Efforts toward rational assessments of risk associated with changes in soils are frustrated by lack of adequate understanding of the dynamics of the interaction of the contaminant and soil, as well as the underlying social ramifications associated with change. The basic concerns of soils, ecology, and toxicology assure that few individuals possess the education and experience to address the complex nature of the contaminant’s environmental and toxicological behavior from a technical prospective. Further, the arguments of Simms and Beckett (1987) and Vegter et al. (1988) about the use of science in the resolution of soil quality issues assures that misuse of science in formulation of public policy will occur as it is most certain that some decision will be made, with or without technical input. Decision makers without technical training fail to become informed on the technical issues and must rely on conflicting input from the technical community to formulate the technical issues for input into their decision. Thus, the decision makers are forced to rely on public policy issues to develop their response.

Science may not yield the final answer on the risk issue, but it can and must provide a technical basis "a bell curve with the preponderance of scientific evidence in the middle" on which social issues can be considered to develop the final answer. It must be recognized that the decision to allow anthropogenic changes in soil is a complex issue involving technical as well as policy decisions and that the correct decision cannot be reached if the technical and policy issues are not understood. It becomes apparent that the scientist must communicate

\[1\] Although the research described in this article has been undertaken by the U.S. Environmental Protection Agency, it has not been subjected to Agency review. Therefore, it does not necessarily reflect the views of the Agency.