

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 8, 2002

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: R. T. Davis/ T. D. Burns
SUBJECT: SRS Report for Week Ending February 8, 2002

Recommendation 2000-2: Staff member Burnfield and outside expert Volgenau were on-site this week to review Recommendation 2000-2 related activities. Presentations by WSRC and DOE-SR outlined the training and qualification programs for the contractor system engineers and federal subject matter experts, respectively. Both programs appear satisfactory. Discussions regarding the scope of upcoming phase II assessments indicate that the site still believes the existing Facility Evaluation Board and other self-assessments provide an adequate vehicle for meeting the intent of Recommendation 2000-2. However, they are beginning to recognize the value of an initial set of phase II reviews for validation of these processes.

Project Management: Based on recent problems with several projects at SRS (e.g., canyon exhaust upgrade, tritium extraction facility, and HEU blend down projects), WSRC issued a letter this week outlining common causal factors and identifying management expectations. The first issue identified was that project design tended to exceed the minimum safe requirements. WSRC has established a concept of safe mission essential that attempts to achieve the appropriate level of safety and mission assurance for the minimum cost. The next problem identified was scope definition of a project and use of the change control process to authorize out-of-scope work. The final problem outlined was related to pre-conceptual estimates and project contingency funding. Ideally, contingency is established for the existing scope and should not be used to add scope.

WSRC has also chartered a Facility Evaluation Board - Project Review Team (FEB-PRT) to review line item projects and other site project activities. The purpose of this review team is to evaluate compliance with site procedures and identify strengths and weaknesses to improve overall site project performance. This team will be lead by a full time project manager and begin project reviews by May 2002.

HB-Line: WSRC completed instrument calibration and other testing (site rep weekly 12/21/01) and began plutonium solution processing during the week of January 21, 2002. Late last week, WSRC identified excessive holdup of material in the 2nd stage precipitator. Flushing with a low molar nitric acid and oxalic acid was not successful in cleaning the tank. Subsequent flushing with stronger nitric acid was successful as confirmed by camera inspections. Working groups have been established to investigate this problem. WSRC currently expects to produce the first can of plutonium oxide this weekend with material that was transferred to the mechanical line.

Plutonium Stabilization and Packaging: On Thursday, DOE-SR agreed with the WSRC path forward for the Tungsten Inert Gas weld system (site rep weekly 2/1/02). DOE-SR also authorized WSRC to proceed with detailed design and fabrication for the outer can welder and preliminary design of the digital radiography equipment.