

U.S. Department of Transportation **Pipeline and Hazardous Materials Safety Administration** 1200 New Jersey Avenue, SE Washington, DC 20590

August 19, 2021

Mr. Joshua Howk Wellmatics 6770 McHard Road Houston, TX 77053

Reference No. 21-0030

Dear Mr. Howk:

This letter is in response to your March 22, 2021, letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to labeling and marking requirements for jet perforating guns (JPGs). You provide an overview of your process for JPG loading and preparation for transportation and state that, when multiple JPGs are palletized, the required labels and markings are not always visible and/or may not be applied. Furthermore, you provide images of a potential solution; specifically, an extended threaded end cap design that would allow space for placement of the required label(s) and marking(s) without having to remove the JPG from a pallet. You ask whether the placement of a label and marking on the extended threaded end cap—for each individual JPG on a pallet—meets the labeling and marking requirements of the HMR.

The answer is yes. As provided in §§ 172.304 and 172.406, respectively, each marking must be printed on or affixed to the surface of a package or on a label, tag, or sign; and each label must be printed on or affixed to a surface (other than the bottom) of the package or containment device containing the hazardous material and near the proper shipping name marking.

Provided each individual JPG on a pallet is labeled and marked—either on the body of the JPG or on its extended threaded end cap—this practice would be in compliance with the HMR.

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

Sincerely,

Upton

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

Cardez

21-0030

From:	INFOCNTR (PHMSA)
То:	Dodd, Alice (PHMSA); Hazmat Interps
Subject:	FW: Interpretation request for explosive label sticker placement on jet perforating guns
Date:	Monday, March 22, 2021 3:55:48 PM
Attachments:	image008.png
	image001.png
	image011.png
	image012.png

Good afternoon Alice,

image013.png

Please see the request for a letter of interpretation below. Please contact our office with any questions.

Thank you,

Sarah, HMIC

From: Joshua Howk [mailto:josh.howk@wellmatics.com] Sent: Monday, March 22, 2021 1:40 PM To: INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov> Subject: Interpretation request for explosive label sticker placement on jet perforating guns

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U.S. Department of Transportation 1200 New Jersey Avenue, SE Washington, DC 20590 United States

To Whom it may concern:

Wellmatics is a manufacturer for the oil and gas industry and provides products to service companies for perforating in oil and gas wells.

These products include perforating systems and assemblies.

We are looking for an interpretation on the explosive labeling of jet perforating guns sticker placement location.

Here is some information that will give detail to what interpretation we are requesting.

The physical perforating gun is comprised of three parts. Outside tubular body or carrier, inner charge holder tube or strip, and threaded end protectors on both ends.



These are sent to the users by manufacturers on pallets and or racking for the user to load explosives into for oilfield perforating operations.



This is the steps followed by the users to load and prepare for transport:

Following API RP 67 for explosive loading

- The user would remove one of the threaded end caps to pull out the inner charge tube and or strip.
- The user would take the inner charge tube or strip out of the carrier or outer tube body.
- Then the user will load explosive shape charges and detonating cord in the inner charge tube or strip holder.
- The user will insert back into the carrier or outer tube body.
- The user will replace the threaded end cap to hold inner charge tube or strip in place

We now have a loaded jet perforating gun-

The label sticker that shows the explosive classification, UN number, description, and company address is placed on the carrier outside tube.



With typical pallets and or racking there are between 50-100 loaded perforating guns for each pallet or rack.

The users are moving thousands of these per week, and we have noticed a few observations.

The user is responsible for attaching the label sticker to each unit to comply the regulation for labeling for transportation.

The problem arises as the physicality and time of moving these in order to label each one individually- this is not happening.

We are seeing only partial labeling of the guns on the pallet, labeling the exterior only, and or worse not being labeled at all.

Wellmatics strongly recommends to the user to comply with the individual labeling but has no authority in the matter so we are seeking to engineer a solution to prevent a lack of compliance.

In order to label each individual gun body the user must physically remove from the pallet that they are provided on.

This should but often does not happen and the reasoning is listed below:

This creates a potential dropped object once they cut the band or strap as they can roll to the floor.

This also creates a potential hand and or finger injury as there are multiple pinch points when stacking and unstacking

This also creates a potential back injury as the user is moving thousands of these

weekly with average gun weighing 15-50 lbs. each

Time it takes to physically unsecure each gun, move each gun to label, and then place back on pallet and secure for transport .

What Wellmatics solution to this is to extend the threaded end cap protector to accept the sticker so that the user can leave the gun bodies secured to the pallets only have to move the charge tube or strip to load which is significantly lighter.



The threaded gun label end protector would allow the user to visibly show each gun has a sticker as these are not hidden in a stacked configuration.

When an inspection occurs the inspector could identify immediately the label on the threaded end cap and would not have to un secure the stacked gun bodies in the event they wanted to do a full inspection of each individual perforating gun.

What interpretation Wellmatics is looking for is -Will the label sticker if placed on the threaded end cap be considered compliant for individually labeled jet perforating guns?

Thank you,

Joshua Howk 6770 McHard Road Houston, TX 77053

