



Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Material Safety
East Building, PHH-30
1200 New Jersey Ave S.E.
Washington, D.C., 20590

26 March 2014

Dear Dr. El-Sibaie,

Pursuant to Section 8.c. of DOT SP-14657, Sixth Revision, dated December 3, 2013, the University of Missouri Research Reactor (MURR) provides the following revision to the update on package transition activities for the **1st Quarter of 2014**.

The packages referred to below are the Croft SAFKEG-LS (NRC Docket #71-9337) and SAFKEG-HS (NRC Docket #71-9338).

“Croft” refers to Croft Associates, Ltd., the radioactive material package design and manufacturing firm that was awarded the contract. “CHT” refers to Columbiana Hi-Tech Nuclear, the sub-contractor hired by Croft for package fabrication. “MSC” refers to Manufacturing Sciences Corporation, the sub-contractor hired by CHT to prepare the depleted uranium (DU) material that will act as the primary shield in the HS package.

Progress During Q1 2014

SAFKEG-HS (Model 3977A)

The manufacturing program continued during Q1.

1. Issues related to the DU specifications were relayed to the NRC. These included a request to change the original specification of the DU. NRC approved of the changes, allowing for the fabrication of the DU components and their shipment to CHT.
2. The vibration test requested by NRC staff was completed successfully.
3. The DU material for the Inner Containment Vessel lids has been received and approved. CHT has the material and is in final manufacture of the lids.
4. MSC has revised the schedule for delivery of the DU bodies as they continue to encounter challenges in pouring the DU to the revised specification. MSC expects to finish delivery of the DU bodies by the third week of April, 2014.



5. NRC staff indicated that the Safety Evaluation Report and the Certificate of Compliance for the HS are routing for signature and are expected to be issued in the very near future.

Program Status

Status of Authorization to Ship in Existing Fleet Under SP-14657 and RIS 2008-018

DOT has issued a revised Special Permit allowing MURR to continue shipments in the existing fleet of 20WC-1 and 6M packages until June 30, 2014. NRC has provided concurrent permission under RIS 2008-018.

Please note: We plan to submit a final timely renewal request in April of 2014. While we expect to have the SAFKEG-HS packages formally received at MURR before the expiry of SP-14657, the current schedule would only allow thirty (30) days to receive the packages, check them in under our Type B program, send packages to end-users for evaluation, and then implement routine use. We expect that process to take 60-90 days from receipt of the packages at our dock.

SAFKEG-LS: Program is complete for the Model 3979A. All future activities under this program are expected to center on modifications to allowable contents.

SAFKEG-HS: The SARP for the SAFKEG-HS (Model 3977A) is still under review at NRC. Croft indicates that the Safety Evaluation Report (SER) and Certificate of Compliance (COC) should be issued in the immediate future.

Schedule

Due to ongoing issues related to the casting of the DU material, Croft can no longer project a delivery date for the HS packages.

From continued contact with Croft and from reviewing information provided by MSC and CHT, the fifteen (15) SAFKEG-HS packages are scheduled for delivery to MURR on 30 May 2014, assuming no unforeseen issues. As the ability of MSC to meet the specification has delayed the program by several months, a slippage of the delivery date past 30 May 2014 cannot be ruled out. DOT will be notified immediately if we learn anything further on the delivery schedule.

Estimate of Shipments in DOT Specification Packaging in the Coming Quarter

MURR continues to use both the 6M and 20WC-1 packages for portions of our radioactive materials transport needs. The needs are estimated to be:

- 6 shipments per quarter of Ir-192 in a 6M
- 6 shipments per quarter of P-32 in 20WC-1
- 12 shipments per quarter of Ir-192 in 20WC-1



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- 12 shipments per quarter of Cs-131/Ba-131/Ba-135m in 20WC-1

If you have any questions, concerns or need more details on this revision of the transition activities listed above, please contact Mr. Michael Flagg, technical lead for this project at MURR. He may be reached at flaggm@missouri.edu or 573-882-5364.

Thank you for your time and attention to this communication.

Sincerely,

*Matt Sanford, Acting, for
R. Butler*

Ralph A. Butler, Director
MU Research Reactor

26-Mar-2014
Date