

Stephen H. McCracken, Project Manager  
U. S. Department of Energy  
Weldon Spring Site Remedial Action Project Office  
7925 Highway 94 South  
St. Charles, Missouri 63304

Dear Mr. McCracken,

The time has come, it seems, when I can refocus on the goal of realistically evaluating the proposed actions for the Weldon Spring site. I do not refer to the real realistic evaluation because it surely is based on the actual hazard than risk analysis.

Recent reports on television and in news papers indicate, people are dying from exposures to toxic chemicals, nuclear power plant disasters, drunken drivers and incompetent health care. If one avoids these hazards and with little help from replacing the overused and tired organs and tissues, dying seems like a happening of the past centuries. All that needs to be done is to reduce life to zero risk. This will require first the full understanding of risk analysis as carried out by experts.

The comparative listing of various risks ( as provided in the RI/FS-EIS) makes it evident that I have to give up being a policeman with a  $2 \times 10^{-4}$  annual risk of death (AR), driving motor vehicles ( $2 \times 10^{-4}$  AR), and being a "frequent flying" professor ( $5 \times 10^{-5}$  AR). I was, to say the least, stunned to find that by switching from city water ( $6 \times 10^{-7}$  AR) to what the Environmental Protection Agency considers contaminated water at the Raffinate pits, I could actually lower my risk by a factor of 500. It was also distinctly unnerving to find out that the potassium in my body, which contains a radioactive isotope, gave me 4-500 times the radiation level of that of the air around the Chemical plant area, and 100 times that from being a hiker in the Weldon Spring wild life area. Should we, I wondered, abandon superfund and find a substitute for potassium in the body? Astonishingly, corn contains aflatoxin at appreciable levels as does peanut butter and, for me, giving up these two delicacies is not going to be an easy trade-off for mere immortality. Apparently, plants learned through evolutionary time that chemical warfare is an extremely effective way to fight off fungi, insects, and animal predators. Unfortunately, these species have the same type of genetic code as I do, so that whatever I eat, I am consuming mutagens and carcinogens rated everywhere as hazardous to my health.

Clearly, to get to zero risk I must give up walking up and down stairs, not play physical sports, or live in a metropolitan area with a population higher than 100,000, and innumerable other temptations. I am willing to sit in a rocking chair with a lead roof over my head and be fed amino acids intravenously in order to live forever.

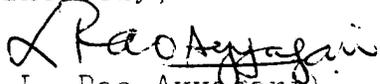
Still, a scientist does not necessarily see risk in the same way as the public does. The public regards deaths caused by mysterious and invisible technology (such as nuclear power plant failure or the threat from high voltage or electromagnetic fields) or the

simultaneous deaths of a large number of people (air plane crashes) as being far worse than those from well-known causes (from cancers directly related to smoking) or the same number of deaths occurring in multiple locations (as in automobile accidents). Therefore, I had no choice than to evaluate the proposed actions based on exhaustive scientific data contained in the RI/FS-EIS documents because excessive worry about the inherent value of the risk analysis can cause peptic ulcers and lead to my death from "natural causes".

Thus, although my commitment to the goal of immortality is unswerving, I am not positive that a zero risk society is yet in the immediate future. Given that as it may be, I am very comfortable that this report is based on the best available methodology and comprehensive in its considerations. I also believe that the preferred alternative 6a of the Department of Energy was the result of very careful evaluation of cost-effectiveness, longevity of the cell's containment of hazardous material, and prudent management practices. I fully concur with this alternative and list few minor comments in the next few pages.

On a personal note, I am extremely pleased with the gradual maturity of the project management and special improvements made in the scientific aspects of the project. I look forward to a successful remediation of the Weldon Spring Chemical plant area and the Quarry in the immediate future.

Sincerely,



( L. Rao Ayyagari )  
Professor of Biology  
Lindenwood College  
209 S. Kingshighway  
St. Charles, MO 63301