

July 8, 2005

MEMORANDUM TO: William H. Ruland, Deputy Director  
Licensing and Inspection Directorate  
Spent Fuel Project Office, NMSS

FROM: Nancy L. Osgood, Senior Project Manager  
Licensing Section /RA/  
Spent Fuel Project Office, NMSS

SUBJECT: SUMMARY OF JUNE 29, 2005, MEETING WITH DURATEK  
REGARDING TRANSPORT OF URANIUM HEXAFLUORIDE IN THE  
MODEL NO. UX-30 PACKAGE

### Background

A meeting was held on June 29, 2005, in Rockville, Maryland, at the request of Duratek, Inc., to discuss the transport of uranium hexafluoride in the Model No. UX-30 package (Certificate of Compliance No. 9196). The meeting was held to discuss the future transport of uranium hexafluoride from the East Tennessee Technology Park in Oak Ridge, Tennessee, to the Portsmouth, Ohio, gaseous diffusion plant site for final processing and disposition. This meeting was a follow-up to meetings held on February 22 and March 29, 2005. Attachment 1 is the list of meeting attendees, and Attachment 2 is the meeting handout. No regulatory decisions were made nor requested at the meeting.

### Discussion

The meeting followed the attached meeting handout. The following points were discussed.

- Cylinders needing moderator exclusion. Duratek described the three filled cylinders that have not been shown to be critically safe if water leaks into the containment vessel. Duratek described the shipping configuration that would be used for the three cylinders within the UX-30 package, and the information that would be submitted to NRC for approval. Duratek stated that the three cylinders comply with ANSI N14.1 specifications for 12-inch cylinders. It was noted that ANSI compliant cylinders could be shipped in accordance with DOT regulations in a DOT specification overpack. Duratek will evaluate whether to ship the three cylinders within the UX-30 package or within a DOT specification overpack.

- Large cylinders needing disposition. Duratek presented information regarding uranium hexafluoride that is currently stored in various 48-inch diameter cylinders. Some cylinders have more than "heel" quantities, as defined in DOT regulations, and the uranium enrichment of some of the material exceeds the limit specified in ANSI N14.1. It was noted that cylinders with greater than heel quantities of fissile material must meet fissile material package standards. Since the material will be shipped by the Department of Energy (DOE), it was recommended that DOE be contacted with respect to fissile material package approval.
- Future NRC submittals. NRC is currently reviewing the Duratek request for approval for 30-inch diameter cylinders. Duratek has prepared the application for approval of cylinders less than 30-inches in diameter, which will be submitted for NRC review in the near future. Duratek will evaluate options with respect to the cylinders needing moderator exclusion. Any request for shipment of 48-inch diameter cylinders will be made to DOT or DOE, as applicable. DOT may request NRC review of any application it receives, if appropriate.

Docket No. 71-9196  
 TAC No. L23817

Attachments: 1. Meeting Attendees  
 2. Meeting Handouts

**ML051930219**

Distribution: NRC Attendees SBaggett LCampbell RBoyle, U.S.DOT  
 Filename: E:\Filenet\ML051930238.wpd

<b>OFC</b>	SFPO	E	SFPO	SFPO
<b>NAME</b>	NLOsgood		MRDeBose	MTMarkley
<b>DATE</b>	07/01/05		07/01//05	07/08/05

C=Without attachment/enclosure E=With attachment/enclosure N=No copy **OFFICIAL RECORD COPY**

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**Meeting Between Duratek, Inc., and the  
Nuclear Regulatory Commission  
June 29, 2005**

**Meeting Attendees**

Andrew Barto	NRC/SFPO
Antonio Dias	NRC/SFPO
Bill Brach	NRC/SFPO
Jerry Chuang	NRC/SFPO
Jose Cuadrado	NRC/SFPO
Wayne Hodges	NRC/SFPO
Henry Lee	NRC/SFPO
Michael Markley	NRC/SFPO
Nancy Osgood	NRC/SFPO
William Ruland (part time)	NRC/SFPO
Stacie Sakai	NRC/SFPO
David Tang	NRC/SFPO
Ben Wilson	NRC/SFPO
Stacey Wilson	NRC/NRR
Carl Withee	NRC/SFPO
Rick Boyle	DOT/PHMSA
Mirza Baig	Duratek
R. Dale Roberts	Duratek
Charles Witt	Duratek
Mark Allen	Bechtel Jacobs Co.
Guy Wilson	Bechtel Jacobs Co.
Audrey Taucher	Fuel Cycle Weekly