



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

1200 New Jersey Ave, S.E.
Washington, D.C. 20590

Mr. Mark F. Kozak
BEAM Strategic Solutions
P.O. Box 2351
Glen Ellyn, IL 60138

MAY 31 2013

Ref. No. 13-0059

Dear Mr. Kozak:

This responds to your February 19, 2013 letter requesting clarification of the testing requirements for aerosol cans under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you request clarification if a visual observer is required to witness the hot water bath testing requirements for metal aerosol cans specified in § 173.306(a)(5)(v).

In accordance with § 173.306(a)(5)(v), each aerosol can, after it is filled, must be subjected to a test performed in a hot water bath resulting in no leakage or permanent deformation of a container. It is your understanding the requirements of § 173.306(a)(5)(v) can be met without an observer being present during the hot water bath testing, provided test operators are trained to identify signs of leakage, distortion or defect after the test is completed. You request confirmation that your understanding is correct.

Your understanding is incorrect. The intent of the hot water bath specified in § 173.306(a)(5)(v) is to test the leakproofness of a filled container. Though permanent distortion may be visible during or after the test, leakage must be observed during the test. For this reason, a visual observer must be present for the hot water bath test. An alternative to the hot water bath test method is provided in § 173.306(a)(5)(vi) for plastic containers.

I hope this answers your inquiry. If you need additional assistance, please call this office at 202-366-8553.

Sincerely,

Robert Benedict
Chief, Regulations Development Branch
Standards and Rulemaking Division

DOT/RSPA/OHMS
UNIT
13 FEB 28 AM 10:18



February 19, 2013

U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
East Building, 2nd Floor
Mail Stop: E24-455
1200 New Jersey Ave., SE
Washington, DC 20590

Boothe
3 172.101
Aerosol
13-0059

Subject: Hot Water Bath Testing Required For Aerosol Products

Dear Sir or Madam,

BEAM Strategic Solutions is a consulting firm serving the chemical industry. We have a question regarding aerosol testing that we would like to receive guidance from your agency.

The hot water bath testing required for aerosol products, is effective in identifying overfilled cans and defective cans that may have catastrophic failure. However, it is not an effective location to identify deformed cans or leakers.

Deformed cans are easily identified as they travel down the production line after the water bath. At that point they are in single file and vision is not impaired by looking through water.

Cans that are leaking significantly are identified by product on the cans or in the valve cups and again this is easier to see after the water bath. Even product with a very slow leak rate is more accurately identified elsewhere in the production process or in storage. When checking for leakers in the water bath there are many cans that may have trapped air in the valve body or around the crimp that are thought to be leakers but are not. Removing these cans from the bath is dangerous and results in additional sorting and QC to determine whether they are truly leaking.

The regulation states that cans must pass through the water bath without evidence of leakage, distortion or other defect. It does not clearly state whether there must be a visual observer at the water bath. Our feeling is that we can



meet this requirement without an observer at the water bath as long as operators after the water bath are trained and looking for signs of leakage, distortion or defect. We would like confirmation that this is a correct interpretation of the regulation.

Thank you in advance for your reply and for comment on our question. I can be reached by phone at 708-927-9659, email at mark@beamstrategic.com, or by mail at the address below.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Mark F. Kozak', written in a cursive style.

Mark F. Kozak
President

BEAM Strategic Solutions
PO BOX 2351
Glen Ellyn, IL 60138

CC: phmsa.hm-pipelinesafety@dot.gov
202-366-4595
202-366-4566 (Fax)