

Department of Energy

Washington, DC 20585

June 15, 2006

Mr. George Dials General Manager BWXT Y-12 Y-12 National Security Complex P.O. Box 2009 Oak Ridge, TN 37831-8245

Subject: BWXT Y-12 Enforcement Letter

Dear Mr. Dials:

The Department of Energy's Office of Price-Anderson Enforcement (OE) has conducted a preliminary evaluation of the deficiencies described in Noncompliance Tracking System (NTS) report NTS-Y12--BWXT-Y12NUCLEAR-2006-0003. Our evaluation included review of the causal analysis, associated corrective action plan, and discussion with you and other site personnel.

The subject NTS report described numerous Quality Assurance (QA) deficiencies resulting in the incorrect installation of reinforcing steel during early construction activities at the Highly Enriched Uranium Manufacturing Facility (HEUMF). Based on a number of Nonconformance Reports (NCR) issued during late 2005 and January 2006 identifying incorrectly placed or missing rebar and wall dowels, concrete pouring activities were suspended in early February 2006. Further investigation and assessment of the deficiencies and the implementation of the project QA Program by BWXT Y-12, the design subcontractor (Parsons), the construction subcontractor (CBJV), and various other subcontractors identified numerous deficiencies associated with the field inspection process, design change control, documentation, and project oversight. These included the following:

- Inspections of concrete pre-placements were inadequately performed, utilized inappropriate drawings and were not documented as required by procedure
- Design change processes were not effective in ensuring changes were clearly communicated and controlled
- There was inadequate QA oversight of subcontractors and lack of field inspection activities by BWXT Y-12
- There were inadequacies in BWXT Y-12 and subcontractor documented project QA Programs.

As concluded by the Corporate Review Team assembled by BWXT Y-12 to perform an independent assessment of the activity, the "...project's processes and quality programs as implemented do not fully support the rigor, oversight and controls needed for effective nuclear construction quality." Although your subsequent evaluations of the deficiencies indicate the existing concrete does not require replacement, your own estimates indicate that the lost project time, investigation and recovery costs will equal approximately \$10 million dollars.

We have concluded that violations of 10 CFR 830.120 (Quality Assurance Requirements) did occur in association with this event. I am also concerned that the OE 2003 Enforcement Letter describing similar reinforcing steel issues at the Hanford Waste Treatment Plant did not heighten your sensitivity to potential pitfalls in this area.

OE also recognizes, however, that upon recognition of the rebar placement deficiencies as a potentially programmatic issue BWXT Y-12 took aggressive actions. These included the conduct of an extent of condition review, a formal causal analysis, and reporting of the issue into the NTS. BWXT Y-12 also commissioned an Independent Assessment of project QA practices by a Corporate Review Team. The corrective actions developed as a result of the causal analysis and independent assessment appear to be broad and programmatic in nature.

In light of the early-stage recognition of these issues, and in consideration of the comprehensive scope of your investigation and corrective actions, OE has determined that no formal enforcement action will be taken by our office at this time. In conjunction with the NNSA Y-12 Site Office we will continue to monitor your performance in this area, and your completion of the identified corrective actions.

No response to this letter is required. Should you have any questions, please contact me at (301) 903-0100 or have your staff contact Tony Weadock at (301) 903-4283.

Sincerely,

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Stephen M. Sohinki Director Office of Price-Anderson Enforcement

cc: C. Lagdon, S-1 R. Shearer. EH-1 J. Cook, EH-1 A. Patterson, EH-1 P. Bubar, EH-3 T. Weadock, EH-6 Docket Clerk, EH-6 L. Brook, NA-1 F. Russo NA-1

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