



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, DC 20590

June 7, 2023

Ario Estrada  
Senior Quality Manager  
Essex Industries, Inc.  
8007 Chivvis Drive  
St. Louis, MO 63123-2395

Reference No. 23-0031

Dear Mr. Estrada:

This letter is in response to your March 20, 2023, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to general requirements for DOT specification cylinders. In your email, you state that your company manufactures DOT 4L cylinders with a water capacity of 1,220 cubic inches at a facility in the United States. In reference to the inspection and analyses requirements of § 178.35(b)(2), you ask whether your company is able to use a competent inspector of the manufacturer or must instead use an independent inspection agency approved in writing by the Associate Administrator. Specifically, you seek confirmation of your understanding that the water capacity threshold limit of 1,100 cubic inches for use of a competent inspector of the manufacturer for domestic manufacturing applies only to DOT 4D cylinders and not to the other cylinders listed including DOT 4L cylinders.

Your understanding is correct, the 1,100 cubic-inch limit only applies to DOT 4D cylinders. A domestic manufacturer of DOT 4L cylinders may use a “competent inspector of the manufacturer” for performance of inspections and verification of the cylinders. Specifically, your 1,220 cubic inch DOT 4L cylinders may be inspected by a competent inspector of the manufacturer.

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'.

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

Cardez

23-0031

**From:** [INFOCNTR \(PHMSA\)](#)  
**To:** [Dodd, Alice \(PHMSA\)](#)  
**Cc:** [Hazmat Interps](#)  
**Subject:** FW: Request of Formal Letter of Interpretation - Essex Industries, Inc.  
**Date:** Tuesday, March 28, 2023 11:27:29 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)  
[image005.png](#)  
[image006.png](#)  
[image007.png](#)  
[Request of PHMSA Letter of Interpretation of CFR 49 178.35\(b\)\(2\) - Essex Industries, Inc. March 20, 2023.pdf](#)

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Hi Alice,

Please see the attached interpretation request.

Let us know if you need anything else.

Regards,

-Breanna

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**From:** Ario Estrada <AEstrada@EssexInd.com>  
**Sent:** Monday, March 20, 2023 3:42 PM  
**To:** INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov>  
**Cc:** Sears, Craig (PHMSA) <craig.sears@dot.gov>; Gary Schreckenber  
<GSchreckenber@EssexInd.com>; Brad Schaefer <bschaefer@essexind.com>; Mike Balbuena  
<MBalbuena@EssexInd.com>  
**Subject:** Request of Formal Letter of Interpretation - Essex Industries, Inc.

**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.

Attention: Mr. Shane Kelley  
Director, Standards and Rulemaking Division  
U.S. DOT/PHMSA (PHH-10)  
1200 New Jersey Avenue, SE East Building, 2nd Floor  
Washington, DC 20590  
[infocntr@dot.gov](mailto:infocntr@dot.gov)

Dear Mr. Shane Kelly,

I hereby request a formal letter of interpretation of CFR 49 178.35(b)(2) per the enclosed letter.

Should you have any questions regarding this request, don't hesitate to contact me.

Respectfully,

> [Ario Estrada](#) | Senior Quality Manager | STL Sites  
Sunnen | [6 Sunnen Dr. | Maplewood, MO 63143](#)  
Chivvis | [8007 Chivvis Dr. | St. Louis, MO 63123](#)  
o 314.338.8268 | m 314.250.8904





March 20, 2023

Attention: Mr. Shane Kelley  
Director, Standards and Rulemaking Division  
U.S. DOT/PHMSA (PHH-10)  
1200 New Jersey Avenue, SE East Building, 2nd Floor  
Washington, DC 20590  
[infocntr@dot.gov](mailto:infocntr@dot.gov)

Dear Mr. Shane Kelly,

Essex is requesting a letter of interpretation of CFR 49 178.35(b)(2) on whether the requirement of “(with a water capacity less than 1,100 cubic inches)” pertains to only the 4D cylinders or pertains to all the cylinder types (3B, 3BN, 3E, 4B, 4BA, 4B240ET, 4AA480, 4L, 8, 8AL, 4BW, 4E, 4D) list prior to this statement. This is in regards to DOT compliance inspection here at Essex Industries, Inc. the week of February 27, 2023, in regards to Essex Industries, Inc. **4L** cylinder P/N: 50C-0083-0001, which has a water capacity of 1,220 cubic inches.

If the DOT PMHSA interpretation “(with a water capacity less than 1,100 cubic inches)” pertained to all the cylinder types listed prior to this statement, including 4L cylinders. This would mean Essex Industries, Inc. would require an outside DOT inspector to witness steps in the manufacturing process of P/N: 50C-0083-0001 4L cylinder since it is over the 1,100 cubic inches, instead of a competent inspector of the manufacturer, in this case, Essex Industries, Inc.

Essex Industries, Inc.’s interpretation of CFR 49 178.35(b) is “(with a water capacity less than 1,100 cubic inches)” pertains to only the 4D cylinders and not 4L cylinders. The “(with a water capacity less than 1,100 cubic inches)” is in parenthesis only after 4D and not directly after any of the other cylinder types listed, including 4L. If this pertained to all of the types of cylinders listed, it would be stated in the sentence prior to or after the listing of all the cylinder types and not just after the 4D. See the section of CFR 49 178.35(b) below:

CFR 49 178.35(b)

(b) **Inspections and analyses.** Chemical analyses and tests required by this subchapter must be made within the United States, unless otherwise approved in

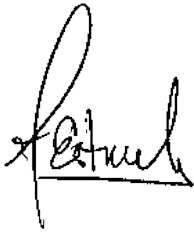
writing by the Associate Administrator, in accordance with subpart I of part 107 of this chapter. Inspections and verification must be performed by –

(1) An independent inspection agency approved in writing by the Associate Administrator, in accordance with subpart I of part 107 of this chapter; or

(2) For DOT Specifications 3B, 3BN, 3E, 4B, 4BA, 4B240ET, 4AA480, 4L, 8, 8AL, 4BW, 4E, 4D (with a water capacity less than 1,100 cubic inches) and Specification 39 (with a marked service pressure 900 psig or lower), and manufactured within the United States, a competent inspector of the manufacturer.

Essex is requesting clarification of the DOT requirement stated above in conjunction with the DOT Office of Hazardous Materials Safety group to determine how Essex Industries, Inc. needs to proceed on manufacturing 4L cylinder P/N: 50C-0083-0001. If you would like to discuss or need additional information for your consideration, please do not hesitate to contact me at (314) 338-8268.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ario Estrada', written over a horizontal line.

Ario Estrada  
Senior Quality Manager  
Essex Industries, Inc.  
8007 Chivvis Drive  
St. Louis, MO 63123-2395  
Phone: 314-338-8268  
aestrada@essexind.com