

Presentation PATRAM 2019 - paper 1290

Thomas BANDE, Marlon HESIUS, Vincent LEBLANC, Guy LOURTIE

INSPECTIONS PROGRAMME OF THE BELGIAN COMPETENT AUTHORITY (FANC) FOR NON-APPROVED AND APPROVED PACKAGE DESIGNS

Introduction

Regulations for the Safe Transport of Radioactive Material (SSR-6) 2012:

307. The competent authority shall assure compliance with these Regulations.

SSG-26 2012: *307.4. An effective compliance assurance programme should, as a minimum, include measures related to:*

- (a) Review and assessment, including the issuance of approval certificates;*
- (b) Inspection and enforcement.***

Before 2019

Inspections of FANC's Transport section :

- one-off inspections of shipments
- management system inspections of registered organizations (carriers, handling agents, ...)
- *occasional inspections of non-approved package designs*
- *occasional packaging manufacture inspections*
- (reactive inspections)

Starting from 2019

New Belgian legislation:

- Royal Decree of 22 October 2017 on the transport of class 7 dangerous goods
- Related FANC regulations (published on 18 May 2018):
 - Chapter 7: Obligations for applicants of package design approvals
 - Chapter 8: Obligations for approvals other than specified in chapter 7
 - Chapter 9: Various obligations for package designs and packagings
 - Chapter 10: External advice

→ Inspections programme is elaborated with regard to package designs

Inspections programme for package designs

- Updated every 3 years and implemented yearly as an inspection plan
- Following a graded approach, with focus on
 - Risk
 - Use in Belgium
- Input = notification system: clear view on
 - Use in Belgium
 - Complete life cycle (for approved package designs)

Notification system

Design	Required Actions				
	(non-approved package) Design Notification	Manufacture Notification	<i>Manufacturing Records</i>	1 st Use Notification	Serial Number Notification
Belgian non-approved package design (excepted)	1X per year by designer		<i>Kept available by designer</i>		
Non-Belgian non- approved package design (excepted)	1X per year by B owner				
	1X per year by B consignor (if no B owner)				
	1X per year by B consignee (if no B owner or consignor)				
Belgian approved package design		At least 4 weeks before start, by the designer	<i>Kept available by owner</i>	B owner	when: a packaging is commissioned; a packaging is decommissioned; the owner of a packaging changes. by the owner
				B consignor (if loaded in Belgium)	
				B consignee (if no B owner or consignor)	
Non-Belgian unilaterally approved package design		If DPC: At least 4 weeks before start, by the designer	<i>If DPC: Kept available by B owner</i>	Consignor (notification should contain certificate)	when: a packaging is commissioned; a packaging is decommissioned; the owner of a packaging changes. by the B owner
Non-Belgian multilaterally approved package design		If DPC: At least 4 weeks before start, by the designer	<i>If DPC: Kept available by B owner</i>	B owner	when: a packaging is commissioned; a packaging is decommissioned; the owner of a packaging changes. by the B owner
				B consignor (if loaded in Belgium)	
				B consignee (if no B owner or consignor)	
Non-Belgian SFRAM design				Consignor (notification should contain certificate)	

B=Belgium/Belgian; DPC=Dual Purpose Cask, loaded and stored >1y in B; SFRAM=Special Form Radioactive Material

Approved package designs

	Manufacturing (#inspections)		Mass production (#inspections per packagings produced)			Operation (#inspections)	
	Mgmt system	First packaging	Fissile, loaded & stored in B >1y	Other Fissile	Other	First use	First maintenance
Belgian design	1	1	1/3	1/6	1/10	1	1
Non-Belgian design, with Belgian owner	1	1	1/6	1/10	1/20	1	1

→ Not all packagings are systematically inspected, but
“higher level” compliance assurance

(prime responsibility for safety must rest with user – according to SF-1 of
IAEA)

Other designs

- Non-approved package designs (type IP-1, IP-2, IP-3 and A) used in Belgium: 4 safety report reviews/y (for each an inspection 'in the field')
- Other (SpAr, SFRAM...): ad hoc

Lessons learned (July 2019)

- Non-approved package designs (type A) used in Belgium: 2 safety report reviews
 - No fundamental issues for safety
 - Necessary improvements for documentation: description of contents, justifications and the certificate of compliance
 - European PDSR (Package Design Safety Reports) Guide is highly recommended
- Approved package designs (*starting up...*)
 - More transparent Inspections programme
 - Better collaboration with involved stakeholders

Conclusion

Inspections programme for package designs allows for:

- Continuous improvement concerning para 307 of SSR-6
- Preventive (versus repressive) approach
- Identification and sharing of best practices among all stakeholders
- Better (transparent) communication to the stakeholders and the public

Questions?

transport@fanc.fgov.be

