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Minor Revision

Document: Jewel Box 90c Real Time X-Ray Inspection System

List Changes:

1. Removed Greg Deuerling's name as an Authorized Operator
2. Added Alan Prosser's name as an Authorized Operator

Prepared By: A. Pavnica Date: 12/14/07

Glenbrook Technologies
Jewel Box 90c Real Time X-Ray Inspection System

Objective

This procedure is intended to provide written guidance to individuals who have been approved to operate the x-ray inspection system.

Definitions

Radiation Worker Permit (RWP) – Document which identifies the potential radiological hazards for a particular procedure, as well as requirements to mitigate these potential hazards.

Standard Operating Procedure (SOP) – Document giving consistent instruction on the use of the x-ray system.

Responsibilities

Department Head – Must ensure that all requirements of the Jewel Box 90c Real Time X-Ray Inspection System SOP and RWP are followed by approved users. Ensure that required training is up to date and ensure that the RWP is posted next to the unit, as well as the SOP.

Senior Safety Officer – Consult approved operators of the unit and their supervisors on recordkeeping, training and the safe use of the inspection unit.

Users – Responsible for following all requirements of the Jewel Box 90c Real Time X-Ray Inspection System Standard Operating Procedure and RWP.

Procedure

Interlock keys for the x-ray system reside in a locked key storage cabinet near the x-ray system in FCC room 375. Authorized Operators are issued a key to the x-ray system

key storage cabinet. All access to the x-ray system interlock keys must be noted in the key access logbook located near the key storage cabinet. The x-ray system interlock keys must be kept locked inside the key storage box in room 375 whenever the x-ray system is not in use.

Newly Authorized Operators not currently listed below should contact Vince Pavlicek (x3257) to be issued a key to the x-ray system key storage cabinet.

- **All Operators must be familiar with the "Installation and Operation" x-ray inspection system manual.**
- **Only the trained Operators listed below are authorized to operate the x-ray inspection system.**
- **The door for room 375 must display a Controlled Area sign.**
- **The radiation exposure dosage received by personnel working with x-ray inspection equipment shall not exceed those limits set by local and Fermilab regulations relating to ionizing radiation.**
- **Do not insert any part of the body into the inspection chamber while x-rays are on. Although the Jewel Box x-ray system dose rates are extremely low, any unnecessary radiation exposure should be avoided. If an item becomes jammed, the Jewel Box x-ray system should be turned off before any attempt is made to clear the inspection chamber.**
- **Operators are responsible for having valid Radiological Worker Training.**
- **Operators must wear their own TLD badge when operating the x-ray system.**
- **Never leave the x-ray inspection system unattended with the interlock keys installed in any of the system's key locks.**

Authorized Operators:

William Barker

Jeffry Andresen
Ryan Rivera
Rick Mahlum
Simon Kwan

Alan Prosser
Tom Boes
Marcos Turqueti