



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

April 30, 2021

Nelson Kays
Packaging Engineering Specialist
BCA Packaging Services

Reference No. 21-0009

Dear Mr. Kays:

This letter is in response to your January 29, 2021, letter and previous phone conversations requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to UN Series 6(d) testing. Specifically, you describe a scenario in which your company repackages and reoffers an explosive that is currently approved under EX2003030247; however, the approval is issued to a different company. Furthermore, you state that when repackaged, the explosive continues to be identified and associated with the manufacturer and product designation/part number specified in the EX approval.

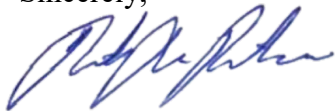
We have paraphrased and answered your questions as follows:

- Q1. You ask whether your company can reproduce the packaging authorized in EX2003030247 without conducting UN Series 6(d) testing. You indicate that the reproduced packaging retains the specified segregation dimensions, spacing, and materials of construction of the original inner and intermediate packaging, but is designed to hold less than 20 intermediate packagings (i.e., less than the maximum specified in the EX approval).
- A1. The answer is yes. The EX approval authorizes the transportation of the explosive in the packaging configuration outlined in the Competent Authority Approval (i.e., the EX approval) letter, and indicates that the explosive meets the UN Series 6(d) test criteria when in the prescribed configuration. Therefore, when the reproduced packaging meets all of the conditions prescribed in the packaging notes, the approval remains valid without needing new UN Series 6(d) testing. Please note that the explosive still must be offered under the EX approval, and must be associated with the manufacturer and product designation/part number specified in the EX approval.

- Q2. You ask whether an UN Specification 4G (fiberboard) box must be used as the outer packaging when reproducing the packaging, as described in Q1.
- A2. The answer is yes. See answer A1 as well as the EX approval for outer packaging requirements.
- Q3. You ask whether the materials of construction (i.e., the specific fiberboard material, fluting, number of corrugate layers or edge crush/burst strength of board, etc.) must be identical to the UN Specification 4G (fiberboard) box in the EX approval, when reproducing the packaging as described in Q1.
- A3. The answer is no, unless a difference in the outer packaging would impact the classification of the explosive. As specified in the UN Manual of Tests and Criteria, Section 16.7.1.3.1, explosives shall be submitted for UN Series testing “in the same condition and form in which they are offered for transport.” While the EX approval does not specify criteria regarding the UN Specification 4G (fiberboard) box, the classification of an explosive article or substance is based on the packaging configuration used during testing. Therefore, a change to the packaging configuration, such as a change to the UN Specification 4G (fiberboard) box, that would impact the classification of the explosive article or substance (e.g., a change that would affect test results), would constitute a “new explosive” in accordance with § 173.56(a)(2).

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Dirk Der Kinderen', is positioned above the printed name.

Dirk Der Kinderen
Chief, Standards Development Branch
Standards and Rulemaking Division

Hello Mr. Foster,

I am writing to request a formal letter of interpretation. Can you please provide guidance in regards to 49CFR§172.102 (c)(1)347?

The Special Provision States:

Effective July 1, 2011, for transportation by aircraft, this entry may only be used if the results of Test series 6(d) of Part I of the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter) have demonstrated that any hazardous effects from accidental functioning are confined to within the package. Effective January 1, 2012, for transportation by vessel, this entry may only be used if the results of Test Series 6(d) of Part I of the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter) have demonstrated that any hazardous effects from accidental functioning are confined to within the package. Effective January 1, 2014, for transportation domestically by highway or rail, this entry may only be used if the results of Test Series 6(d) of Part I of the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter) have demonstrated that any hazardous effects from accidental functioning are confined to within the package. Testing must be performed or witnessed by a person who is approved by the Associate Administrator (see §173.56(b) of this subchapter). All successfully conducted tests or reassignment to another compatibility group require the issuance of a new or revised approval by the Associate Administrator prior to transportation on or after the dates specified for each authorized mode of transport in this special provision.

My question has 2 parts

Part 1:

Can Boeing produce 6(d) tested packaging as specified by a CA letter without further 6(d) testing?

Pacific Scientific offers a 4x5 array of 20 count 1.4s P/N 52000735-1 in one package as approved under EX2003030247 with a completed 6(d) test.

