

Virginia Department of Agriculture and Consumer Services

Division of Consumer Protection - Office of Weights and Measures

102 Governor Street, Richmond VA 23219 • www.vdacs.virginia.gov

TECHNICAL BULLETIN

Bulletin number: 2016-01

Subject: Handling of Diesel Exhaust Fluid dispensed for testing

Issue date: May 1, 2016

Expiration date: In effect until rescinded or amended

Purpose:

The purpose of this bulletin is to provide guidance on the return or disposal of Diesel Exhaust Fluid (DEF) test liquid to retailers selling DEF via liquid measuring devices.

Background:

DEF is a urea solution made from high purity urea and water. Its main function is to reduce the concentration of nitrogen oxides in diesel exhaust emissions. The Office of Weights and Measures (OWM) recognizes that multiple retailers are selling DEF via liquid measuring devices that require inspection by OWM staff. OWM inspectors test DEF dispensing devices in accordance with National Institute of Standards Handbook 44 utilizing a dedicated test measure to avoid cross-contamination. The test liquid must then be returned to the DEF storage tank or disposed of properly. It is this process, the return of the product, that this office now is issuing guidance to retailers.

Guidance:

The Virginia Department of Agriculture and Consumer Services, Office of Weights and Measures has the authority to inspect weighing and measuring devices used for commercial sale under the Code of Virginia §3.2-5609. The Code gives the authority for the Board of Agriculture to promulgate regulations and in so doing, the Board gave official status to the National Institute of Standards (NIST) handbooks.

NIST Handbook 44, Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices, outlines the procedures for the inspection and testing of liquid measuring devices in Section 3.30. This would apply to DEF sold via liquid measuring devices at retail fuel locations. Part of this testing process involves the inspector dispensing the product into a certified test measure to determine if the meter is within applicable tolerances as specified by Handbook 44. It is preferable to return the test liquid to the retailer to minimize loss and intrusion to the business. With respect to DEF, the issue of contamination of the storage tanks was noted as a concern with the return of the product to the retailer. Furthermore, the release of the product into the environment (via storm drain or other method) is not recommended by current material safety data sheets gathered by the Office of Weights and Measures and therefore will not be disposed of in this manner by OWM staff.

Therefore, in accordance with NIST Handbook 44, General Code Section G-UR.4.4, Assistance in Testing Operations, the retailer shall provide a method for OWM staff to return the tested DEF product to the storage tank or provide another suitable storage container in which to return the DEF. It is the responsibility of the retailer to properly return or dispose of the tested product in accordance with state and federal regulations.