

**From:** Marilena Conde [mailto:mconde@edlow.com]  
**Sent:** Wednesday, April 27, 2016 10:09 AM  
**To:** Garcia-Santos, Norma <Norma.Garcia-Santos@nrc.gov>; 'Conroy, Michael (PHMSA)' <Michael.Conroy@dot.gov>; Barrios Roberto (barrios@invap.com.ar) <barrios@invap.com.ar>; jausas@invap.com.ar  
**Cc:** Ruffin, Steve <Steve.Ruffin@nrc.gov>; Smith, Shawn <Shawn.Smith@nrc.gov>; Wittick, Susan <Susan.Wittick@nrc.gov>; Rini, Brett <Brett.Rini@nrc.gov>; 'Rick.boyle@dot.gov' <Rick.boyle@dot.gov>  
**Subject:** [External\_Sender] RE: RE: Visit with INVAP--NRC  
**Importance:** High

Good morning Norma,

In anticipation of the meeting later this afternoon, I am sending you a reply to the questions you addressed in this email. I shall also bring copies so that we can review them during the meeting as well as during the conference call with the technical support in Argentina.

## ***Marilena Conde***

***Vice President***

***Marketing and Administration***

***EDLOW INTERNATIONAL COMPANY***

***Tel: 202-483-4959***

***Cell: 703-944-7949***

***email: [mconde@edlow.com](mailto:mconde@edlow.com)***

**From:** Garcia-Santos, Norma [<mailto:Norma.Garcia-Santos@nrc.gov>]  
**Sent:** Tuesday, April 26, 2016 6:06 AM  
**To:** Marilena Conde; 'Conroy, Michael (PHMSA)'  
**Cc:** Ruffin, Steve; Smith, Shawn; Wittick, Susan; Rini, Brett; 'Rick.boyle@dot.gov'  
**Subject:** RE: RE: Visit with INVAP--NRC

Good morning Marilene,

I received a question from our staff. The team wants to know if there is a possibility of also having their Argentinian counterparts on the phone, in case they have a question directly related to their technical area. The staff has used this approach in the past in which we have a corporate manager and also their technical staff on the phone in case there are very specific questions about their technical areas. This approach has worked well in the past with other applicants on resolving some of the questions from the staff.

This proposed approach is for your and Mr. Barrios consideration. Please let me your decision and we will plan accordantly.

Thanks,

*Norma Garcia Santos*

Project Manager

Spent Fuel Management Licensing Branch

Division of Spent Fuel Management

Office of Nuclear Material Safety  
and Safeguards  
**U.S. Nuclear Regulatory Commission**

Phone No. (301) 415-6999

E-mail Address: [Norma.Garcia-Santos@nrc.gov](mailto:Norma.Garcia-Santos@nrc.gov)

**From:** Marilena Conde [<mailto:mconde@edlow.com>]

**Sent:** Monday, April 25, 2016 9:54 AM

**To:** Garcia-Santos, Norma <[Norma.Garcia-Santos@nrc.gov](mailto:Norma.Garcia-Santos@nrc.gov)>; 'Conroy, Michael (PHMSA)' <[Michael.Conroy@dot.gov](mailto:Michael.Conroy@dot.gov)>

**Cc:** Ruffin, Steve <[Steve.Ruffin@nrc.gov](mailto:Steve.Ruffin@nrc.gov)>; Smith, Shawn <[Shawn.Smith@nrc.gov](mailto:Shawn.Smith@nrc.gov)>; Wittick, Susan <[Susan.Wittick@nrc.gov](mailto:Susan.Wittick@nrc.gov)>; Rini, Brett <[Brett.Rini@nrc.gov](mailto:Brett.Rini@nrc.gov)>; 'Rick.boyle@dot.gov' <[Rick.boyle@dot.gov](mailto:Rick.boyle@dot.gov)>

**Subject:** [External\_Sender] RE: Visit with INVAP--NRC

Good morning Norma,

Thank you for the detailed email and I will work with Roberto this morning to prepare for the meeting. I would like to attend if it is possible; I have been to the NRC before and my information should already be in the system. Should you wish to deal directly with Roberto, I will be happy to wait for him in the lobby.

