# **CHAPTER 12**

# PACKAGING COMPLIANCE TESTING PROGRAM

# **SECTION 12.1 - PURPOSE**

The purpose of this chapter is to provide you with guidance for implementation of the Field Operations Enforcement Division Packaging Compliance Testing Program. Please consult with the National Field Leadership Team (NFLT) and the Packaging Program Manager (PPM) prior to all packaging purchases.

# SECTION 12.2 - SCOPE

The Enforcement Division engages in independent confirmation testing of UN standard packagings intended for hazardous materials transportation. Independent testing ensures that UN standard packagings are capable of passing all tests prescribed in the Hazardous Materials Regulations (HMR), Title 49 Code of Federal Regulations.

The Office of Hazardous Materials Safety (OHMS) Field Operations utilizes the U.S. Army Materiel Command, Packaging, Storage and Containerization Center, Logistics Support Activity (LOGSA) laboratory at Tobyhanna, PA, to conduct the testing. OHMS and LOGSA have had an interagency agreement since 1996. Designs submitted by OHMS to LOGSA are subjected to design qualification testing as prescribed in the HMR. The testing is digitally recorded, available via web. A formal written report and access to the recording are provided for each project.

The PPM will provide the NFLT with a list of designs of interest for purchase. Purchases will be based on data driven, risk-based principles. However, investigators may make purchases during the course of an inspection or investigation if the situation warrants. All purchases must be driven by risk principles. Please consult with assigned supervisor and the PPM.

## **SECTION 12.3 - PROCEDURES**

#### 12.3.1 - Sources

UN-rated non-bulk and intermediate bulk (IBC) packagings may be purchased from a number of sources, including packaging manufacturers and reconditioners, self-certifiers, and end-use customers. The preferred source is from manufacturers, preferably during a facility inspection.

Packaging purchased from manufacturers or reconditioners should be obtained from existing inventory or pulled from production. If a design of interest is not in inventory or production during the inspection, do not request production of the design.

Precautions should be taken to ensure that packaging pulled from production meet standard design specifications for sale to customers. Specification sheets, production records and test reports should be obtained and carefully reviewed to determine that no design changes have been made for compliance testing purposes.

The second preferred source for packagings would be from distributors or end users. If an inspection of the distributor or end-user is not warranted or possible due to pending enforcement action, the investigator may attempt to schedule a visit for the sole purpose of purchasing packaging. Note that end-users are not required to sell packaging to PHMSA. Investigators may ask for them to sell packaging, but it must be voluntary.

If packaging is obtained from an end-user, advise them that they are not responsible for design compliance, only the manufacturer or certifying party are held responsible. In the case where the end-user is the certifying party, such as when they have contracted for the manufacture and testing of the design for their own use then they are the responsible party. The HMR provides that the manufacturer or certifying party must either submit packaging samples for testing or demonstrate performance testing.

Regardless of source for purchases, the investigator must determine that each unit is identical in all respects to the current test report and closure notification statement, including marked ratings, thicknesses of steel, closure, inner parts and pieces for combination packaging, absorbent material, etc. The design must be compared against the current test report and closure instructions to ensure that no changes have been made after testing and certification. The test report and assembly and closure instructions must be provided to LOGSA for review before the purchase will be executed.

For other than reconditioned drums, each unit must be identical in all respects. For reconditioned drums, the marked certification may not be higher than the manufacturer's certification. Each reconditioned drum must be permanently embossed with the original UN certification. The reconditioner's marked certification may not be higher than the permanently embossed certification on the bottom of the drum.

## 12.3.2 - Quantities

Single packaging - 24 units Combination packaging - 20 units Intermediate bulk containers - 5 units Regulated medical waste poly bags (red bags) - 20 units

When a packaging has multiple marked certifications, e.g., X1.8, Y1.4 and Z1.2, etc., purchase one complete set for every certification. LOGSA will conduct testing for each mark. Separate report numbers should be assigned for each certification. Separate inspection reports should be prepared for each certification.

#### 12.3.3 – Evidence collection

Photographs of the entire lot of packaging must be taken. Detailed photographs of one or more individual units must be taken. Photographs of individual units should capture all markings and design details. A detailed observation report for each design must be created. The observation report should include the investigator's name, report number, date of observation, location, packaging manufacturer or certifier, total number of units, all available package markings, dimensions, and all component parts.

Each set of packaging must have a report number assigned to it by the investigator. Each unit must have the report number applied on evidence tape, preferably near the UN certification.

## 12.3.4 - Documentation

The investigator must obtain a valid test report and closure instructions for each design prior to purchase commitment. For reconditioned drums, closure instructions must be obtained from the vendor. If the vendor is not the reconditioner, e.g., a distributor, ensure that the reconditioner's original closure instructions are obtained prior to purchase commitment.

