

While we recognize that there are beneficial spin-offs from these more glamorous programs, we respectfully submit that a better balance in Federal funding is urgently needed.

I cannot emphasize too strongly, gentlemen, that the correction of the environmental pollution problems associated with abandoned mines is not solely a Pennsylvania problem—they affect many other States. Because of the number of States affected, polluted streams are not respectors of State boundaries, and because the detrimental effects of these problems affect not only the State but also the National economy, these are National problems as well.

There are many people who will tell you that it is wrong to spend public moneys on correcting these problems—that an attempt should be made to locate the owners of the abandoned workings, or that the present coal industry should be saddled with correcting the sins of their long-gone brothers.

The simple fact of the matter is that, while we might agree that we would prefer that somebody else shoulder the burden, it is virtually impossible to trace these former owners and absolutely impossible to legally fix responsibility in those cases where the workings were abandoned prior to the passage of laws regulating mine drainage and requiring reclamation measures.

Of course, where it is possible to rectify the ills on past workings in conjunction with active mining operations, it is often possible to do so much cheaper with the cooperation of those in the private sector engaged in active mining.

I am not going to say too much about the need for additional trained personnel and technicians. This is a problem facing virtually every major program where technical skills and know-how are required, and failure to attract and utilize fresh technical blood could seriously delay our program.

Our hope is that the research programs which will be conducted by our colleges and universities will furnish additional specialists in this area. Most certainly, engineering personnel from allied fields, such as sanitary engineering, mine engineering, and hydraulic engineering, should lend their expertise to this work.

The third need—the need for research—is the one which I said I intended to qualify to some extent.

By this, I meant that our technicians in Pennsylvania are firmly convinced that many of the techniques and methods necessary to abate mine drainage and reclaim ravaged areas are already well-studied and well-understood.

Further, that research in these areas, except perhaps to find ways of reducing costs, is not urgently needed—we have adequate tools to begin and actually correct the problems now.

On the other hand, we do not deny that additional research is needed to find ways of lowering costs, to find ways of refining our cruder methods and to develop new approaches or techniques in certain areas.

I emphasize, however, that we do not need to delay our start for these.

The specialized areas where additional research is obviously needed would include: (1) research on the effects of auger-mining, (2) the study of the techniques of mining, and (3) the acid production which