I am also forwarding this email to his staff in Buenos Aires just in case they can provide answers to the items below.

Have a pleasant day and Roberto appreciate the opportunity to meet with you on Wednesday.

Best regards.

***Marilena Conde***

***Vice President***

***Marketing and Administration***

***EDLOW INTERNATIONAL COMPANY***

***Tel: 202-483-4959***

***Cell: 703-944-7949***

***email: [mconde@edlow.com](mailto:mconde@edlow.com)***

**From:** Garcia-Santos, Norma [<mailto:Norma.Garcia-Santos@nrc.gov>]

**Sent:** Friday, April 22, 2016 2:49 PM

**To:** Marilena Conde; 'Conroy, Michael (PHMSA)'

**Cc:** Ruffin, Steve; Smith, Shawn; Wittick, Susan; Rini, Brett; 'Rick.boyle@dot.gov'

**Subject:** Visit with INVAP--NRC

Good afternoon Marilena,

We are looking forward to meet with Roberto Barrios, Vice-President, International Trade, INVAP S.E., to clarify questions that the applicant may have about the staff's questions and issues related with the application. I appreciate that you sent the information to the NRC about

Mr. Roberto Barrios. I noticed that you included your information. Please let me know if you are also planning to attend either in person or over the phone.

Since Michael Conroy (DOT) is dealing with a family emergency and in order to provide you with information that may help Mr. Barrios to prepare for the meeting with the staff, I am sending a synopsis of some of the issues that the staff encountered with the application as well as the responses to the requests for additional information (RAIs).

It is important to note that the evaluation of the Model No. LEUPA as well the RAIs consider the T-S-R-1 requirements for a Type B package. The issues related to the staff's questions (i.e., RAIs) are included in the items below and need to be resolved before moving forward with our organization's support for this review. (This e-mail does not include the staff's assessment of the responses related to the Materials Evaluation or an in-depth assessment of the shielding evaluation.)

### **1. General questions:**

- a. The staff is aware that the application include descriptions of the main components related to this package throughout the application. Nevertheless, the staff requested to consolidate the definitions\descriptions of the main components (important to safety) in the "Definitions" section of the application.
- b. The applicant needs to define the term "Other." If this item is not resolved, there should be a condition on the recommendation for revalidation to limit the authorized contents for the Model No. LEUPA during transport to not include the term "Other."
- c. The translation of the application and documentation associated with it is incomplete;
- d. The documentation translated is not adequate or clear enough to make a revalidation recommendation;
- e. The information provided in the responses to the requests for additional information (RAI) is either unclear, incomplete, or not adequate.
- f. There are still instances in which text\links\referenced information cannot be found (For example: Table 3 of document No. 004-908-LE01-3BEIN-024B, Section 7.4.2.2, and Section 7.4.2.4.)

### **2. Criticality Safety:**

- a. Cr-1, -3, and -4  
In general, for the criticality evaluation, the staff cannot find the following information in the application:
  - i. acceptance tests for neutron absorbers;
  - ii. analysis for a single package array – Given a  $k_{\text{eff}}$  of 0.8, the staff may be able to make a determination, even though, the question was not answered;
  - iii. benchmarking analysis; and
  - iv. calculation of the upper sub criticality limit for a single package - Given a  $k_{\text{eff}}$  of 0.8, the staff may be able to make a determination, even though, the question was not answered.
- b. Cr-2



The staff would be proposing a condition to limit the amount of plastic when using the Model No. LEUPA for transporting radioactive material. (The applicant provided a response, but this response is not part of the certificate.)

