

LEUPA

Type B(U) Package to Contain Fissile Substances

INSPECTION AND MAINTENANCE MANUAL

Made by

IN/AP

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1 PURPOSE

1. The purpose of this manual is to ensure that transport packaging containing fissile substances, the design of which has been approved by the ARN (Nuclear Regulatory Authority) as package RA/0103/B(U)F-96 – LEUPA, is duly inspected and maintained.

2 SCOPE

1. This manual is applicable to all RA/0103/B(U)F-96 – LEUPA packaging. The packaging shall be inspected before each loading. No inspection is required for empty packages.

3 APPLICABLE DOCUMENTS

Drawing	Title
0908-LE01-3ASIN-004	LOW ENRICHED URANIUM PACKAGE (LEUPA) – PACKAGE – GENERAL ASSEMBLY
0908-LE01-3ASIN-005	LOW ENRICHED URANIUM PACKAGE (LEUPA) – CONTAINER OF INNER CANS
0908-LE01-3ASIN-006	LOW ENRICHED URANIUM PACKAGE (LEUPA) – PACKAGE – MAIN BODY – CADMIUM CHAMBER
0908-LE01-3ASIN-007	LOW ENRICHED URANIUM PACKAGE (LEUPA) – INNER CAN
0908-LE01-3ASIN-008	LOW ENRICHED URANIUM PACKAGE (LEUPA) – PACKAGE – INTERMEDIATE COVER
0908-LE01-3ASIN-009	LOW ENRICHED URANIUM PACKAGE (LEUPA) – PACKAGE – EXTERNAL COVER
0908-LE01-3ASIN-010	LOW ENRICHED URANIUM PACKAGE (LEUPA) – PACKAGE – MAIN BODY
0908-LE01-3ASIN-015	LOW ENRICHED URANIUM PACKAGE (LEUPA) – PACKAGE - MAIN BODY – TYPE “A” AND “B” PLATES
0908-LE01-3ASIN-016	LOW ENRICHED URANIUM PACKAGE (LEUPA) – PACKAGE – MAIN BODY – FLANGE
0908-LE01-3ASIN-017	LOW ENRICHED URANIUM PACKAGE (LEUPA) – PACKAGE – MAIN BODY – WARNING PLATE
0908-LE01-3ASIN-018	LOW ENRICHED URANIUM PACKAGE (LEUPA) – PACKAGE – MAIN BODY – NAME PLATE
0908-LE01-3ASIN-019	LOW ENRICHED URANIUM PACKAGE (LEUPA) – PACKAGE – MAIN BODY – DESIGN AND MANUFACTURE PLATES
0908-LE01-3ASIN-020	LOW ENRICHED URANIUM PACKAGE (LEUPA) – GASKET SET AND RUBBER SUPPLEMENTS

4 ABBREVIATIONS

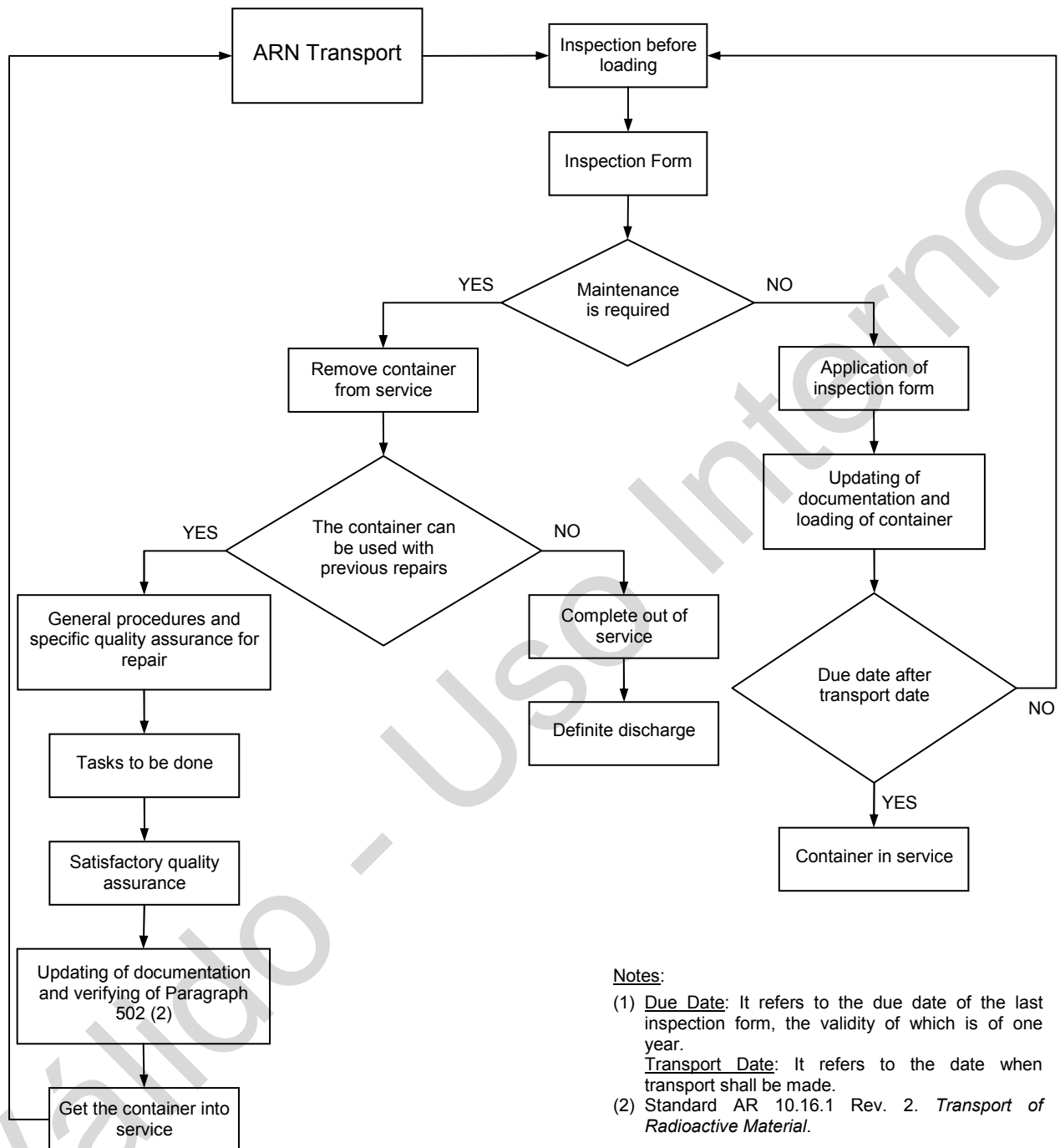
Abbreviation	Description
FS	Fissile Substance

