

CSSG TASKING 2007-07

Date Issued 7/02/07

Task Title: Review of the Technical Basis for IEZ at Y-12 (Y/DD-1242)

Task Statement: The CSSG is tasked to perform a technical review of the proposed approach to criticality accident alarm detection and placement at Y-12 with particular attention to whether such an approach is acceptable for the new Highly Enriched Uranium Materials Facility (HEUMF). Some specific potential applications at Y-12 of this new approach may be provided by the NNSA Y-12 Site Office (YSO) via the NCSP Manager under separate cover for the CSSG's consideration as part of this effort. The CSSG is requested to consider the acceptability of the proposal relative to DOE Order 420.1b nuclear criticality safety requirements including all ANSI/ANS-8 Standards invoked by the Order. An excerpt from the Executive Summary of Y/DD-1242 summarizes the purpose of the document:

This document presents a technical basis for an Immediate Evacuation Zone (IEZ) for Y-12 facilities requiring Criticality Accident Alarm System (CAAS) installation and subject to U.S. Department of Energy (DOE) Order 420.1B Facility Safety. The order bases requirements for an IEZ on the American National Standards Institute/American Nuclear Society (ANSI/ANS) 8.23, Nuclear Criticality Accident Emergency Planning and Response, and removes reliance on a previous requirement for CAAS annunciation based on 12 rad in air as noted in predecessor orders.

Task Deliverable:

The deliverable is a report to the NCSP Manager on the results of the CSSG review.

Task Due Date:

Due Date: September 17, 2007