

Buenos Aires, Argentina, July 18th, 2016

Mr. Richard W. Boyle, Chief  
Sciences Branch  
Division of Engineering and Research  
Office of Hazardous Materials Safety  
United States Department of Transportation  
1200 New Jersey Ave., S.E.  
Washington, D.C. 20590

**Subject: Docket N° 71-3090 and CAC N° L25036. Resubmittal of request for additional information for the Model N° LEUPA Package**

Dear Mr. Boyle:

Enclose are INVAP's Responses to the Resubmittal of Request for Additional Information for the docket of reference and a Files Guideline.

Please check file "002 LEUPA Revalidation Review RAI" for:

- General information
- Criticality safety
- Shielding evaluation
- Containment evaluation
- Package operations

Sincerely,



Roberto J. Barrios  
VP International Trade  
INVAP S.E.  
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## Files Guideline:

- Folder DOCS
- Folder DRAWS

## Folder DOCS

**Content:** The folder DOCS contains documents such as reports, analysis, manuals, programs, specifications, tests carried out, calculation reports and reviews, delivered to NRC-DOT in response to the RESUBMITTAL OF REQUEST FOR ADDITIONAL INFORMATION FOR THE MODEL NO. LEUPA PACKAGE (RAI) dated June 17, 2016.

001. 0908-LE00-3BEIN-023-C - Safety Report
002. 0908-LE02-3BEIN-008-B - Tests Final Report
003. 0908-LE01-3BEIN-024-C - Criticality Analysis
004. 0908-LE00-3BEIN-017-C - Operation Manual
005. 0908-LE00-2BEIN-015-B - Thermal Analysis
006. 0908-LE00-3BEIN-025-B - Radiation Protection Program
007. 0908-LE00-3BEIN-026-B - Inspection and Maintenance Manual
008. 0908-LE00-EDEIN-019-B - Quality Management Program for the LEUPA Package
009. 0908-LE01-3BEIN-011-B - Calculation Report
010. 0908-LE01-3BEIN-012-B - Verification of Lifting Points of the LEUPA Package
011. 0908-LE01-3BEIN-013-B - Manufacture Specifications
012. 0908-LE00-3DEIN-018-C - Transport Manual
013. 0908-LE01-3BEIN-025-B - Analysis of the LEUPA Package –Restraint for Transport
014. 0908-LE01-3BEIN-026-B - Analysis of the LEUPA Package – Impact Test
015. 0908-LE02-3BEIN-002-B - LEUPA Specification of Approval Tests for Type B(U) Package for Fissile Materials
016. 0908-LE02-3BEIN-003-B - Analysis of the LEUPA Package – Drop Position Causing Most Damage
017. 0908-LE02-3BEIN-004-A - Analysis of the LEUPA Package – External Pressure
018. 0908-LE02-3BEIN-006-A - LEUPA Specification for the Assembly of the Type B(U) Package for Approval Tests
019. 0908-LE00-EBEIN-001-A - Database for the Design of LEUPA Package

- 020. 0908-LE02-3BEIN-007-A - Independent Review of Doc. 0908-LE01-3BEIN-024-B – Criticality Analysis
- 021. 0908-LE01-3BEIN-028-A - Dose Rate Calculations
- 022. 0908-LE01-3BEIN-027-A - Calculation Line for LEUPA Sub-Criticality Analysis
- 023. LEUPA ARN certificate + translation

## Folder INPUT FILES

The following files correspond to new versions:

- 001 0908-LE00-3BEIN-023-C - Safety Report
- 003 0908-LE01-3BEIN-024-C - Criticality Analysis
- 004 0908-LE00-3BEIN-017-C - Operation Manual
- 012 0908-LE00-3DEIN-018-C - Transport Manual

The translation of the LEUPA's approval certificate refers to documents in Spanish version; therefore, the new translation of the certificate that is sent, includes the identification number of documents in English version. File:

- 023 LEUPA ARN certificate + translation

The following files have been added:

- 021 0908-LE01-3BEIN-028-A - Dose Rate Calculations
- 022 0908-LE01-3BEIN-027-A - Calculation Line for LEUPA Sub-Criticality Analysis

The folder INPUT FILES contains the input files related to:

- 003 0908-LE01-3BEIN-024-C - Criticality Analysis
- 021 0908-LE01-3BEIN-028-A - Dose Rate Calculations

  
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The content of the rest of the files in folder DOCS, has not been modified; only the translations were reviewed.


## Folder DRAWS

**Content:** The folder DRAWS contains the drawings referenced in the text of application, delivered to NRC-DOT in response to the RESUBMITTAL OF REQUEST FOR ADDITIONAL INFORMATION FOR THE MODEL NO. LEUPA PACKAGE (RAI) dated June 17, 2016.

- 00A. 0908-LE01-3AEIN-004-B - Package General Assembly
- 00B. 0908-LE01-3AEIN-005-A - Package – Main Body Container of Inner Containers
- 00C. 0908-LE01-3AEIN-006-A - Package – Main Body Cadmium Chamber
- 00D. 0908-LE01-3AEIN-007-A - Inner Container
- 00E. 0908-LE01-3AEIN-008-A - Packaging Intermediate Cover
- 00F. 0908-LE01-3AEIN-009-A - Packaging External Cover
- 00G. 0908-LE01-3AEIN-010-A - Packaging Main Body
- 00H. 0908-LE01-3AEIN-015-A - Packaging Main Body Type A & B Sheets
- 00I. 0908-LE01-3AEIN-016-A - Packaging Main Body Flange
- 00J. 0908-LE01-3AEIN-017-A - Packaging Main Body Warning Plate
- 00K. 0908-LE01-3AEIN-018-A - Packaging Main Body Name Plate
- 00L. 0908-LE01-3AEIN-019-A - Packaging Main Body Design and Manufacture Plate
- 00M. 0908-LE01-3AEIN-020-A - Set of Joints Rubber Supplements
- 00N. 0908-LE02-3AEIN-001-A - Immersion Test Containers
- 00O. 0908-LE02-3AEIN-003-A - Indenter for Testing According Paragraph 724
- 00P. 0908-LE02-3AEIN-004-A - Indenters for Testing According Paragraphs 727 B) & 735 B)
- 00Q. 0908-LE02-3AEIN-005-A - Plate for Testing According Paragraph 727 C)
- 00R. 0908-LE02-3AEIN-006-A - Disposition of the Indenters on the Target
- 00S. 0908-LE02-3AEIN-009-A - Piping for Aspersion Test
- 00T. 0908-LE02-3AEIN-012-A - Quick Release Hook for Drop Tests
- 00U. 0908-LE02-3AEIN-013-A - Fixing Elements Anchorage
- 00V. 0908-LE02-3AEIN-014-A - Fixing Elements Wedge
- 00W. 0908-LE02-3AEIN-015-A - Fixing Elements Clamping Over

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The following file corresponds to a new version:

- 00A 0908-LE01-3AEIN-004-B - Package General Assembly

The content of the rest of the files in folder DRAWS, has not been modified; only the translations were reviewed.



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