

TECHNICAL PROGRESS REPORT

APPALACHIAN CLEAN COAL TECHNOLOGY CONSORTIUM

Cooperative Agreement No.: DE-FC22-94PC94152

Project Report for the period

January 1, 1995 - March 31, 1995

Performing Organizations:

Virginia Polytechnic Institute & State University
Blacksburg, VA

University of Kentucky
Lexington, KY

West Virginia University
Morgantown, WV

Date Submitted: June 26, 1995

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INTRODUCTION

The Appalachian Clean Coal Technology Consortium (ACCTC) has been established to help U.S. Coal producers, particularly those in the Appalachian region, increase the production of lower-sulfur coal. The cooperative research conducted as part of the consortium activities will help utilities meet the emissions standards established by the 1990 Clean Air Act Amendments, enhance the competitiveness of U.S. coals in the world market, create jobs in economically-depressed coal producing regions, and reduce U.S. dependence on foreign energy supplies.

The consortium has three charter members, including Virginia Polytechnic Institute and State University, West Virginia University, and the University of Kentucky. The Consortium also includes industry affiliate members that form an Advisory Committee. Affiliate members currently include AMVEST Minerals; Arch Minerals Corp.; A.T. Massey Coal Co.; Carpc, Inc.; CONSOL Inc.; Cyprus Amax Coal Co.; Pittston Coal Management Co.; and Roberts & Schaefer Company.

OBJECTIVES

In keeping with the recommendations of the Advisory Committee, first-year R&D activities are focused on two areas of research: fine coal dewatering and modeling of spirals. The industry representatives to the Consortium identified fine coal dewatering as the most needed area of technology development. Dewatering studies will be conducted by Virginia Tech's Center for Coal and Minerals Processing and the University of Kentucky's Center for Applied Energy Research. A spiral model will be developed by West Virginia University. Project management and administration will be provided by Virginia Tech, for the first year.

DISCUSSION

A Consortium Council meeting was held on February 9, 1995 in Pittsburgh. In attendance were representatives of West Virginia University (Dr. Tom Meloy), University of Kentucky (Dr. B.K. Parekh), Virginia Tech (Dr. Jerry Luttrell), the Chairman of the Advisory Committee (Dr. Peter Bethell), and the Director (Dr. Roe-Hoan Yoon).

During the meeting, the initial recommendations of the Advisory Committee were reviewed. The recommendations included: 1) removal of the indirect thermal drying component from Virginia Tech's proposal, 2) West Virginia University should look at determining the ability of spirals to separate at a lower cut point and process a wider size distribution, and 3) the University of Kentucky should remove from its proposal components previously studied under DOE contract/grants (e.g., use of chemical reagents and fibers as filtration aids) and include vacuum filtration in the lab testing program. Each university was requested to submit revised proposals which would undergo a second review by the Advisory Committee. The recommendations from the committee are expected early in the next quarter.

A project kick-off meeting was held following the Council meeting, on February 10, 1995. The results of the Council meeting were presented to DOE at that time.

PLANS FOR THE NEXT QUARTER

The final decision on funding of individual projects should be made early in the quarter with subawards made soon thereafter. Due to the delays in finalizing the technical makeup of each project, a no-cost time extension will be requested from DOE. A paper will be prepared for inclusion in the proceedings for the July contractor's conference in Pittsburgh.