule meetings with DEPARTMENT and interested parties to present initial draft report and collect feedback.
5. Revise draft report based on feedback, if necessary.

C. October 1, 2009-October 31, 2009

1. Revise draft report based on feedback.
2. Submit draft report to the DEPARTMENT.
3. Submit draft report to expert panel.

D. November 1, 2009-December 31, 2009

1. Receive comments from the DEPARTMENT and expert panel.
2. Revise draft document based on comments.
3. Submit final report to the DEPARTMENT.

E. January 1, 2010-March 31, 2010

Participate in presentation to West Virginia State Legislature, if requested.

IV. Terms of AGREEMENT

- A. The PROVIDER further agrees that all subcontracts entered into by the PROVIDER shall be subjected to prior approval of the DEPARTMENT. In addition, any and all subcontracts entered into by the PROVIDER to perform work or provide services in furtherance of the successful completion of this AGREEMENT shall be subject to review and approval of the DEPARTMENT.

- B. This AGREEMENT can be terminated by the DEPARTMENT or PROVIDER at any time during the agreement period if the DEPARTMENT or PROVIDER shows adequate cause that the DEPARTMENT or PROVIDER has not or is not fulfilling its responsibilities as detailed by the terms of the AGREEMENT.
- C. This AGREEMENT can be amended at any time by mutual agreement of the parties hereto, in writing, with such amendments being executed by the designated signatures.
- D. By mutual consent, both parties agree that the initiation of this AGREEMENT shall begin upon the date specified on the face of this document and that those signatory parties identified below have the authority, statutorily or otherwise, to enter into such AGREEMENT for the mutual benefit of their respective agencies and the citizens of the State of West Virginia.

FOR West Virginia University

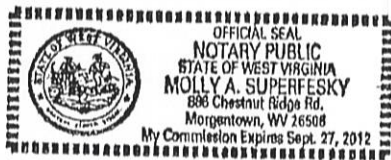
Authorized Signature: *Alan B. Martin* Date: 5/28/09

Printed Name and Title: Alan B. Martin
Asst. V.P. for Research & Econ. Development

Taken, sworn, and subscribed before me this 26 day of May, 20 09

Notary Public Signature: *Molly Superfesky*

My Commission Expires: Sept 27, 2012



FOR West Virginia Department of Health and Human Resources

[Signature] Date: 5/28/09