

May 30, 1986

Note to: Merri Horn, NMSS

From: Ann Hodgdon, OELD

SUBJECT: NEED FOR FURTHER EVALUATION OF THE DISPOSAL OF
THE WEST CHICAGO MATERIAL AT THE EXISTING LOW-
LEVEL RADIOACTIVE WASTE BURIAL SITES

In connection with the preparation of the Supplemental Draft Environmental Impact Statement concerning the disposal of the West Chicago wastes, you have asked OELD whether the Staff's consideration under NEPA of alternatives to Kerr-McGee's proposal for onsite disposal should include further evaluation of disposal in the existing low-level waste disposal sites at Richland, Washington; Beatty, Nevada and/or Barnwell, South Carolina, *i.e.*, beyond the evaluation included in the FES. For the reasons that follow, we believe that the Staff need not further evaluate such an alternative.

The Low-Level Radioactive Waste Policy Amendments Act of 1985 (42 U.S.C. § 2021b *et seq.*) (LLRWPA) defines low-level radioactive waste as radioactive waste that is "not high-level radioactive waste, spent nuclear fuel, or byproduct material (as defined in Section 11e.(2) of the Atomic Energy Act of 1954 (42 USC: 2014(e)(2))." Section 11e.(2) defines by-product material as "the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content." Based upon analysis reflected in the FES (Appendix H, pp. H-2 to H-5), the NRC staff has concluded that the wastes on the Rare Earths Facility site should be considered to be by-product material. The LLRWPA returned to each state the responsibility to dispose of low-level radioactive wastes generated in that state. The legislation did not enlarge the authority of the states over radioactive wastes other than low-level. Thus, the LLRWPA does not change existing law regarding wastes such as those at West Chicago.

Although the LLRWPA does not require the disposal sites established under that statute to accept 11e.(2) by-product material for disposal, no provision of the statute explicitly prohibits states from accepting these materials. However, even though the LLRWPA does not explicitly prohibit the regional disposal facilities located at Barnwell, South Carolina; Richland, Washington; and Beatty, Nevada from accepting by-product material for disposal at these facilities, the Act sets certain limitations on the availability of Barnwell, Richland and Beatty. Under the Act as amended, the State of South Carolina may limit the volume of low-level radioactive waste accepted for disposal at Barnwell to

a total of 8,400,000 cubic feet of low-level radioactive waste during the seven year period beginning January 1, 1986 and ending December 31, 1992; the State of Washington may limit the amount of such waste for disposal at Richland to 9,800,000 cubic feet during that same period and the State of Nevada may limit the amount of such waste to be disposed at Beatty to 1,400,000 cubic feet for that same period. Thus, the three states in which the existing sites are located may limit the total amount of low-level wastes to be disposed at these sites during the seven years ending December 31, 1992, to 19,600,000 cubic feet.

The three existing disposal facilities are required to accept as much as 11,900,000 cubic feet of low-level radioactive waste generated by commercial nuclear power reactors during the seven year interim access period. Thus, the total capacity to which the states in which the interim sites are located may limit disposal is 19,600,000 cubic feet of which 11,900,000 is allocated to reactors. There are 400,000 cubic yards (or 10,800,000 cubic feet) of waste material at West Chicago. This is more than the residual capacity of the three interim sites once the reactor allocation is subtracted.

Since the total available capacity of the three interim sites is less than that required to dispose of the West Chicago wastes, disposal at these sites need not be evaluated under NEPA as an alternative to Kerr-McGee's proposed plan to dispose of the waste onsite.

Disposal at one of the interstate compact sites need not be considered as an alternative to onsite disposal at West Chicago because these facilities will not be available in the timeframe contemplated for disposal of the West Chicago wastes and because no compact facility would be required to accept the West Chicago wastes. The Central Midwest Compact, of which Illinois is a member, would not be obligated to accept the West Chicago material, even if the Central Midwest Compact facility were ready to accept wastes for disposal in the required timeframe. The Central Midwest Compact defines low level radioactive waste as excluding among other things "by-product material as defined in Section 11e.(2) of the Atomic Energy Act of 1954."

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for Ann P. Hodgdon

cc: Steve Tsai, ANL