

**From:** Sensue, Terry [sensuet@usec.com]  
**Sent:** Wednesday, November 02, 2011 1:29 PM  
**To:** Siurano-Perez, Osiris  
**Cc:** Coriell, Kelly L; Miner, Peter J  
**Subject:** FW: Review of Lead Cascade DFP (TAC L33103)

**Importance:** High

Osiris,

As discussed on the conference call held at 1430 on Tuesday, November 1, 2011 with NRC staff, the American Centrifuge Lead Cascade centrifuge machines operate on a recycle mode as a “closed loop” system. Therefore, the Lead Cascade does not generate any enriched uranium (product) and does not generate any depleted uranium (tails). The uranium hexafluoride (UF<sub>6</sub>) when removed from the system is considered feed material and is treated as an asset rather than as a waste stream needing disposal during the decommissioning process.

As a result of USEC’s continued work on addressing NRC’s question into USEC’s RAI #7 responses, USEC has identified two discrepancies within Chapter 10.0 of the License Application for the Lead Cascade which discusses “tails” that appears to be the source of confusion:

- Section 10.2.1 states, in part, “Any UF<sub>6</sub> tails material remaining at the facility will be transferred to an authorized facility at decommissioning and its ultimate disposition will be accounted by the receiving facility.”
- Section 10.2.6 states, in part, “Any UF<sub>6</sub> tails material remaining at the facility will be transferred to an authorized plant.”

USEC recommends that both sentences be deleted from Chapter 10.0, with no replacement, since these sections discuss decommissioning activities which do not apply to the UF<sub>6</sub> feed material. USEC will make these recommended changes subsequent to NRC approving USEC’s response to RAI #7.

Terry

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**From:** Siurano-Perez, Osiris [<mailto:Osiris.Siurano-Perez@nrc.gov>]  
**Sent:** Wednesday, October 26, 2011 1:03 PM  
**To:** Sensue, Terry  
**Cc:** Coriell, Kelly L  
**Subject:** Review of Lead Cascade DFP (TAC L33103)  
**Importance:** High

Terry:

Below is the information on the issue about USEC’s responses to the clarification questions regarding TAC L33103, Revision to the Decommissioning Program for the American Centrifuge Lead Cascade Facility.

As I stated in my message we would like to set up a call to discuss this (apparently minor) issue so we can move forward in completing and closing this action.

We are looking for Monday October 31<sup>st</sup> at 2:30 PM, probably a half hour call with you, FSME, ICF, you and your staff.

Let me know if you are available and/or if you have any questions.

Thanks.

Osiris

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**From:** Kline, Kenneth  
**Sent:** Tuesday, October 25, 2011 10:59 AM  
**To:** Siurano-Perez, Osiris  
**Subject:** FW: ICF's review of the Cardinal Health Standby Trust Agreement

Osiris, our contractor came back very quickly. Please see the attached for the full review. There is still one remaining item to clarify:

The NRC requested that USEC provide additional detail in the Lead Cascade DFP and/or the PGDP DU Plan to account for the  $UF_6$  that will be sent to the PGDP from the Lead Cascade facility. USEC explained that when the Lead Cascade is shut down,  $UF_6$  material will be removed by normal process operation, and the feed material will be dispositioned prior to the decommissioning phase and license termination.

It is not clear how this additional information responds to the NRC's concern regarding  $UF_6$  remaining at the site or being transferred to PGDP. ICF understands from USEC's October 4, 2011 response that the amount of  $UF_6$  material remaining at the site will be minimized prior to decommissioning by running it through the normal process operation, but USEC's July 22, 2011 response to this RAI stated that "tails material remaining at the facility will be transferred to an authorized facility (i.e., Paducah Gaseous Diffusion Plant in Paducah, Kentucky)." In ICF's interpretation, the clarifying response in USEC's October 4, 2011 submittal seems to contradict USEC's response in the July 22, 2011 submittal.

ICF recommends that the NRC ask USEC to clarify the RAI 7 responses received from USEC (July 22, 2011 and October 4, 2011) to determine how much (if any)  $UF_6$  will remain at the Lead Cascade facility at the time of decommissioning, and where USEC is accounting for the decommissioning costs associated with the material.

Ken