### **3. Shielding Evaluation:**

- a. G-Sh-1 - The staff cannot determine if the picture referenced in the response to the question has been fixed or not (the reviewer would need to confirm this in the application documents). The response only provided another figure/diagram of the package (in Spanish) and said nothing regarding the picture the RAI asked about.
- b. G-Sh-2 – The response does not answer the question. If it is not resolved, there should be a condition on the recommendation for revalidation.
- c. Sh-2 - For the part related to hypothetical accident conditions (HAC), the response is not adequate. The staff still needs to determine if the response related to normal conditions of transport (NCT) is adequate.
- d. The application documents do not include a shielding evaluation chapter, but these include shielding-related information (e.g., dose rates, shielding analysis codes used to determine dose rates). Even though the contents in the Model No. LEUPA are Type AF quantities and there really is no need for shielding chapter, the staff needs to perform a review of the sections of the application related to a shielding evaluation because it is being revalidated as a Type B package.

### **4. Structural Evaluation\Containment Evaluation**

St-4 – The response does not directly address the question. The staff's question is about the impact(s) of the temperature and pressure (as required for a Type B package) on the spiral seal gasket (in general, compliance with TS-R-1 requirements of a Type B package).

### **5. Operating procedures**

The unloading procedure does not include torques, tolerances, dimensions, etc. (The unloading procedure should include at least details as in sections 7.2.4 and 7.2.5 of the application as well as any other applicable information.)

Please do not hesitate to contact me if you have questions about this communication.

Have nice weekend,

*Norma Garcia Santos*

Project Manager  
Spent Fuel Management Licensing Branch  
Division of Spent Fuel Management  
Office of Nuclear Material Safety  
and Safeguards  
**U.S. Nuclear Regulatory Commission**

Phone No. (301) 415-6999

E-mail Address: [Norma.Garcia-Santos@nrc.gov](mailto:Norma.Garcia-Santos@nrc.gov)



**From:** Garcia-Santos, Norma  
**Sent:** Thursday, April 21, 2016 3:08 PM  
**To:** Marilena Conde <[mconde@edlow.com](mailto:mconde@edlow.com)>; 'Conroy, Michael (PHMSA)' <[Michael.Conroy@dot.gov](mailto:Michael.Conroy@dot.gov)>  
**Cc:** Ruffin, Steve <[Steve.Ruffin@nrc.gov](mailto:Steve.Ruffin@nrc.gov)>; Smith, Shawn <[Shawn.Smith@nrc.gov](mailto:Shawn.Smith@nrc.gov)>; Wittick, Susan <[Susan.Wittick@nrc.gov](mailto:Susan.Wittick@nrc.gov)>; Rini, Brett <[Brett.Rini@nrc.gov](mailto:Brett.Rini@nrc.gov)>  
**Subject:** RE: RE: RE: Visit with INVAP

Good afternoon Marilena,

Based on conversations with the staff, Wednesday from 1:00pm to 3:00pm should be appropriate.

Thanks,  
Norma

**From:** Marilena Conde [<mailto:mconde@edlow.com>]  
**Sent:** Thursday, April 21, 2016 11:52 AM  
**To:** Garcia-Santos, Norma <[Norma.Garcia-Santos@nrc.gov](mailto:Norma.Garcia-Santos@nrc.gov)>; 'Conroy, Michael (PHMSA)' <[Michael.Conroy@dot.gov](mailto:Michael.Conroy@dot.gov)>  
**Cc:** Ruffin, Steve <[Steve.Ruffin@nrc.gov](mailto:Steve.Ruffin@nrc.gov)>; Smith, Shawn <[Shawn.Smith@nrc.gov](mailto:Shawn.Smith@nrc.gov)>  
**Subject:** [External\_Sender] RE: RE: Visit with INVAP

Hello Norma,

Thank you for your reply and we look forward to the meeting at the NRC on Wednesday at a time most convenient to you and Michael. I have asked Roberto to send his passport information for access to the NRC and should have it no later than tomorrow morning.