Abbreviation	Description
LEUPA	Low Enriched Uranium Package for Transport

5 INSPECTION PROCEDURE

1. The owner of package shall appoint a technical group in charge of the development of the tasks established in this manual.
2. The owner of package shall appoint an operation group to perform tasks of disassembly, visual inspection and assembly of the involved packages.
3. Inspection shall be undertaken and approved within three (3) months prior to each loading.
4. Inspection and maintenance procedure shall be carried out following the flux diagram specified in Picture 1:.
5. An inspection form shall be filled in for each inspection (Picture 2:, Picture 3: and Picture 4:).
6. The operation group is responsible for the required inspection before each loading and for the documentation of points A and B of the inspection form (Picture 1: and Picture 2:).
7. The inspection form shall be sent to the technical group to be approved.
8. The technical group shall decide whether the package is acceptable for transport or if it requires repair and maintenance operations.
9. If package state is acceptable for transport, the technical group shall approve the inspection form, and send an authorized copy to the operation group to be attached to dispatch documentation. A packaging label shall be put indicating its approval status for transport (see Picture 5:).
10. Inspection forms shall be sent to ARN Transport.

Picture 1: Flux diagram of inspection and maintenance procedure



Picture 2: Inspection form 1

LEUPA		INSPECTION FORM 1		
Date: ____ / ____ / ____		Page No. ____ of ____		
Packaging: LEUPA	Type of Material to be Transported: _____			
Series Number: _____				
A – Visual Inspection		Accepted	Rep. / Maint.	Notes
Body and Covers:				
Structure:	Corrosion			
	Fissures Breaking or			
	Dents			
Bolts and Washers:				
Welding:	Fissures Breaking or			
	Corrosion			
Elastometer in Inner Covers:	Pasting			
	Breaking			
	Wearing			
Name Plate:	Clamping			
	Paint			
Warning Plate:	Clamping			
	Paint			
Spiral Gasket Container of Inner Cans:				
INNER CANS				
Cans:	Fissure or Braking			
	Corrosion			
	Deformation			
Lids:	Fissure Breaking or			
	Corrosion			
	Wear			

Picture 3: Inspection form 2

LEUPA				INSPECTION FORM 2			
Date: ____ / ____ / ____				Page No. ____ of ____			
B – Inspection Results							
Acceptable for Service		Yes		No		(Cross out what does not correspond)	
Inspection Manager:		_____ Signature		_____ Print Full Name			
C – Approved and Documented							
Date of Approval		____ / ____ / ____					
Inspection Manager:		_____ Signature		_____ Print Full Name			

[illegible]

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Picture 5: Form for approval for inspection and maintenance

<h1>LEUPA</h1>			
<h2>INSPECTION AND MAINTENANCE</h2> <h2>APPROVED</h2>			
SERIES NUMBER			
Date of Inspection			
Due Date			
Approval Manager:	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%; border-bottom: 1px solid black; text-align: center;">Signature</div> <div style="width: 45%; border-bottom: 1px solid black; text-align: center;">Write Full Name</div> </div>		

5.1 Requirements of Repair and Maintenance Operations

1. The package shall be retired from service.
2. The quality assurance procedures shall be applied for the repairing and maintenance of package.
3. Modifications to the design are not allowed without the application of the Quality Assurance procedures and the consent of INVAP S.E. and ARN Transport.
4. All necessary tasks in accordance with the procedures established in the execution of the above point shall be carried out.
5. Documentation must be sent to ARN Transport and then the package shall be returned to service.
6. The technical group is responsible for the updating and filing in of inspection and maintenance documentation.
7. The term between the inspection and transport cannot be more than one (1) year. In case this condition is not complied with, the package shall be downloaded and a new inspection carried out before transport.
8. No inspection is required prior to transport of empty package.

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