For new packaging, the test report must match the design in question. Assembly and closure instructions must be obtained. If the test report does not provide sufficient detail to replicate the design as it was tested by the certifying party, the design must not be purchased. Contact the PPM if necessary for guidance.

If the current test report can not be obtained from the manufacturer or certifying party, the design must not be purchased. If the test report is for periodic testing, obtain the original design qualification test report for comparison to the periodic report. The investigator may ask the vendor to hold the packaging for a short period of time while the test report and closure are obtained. The vendor is not obligated to do so.

The investigator may not commit to purchase, or mark the units with evidence tape, until a valid test report and closure instructions are obtained and reviewed for completeness. The investigator must ensure that LOGSA will be able to replicate the assembly and closure and conduct design qualification based on the design qualification (and periodic retest if applicable) test report.

If the current test report indicates that the design was subjected to periodic retesting, obtain the original design qualification test report to determine if any changes were made that would invalidate the certification. Supply the periodic test report and the original design qualification test report to LOGSA. Consult with the PPM if guidance is necessary.

The investigator must obtain a written quote from the vendor at the time of purchase commitment, or shortly thereafter if transportation charges must be determined. The quote must provide the U.S. DOT/PHMSA as the customer. The investigator's name and report number should be identified on the quote for LOGSA tracking purposes.

The total quantity of units must be detailed along with the manufacturer's name, the design type and UN certification string. If more than one design is to be purchased, the investigator shall instruct the vendor to detail each design separately on the quote. Transportation charges should be a separate line item.

The quote must be provided to LOGSA as soon as possible. Facsimile transmission is acceptable. The vendor may forward the quote to LOGSA on the investigator's behalf. As soon as possible, but no longer than 5 business days after the quote as been obtained, the investigator shall forwarded the quote, test report, closure instructions and a written request for purchase and transportation arrangements to LOGSA. LOGSA will not, without permission from the PPM, arrange for purchase and transportation without a complete quote, valid test report(s), closure instructions and written request from the investigator to purchase the design.

Additional information on LOGSA notification can be found in Chapter 12, Section 12.3.7.

#### 12.3.5 - Reimbursement

All packaging purchases must be made by LOGSA on behalf of Field Operations. Two methods for reimbursement are available to the vendor. For purchases under \$3,000, including transportation charges, LOGSA will arrange for payment via credit card, or check if the vendor does not accept credit cards. If the purchase totals more than \$3,000, including transportation charges, a purchase order will be prepared by LOGSA.

If multiple designs are purchased and the total cost is greater than \$3,000, the vendor may prepare separate quotes. In this case the transportation charges should be split between the quotes to keep the total expense for each quote at or below \$3,000. If the vendor is unwilling to prepare multiple quotes, a purchase order will be necessary. Purchase orders can take several weeks to prepare and execute.

# 12.3.6 - Packing and Shipping

The investigator must notify the vendor to hold the packagings until LOGSA contacts them for release authorization.

The investigator shall advise the vendor that all integral components for the packagings, including locking rings, nuts and bolts, gaskets, bungs, inner bottles, caps, absorbent material, tape, etc., must be included in the shipment.

When the vendor has the ability to consolidate packagings with shrink-wrap, stretch-wrap, banding, etc., they should take these additional precautions to protect the packaging for transportation. **Packagings should be transported on pallets when available.** 

The packaging must be consigned to:

U.S. Army Material Command (LOGSA-PSCC) ATTN: AMXLS-AT (Charlotte Lent) Warehouse 2, Bay 5 11 Hap Arnold Boulevard Tobyhanna, PA 18466-5097 (570) 615-7160

# 12.3.7 - LOGSA notification by Investigator

Once the investigator makes a commitment to purchase packagings, a written request to arrange for purchase, transportation and testing must be forwarded to LOGSA within 5 business days. The correspondence (e-mail is sufficient) must include the vendor quote, test report, closure notification and observation report. The supporting documentation should be attached as Adobe Acrobat files and emailed to Charlotte.lent@us.army.mil.

## 12.3.8 – Hazardous Materials Information System (HMIS) entry

Within 7 business days from the LOGSA notification, an HMIS entry must be created by the investigator. The entry should identify the vendor as the company of record. The primary inspection code is "41". The secondary primary code should correspond to the business of the vendor – manufacturer (type), distributor, shipper (type), etc. Each HMIS entry must provide all available design information in the Package Testing area. The summary must detail the number of samples purchased, the UN certification, manufacturer's name and location (plant where applicable), size, closures and all other available information. A separate entry for the manufacturer or certifying party, as appropriate, should be prepared when the vendor is not the responsible party for marking and certification.