I appreciate all your efforts to organize this meeting.

Best regards.

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**From:** Garcia-Santos, Norma [[Norma.Garcia-Santos@nrc.gov](mailto:Norma.Garcia-Santos@nrc.gov)]  
**Sent:** Thursday, April 21, 2016 5:13 AM  
**To:** 'Conroy, Michael (PHMSA)'; Marilena Conde  
**Cc:** Ruffin, Steve; Smith, Shawn  
**Subject:** RE: RE: Visit with INVAP

Good morning Michael,

I hope that you are fine. I talked to the review team and Wednesday is the best day for them.

Thanks for taking time to respond during your family emergency.  
Norma

**From:** Conroy, Michael (PHMSA) [<mailto:Michael.Conroy@dot.gov>]  
**Sent:** Wednesday, April 20, 2016 9:25 PM  
**To:** Garcia-Santos, Norma <[Norma.Garcia-Santos@nrc.gov](mailto:Norma.Garcia-Santos@nrc.gov)>; Marilena Conde <[mconde@edlow.com](mailto:mconde@edlow.com)>  
**Cc:** Ruffin, Steve <[Steve.Ruffin@nrc.gov](mailto:Steve.Ruffin@nrc.gov)>; Smith, Shawn <[Shawn.Smith@nrc.gov](mailto:Shawn.Smith@nrc.gov)>  
**Subject:** [External\_Sender] RE: Visit with INVAP

Norma and Marilena –

I am currently out of the office due to a family emergency.

I am hoping I will back in the office next week, but at this point I do not know for certain that I will be.

If I'm back, I should be available for a meeting Monday – Thursday.

Perhaps we should aim for midweek at NRC and hope that I am back in time. You could meet without me if I can't make it.

**From:** Garcia-Santos, Norma [<mailto:Norma.Garcia-Santos@nrc.gov>]  
**Sent:** Tuesday, April 19, 2016 11:28 AM  
**To:** Marilena Conde; Conroy, Michael (PHMSA)  
**Cc:** Ruffin, Steve; Smith, Shawn  
**Subject:** Visit with INVAP

Hello Marilena,

I verified our internal process and since DOT is the competent authority that requested NRC's support, and other aspects related to this specific case, there would not be a need for public meeting to discuss your questions. I will rely on Michel (DOT) to make the decision regarding this meeting and as I previously mentioned, I will verify the staff's availability to support this meeting.

(FYI: Steve is my supervisor and Shawn is the Coordinator for International Activities in my organization.)

Thanks,  
Norma

**From:** Marilena Conde [<mailto:mconde@edlow.com>]  
**Sent:** Tuesday, April 19, 2016 10:24 AM  
**To:** Garcia-Santos, Norma <[Norma.Garcia-Santos@nrc.gov](mailto:Norma.Garcia-Santos@nrc.gov)>; Michael Conroy ([Michael.Conroy@dot.gov](mailto:Michael.Conroy@dot.gov)) <[Michael.Conroy@dot.gov](mailto:Michael.Conroy@dot.gov)>  
**Subject:** [External\_Sender] RE: Visit with INVAP

Hello Norma,

Appreciate your reply and hope we can still make time. Look forward to hearing from both you and Michael.

Have a pleasant day.

Cordially,

***Marilena Conde***  
***Vice President***  
***Marketing and Administration***

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**Tel: 202-483-4959**

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**email: [mconde@edlow.com](mailto:mconde@edlow.com)**

**From:** Garcia-Santos, Norma [<mailto:Norma.Garcia-Santos@nrc.gov>]

**Sent:** Tuesday, April 19, 2016 10:02 AM

**To:** Marilena Conde; Michael Conroy ([Michael.Conroy@dot.gov](mailto:Michael.Conroy@dot.gov))

**Subject:** RE: Visit with INVAP

Good morning Marilena,

I need to verify DOT's and staff's availability. (FYI: For this type of meeting, NRC usually announces a public meeting 10 calendar days prior to the meeting.)

