

2010 Quality Council Lessons Learned

Vendor Supplier Deficiencies: Myers Drum Concerns at Los Alamos National Laboratory (LANL)

The Office of Packaging and Transportation, in the DOE Office of Environmental Management, issued a Safety Alert in January 12, 2010, (Issue Number: DOE/OPT/SA-01) alerting the DOE packaging and transportation community about potential failure associated with 55 and 30-gallon carbon steel drum closure rings. On January 13, 2010, HSS issued a Data Collection Sheet (DCS) to all DOE sites citing the concerns as well. Those concerns arose while contractors were performing receipt inspections on several lots of drums and drum rings received at the Hanford site and Lawrence Livermore National Laboratory (LLNL). It was determined that the drum closure ring clamping force could not be achieved due to the closure ring ends making contact prior to reaching the specified torque value.

In May of 2010, the Los Alamos Site Office (LASO) was notified by the Office of the Inspector General (OIG) that the OIG had initiated an investigation of Myers Container, LLC. The OIG discussed the issues identified in the safety alert and DCS and determined it appropriate to begin an investigation of materials received previously by LANL in addition to materials received at LLNL and Hanford. On May 19, 2010, the LASO Contracting Officer (CO) issued direction to LANL to immediately identify all drums purchased from Myers Container, LLC on or after April 17, 2008. LANL was directed to segregate all drums purchased between April 17, 2008, and May 19, 2010, and identify them with a "HOLD" tag as nonconforming material in accordance with LANL's procedures. Finally, LANL was also directed to maintain the drums under segregation pending further, formal written direction from LASO.

As directed, LANL identified and segregated the drums that remained in inventory. The LASO Office of Quality Assurance (OQA) visually inspected many of LANL's drum holding areas prior to the OIG's arrival to validate compliance with the CO's direction. Subsequently, a recycle container that contained suspect closure rings was removed from its location and delivered to a recycling facility. It was identified as a Lessons Learned that the facility manager and/or Quality Assurance representative should immediately place a HOLD tag on suspect material versus delaying application to preclude inadvertent removal. Accordingly, some of the closure rings were not retrievable as a result of the delay in identifying the materials with a HOLD tag. Another Lessons Learned included the augmentation of the receipt and inspection plan for drum rings to assure compliance with specific requirements, including inspection of the drum rings for evidence of weld cracking following drum loading and ring torque. Additionally, LANL determined that tracking information records should include the drums' Purchase Order Number, Lot Number, Serial Number and location. Previously these items were tracked by lot numbers and not by serial number and/or distribution location.

At this time, all drums sequestered by the CO's May 19, 2010, memorandum, remain segregated and tagged at LANL. Three storage trailers have been rented by LANL to warehouse segregated drums and rings from Myers Container, LLC. These storage containers meet the OIG's

requirements for evidence identification. LANL has resource loaded its implementation plan to complete all lessons-learned regarding Myers Drums.

High Efficiency Particulate Air Filter Deficiencies

In response to historical vendor performance problems with a vendor supplying Nuclear-Grade High Efficiency Particulate Air Filters (HEPA), Los Alamos National Laboratory (LANL) identified an alternate vendor and placed an order for more than 100 HEPA filters. These replacement filters from the new vendor are required to support a facility maintenance initiative.

As required by HSS, all sites within DOE direct their vendors to ship HEPA filters to the Filter Test Facility (FTF) which is a contractor to DOE. FTF is responsible for inspecting and testing the ordered filters prior to shipment to the procuring site. The initial shipment arrived at the FTF in significantly damaged crates and were returned to the vendor accordingly. Subsequently, the replacement filters sent to the FTF were identified as not meeting specifications as identified in inspections. The non-conformances primarily originated from poor manufacturing practices by the filter supplier and included manufacturing problems associated with gaskets and seals, adhesive separation, and general filter construction with a failure to meet ASME AG-1, FC 4000, and FC-6000 criteria. Beyond physical construction, supplier non-conformances have included incorrect and/or inadequate filter labeling and paperwork deficiencies affecting traceability required for conformance under ASME /NQA-1-2000. Additionally, the vendor has provided subsequent shipments that contained shipping damage similar to the first shipment.

LANL Response to HEPA Concerns

LANL is continuing to work with this vendor to close out the initial order. Actions taken as a Lessons Learned include issuance of a Safety Advisory to enhance the level of inspection activities, updating the Work Instruction specific to Receipt Inspection of HEPA Filters used in Ventilation Systems, and mandating additional statistical sampling of filters. The sampling process has reverted to 100% receipt inspection on all attributes for all items. Also, LANL has provided additional training for their Inspection personnel; established a subject matter expert (SME) position within the Laboratory for HEPA filter related engineering applications; and identified that validation of the Certificates of Conformance and Certified Material Test Reports is the responsibility of LANL and not performed by the FTF. LANL will continue to monitor the current vendor's performance to determine if future orders can be delivered that meet the quality assurance requirements.