First, prior to final selection of an acid pollution control demonstration project site, coal reserves that will no longer be recoverable as a result of the project will be evaluated, and the owner or lessor of the emineral rights will be compensated equitably for the loss of rights to mine the coal.

Second, if possible to do so, before work is initiated at the demonstration site, the owner or lessor of the rights to the coal should be given sufficient time to mine the coal that otherwise would be lost. In the event it is not possible for the owner or lessor to mine, in a diligent and workmanlike manner, all of the coal involved, just compensation should be paid in the manner suggested.

Third, if mining within the demonstration area is permitted after reclamation has been completed, the operator of the mine will be liable for damages to the control measures installed and prior to opening the mine will be required to post bond in an amount sufficient to defray

the repair costs.

The amendments we have suggested would, in our opinion, assure payment of equitable compensation for loss of rights to coal that could be lost in connection with this program, or permit coal to be mined under conditions which would protect the government's investment in the program.

While the bill would authorize the Federal Government to share the cost of any demonstration project, it does not mention Federal sharing of subsequent costs of maintaining the pollution control meatures installed. We believe that this omission should be covered with an amendment specifically authorizing maintenance cost sharing

Bituminous Coal Research, Inc., has been searching since 1944, in the field and in the laboratory, for methods to prevent stream pollution from coal mine waters. Other efforts by research organizations and the coal industry can be traced back 50 years, yet it has only been during the past 10 years that combined efforts of industry and government have been accelerated sufficiently to produce significant—although not yet adequate—technological advances.

Our support of the program set forth in this bill, with the amendments we have recommended, is founded on an awareness on the part of the coal industry of the problems still remaining to be solved in controlling mine drainage pollution.

As you are aware, stream pollution by mine drainage is as old as the mining industry. Shortening the term to "drainage" adds years to the history of the problem. Many coal seams were first located by observation of stretches of red water—stained by iron precipitates—downstream from natural coal outcrops. Coal mining did not create the problem, but it compounded it in the course of supplying

the big coal tonnages demanded by industrial growth.

Lengthening the key term to "acid mine drainage" calls for more important qualification. Mine water discharges can be either acid or alkaline, and even change from one to the other in the life of a mine—from alkaline during development to acid during retreat mining, and then back to alkaline after the mine has been abandoned

for a time.

Even the term "acid" in connection with mine drainage is frequently misunderstood to conjure up the picture of a stream of corrosive sulfuric acid. In fact, little or no free sulfuric acid is present in mine