

HSS Independent Activity Report - Rev. 0**Report Number:** HIAR-NNSS-2011-07-08**Site:** Nevada National Security Site**Subject:** Office of Enforcement and Oversight's Office of Safety and Emergency Management Evaluations Activity Report for the Review of DAF-JCO-11-01 for Inoperable HEPA-Filtered Ventilation System**Dates of Activity :** 06/06/2011 – 07/08/2011**Report Preparer:** William Macon**Activity Description/Purpose:**

As an operational awareness activity, the Office of Health, Safety and Security (HSS) site lead reviewed a recent Justification for Continued Operations (JCO) for the Inoperable High Efficiency Particulate Air (HEPA)-Filtered Ventilation System at the Device Assembly Facility (DAF) at the Nevada National Security Site (NNSS). DAF-JCO-11-01, Revision 2, was prepared by the contractor, National Security Technologies, LLC (NSTec), on May 10, 2011. The Nevada Site Office (NSO) approved the JCO on May 18, 2011, in accordance with Safety Evaluation Report (SER) NST-SER-2011-2. Between June 6 and July 8, 2011, HSS personnel reviewed the JCO, SER, and supporting references and discussed these documents with NSO staff via teleconferences on July 7 and 8 to assess the adequacy of the JCO with respect to Department of Energy (DOE) G 424.1-1.

Result:

Background. DAF-JCO-11-01, Revision 0, was originally approved in January 2011 following a Technical Safety Requirement violation and a Potential Inadequacy in the Safety Analysis declaration in December 2010 related to in-place leak testing issues with the HEPA-Filtered Ventilation System at DAF. JCO Revision 1 was deemed inadequate and rescinded. JCO Revision 2 was prepared to allow for continued operation under the existing DAF Documented Safety Analysis (DSA) Revision 2 and the phased implementation of DAF DSA Revision 3 approved in February 2011.

The updated JCO and SER refer to DAF DSA Appendix 3D to calculate a conversion factor for determining co-located worker dose estimates for accident scenarios with and without HEPA filter. In the JCO, SER, and their associated notes and references, it is not clear how these calculations were made. Based on teleconference discussions, the NSO staff recognizes that the information flow logic could have been more transparent and has proposed that NSTec should revise DAF DSA Appendix 3D to include a plot of X/Q vs. Distance With No Buoyancy. The JCO and SER evaluations use this information but do not adequately document it. In response, NSTec will include this supplemental information in the next Change Notice 2 update to the DSA. It is important to note that no new analysis is needed and that the information inherently resides in the MELCOR Accident Consequence Code System, Version 2 hazard analysis runs used as the basis for maximally exposed offsite individual consequence analysis.

Conclusion. The JCO and SER adequately define specific operational restrictions and other compensatory measures supported by analysis in accordance with the guidance in DOE G 424.1-1.

HSS Participants**References**

1 (lead). William Macon

2. Shivaji Seth

Were there any items for HSS follow up? Yes No**HSS Follow Up Items**