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Mr. John W. N. Hickey  
Chief, Enrichment Branch  
Division of Fuel Cycle Safety and Safeguards  
Office of Nuclear Material Safety and Safeguards, Mail Stop 4-E-4  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Mr. Hickey:

I have been afforded the opportunity to review NUREG-1484, "Draft Environmental Impact Statement for the Construction and Operation of Claiborne Enrichment Center, Homer, Louisiana." I wish to provide the following comments from the perspective of a nuclear engineer.

1. The gas centrifuge technology proposed for this project is well tested and understood. The reliability of the proposed facility should be adequate to protect all environmental interests. This issue appears to be appropriately addressed in Chapter 4.
2. From the standpoint of the amount of electrical energy per atom of U-235 enriched, the gas centrifuge method is superior to gaseous diffusion technology. Thus, in comparison to gaseous diffusion technology, the environmental effects from electricity production will be reduced by a corresponding amount if fossil fuel is used to provide the electricity. If nuclear power is used, the release to the environment will be essentially independent of the quantity of uranium separated. A 50-to-1 advantage in electricity consumption is quoted on page 2-55. A reference for this figure should be given.
3. The discussion of indigenous plant and animal species in Section 3.5 is comprehensive. The base line data for determination of effects upon flora and fauna appear to be adequate. In Section 3.8, the cattle ranches should be identified as being either dairy or beef.
4. In Table 3.51 on page 3-129, <sup>137</sup>Cs is identified as being present in the majority of sediment and soil samples. Some explanation of the source of this isotope should be presented, since <sup>137</sup>Cs does not ordinarily occur naturally. In addition, Table 5.1 shows sampling locations for radiological monitoring. The locations identified in Table 3.51 should be used in an operational sampling program since a record of

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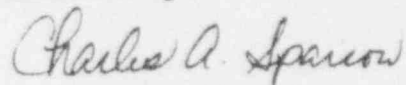
Mr. John W. N. Hickey  
page two

existing radionuclide inventory has been developed for those locations.

5. The discussion of air pollution from mobile sources given in Section 4.1.6 is quite detailed. The effect of seasonal variations in emissions, due to differences in gasoline composition as indicated by Reid Vapor Pressure, might be noted.

In my view, NUREG-1484 addresses all pertinent issues relating to environmental considerations. Conclusions are based upon contemporary data, and methodology is clearly identified. The Draft Environmental Impact Statement addresses those issues of substance relevant to the siting, construction, and operation of a gas centrifuge facility near Homer, Louisiana. It is my personal opinion that the document provides an adequate basis for continued development.

Sincerely,



Charles A. Sparrow, Ph.D.