

CHAPTER 6

WASTE CONFINEMENT AND MANAGEMENT

6.0 WASTE CONFINEMENT AND MANAGEMENT

6.1 WASTE SOURCES

No contaminated wastes are generated during the storage of irradiated fuel in the H. B. Robinson (HBR) Independent Spent Fuel Storage Installation (ISFSI). The contaminated waste generated as a result of loading the spent fuel into the dry shielded canister (DSC) and into the IF-300 shipping container (see Chapter 5 for discussion of operations) is handled using existing H. B. Robinson Steam Electric Plant Unit No. 2 (HBR2) systems and procedures. The small amounts of contaminated waste which may be generated consist of the spent fuel pool water and air and inert gas which are vented from the DSC and the cask during the drying operation. The handling of spent fuel and loading into the canisters occurs in the existing cask handling area within the Fuel Handling Building of HBR2.

6.2 OFFGAS TREATMENT AND VENTILATION

Small amounts of slightly contaminated air and inert gas may be generated during loading of the spent fuel into the dry shielded canister and then the cask. Since the spent fuel will be handled as if it is being prepared for offsite shipment using the IF-300, no new procedures are required. The HBR2 ventilation systems will be used to control any gaseous wastes generated. The ventilation systems are described in Chapter 9 of the UFSAR.

6.3 LIQUID WASTE TREATMENT AND RETENTION

The only liquid waste generated from the ISFSI results from loading the spent fuel assemblies into the dry shielded canister and into the IF-300 shipping container. This liquid waste is handled using existing HBR2 systems and procedures. The liquid waste system is described in Section 11.2 of the UFSAR.

6.4 SOLID WASTES

The ISFSI is not expected to generate any solid waste. Should any solid waste be generated, however, the existing HBR2 procedures will be used to process and dispose of the waste. Section 11.4 of the UFSAR describes the HBR2 solid waste processing system, the design basis, and an identification of the normal types of solid waste generated by HBR2 operations.

6.5 RADIOLOGICAL IMPACT OF NORMAL OPERATIONS - SUMMARY

The HBR ISFSI is a passive and independent system which provides for the dry storage of irradiated fuel. The ISFSI will not cause a significant radiological impact; the ISFSI has no requirement for radwaste or auxiliary systems for normal operation. Liquid and gaseous effluents utilized in the loading and handling of the Dry Shielded Canisters will be handled using the plant's existing process systems. There will be essentially no solid, liquid, or gaseous wastes generated during normal operation of the ISFSI.

The existing HBR2 health physics program and procedures are followed to maintain exposures ALARA during routine surveillances of the ISFSI.

REFERENCE: CHAPTER 6

- 6.1 Carolina Power & Light Company, "H. B. Robinson Steam Electric Plant Unit No. 2 Updated Final Safety Analysis Report," Docket No. 50-261, License No. DPR-23.