October 1, 1967

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Service List

Docket No. 50-320

Mr. F. R. Standerfer Vice President/Director Inree Mile Island Unit 2 SPU Nuclear Corporation P. O. Box 450 Middletown, PA 17057

Dwar Mr. Stangerfer

Subject: Staging of Mittain Solidification Liners in the Easte Hendling and Fackaging Facility (M85359)

In your letter of only 74, 1987 you requested RRC approval for the staging of two reducative wasts solidification liners in the Waste dandling and Packaging Facility. These two liners contain different waste forms, radiomaclide mix and resisuacilide inventory than previously enalyzed in the safety evaluation. Based on our review of the information you provided we have determined that the proposed change does not involve a significant hazard or a significant risk to the health and safety of the public, we therefore approve these changes. Our safety valuation is enclosed.

Sincerely

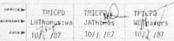
DRIGHTAL SIGNED BY:

William D. Travers, Director THI-2 Cleasup Project Strectorate

Enclosure: As stated

cc: T. F. Bumefit
R. E. Rogan
W. E. Potts
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STAGING OF HITIMAN LINERS IN THE WASTE HANDLING

AND PACKAGING FACILITY

SAFETY EVALUATION

INTRODUCTION

The Maste Handling and Packaging Facility(MMPF) is designed to process and package radioactive and contaminated items generated by the IMI-2 cleanup. The MRC staff found the proposed operation of the WMPF acceptable and documented approval in the July 10, 1986 Safety evaluation. (reference 2). By references 3 and 4 General Public Utilities Nuclear (EPDM) (Orporation, the litensies, requested that the radionuclide mix and inventory allowed in the MMPF be updated to reflect the change in the mix as the cleanup and defueling progressed. The MRC staff reviewed these changes, found them acceptable and approved them in reference 5.

The current proposal would allow the use of the MMPF for inspection of two previously packaged liners. The liners contain 274 and 228 curies respectively with strontium and cesium being the principal radionuclides. The resin and sand containing the radionuclides have been solidified in concrete inside the liners.

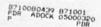
EVALUATION

The staff has evaluated the putential effsite dose consequences of putential actidents associated with staging the two Hittmen liners in the MHPP and compared the results with the previous analyses. The worst case previously assumed was 7.5 Cl of "moreal" waste containing 90.3x CS-137, 2.4x CS-124 at 7.3x Sr-90 and an additional 7.5 Cl of "defueling" waste containing 50x Sr-90, IOX CS-134, 24x CS-124 and 6x transurante (actinide) activity. The worst case accident previously analyzed was a fire in which paper, rags, and decontamination materials containing the radionuclides burned. The resultant hypothetical worst case offsite dose commitment was 119 merem.

In the current case the radionuclide wip is 89.25 5r-90, 7.31 (5:137, 2.2% 55-125 and 1.33 other radionuclides with 0.15 being actinides (including uranium and transurants). Since the concrete will not burn the worst case accident considered was a drop of the liner. The resultant hypothetical offsite dose commitment was 7 mrem. This is well within the bounds previously analyzed and is a small part of the limits in 10 CFR 100.

CONCLUSION

The staff concludes that the staying and inspection of the Hittman liners in the WHPF does not pose a significant risk to the health and safety of the public and does not involve a significant hosard.



REFERENCES

- GFU letter 4410-85-1-0128, F. R. Standerter to E. D. Travers, Technical Evaluation Report for the Waste Hundling and Packaging Facility, dated November 12, 1985.
- MRC letter MRC/IMI-86-068, w. D. Travers to F. R. Standerfer. Safety Evaluation for Waste Hundling and Packaging Facility and Recovery Operations Plan Change Nu. 34 dated July 10, 1986.
- GPUN letter 4410-86-1-0219, F. R. Standerfer to W. D. Travers, Waste Handling and Packaging Facility Technical Evaluation Report, dated January 14, 1987.
- 6PUN letter 4410-87-1-0016, F. R. Standerfer to M. D. Travers, Wester Hendling and Packaging Facility Technical Evaluation Report, dated February 2, 1987.
- KRC letter NRC/1MI-87-017. W. D. Travers to F. R. Standerfer, Safety Evaluation for the Waste Handling and Packaging Facility dated March 5, 1987.
- GPUN letter 4410-87-L-D062, F. R. Standerfer to W. D. Travers, Staging of Hittman Soliditication Liners in the Maste Handling and Packaging Facility, dated July 24. 1987.