

**TOPICAL QUALITY ASSURANCE REPORT****TQR 13.0****HANDLING, STORAGE, SHIPPING
CLEANNESS CONTROL,
AND HOUSEKEEPING**

Rev. 9 Draft A

Date 10/21/96

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13.1 GENERAL REQUIREMENTS

Written instructions or procedures shall be established and implemented for the cleaning, shipping, storage, preservation, packaging, and handling of specified items. These instructions and procedures shall delineate measures which prevent degrading an item through damage or deterioration. When necessary for particular products, special protective environments such as inert gas atmosphere, specific moisture content levels, and temperature levels shall be specified and provided.

Housekeeping procedures and instructions shall require cleanliness to be maintained at a level consistent with the work performed to prevent the entry of foreign material into safety related systems. Control of personnel, tools, equipment and supplies shall be established with approved procedures or instructions when the safety function of a system, component or item may be jeopardized and also while the reactor system is opened for inspection, maintenance or repair. Documented cleanliness inspections shall be performed prior to system closure.

13.2 IMPLEMENTATION**13.2.1 General**

Instructions or procedures shall be written to define the requirements and responsibilities for the housekeeping, cleaning, packaging, preservation, handling, storage, and shipping of equipment and material, and shall require implementation of the established design and specification requirements by personnel having appropriate qualifications. FPL may delegate any portion of the responsibility for cleaning, housekeeping, handling, storage and shipping of material and equipment, but shall retain ultimate responsibility. Where any of the functions in the sections which follow is delegated to a contractor, the contractor shall be required to adhere to the FPL requirements stated herein.



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13.2.2 Handling, Storage, and Shipping Procedures

Materials and equipment which are to be incorporated into a safety related system of a nuclear power plant shall be handled, stored, and shipped in accordance with written procedures, where necessary, to implement the design document and purchase order requirements. These procedures shall assure that cleaning, handling, storing, packaging, shipping, and preserving materials, components and systems will preclude damage, loss, or deterioration by environmental conditions, such as temperature or humidity.

Site specific procedures or specific work instructions shall be developed which provide guidelines in handling heavy loads that are lifted over, or in proximity to, irradiated fuel or safe shutdown equipment/systems.

The preparation and/or implementation of these procedures may be delegated to other organizations, but FPL shall retain the ultimate responsibility for proper material handling, storage, and shipping.

13.2.3 Cleanness Procedures

Procedures or work instructions for cleaning; cleanliness control practices and inspections; examinations or tests to verify cleanliness of items; shall be prepared and implemented.

13.2.4 Housekeeping Procedures

Methods and techniques for controlling and maintaining housekeeping and documenting housekeeping surveillances and inspections shall be delineated in procedures or instructions.



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13.3 RESPONSIBILITIES

13.3.1 The Site Vice President has overall responsibility for ensuring that handling, storage, shipping, cleanliness and housekeeping requirements are identified, and implemented.

13.3.2 The Vice President Nuclear Engineering and ~~Licensing~~ is responsible for:

- a. Identifying special handling and storage requirements for site-fabricated items in applicable design output documents/work instructions;
- b. Identifying cleaning and cleanliness verification methods in appropriate specifications, drawings or procedures.

13.3.3 The Director Nuclear Assurance is responsible for:

- a. Verifying proper handling, storage, and shipping activities at supplier facilities;
- b. Verification of housekeeping, handling, storage, shipping and cleanliness of items through inspections, surveillances, examinations or tests at the plant site.

