



June 4, 2015

VIA EMAIL AND FEDEX

Mr. Terrence Brimfield
Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Mail Stop: T-8D20
Rockville, MD 20852

- References: (1) Texas Commission on Environmental Quality, Radioactive Material License No. R04100, Amendment 28, CN6006616890, RN101702439
- (2) Letter from J. Scott Kirk (WCS) to Catherine Haney (NRC), re: Exemption Request to Possess Special Nuclear Materials in Excess of Critical Mass Limits Specified in 10 CFR 150.11, dated December 4, 2014
- (3) Email from Terrence Brimfield (NRC) to J. Scott Kirk (WCS), RAI's for December 2014 Exemption Request, dated May 22, 2015
- (4) NRC Docket No. 70-7005

Subject: WCS Response to NRC Request for Additional Information (RAI) Resulting from a April, 29 2015 WCS and NRC Teleconference

Dear Mr. Brimfield:

Waste Control Specialists LLC (WCS) respectfully provides the following responses to the U.S. Nuclear Regulatory Commission's (NRC) Request for Additional Information (RAI) (Reference 3). These responses are intended to support approval of WCS' exemption request to possession Special Nuclear Materials (SNM) in excess of the critical mass limits specified in Title 10 of the Code of Federal Regulations (CFR), Part 150.11 (Reference 2).

Question No. 1: "NRC does not understand the meaning of proposed WCS Condition 13 in the December 2014 Request in relation to the 350 g limit because there will be onsite transfers greater than 350 g. Please explain what WCS meant by proposed Condition 13?"

WCS Response: In accordance with WCS' original presentation to the NRC on February 24, 2014 and our December 4, 2014 Exemption Request, WCS stated the mass of Special Nuclear Materials present in a single container will not exceed the critical mass limits specified in 10 CFR 150.11. WCS is proposing an exemption to allow on-site transfers of SNM that can exceed 10 CFR 150.11 limits to increase safety and efficiency in operations. Condition 13 (and others) is proposed to assure that all SNM transfers in excess of 10 CFR 150.11 limits be required to be made in the original Department of Transportation (DOT) approved conveyance, NRC or DOT approved packages, or within the original unopened inner container subjected to strict administrative controls. Also, Condition 13 is intended to clarify that SNM in transfer, when contained in a DOT conveyance, approved transportation package, or inner transportation container, does not count against WCS' above ground possession limit (10 CFR 150.11).

WCS has proposed transferring SNM waste exceeding 10 CFR 150.11 by three different methods (reference proposed Condition 1 in the December 2014 application): In the original conveyance, in the original unopened transportation package, or by removing unopened inner packages from within a transportation package and transferring them in accordance with strict administrative controls.

In the case of transferring in the original conveyance (Condition 1.a), the conveyance may have greater than 10 CFR 150.11 quantity, but may not have individual packages that exceed this limit. Only one package or groups of packages with less than 10 CFR 150.11 quantities at a time may be transferred from the original conveyance and opened and disposed or left unopened and directly disposed within the disposal unit. A similar arrangement is requested for Condition 1.b. Same as Condition 1.a, no single NRC or DOT authorized shipping package may not contain a greater than 10 CFR 150.11 quantity and must remain unopened until it reaches the disposal facility. But in this case all packages on a original conveyance may be transferred onto a WCS conveyance and transferred to the disposal unit according to strict administrative controls procedures spelled out in Conditions 2 through 12, but only one package or groups of packages with less than 10 CFR 150.11 quantities at a time can be opened and disposed or left unopened and directly disposed within the disposal unit. In proposed Condition 1.c, WCS proposes to transfer all inner containers that are shipped from a single transportation over-pack and transfer them together to the disposal unit according to strict administrative controls procedures spelled out in Conditions 2 through 12. Still, no single container can contain more than a 10 CFR 150.11 quantity and only one package or groups of packages with less than 10 CFR 150.11 quantities at a time at can be opened and disposed or left unopened and directly disposed within the disposal unit. These conditions are intended to eliminate the possibility of severe accidents and assure moderator control during transfer. Criticality safety is further assured by limiting the overall number that can be transferred in a single conveyance.

Question No. 2. NRC staff does not see any information about the WCS security plan in the December 2014 Request.

2.a. What is the WCS security plan for onsite transfers?

WCS Response: The WCS Security plan currently addresses control of Cat1/Cat2 radioactive materials by requiring the continuous presence of a T&RUA employee who has custody over the material until it is stored in a security zone or disposed.

2.b. Will the current WCS security plan change as a result of the December 2014 Request?

WCS Response: No changes to the WCS security plan are needed to support the SNM exemption request. See (2a)

Also please find enclosed the presentation slides that WCS presented to the NRC staff on February 24, 2014.

If you have any additional questions or need additional information, please contact me by email (skirk@valhi.net) or by phone at 972-450-4284.

Sincerely,



J. Scott Kirk, CHP
Vice President of Licensing and Regulatory Affairs

cc: Larry Camper, NRC
Drew Persinko, NRC
Harry Felsher, NRC
Rodney Baltzer, WCS
Elicia Sanchez, WCS
Jay Cartwright, WCS
Jay Britten, WCS
WCS Regulatory Compliance
WCS Records Management