

NRC FORM 651

(3-1999)
10 CFR 72

**CERTIFICATE OF COMPLIANCE
FOR SPENT FUEL STORAGE CASKS**
Supplemental Sheet

U.S. NUCLEAR REGULATORY COMMISSION

Certificate No. 1032

Amendment No. **65**

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DESCRIPTION (continued)

There are three types of MPCs: the MPC-37, MPC-89 and MPC-32ML. The number suffix indicates the maximum number of fuel assemblies permitted to be loaded in the MPC. All MPC models have the same external diameter.

The HI-TRAC VW transfer cask provides shielding and structural protection of the MPC during loading, unloading, and movement of the MPC from the cask loading area to the storage overpack. The transfer cask is a multi-walled (carbon steel/lead/carbon steel) cylindrical vessel with a neutron shield jacket or neutron shield cylinder attached to the exterior and a retractable bottom lid used during transfer operations.

The HI-STORM FW storage overpack provides shielding and structural protection of the MPC during storage. The overpack is a heavy-walled steel and concrete, cylindrical vessel. Its side wall consists of plain (unreinforced) concrete that is enclosed between inner and outer carbon steel shells. The overpack has air inlets at the bottom and air outlets at the top to allow air to circulate naturally through the cavity to cool the stored MPC. The inner shell has supports attached to its interior surface to guide the MPC during insertion and removal and provide a means to protect the MPC confinement boundary against impactive or impulsive loadings. A loaded MPC is stored within the HI-STORM FW storage overpack in a vertical orientation. **The HI-STORM FW storage overpack can be arrayed in a free-standing or anchored configuration.**

CONDITIONS**1. OPERATING PROCEDURES**

Written operating procedures shall be prepared for handling, loading, movement, surveillance, and maintenance. The user's site-specific written operating procedures shall be consistent with the technical basis described in Chapter 9 of the FSAR.

2. ACCEPTANCE TESTS AND MAINTENANCE PROGRAM

Written acceptance tests and a maintenance program shall be prepared consistent with the technical basis described in Chapter 10 of the FSAR. At completion of welding the MPC shell to baseplate, an MPC confinement weld helium leak test shall be performed using a helium mass spectrometer. The confinement boundary welds leakage rate test shall be performed in accordance with ANSI N14.5 to "leaktight" criterion. If a leakage rate exceeding the acceptance criteria is detected, then the area of leakage shall be determined and the area repaired per ASME Code Section III, Subsection NB, Article NB-4450 requirements. Re-testing shall be performed until the leakage rate acceptance criterion is met.

3. QUALITY ASSURANCE

Activities in the areas of design, purchase, fabrication, assembly, inspection, testing, operation, maintenance, repair, modification of structures, systems and components, and decommissioning that are important-to-safety shall be conducted in accordance with a Commission-approved quality assurance program which satisfies the applicable requirements of 10 CFR Part 72, Subpart G, and which is established, maintained, and executed with regard to the storage system

4. HEAVY LOADS REQUIREMENTS

Each lift of an MPC, a HI-TRAC VW transfer cask, or any HI-STORM FW overpack must be made in accordance to the existing heavy loads requirements and procedures of the licensed facility at which the lift is made. A plant-specific review of the heavy load handling procedures (under 10 CFR 50.59 or 10 CFR 72.48, as applicable) is required to show operational compliance with existing plant specific heavy loads requirements. Lifting operations outside of structures governed by 10 CFR Part 50 must be in accordance with Section 5.2 of Appendix A **and Section 3.4.7 of Appendix B.**