## 12.3.9 – Testing Documentation

At the completion of testing, LOGSA will forward a copy of their test report to the investigator as a Word document attached to an e-mail. The investigator shall forward the test report to the respondent with the exit briefing. The test report should be provided to the respondent even when the design passes all tests. LOGSA will also upload video of the testing, and a copy of the test report to OHMS website – ftp://phmhqnwas005.ad.dot.gov/.

LOGSA will notify the investigator and the PPM in an e-mail that the video and test report are available for download. The investigator must notify the manufacturer or certifying party as soon as possible that the video and test report are available for download.

Provide the PPM with the responsible party's name for credentials to be issued for the video and test report download. Access to the website will be provided for a limited time. The investigator should also download the video for storage on the region's network drive.

The PPM will arrange for indefinite credentials for the investigator. If an enforcement action is taken, the Office of Chief Counsel attorney assigned the case will also be given credentials for video download. Note that the videos must be downloaded for viewing to ensure that the regional office and customer take ownership of the clips. Each separate test will be its own video clip. Each video clip or file will be stored in a folder named for the report number assigned to the purchase. Credentials provided to customers will allow them to view and download only the folder and files they are given permission to access. A physical copy of the video will not be provided by LOGSA to the respondent, investigator, PPM or counsel. The original video will be maintained by LOGSA and the PPM on network drives.

# 12.3.9 - Cite

If packaging failures are determined, please use the following basic format for the probable violation summary:

"Represented, marked, certified, sold and offered steel drums (combination packagings, composite packagings, intermediate bulk containers, etc., as appropriate) marked UN1A1/X1.3/250/05/USA/+ZZ0123 when the containers were not capable of passing the drop test prescribed in Sections 178.\*\*\* in violation of the Hazardous Materials Regulations (HMR), 49 CFR, Sections 171.2(c) and (g), 178.2(b), and 178.601(b)."

# <u>12.4</u> – <u>Corrective Action Testing</u>

The goal of the compliance testing program is to ensure hazardous materials packaging safety. In certain circumstances, respondents should be offered the opportunity to submit an improved or replacement design for additional testing, if the original design fails LOGSA testing.

The PPM and Enforcement Officer receive copies of LOGSA's test reports and will make the determination if corrective action testing is appropriate based on the number of total failures, severity of failures, type of failures (hydrostatic, leak, drop, etc.) and corrective action correspondence. Reconditioned drums and reconditioned IBC's are not suitable for corrective action testing.

Corrective action testing will only be offered after the respondent has been provided the test report and video and has had an opportunity to correspond. If the respondent fails to respond to the exit briefing, corrective action testing will not be offered. If the respondent refutes the failures due to issues regarding LOGSA testing or testing methods, or because of the length of time between production and testing at LOGSA, the enforcement officer will determine if the respondent will be offered corrective action testing.

If the respondent corresponds that the failures can be attributed to design, production, packaging components or quality control issues, and they have taken steps to correct the issue(s), corrective action testing should be offered.

The investigator should advise the respondent that if the improved or replacement design fails any of the required design qualification tests, a separate enforcement action will not be taken. The goal of corrective action testing is to work with the respondent to improve the design. Regardless of the outcome of the corrective action testing, the results will be forwarded to counsel. If the design passes all required tests, the results will serve as mitigation.

The respondent must provide a written affidavit that the improved or replacement is intended for sale to customers. If the Enforcement Division determines after the fact that the respondent has produced the packaging for LOGSA testing only, the agency may decide to begin civil and or criminal action against the respondent. The respondent should be advised why the affidavit is required.

A compliance inspection at the manufacturer's production facility should be conducted in conjunction with submission of the packagings for corrective action testing, when possible. If the manufacturing facility was inspected at the time of the original purchase, and no violations were noted, or an inspection can not be arranged, the manufacturer may ship the packaging directly to LOGSA. In that case the PPM will mark the packagings for the investigator.

The respondent should be asked to submit the second set of packaging and transportation charges at no cost to the government. The investigator will assign a new report number for the corrective action testing. The investigator must notify LOGSA per the requirements in Chapter 12, Section 12.3.7 that a design will be submitted for corrective action testing. LOGSA must be told to reference the original test report number in the corrective action test report. LOGSA will closely examine the second set of packagings and detail any noticeable differences.

Regardless of LOGSA's test results, the investigator will prepare a second report for the corrective action test results. The report should include the first report, in its entirety, as an exhibit. A reference to the first report should be included in the summary, along with a statement that the report is for informational purposes only and is being submitted in support of the original report. No probable violation write-up is necessary. Background information and other necessary details to explain the situation should be included in the summary.

An HMIS entry for the corrective action testing should be created. All required fields should be populated, including testing details. The codes should be the same as the first entry. The action status should be "NFA" for no further action. The entry will be used to identify that the respondent participated in corrective action testing and to provide the results of the tests. If a respondent declines to participate in corrective action testing, consideration by the enforcement officer may be given to purchase the design from another source.