

**From:** Steven Sisley [mailto:ssisley@energysolutions.com]  
**Sent:** Monday, October 17, 2016 1:05 PM  
**To:** Garcia Santos, Norma <Norma.Garcia-Santos@nrc.gov>  
**Cc:** McKirgan, John <John.McKirgan@nrc.gov>  
**Subject:** [External\_Sender] Comments on Draft SER for MIDUS CoC 9320, Rev. 3

Norma,

Thank you for the opportunity to review and comment on the draft SER for MIDUS CoC No. 9320, Revision 3. Please consider the following comments and observations:

1. Section 1.1.3, 1<sup>st</sup> sentence: Suggest changing “changes requested by” to “changes made” because the SAR drawings have already been revised to include the changes.
2. Section 1.1.3, 2<sup>nd</sup> sentence: What is the reason for this sentence? It should be put into context.
3. Section 1.1.3, 3<sup>rd</sup> sentence: Sentence not needed because SAR drawing was revised to show a single line for the “grind flush” symbol in response to the RAI.
4. Section 1.1.3, Table 1, TYC01-1601, Rev. 2, Sht. 1, “Brief Description of Changes”: The 2<sup>nd</sup> and 3<sup>rd</sup> bullets are the same change and should be combined.
5. Section 1.1.3, Table 1: The table appears to include only the drawing changes made in response to the RAI, but does not include all of the drawing changes included in the initial application (see letter ES/NRC 16-007, Attachment 1). If Table 1 is intended to describe all of the changes to the SAR drawings, then it should be revised to also include those changes included in the initial application. Is it necessary to provide an itemized list of the drawing changes in the SER, or is it sufficient to just list the drawing numbers and associated revision numbers for the final revision of the SAR on which the approval is based?
6. Section 2.2.1, last paragraph: It is not clear if there are any specific corrections that are required in response to this paragraph, or if this is intended only to apply to changes made to future amendments. It is also not clear if this was previously communicated to EnergySolutions (e.g., via RAI) or if this is a new action required by the NRC staff. Please clarify the intent of this paragraph.
7. Section 2.2.2.2, 2<sup>nd</sup> sentence: The safety basis for chemical, galvanic, and other reactions is discussed in Section 2.2.2 of the SAR, as stated in the response to RAI No. M-1 provided in Letter ES/NRC 16-004, Attachment 1. In the RAI response it is noted that the conclusion of the safety analysis is supported by considerable operating experience in which no significant reactions have occurred. Contrary to the 2<sup>nd</sup> sentence in Section 2.2.2.2 of the draft SER, as currently written, the RAI response did not make a commitment for the applicant (ES) to perform visual inspections of the payload cavity. It should be noted that visual examination of the payload cavity is performed by the cask user in accordance with Step 11 of Section 7.1.1 of the SAR during preparation for loading. The 2<sup>nd</sup> sentence in Section 2.2.2.2 of the SER should either be revised for consistency with the SAR and the RAI response, or it should be deleted.
8. Section 2.2.2.4, 2<sup>nd</sup> to last paragraph, 3<sup>rd</sup> sentence: Suggest changing wording from “materials of construction that may cause possible ...” to “materials of construction, including possible...”. The sentence as written does not accurately describe the purpose or content of Table 2-24 of the SAR.
9. Section 2.2.2.4, last paragraph: ES will submit a letter to NRC requesting renewal of the MIDUS CoC concurrent with the current amendment request. The renewal request will provide a revised SAR drawing to correct the typo and modify the call-out for the thread lubricant to fulfill

our previous licensing commitment. As such, the last paragraph of Section 2.2.2.4 will no longer be required.

10. Section 2.2.4.1, last paragraph: Confirmatory drop testing was performed under ambient conditions, not at -20°F as stated in the 1<sup>st</sup> sentence of the last paragraph. As discussed in Section 2 of the SAR, the purpose of the confirmatory drop tests was to confirm the adequacy of the analytical techniques used to perform the structural evaluation of the MIDUS package. Although it is true that no brittle fracture failure was observed to result from the confirmatory drop tests, that was not the purpose of the tests.
11. Section 2.2.4.2(a): Revise the section to reflect that SAR drawings were already revised with the change(s) noted and submitted with the RAI response.
12. Section 2.2.4.2(b): Revise the section to reflect that SAR drawings were already revised with the change(s) noted and submitted with the RAI response.
13. Section 2.2.4.2, last paragraph, 1<sup>st</sup> sentence: Revise sentence to reflect that SAR drawings were already revised with the change(s) noted and submitted with the RAI response.
14. Section 2.2.4.3(a): The sentence, as currently written, does not accurately state the response to RAI M-8, which stated "The inside surface of the overpack is cleaned after brazing and prior to installation of the polyurethane foam, which assures proper installation of the polyurethane foam."
15. Section 2.2.4.3, last paragraph, 2<sup>nd</sup> sentence: Change to past tense because an inspection of the fabrication activities has already been performed by NRC.
16. Section 2.4, 1<sup>st</sup> sentence: As discussed above, the revised SAR drawing will be submitted along with the request for renewal of the MIDUS CoC in combination with the current amendment request. Therefore, the first sentence should be revised to delete "the applicant's agreement to revise drawings in the application,".
17. Section 4.1, 2<sup>nd</sup> to last sentence: Suggest changing from future tense to past tense. The changes were already made in the SAR revision submitted with the RAI response.
18. Condition No. 8: Change date to May 31, 2017 for consistency with the draft CoC Rev. 3.

Please let me know if you need any additional clarification on these comments.

Best regards,

Steven Sisley  
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Cask Licensing Manager  
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Thread-Topic: Comments on Draft SER for MIDUS CoC 9320, Rev. 3

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X-ASG-Orig-Subj: Comments on Draft SER for MIDUS CoC 9320, Rev. 3

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