Thanks for letting us know that INVAP will be in DC next week.

*Norma Garcia Santos*

Project Manager

Division of Spent Fuel Management

Office of Nuclear Material

Safety and Safeguards

U.S. Nuclear Regulatory Commission

Telephone No.: 301-415-6999

Email: [Norma.Garcia-Santos@nrc.gov](mailto:Norma.Garcia-Santos@nrc.gov)

**From:** Marilena Conde [<mailto:mconde@edlow.com>]

**Sent:** Tuesday, April 19, 2016 9:41 AM

**To:** Michael Conroy ([Michael.Conroy@dot.gov](mailto:Michael.Conroy@dot.gov)) <[Michael.Conroy@dot.gov](mailto:Michael.Conroy@dot.gov)>; Garcia-Santos, Norma <[Norma.Garcia-Santos@nrc.gov](mailto:Norma.Garcia-Santos@nrc.gov)>

**Subject:** [External\_Sender] Visit with INVAP

Good morning Michael and Norma,

Roberto Barrios is planning to be in Washington April 25 through April 29 and asked whether it would be possible to visit with both of you and discuss any open issues regarding the LEUPA cask. Please let me know if we can schedule a time to meet with both of you.

Thank you for your consideration and look forward to your response.  
Cordially,

***Marilena Conde***

***Vice President***

***Marketing and Administration***

***EDLOW INTERNATIONAL COMPANY***



**Tel: 202-483-4959**  
**Cell: 703-944-7949**  
**email: [mconde@edlow.com](mailto:mconde@edlow.com)**

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x-sender="mconde@edlow.com"; x-conformance=spf\_only

Received-SPF: None (mail1.nrc.gov: no sender authenticity information available from domain of postmaster@us-smtp-delivery-156.mimecast.com) identity=helo; client-ip=216.205.24.156; receiver=mail1.nrc.gov; envelope-from="mconde@edlow.com"; x-sender="postmaster@us-smtp-delivery-156.mimecast.com"; x-conformance=spf\_only

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X-SBRS: 4.4

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X-fn: Apr 27 2016 Reply to NRC General Questions.doc

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X-IronPort-Anti-Spam-Result:

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Thread-Topic: RE: RE: Visit with INVAP--NRC

Subject: [External\_Sender] RE: RE: Visit with INVAP--NRC

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14.02.0318.004; Wed, 27 Apr 2016 10:09:15 -0400

From: Marilena Conde <mconde@edlow.com>

To: "Garcia-Santos, Norma" <Norma.Garcia-Santos@nrc.gov>, "Conroy, Michael  
(PHMSA)" <Michael.Conroy@dot.gov>, "Barrios Roberto (barrios@invap.com.ar)"

<barrios@invap.com.ar>, "jausas@invap.com.ar" <jausas@invap.com.ar>

CC: "Ruffin, Steve" <Steve.Ruffin@nrc.gov>, "Smith, Shawn"

