



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

JAN 07 2013

Mr. Charles Radev  
President and Chief Executive Officer  
Southeast Testing and Engineering  
1325 Capital Circle, Suite D  
Lawrenceville, GA 30043

Reference No. 12-0138

Dear Mr. Radev:

This is in response to your June 25, 2012, and July 19, 2012 e-mails and telephone calls and your August 9, 2012 telephone call with a member of my staff requesting clarification of the testing requirements for Large Packagings under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask how to properly test a fiberboard, UN 50 GW Large Packaging under the HMR that is authorized under the terms and conditions of Competent Authority (CA) Approval CA 2006030023. You state this packaging contains Packing Group II, "UN 0336, Division 1.4G," and "UN 0337, Division 1.4S" fireworks that the shipper places in a variety of inner packagings and configurations in response to customer orders. You also state these packages are shipped from China to the United States (U.S.) by vessel, and from a port area in the U.S. to customers in North America by motor vehicle and/or railcar. Further, you state testing all possible configurations of the packaging and preparing the test report on each are time consuming and difficult. You ask if the packaging can be tested once in a manner that accommodates all the shipper's packaging configurations.

The answer is yes. Normally, under § 178.601(c)(4), any change to the structural design, size, material of construction, wall thickness or manner of construction from the originally produced and tested packaging, unless specifically excepted, meets the definition of a "different packaging" and requires new design-type qualification testing. However, the terms of CA 2006030023 do not contain specific requirements for inner packagings except that they must be "suitable for retail sale" and in "plastic-wrapped boxes and plastic bags [that] are suitable inner packagings." Therefore, only a representative sample of fireworks must be tested and not every possible combination of items.

The enclosed test report you provided states the outer packaging is a fiberboard UN 50GW/Y250/S/USA Large Packaging that is surrounded in a polyethylene, shrinkwrap overpack, and the entire package is attached to a wooden pallet. The test report also states the inner packagings consist of one large, multicolored fiberboard store display box, composed of interlocking panels and trays that form up to 10 multi-level, cabinet-like

lower compartments and 1 open tray-like top with several vertical dividing interlocking panels. In addition to photographs of the above-described packagings, the report includes photographs of the fireworks, both individually and grouped together and enclosed in polyethylene film, and engineering drawings of the packagings authorized under CA 2006030023.

We note that CA 2006030023 is valid until January 31, 2013. The Pipeline and Hazardous Materials Safety Administration (PHMSA) incorporated UN 50 Large Packagings into the HMR on October 1, 2010, in a rulemaking issued under Docket No. PHMSA-06-02536 (HM-231; 9/30/10, 75 FR 60333), but did not authorize these packagings to transport explosives. PHMSA has issued Special Permit DOT-SP 15615 that allows a Large Packaging to be tested as a non-bulk packaging for fireworks, but it is authorized for domestic transportation by motor vehicle only. If your customer wishes to continue to transport the fireworks it manufactures by vessel and rail in bulk fiberboard packagings, your customer should contact PHMSA's Approvals and Permits Division at (202) 366-4511 to initiate a new special permit or to modify an existing one. The requirements to apply for or modify a special permit are prescribed in 49 CFR Part 107, Subpart B, §§ 107.105 and 107.121, respectively.

I hope this satisfies your request.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Glenn Foster", with a long horizontal flourish extending to the right.

T. Glenn Foster  
Chief, Regulatory Review and Reinvention Branch  
Standards and Rulemaking Division

**From:** Charles Radev [mailto:chradev@setelab.com]  
**Sent:** Monday, June 25, 2012 6:02 PM  
**To:** Edmonson, Eileen (PHMSA)  
**Subject:** Re: Test Message

Edmonson  
§ 178.955 (j)  
§ 178.930  
Packages  
12-0138

Dear Eileen,

Thank you very much for the opportunity to talk with you on the phone today. Most of all I appreciate your effort to support us with fact-of-matter information on which to base our decision for testing in the future.

My question has to do with the report requirements for firework displays in a 50G large Package.

They are usually packaged as an interlocking corrugated display made of corrugated trays and panels which form a cabinet-like lower level and an open pyramid shaped display on top. We may have up to ten different product (shrink wrapped corrugated) trays, then a variety of open top trays with smaller bags or folding cartons of firework items in them, then a few clear bags and other cartons or just straight bundles of fireworks - cylinders, rectangular, pentagonal, etc, etc. It would seem that the creativity of the Chinese has found its fulfillment in making everything colorful and different in shape and size to the extreme.

While this provides joy to the consumer, it makes our effort in describing and documenting this whole package immense beyond reasonable measure.

The latest item I had to certify took me about 5 hours to test and over 50 hours to produce report. In doing so I reflected and produced drawings of all corrugated items, with dimensions (both inside and outside), weights (tare and full weight), and liner combinations. The total number of items described on the report was 32. All of those have drawings in attachment.

Our question is - once the corrugated structure of that display and the pallet is described in the detail, how much more detail is really meaningful and significant as far as all the tray and bag dimensions, thicknesses, shapes, the little folding cartons, the firework cylinders and rectangles - how much meaning does this carry? If you saw one of these and tried counting how many different items there are on one of these you would very possibly count a few dozens.

We know that in the end all that fireworks are is spiral wound paper tubes filled with gunpowder with a thread for sequential ignition going through all the little tubes.

What would be the acceptable level of detail on our reports for such a vast multiplicity of items like in this case?

Very respectfully,  
Charles Radev

Thank you for your business!

Charles Radev, President, CEO  
Southeast Testing & Engineering

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