



**Department of Energy**  
**National Nuclear Security Administration**  
Washington, DC 20585

February 28, 2002

The Honorable John T. Conway  
Chairman  
Defense Nuclear Facilities Safety Board  
625 Indiana Avenue, NW  
Washington, D.C. 20004

Dear Mr. Chairman:

Enclosed is the Pantex Plant Sealed Insert First Quarter Fiscal Year 2002 Summary Status Report. This report is a deliverable to you under Commitment 5.2.2 of the Department's Recommendation 99-1 Implementation Plan (IP). As discussed in the IP, the report summarizes pit repackaging activities.

If you have any questions concerning this information, please contact me at 202 586-4879 or have your staff contact Sujita Pierpoint at 301 903-9601.

Sincerely,

A handwritten signature in black ink, appearing to read "DEB".

David E. Beck  
Assistant Deputy Administrator  
for Military Application and  
Stockpile Operations  
Defense Programs

Enclosure

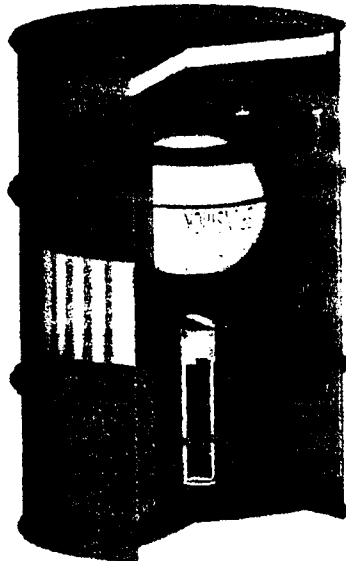
cc w/enclosure:  
Mark B. Whitaker, S-3.1



**BWXT  
Pantex**

# **Status of Sealed Insert Pit Repackaging**

**1<sup>st</sup> Quarter FY2002  
Summary Status Report  
October - December 2001**



**Confirmed to be Unclassified  
L.C. Phillips, Classification Analyst, Pantex/710**

## 1.0 OVERVIEW

This report summarizes the pit repackaging activities during the Fiscal Year 2002 (FY02). In addition, the report provides FY02 milestones; performance metrics related to schedule, and production; problems that resulted in loss of process times; and corrective solutions for those problems.

## 2.0 AL-R8/SI PIT REPACKAGING FY02 MILESTONE

An average of two hundred pit repacks per month annually is the rate required to meet the Department of Energy (DOE) commitment in the Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 99-1 Implementation Plan. The milestone provided in Table 1 represents the established FY02 Performance Evaluation Management Plan (PEMP) commitment for FY02. The PEMP requirement was set to allow the contractor to complete repackaging the current inventory of pits by the end of FY05.

**Table 1: PEMP AL-R8/SI Repackaging Milestone**

Required PEMP Repacks	Date
2400 pits	September 30, 2002

## 3.0 AL-R8/SI PIT REPACKAGING PERFORMANCE

A total of 593 pits were repackaged during the first quarter of FY02 for a total of 3706 pits repackaged since the beginning of the program. Table 2 lists the monthly and cumulative totals and compares the number of pits planned to be repackaged, as identified in the PEMP, with the numbers actually repackaged.

**Table 2: Pits Repackaged, by Month, FY02**

	Monthly		Cumulative	
	Planned	Actual	Planned	Actual
Oct.	200	209	200	209
Nov.	200	210	400	419
Dec.	200	174	600	593

As shown in Table 2, the actual pits repackaged this quarter are below the planned cumulative number; however, the BWXT activities are scheduled to achieve the annual requirement of 2400 pits.

#### 4.0 IMPACTS ON REPACKAGING RATE

BWXT tracks eight categories that impact process capability. For the purpose of this summary report, however, these categories have been grouped into five areas that resulted in the greatest downtime. The impact categories and the corrective actions in each category are shown in Table 3.

**Table 3: Impacts on Repackaging**

Impact Categories	Problems	Corrective Actions
Facility Downtime	Phone/fire alarm	Repaired/reset phone/fire alarm system
	Radiation Air Monitor (RAM) alarms	Radiation safety cleared RAM alarm
	Bay hoist	Crafts repaired hoist
Administrative/Training Downtime	Personnel shortage	Reinstate PAPs/obtain new PAP approval, use of overtime
	Safety Meetings	Conducted safety meetings
	ALARA concerns	Provided ALARA briefing
	Material movement via new procedure	Familiarized personnel with procedure. Established material move priority
Bay Tooling Downtime	Torque station	Repaired torque station
	Inspection Table	Repaired inspection table
Material Resources Planning (MRP II) Downtime	Lockout of terminal	Reroute bay terminals to the main frame
	Bad router	
Engineering Downtime	Procedural revisions	Approval of changes
	Photo	Took photo

#### 5.0 SUPPORT WORK COMPLETED DURING THE QUARTER

**Flexible Container Shielding:** A total of 35 units (a unit consists of two pieces) were fabricated at the plant during the first quarter of FY02. The shields are currently being modified for better performance.

**Stationary Shielding:** During the first quarter of FY02, the shields (4ft x 6ft) surrounding the staging area were moved and setup (in each bay) between the Image Station and the Purge and Backfill station to shield operators as they worked. These shields were then replaced with larger (6ft x 6ft) shields at the staging area to cover gaps at the corners.

## 6.0 FUTURE WORK

**Implementation of Bay-to-Bay Transfer Cart:** The bay-to-bay transfer cart for use with an open lid configuration has undergone evaluation. A submittal package has been transmitted to AAO for approval.

**AL-R8/SI 2040 Container Development:** The design of new AL-R8/SI 2040 container began in FY02. Development of the new container will be consistent with the formal approach used in the successful start-up of the AL-R8/SI 2030 container currently in use.

**Pit Cleaning Station:** The pit cleaning process Conceptual Design Review was held in November 2001. Research and development activities are underway.

**Purge and Backfill Automation:** BWXT is currently coordinating the Software Design Review with the labs. Efforts are being made to have a Purge and Backfill Automation review in conjunction with the AL-R8/SI 2040 Container Requirements Review in January of FY02. This is to be followed by performing Equipment Qualification activities in May, to support the June Engineering Evaluation date.

**Surveillance Bell Jar:** The upgrade of production Purge and Backfill systems for SI repackaging operations is scheduled to occur in the 2<sup>nd</sup> quarter of FY02 when repackaging operations move to bays 15, 16 & 17.

**Fire Basis for Interim Operations (BIO) Controls:** Implementation of fire BIO controls is planned to occur in the 2<sup>nd</sup> quarter of FY02.