

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 23, 2004

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: T. Hunt and W. White, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending July 23, 2004

Tooling Failures. All three copies of a canned subassembly (CSA) removal fixture failed Wednesday during weapon operations. Two copies failed when a locking compound holding a stud in place released, preventing one of the spring-loaded brass feet that grip the CSA during removal from engaging properly. The third copy of the tool was then installed as designed and jacking screws from an adjoining fixture were being used to extract the CSA from the case. After several turns on the screws, the production technicians noticed that the removal fixture had slid about ½" up the surface of the CSA without separating it from the case. After stopping work and upon closer inspection of the CSA, several small indentations were observed. The tool is designed to apply a maximum force of 800 lbs to the CSA. It is unclear if this force, by itself, is enough to damage the CSA. The tools had been validated by the tooling review team prior to use but not sent through a thorough tooling tryout. BWXT plans to dimensionally analyze the CSA for any anomalies and test the extraction tool to ensure forces are within design limits. [I, E4]

Violation of Safety Controls. On Tuesday, subcontractors at the Pantex Plant entered the limited area of the plant with a crane weighing in excess of 80,000 pounds. The subcontractors did not obtain permission from the operations center prior to doing so. This was a violation of a specific compensatory measure in the *Justification for Continued Operations (JCO) for On-Site Transportation of Loads Exceeding 80,000 Pounds*. The JCO identifies four specific controls to compensate for the lack of analysis in the transportation and site-wide safety bases relative to the transportation of these heavy loads which could be involved in an accident with nuclear explosives.

The controls identified the specific gate through which the crane was allowed to enter and a requirement for the BWXT construction management representative to obtain the required permission from the operations center prior to having the crane enter the limited area. The construction management representative was not with the crane when it entered the plant site, the crane entered the wrong gate, and entered without permission from the operations center. As an immediate triage action, BWXT will require all construction equipment entering the limited area to be accompanied by a BWXT representative. [I, W4]

10 CFR 830 Exemptions. Last Friday, BWXT informed PXS0 that the recent shut down of Los Alamos National Laboratory (LANL) operations may impact their ability to submit a documented safety analysis (DSA) for the W88 program before the July 31, 2004, deadline established in the 10 CFR 830 exemption decision granted by NA-10. The exemption decision contained four specific conditions upon which the exemptions are contingent. One of the conditions is the continued monthly submission of a 30/60/90 day report by BWXT to allow NNSA to monitor progress towards meeting the extended deadlines. This monthly report has not been submitted as required. In addition, the exemption decision requires that BWXT implement the controls in the site-wide safety basis documents according the NNSA-approved implementation plan for those controls. [I, W3, W4]