

**From:** [Joyce Tomlinson](#)  
**To:** [Chen, Yen-Ju](#)  
**Subject:** [External\_Sender] RE: RE: Query: FW Amd 5 Review  
**Date:** Wednesday, July 10, 2019 1:33:08 PM  
**Attachments:** [image001.jpg](#)

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Yen,

1. Yes, the values for lead and holtite are the minimum values (Lead: 2.625 inches, Holtite: 4 inches)
2. The minimum thickness of the inner steel shell of the neutron cylinder is 1 inch.

Warm regards,  
Joyce

Joyce Tomlinson  
Adjunct Licensing Manager  
Holtec International

(856) 797-0900 Ext. 3765



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**From:** Chen, Yen-Ju <Yen-Ju.Chen@nrc.gov>  
**Sent:** Wednesday, July 10, 2019 1:21 PM  
**To:** Joyce Tomlinson <J.Tomlinson@holtec.com>  
**Subject:** RE: RE: Query: FW Amd 5 Review

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Joyce:

This is not exact what we are looking for.

Appendix Q of HI-2094431 (Attachment 11 to letter 5018061) (ML19127A270), Section Q4 states that lead thickness of 2.625 inches is used for the calculation because it was specific to Oyster Creek. Is the 2.625 inch just for Oyster Creek or is it the minimum thickness? Please verify.

It states in Drawing 11283, Rev. 0 (ML18179A103) that the thickness of Holtite-A is 4"; however, it also states "4" HOLTITE THK. VARIABLE." We also noticed on the drawing, the neutron shield cylinder inner shell (steel) is also listed as "1" THK. VARIABLE."

Please provide the following information for HI-TRAC VW Version V2:

1. Confirm the values provided in your previous email (Lead: 2.625 inches, Holtite: 4 inches) are **minimum** for both PWR and BWR.
2. Provide the **minimum** thickness of the inner steel shell of the neutron shield cylinder.

Thanks,  
Yen

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**From:** Joyce Tomlinson <[J.Tomlinson@holtec.com](mailto:J.Tomlinson@holtec.com)>  
**Sent:** Wednesday, July 10, 2019 7:58 AM  
**To:** Chen, Yen-Ju <[Yen-Ju.Chen@nrc.gov](mailto:Yen-Ju.Chen@nrc.gov)>  
**Subject:** [External\_Sender] RE: Query: FW Amd 5 Review

Yen,

The thicknesses used for the shielding analysis for HI-TRAC VW Version V2 are as follows:

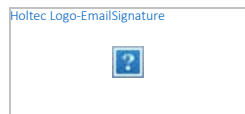
- Lead: 2.625 inches
- Holtite: 4 inches

These values were used in Appendix Q of HI- 2094431 (Attachment 11 to letter 5018061). The thickness are variable based on site needs as indicated on drawing 11283R0, HI-TRAC VW Version V2.

Warm regards,  
Joyce

Joyce Tomlinson  
Adjunct Licensing Manager  
Holtec International

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**From:** Chen, Yen-Ju <[Yen-Ju.Chen@nrc.gov](mailto:Yen-Ju.Chen@nrc.gov)>  
**Sent:** Tuesday, July 09, 2019 3:06 PM

To: Joyce Tomlinson <[J.Tomlinson@holtec.com](mailto:J.Tomlinson@holtec.com)>

Subject: Query: FW Amd 5 Review

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As mentioned on phone, we will have ORNL to develop templates for criticality and shielding calculations for FW Amendment 5.

At this stage, they need the following information for the development:

- **Minimum lead and Holtite thicknesses for the HI-TRAC VW Version V2**

This information is need for shielding calculation. Let me know if you prefer to discuss this in a teleconference.

Thanks,

*Yen*

Yen-Ju Chen  
Division of Spent Fuel Management  
Office of Nuclear Material Safety and Safeguards  
Nuclear Regulatory Commission  
301-415-1018

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