



THE HAZMAT NEWS NETWORK



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SUMMER IS A COMMING and so is the early summer edition of The Hazmat News Network. Pass on the newsletter to others and let them know about this free service. We all in here hope you all out there have a very enjoyable and relaxing summer. Now on to some good stuff.

MAKE SURE TO CHECK OUT our new website. All our training classes currently scheduled, along with course information and registration forms are available. The open-enrollment classes we have coming up soon are:

- June 27-28: DOT Explosives P&T Workshop: <http://regulatoryresources.net/dot-explosives-packaging-transport-workshop/> (sign up by June 5th)
- July 15-19: DOT Hazmat and Rad P&T Workshop: <http://regulatoryresources.net/dot-hazardous-and-radioactive-materials-pt-workshop/> (sign up by June 25th)

Remember that we can come to you to provide the very best in DOT hazmat and RCRA hazardous waste training. We've been doing this for over 15 years and the cost savings to you is substantial. Give us a call if you need training support. It doesn't take many attendees to make it cost effective for you to conduct the training 'in-house'.

WE NEED TO TALK ABOUT A MARCH LETTER from the DOT Office of Hazardous Materials Standards. Yep, this one wins the coveted T-shirt...to both the petitioner and DOT. You might say we don't agree with their opinion issued in the March 30, 2012



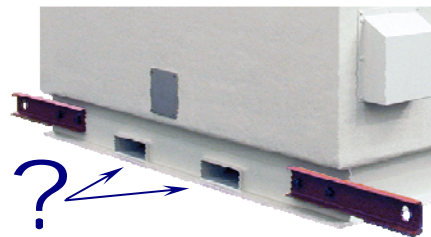
letter, Ref. No. 11-0289. This is one of those letters you really ask yourself why it was ever submitted in the first place. The topic of the letter is the requirement(s) found in 49 CFR 173.410(b), specifically, "lifting attachments" and the regulatory requirements for these as applied to the Class 7 (radioactive) material General Packaging (or Excepted

Packaging) requirements. The petitioner asked DOT to define "lifting attachment" because of this requirement: "Each lifting attachment that is a structural part of the package must be designed with a minimum safety factor of three against yielding when used to lift the package in the intended manner, and it must be designed so that failure of any lifting attachment under excessive load would not impair the ability of the package to meet other requirements of this subpart. Any other structural part of the package which could be used to lift the package must be capable of being rendered inoperable for lifting the package during transport or must be designed with strength equivalent to that required for lifting attachments." Now the scary part...the subject package which is the basis for this letter is a large box lifted from the bottom by means of a forklift. That's right, we're talking the C-channel openings used to place the forklift tines

under the box. Does anybody do any research anymore? What kind of forklift and driver do you have? First, the "lifting point" is the bottom or base of the package. These designs are such that they are able to pick-up the entire maximum gross weight of the package from these points. Changes were made in a lot of large boxes/crates 15+ years ago



when the requirement became effective so as to amend the lifting design from overhead via a hoist to underneath using a forklift. The IAEA TS-G-1.1 advisory and explanatory guidance document talks about the importance of evaluating the "lifting attachment". Here's what ¶607.3 says: *Acceleration load factors (commonly called 'snatch factors' by rigging and handling personnel) for lifting by cranes should be related to the anticipated lifting characteristics of the cranes expected to be involved in these activities. These factors should be clearly identified. Designers should also apply acceptable design safety factors in addition to the acceleration load factors to structural yield parameters, ensuring that there is no plastic deformation during crane lifts in any part of the package.* The IAEA further states in ¶607.2: *For the design of attachment points of packages lifted many times during their lifetime, the fatigue behaviour should be taken into account in order to avoid failure*



cracks. Where fatigue failure may be assumed, the design should take into account the detectability of those cracks by non-destructive means and appropriate tests should be included in the maintenance programme

of the package. It has never been the intent to apply "lifting attachment" requirements to points that are not even "attachments". There's a methodology to apply when looking to define a term used in the regulations – in order: (1) the Law/Act; (2) the regulation codifying the Law/Act; (3) the docket explanation and preamble text adopting the regulation; and (4) the dictionary. Following the flow we end up in the dictionary. Here's what it says for "attachment": (1) *An act of attaching or the state of being attached.* (2) *Something that attaches; a fastening or tie; the attachments of a harness; the attachments of a pair of skis.* (3) *An additional or supplementary device.* Lifting a box from the bottom using a forklift fails to meet the definition of "attachment", unless you talking about the tines used to do the lifting...even the entire forklift.



These are the box's "lifting attachments". My goodness, if we apply this we've just eliminated every pallet used to consolidate Class 7 packages! Take this one with a grain of salt.