<Shawn.Smith@nrc.gov>, "Wittick, Susan" <Susan.Wittick@nrc.gov>, "Rini,

Brett" <Brett.Rini@nrc.gov>, "Rick.boyle@dot.gov" <Rick.boyle@dot.gov>

Thread-Topic: RE: Visit with INVAP--NRC

Thread-Index: AdGcx5hmifVIZ6iFQ7aDK+u0vHJ/TwCMXj0wACowEuAAOnxvEA==

Importance: high

X-Priority: 1  
Date: Wed, 27 Apr 2016 14:09:14 +0000  
Message-ID:  
<50C3B61F236AC44BB58665B90C5EAC2702B5EC4F@EDLOWSBS.Edlow.local>  
References: <9fe34efc6fc340508ae39265d2236719@HQPWMSMRS01.nrc.gov>  
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<2d23ddce4ebf4b50af20b3d5acb6d2f6@HQPWMSMRS01.nrc.gov>  
In-Reply-To: <2d23ddce4ebf4b50af20b3d5acb6d2f6@HQPWMSMRS01.nrc.gov>  
Accept-Language: en-US  
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X-MS-Has-Attach: yes  
X-MS-TNEF-Correlator:  
x-originating-ip: [192.168.4.69]  
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    boundary="\_004\_50C3B61F236AC44BB58665B90C5EAC2702B5EC4FEDLOW  
SBSEdlowlo\_"  
Return-Path: mconde@edlow.com  
X-MS-Exchange-Organization-Network-Message-Id: 220324fa-4e3d-45be-b01e-  
08d36ea58c31  
X-MS-Exchange-Organization-AVStamp-Enterprise: 1.0  
X-MS-Exchange-Organization-AuthSource: HQPWMSMRS02.nrc.gov  
X-MS-Exchange-Organization-AuthAs: Anonymous



1. *General questions:*

1. The staff is aware that the application includes descriptions of the main components related to this package throughout the application. Nevertheless, the staff requested to consolidate the definitions\descriptions of the main components (important to safety) in the "Definitions" section of the application.

**Are these definitions expected to be included in the "Definitions" sections of the Safety Report (0908-LE00-3BEIN-023)? These modifications can be done promptly.**

2. The applicant needs to define the term "Other." If this item is not resolved, there should be a condition on the recommendation for revalidation to limit the authorized contents for the Model No. LEUPA during transport to not include the term "Other. **OTHER means any other authorized contents that can be included in the LEUPA cask i.e., ingots.**
3. The translation of the application and documentation associated with it is incomplete. **Translation will be revised. However, more information about incomplete parts may be useful.**
4. The documentation translated is not adequate or clear enough to make a revalidation recommendation;  
**This seems to be related to the ARN Certificate Translation. Which is exactly the inadequate or unclear part of the translation?**
5. The information provided in the responses to the requests for additional information (RAI) is either unclear, incomplete, or not adequate. **Are these responses the ones detailed below or are there more of them?**
6. There are still instances in which text\links\referenced information cannot be found (For example: Table 3 of document No. 004-908-LE01-3BEIN-024B, Section 7.4.2.2, and Section 7.4.2.4.) **The mentioned document will be send to you again with the links updated.**

1. *Criticality Safety:*

1. Cr-1, -3, and -4

In general, for the criticality evaluation, the staff cannot find the following information in the application: i. acceptance tests for neutron absorbers; **The acceptance test criterion must be defined. Between the Cadmium casting efficiency and the manufacturing error analysis from the Criticality analysis and its independent review, we assume that the Cadmium casting could be accepted as it was. If this acceptance criterion is insufficient, we would like to know the expected tests.**

ii. analysis for a single package array – Given a  $k_{eff}$  of 0.8, the staff may be able to make a determination, even though, the question was not answered; **We insist that the results for the LEUPA arrays in the**

different analysed conditions include the single package case. That is the reason why we have not included explicitly in our analysis as we have previously stated in the response to Cr-4 and as it was stated in the section 5.1.5, paragraph 7 of the Safety Report (0908-LE00-3BEIN-023-B)

iii. benchmarking analysis; and Our response to Cr-1 was focused to show that we performed an independent calculation using another code, another library of cross-sections and another independent analyst to provide more certainty (confidence) to the results obtained at the initial criticality analysis. In both cases, the used tools had been largely validated for similar applications, as stated in the section 7.2, paragraphs 1 and 3 of the document 021 0908-LE02-3BEIN-007-A. To our understanding, TS-R -1 Standard does not require explicitly to benchmark the whole chain of calculation, but only to do a conservative estimation of the analysed situations. If, nevertheless, the benchmarking is a requirement from DOT/NRC, we would like to clarify which is the perspective expected by DOT/NRC for this benchmarking. Is it about showing calculations performed by INVAP for similar problems, using the same tools - XS and codes - and the same analysis methods? Why is not the V&V information provided with MCNP and SCALE enough? Once again, this task may be achieved.

