TABLE 2.1-1

MPC-HB HB FUEL ASSEMBLY LIMITS

A. Allowable Contents (Notes 1 and 2)

1. Uranium oxide, INTACT FUEL ASSEMBLIES and DAMAGED FUEL ASSEMBLIES, with or without channels, meeting the criteria specified in Table 2.1-2 and the following specifications.

Cladding type	ZR (Notes 3 and 4)
Planar-Average Initial enrichment	$\leq$ 2.60 and $\geq$ 2.08 wt% ^{235}U.
Post-irradiation cooling time per assembly	$\geq$ 29 years
Average burnup per assembly	$\leq$ 23,000 MWD/MTU
Decay heat per assembly	$\leq$ 50 Watts
Decay heat per SFSC	$\leq$ 2000 Watts
Fuel assembly length	$\leq$ 96.91 inches (nominal design)
Fuel assembly width	$\leq$ 4.70 inches (nominal design)
Fuel assembly weight	$\leq$ 400 lb (including channel and DFC)

B. Quantity per MPC-HB: Up to 80 fuel assemblies.

C. DAMAGED FUEL ASSEMBLIES must be stored in a DAMAGED FUEL CONTAINER. Allowable Loading Configurations: Up to 28 DAMAGED FUEL ASSEMBLIES in DAMAGED FUEL CONTAINERS, can be stored in the peripheral fuel storage locations as shown in Figure 2.1-1, or up to 40 DAMAGED FUEL ASSEMBLIES in DAMAGED FUEL CONTAINERS, can be stored in a checkerboard pattern as shown in Figure 2.1-2. The remaining fuel storage locations may be filled with INTACT FUEL assemblies meeting the above applicable specifications, or with INTACT FUEL assemblies optionally stored in DFCs.

NOTE 1: Fuel assemblies with channels may be stored in any fuel cell location.

NOTE 2: The total quantity of damaged fuel permitted in a single DAMAGED FUEL CONTAINER is limited to the equivalent weight and special nuclear material quantity of one intact fuel assembly.

NOTE 3: ZR means any-zirconium-based fuel cladding material authorized for use in a commercial nuclear power plant reactor.

NOTE 4: Storage as a DAMAGED FUEL ASSEMBLY of material in the form of loose debris consisting of zirconium clad pellets, stainless steel clad pellets, unclad pellets or rod segments up to a maximum of one equivalent fuel assembly is allowed.