----Original Message----

From: |

Sent: Monday, January 03, 2011 11:50 PM

To: Fusrap, LRB

Subject: RAO's and ARAR's Technical Memorandum

In response to the Corps of Engineers request for public input regarding the December 2010 USACE Technical Memorandum on RAO's and ARAR's please accept the following comments.

According to the Corp, "The NFSS Feasibility Study is the mechanism for the development, screening and detailed evaluation of the remedial alternatives to address any contamination identified in the Remedial Investigation."

Unfortunately, at this point in time, the NFSS Remedial Investigation is incomplete: significant contamination has been identified which has not been investigated or characterized. Major data gaps include:

- i) incomplete identification and characterization of IWCS contents. In addition to uranium ore residues, there is evidence that nuclear reprocessing wastes containing a variety of radionuclides including cesium-137, strontium-90 and plutonium were deposited into the IWCS.
- ii) no investigation of evidence of IWCS leakage. Uranium concentrations of 1,000 pCi/L have been detected in groundwater south and east of the IWCS, but there has been no investigation of these highly elevated uranium levels (background is 10 pCi/L)
- iii) no investigation of the preferential pathways identified around the IWCS, which have allowed contamination to rapidly migrate across the NFSS. How far has the leakage spread?
- iv) no investigation of the effects of adjacent landfill operations on IWCS integrity. Modern is known to have completely reversed the direction of flow of the lower water bearing zone around the IWCS for several years, yet there has been no evaluation of the effect of this dramatic event on the IWCS
- v) Failure to establish a valid background for ground waters on the NFSS. Modern, down gradient of the IWCS was used to establish a combined background for the lower and upper ground waters. The two ground waters are very different and a single background is not valid.

Such serious deficiencies in the Remedial Investigation preclude USACE moving forward with a satisfactory Feasibility Study for the NFSS. The Feasibility study should not be allowed to proceed until sufficient data of the required quality has been obtained in the Remedial Investigation.



Classification: UNCLASSIFIED
Caveats: NONE