iv. calculation of the upper sub criticality limit for a single package - Given a  $k_{eff}$  of 0.8, the staff may be able to make a determination, even though, the question was not answered. **Idem as in previous bullet.**

1. Cr-2

The staff would be proposing a condition to limit the amount of plastic when using the Model No. LEUPA for transporting radioactive material. (The applicant provided a response, but this response is not part of the certificate.) **Our analysis indicated that 400 grams of polyethylene is the upper limit for the mass of wrapping of the four containers.**

1. *Shielding Evaluation:*

1. G-Sh-1 - The staff cannot determine if the picture referenced in the response to the question has been fixed or not (the reviewer would need to confirm this in the application documents). The response only provided another figure/diagram of the package (in Spanish) and said nothing regarding the picture the RAI asked about. **Information was required about something observed in picture 27 of the "Test Final Report". However, this picture is misleading and what you see is a round piece of expandable resin used to avoid the containers from moving inside the package which, due to the temperature reached during the tests, stuck to the cover. This piece is mentioned in the "Operation Manual"**



**and it is only necessary if there is room left after loading the cans into the LEUPA.**

1. G-Sh-2 – The response does not answer the question. If it is not resolved, there should be a condition on the recommendation for revalidation. . **OTHER means any other authorized contents that can be included in the LEUPA cask i.e., ingots. This is the same answer of Item 2. General Questions.**
2. Sh-2 - For the part related to hypothetical accident conditions (HAC), the response is not adequate. The staff still needs to determine if the response related to normal conditions of transport (NCT) is adequate. **We cannot understand why the response is inadequate. The anticipated fissile content of the LEUPA yields negligible dose rates (sections 4.1 and 4.2 of 0908-LE00-3BEIN-025-B Radiation Protection Manual). Calculations show less than 1 microSv/h at a distance of 1 m. (section 2.6 of 0908-LE00-3BEIN-023-B Safety Report).**
- d. The application documents do not include a shielding evaluation chapter, but these include shielding-related information (e.g., dose rates, shielding analysis codes used to determine dose rates). Even though the contents in the Model No. LEUPA are Type AF quantities and there really is no need for shielding chapter, the staff needs to perform a review of the sections of the application related to a shielding evaluation because it is being revalidated as a Type B package. **If it is necessary a shielding chapter will be added. In which document do you expect this chapter to be found?**

#### 1. *Structural Evaluation\Containment Evaluation*

St-4 – The response does not directly address the question. The staff's question is about the impact(s) of the temperature and pressure (as required for a Type B package) on the spiral seal gasket (in general, compliance with TS-R-1 requirements of a Type B package). **According to the manufacturer, the spiral gasket is designed to work at pressures up to 150 Bar and up to 500°C. This fulfills the requirements from TS-R-1. Moreover, the test results show that the gasket is not damaged after the procedures are carried out, as it can be observed in the document 0908-LE02-3BSIN-008 (Image 27). Finally, the gasket supported the 200 meter height of water column required during the immersion test (where the resulting pressure is considerably lower than the gasket operational limit).**

#### 1. *Operating procedures*

The unloading procedure does not include torques, tolerances, dimensions, etc. (The unloading procedure should include at least details as in sections 7.2.4 and 7.2.5 of the application as well as any other applicable information.)

**In the paragraph 7.2.6 item 7 of the document 0908-LE00-3BEIN-017, it is defined that tolerances, dimensions, torque, etc, are the same as in 7.2.4 y 7.2.5. If it is necessary to add an item repeating those values, it can be done in a new version of that document.**