Boeing would like to reproduce the inner packagings and intermediate packaging. All specified dimensions, spacing and materials will be retained with a reduced quantity of inner packagings. Pacific Scientific P/N 52000735-1 will be offered for shipment using EX2003030247 without further 6(d) testing.

Part 2:

Is the specification of outer packaging (4G Box) included in requirements of the 6(d) test?

CA Letter specifies 4G fiberboard but does not specify flute, number of corrugate layers or edge crush/burst strength of board. Is Boeing able to specify grade of 4G corrugated fiberboard based on POP's testing alone or does it need to match the specific board material used in the 6(d) test by Pacific Scientific?

Attachments:

- EX2003030247.pdf
- M2252-D37511-3.pdf
- D37511-3_PRODUCT STANDARD.pdf

From: [Foster, Glenn \(PHMSA\)](#)
To: [Dodd, Alice \(PHMSA\)](#); [Hillman, Kenetha CTR \(PHMSA\)](#)
Subject: [EXTERNAL] Repackaging Explosives, UN6(d) criteria, UN0323 Cartridge Power Device 1.4S
Date: Monday, February 1, 2021 10:46:39 AM

Alice / Kenetha

Please see the attached request for an Interp for processing and assignment to a Specialist.

Thanks,
 Glenn

From: Kays (US), Nelson S [mailto:nelson.s.kays@boeing.com]
Sent: Friday, January 29, 2021 5:15 PM
To: Foster, Glenn (PHMSA) <Glenn.Foster@dot.gov>
Cc: Fink, William (PHMSA) <William.Fink@dot.gov>; Boik (US), Randy P <randy.p.boik@boeing.com>; Burger, Donald (PHMSA) <donald.burger@dot.gov>; Singh, Harpreet (PHMSA) <harpreet.singh@dot.gov>; Raszewski, Kimberly (PHMSA) <kimberly.raszewski@dot.gov>; Nicklous, Joseph (PHMSA) <joseph.nicklous@dot.gov>; Payne (US), Scott B <scott.b.payne@boeing.com>; Vos, Brian (PHMSA) <brian.vos@dot.gov>; Pollack, Arthur (PHMSA) <arthur.pollack@dot.gov>; Roth (US), Randolph R <randolph.r.roth@boeing.com>
Subject: RE: [EXTERNAL] Repackaging Explosives, UN6(d) criteria, UN0323 Cartridge Power Device 1.4S

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Hello all,
 Thank you for taking the time to meet with us and discuss 6(d) testing requirements,
 Please see attached for Boeings formal request for interpretation and supporting documents.
 Thank you,

Nelson Kays

Packaging Engineering Specialist
 Enterprise Transportation, Warehousing & Logistics
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Cell: 714-615-9170
nelson.s.kays@boeing.com
 BCA Packaging Services

-----Original Appointment-----

From: Fink, William (PHMSA) [mailto:William.Fink@dot.gov]
Sent: Wednesday, January 13, 2021 1:04 PM
To: Fink, William (PHMSA); Burger, Donald (PHMSA); Singh, Harpreet (PHMSA); Raszewski, Kimberly (PHMSA); Foster, Glenn (PHMSA); Nicklous, Joseph (PHMSA); Payne (US), Scott B
Cc: Vos, Brian (PHMSA); Pollack, Arthur (PHMSA)
Subject: [EXTERNAL] Repackaging Explosives, UN6(d) criteria, UN0323 Cartridge Power Device 1.4S
When: Tuesday, January 19, 2021 3:00 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Microsoft Teams Meeting

EXT email: be mindful of
 links/attachments.

NOTE: WE WILL NOT BE USING MSTEAMS AS SOME DO NOT HAVE THE CAPABILITY.

IF YOU FORWARDED THE INVITE PLEASE DO SO AGAIN.

Your conference has been setup for January 19, 2021.

Your dial in number will be 202-366-6338

Your schedule time: 3:00pm – 4:00pm

Number of lines: 15

Your passcode is: **217764**

Agenda:

1. Introductions
2. Statement of the request
3. Review of EX2003030247 (attached)
4. Packaging as received by Boeing
5. Re-packaged
6. PHMSA comments on what was presented.
7. Additional information requested/required.
8. Interp letter necessary?
9. Comments/Concerns
10. Action items
11. Adjournment

William Fink

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