

USNRC License Renewal Application

UNBOLTING AND BOLTING OF NUCLEAR GAUGING DEVICES

Purpose

This procedure provides instruction for the removal from service, relocation, alignment and the reinstallation of nuclear gauging devices covered under the World Kitchen specific license.

Scope

This procedure is applicable only for the approved Non-Routine Maintenance activities to include:

- Installation of devices
- Removal or relocation of devices
- Alignment of Devices
- Relocation of Devices
- Initial survey of devices

Prerequisites

Authorized Users performing the removal, alignment, relocation, installation and initial survey of licensed devices must possess the following training qualifications and demonstrate proficiency in the assigned tasks:

1. Successful completion of a device manufacturer/distributor or equivalent course.
2. Successful completion of specific training as prescribed in NUREG 1556, Volume 4, Appendix N.
3. Prior to removal of a nuclear gauging device, a specified location must be identified to securely store the device. The chosen storage location will meet the following requirements:
 - a. The storage location will be located in an area of the facility with low traffic patterns.
 - b. The access door to the cabinet or room shall be locked and will be labeled with a "Caution, Radioactive Materials" sign with contact phone numbers for the Radiation Safety Officer or designee.
 - c. Only the Radiation Safety Officer or designee will maintain the key(s).

The World Kitchen RSO is the only licensee representative authorized to conduct non-routine maintenance.

Precautions and Limitations

World Kitchen personnel will not perform maintenance on the device other than shutter operational checks, leak tests, radiation exposure surveys, removal, relocation, alignment and installation.

Maintenance activities involving mechanical shutter repair, sealed source or shielding removal are NOT AUTHORIZED under this procedure. Contact the RSO or device manufacturer.

Nuclear gauging devices may be removed from service under the following conditions:

- A World Kitchen Authorized User or an individual specifically licensed to perform this service is present
- Shutter mechanism shall be in the closed position and secured prior to removal from mounting
- Devices shall have a gross weight of not more than 700 lbs
- Devices must have a valid leak test performed prior to removal

Nuclear gauging devices will be removed from storage and re-installed under the following conditions:

- A World Kitchen Authorized User or an individual specifically licensed to perform this service is present
- Devices are operational and possess a valid leak test
- Shutter mechanism shall be in the closed position and secured prior to installation
- Devices shall be maintained under continuous surveillance during this operation
- Appropriate labels and signs will be in place and conspicuous

Replacement Parts

World Kitchen shall ensure that any non-manufacturer/non-distributor supplied replacement components or parts, or the use of materials (e.g., lubricants) other than those specified or recommended by the manufacturer or distributor are evaluated to ensure that they do not degrade the engineering safety analysis performed and accepted as part of the device registration

Quality Assurance

Before being returned to routine use, the Authorized User shall ensure that the gauge is tested to verify that it functions as designed and source integrity is not compromised.

Survey Equipment

Surveys performed prior to removal, relocation, alignment and following installation shall be performed with a calibrated survey instrument and the results documented as per the RSO's instructions. Radiation surveys performed during and following installation and shall include the levels in all areas surrounding the device with the shutter in the open position.

Records

Survey records shall include the following as a minimum:

- Name of individual conducting the survey
- Date of survey
- Instrument used (including calibration record)
- Measured radiation levels correlated to location of measurements

Records shall be retained for inspection as required.