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2600 Bull Street
Columbia, SC 29201-1708

November 8, 1999

COMMISSIONER:
Douglas E. Bryant

Mr. Tom O'Brian
Office of State Programs
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

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Dear Mr. O'Brian:

Mark B. Kent
Secretary

We are providing technical information requested on November 2, 1999, in SP-99-074 to assist the NRC in addressing the October 25, 1999 letter from the U.S. House of Representatives.

Howard L. Brilliant, MD

In response to questions 42, defined terms in our regulations are substantially the same as those in NRC regulations. We do not have any terms in our regulations related to release of radioactive materials. The following terms and definitions are included in South Carolina Regulations:

Brian K. Smith

Rodney L. Grandy

Larry R. Chewning, Jr., DMD

"Byproduct Material" (1) any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to radiation incident to the process of producing or utilizing special nuclear material, and (2) the tailings or waste produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content.

"Disposal" the isolation of waste from the biosphere inhabited by man and his food chains by emplacement in a land disposal facility.

"Waste" those low-level radioactive wastes that are acceptable for disposal in a land disposal facility. For the purposes of this definition, low-level waste has the same meaning as in the Low-Level Radioactive Waste Policy Amendments Act of 1985, P.L. 99-240, radioactive waste not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or byproduct material as defined in section 11 e.(2) of the Atomic Energy Act (uranium or thorium tailings and waste).

In response to question 43, we have not approved any materials for unrestricted use. We have approved alternate methods of disposal under the state equivalent to 10 CFR 20.2002. These have been approved on a case-by-case basis using a dose criteria of 1 millirem per year to the maximally exposed individual. Some very low activity materials have been approved for disposal in industrial landfills and RCRA disposal cells.

SP-A-4

SP-AG-25

PDR STPRG

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The following is our response to the six questions on release of solid materials.

1. South Carolina has performed evaluations on a case-by-case basis to develop criteria for alternate methods of disposal and for decommissionings. They have been developed using the RESRAD family of code. For alternate methods of disposal, the maximum annual dose that has been used is one (1) millirem and for decommissionings, the maximum annual dose which has been used is 15 millirem, which is consistent with the 25 millirem decommissioning standard and applies ALARA.
2. The criteria is applied through regulations, guidance documents and licensing actions for decommissionings, and through guidance for alternate methods of disposal.
3. We have generally used the surveying methods of NUREG 5849 and some of the methods of MARSSIM for decommissionings. Representative sampling and laboratory analysis have been used for the alternate methods of disposal.
4. Hand held and stationary instruments are used for analysis. Field screening is done with hand held instruments and solid samples and smears are taken for laboratory analysis. The lower limits of detection are determined based the amount of residual activity calculated using the RESRAD codes.
5. Our release criteria is one millirem for alternate methods of disposal and 25 millirem with ALARA for decommissioning.
6. We do not have any licensees that have volumetric release authorization.

If you need any other information, please call me at (803) 896-4244 or Henry Porter at (803) 896-4245.

Very truly yours,



Virgil R. Autry, Director
Division of Radioactive Waste Management
Bureau of Land and Waste Management

SP99074/HJP/



FAX MESSAGE

DATE: 11/8/99

NUMBER OF PAGES INCLUDING COVER SHEET: 2

PLEASE DELIVER THIS FAX MESSAGE

TO: Tom O'Boon
NAME

USNRC
ORGANIZATION/DEPARTMENT

(301) 415-3522
FAX NUMBER

(301) 415-2308
OFFICE NUMBER

FROM: Henry Puck

BUREAU OF LAND & WASTE MANAGEMENT/DIVISION OF RADIOACTIVE WASTE MANAGEMENT

(803) 896-4242
FAX NUMBER

(803) 896-4242
OFFICE NUMBER

SUBJECT/COMMENTS: _____

