

Code of Operating Practice





Empty Packaging Certification

CHAPTER 2

EMPTY PACKAGING CERTIFICATION

Empty Packaging Certification is at the heart of *Responsible Packaging Management*. It is a concept created and strongly supported by members of the Reusable Industrial Packaging Association.

"Empty Packaging Certification" is a written document, executed by the packaging emptier and the selected reconditioner or dealer. It confirms that the packagings being transferred are actually empty, in accordance with EPA requirements, and that they have been properly prepared for transportation (49 CFR 173.29). Some companies execute these documents on an annual basis, but most reconditioners print the certification on their receiving tickets so that the certificate is signed every time empty packagings are offered to a reconditioner. (See Appendices 8 and 9.)

Why Certification is Important

Certification is vital because it is a packaging user's principal guarantee of compliance with the Hazardous Materials Transportation Act, and two of the nation's most important environmental laws: The Resource Conservation and Recovery Act (RCRA); and, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), better known as "Superfund".

Empty Packaging Certification is also a legal business record. It documents the fact that the packagings transferred to a reconditioner or dealer were empty and, therefore, not subject to the complex and expensive EPA Hazardous Waste Regulations created by RCRA.

Empty packagings – whether reconditioned for reuse or recycled for scrap – have economic value. By offering packagings to a reconditioner and documenting this fact, emptiers are certifying that they are not engaged in the "abandonment or discard" of an

unclean packaging, nor have they "arranged for disposal or treatment...of hazardous substances." Either of these activities would establish strict joint and several liability under Superfund.

Empty Packaging Certification has an extremely valuable side benefit - the reduction of wasted virgin product. A diligent program to ensure proper emptying of all packagings will lower costs by maximizing raw material utilization.

Certification is also a helpful employee training device. Employees who are responsible for certification usually work with other environmentally sensitive aspects of company operations. The obligation to certify empty packaging status is a constant reminder of the need to comply with strict environmental regulations covering the management of hazardous materials and their packagings.



Empty Packaging Management

CHAPTER 3

EMPTY PACKAGING MANAGEMENT

An empty packaging that previously held a U.S. DOT-regulated hazardous material must be handled properly or it will be a safety and environmental liability for both the emptier and the original shipper. Strict liability standards arising from environmental laws and regulations, corporate operating standards, as well as issues related to transportation safety, make empty packaging management a serious matter. Shippers and emptiers should take appropriate steps to ensure that empty industrial packagings are handled properly. Shippers should assure that firms to which product is shipped have clear procedures in place for handling empty packagings. Emptiers should review their own plant operations and empty packaging management practices to reduce potential liabilities.

Proper Emptying

Proper emptying of every packaging is the most important aspect of in-plant *Responsible Packaging Management*. This activity affects costs, regulatory compliance, and legal liability.

- Costs Residues of costly materials left in packagings represent lost profits.
 Even packagings that appear empty can contain a gallon or more of product. This is valuable material that has been paid for but may be discarded unused. It has been estimated that inadequate emptying of industrial packagings may cost American industry as much as 1 billion every year.
- Regulatory Compliance For many chemical products, only those packagings
 meeting the U.S. EPA "empty" definition (40 CFR 261.7) escape classification as
 hazardous wastes. Used packagings that are hazardous wastes incur staggering
 costs for proper disposal. Container reconditioners can manage empty containers

as used equipment rather then waste. Additionally, their facilities operate within their own national and local limits for air emissions and wastewater discharges.

- Legal Liability for Environmental Damage Persons arranging for disposition of packagings with unused, removable contents may be considered to have "arranged for disposal or treatment...of hazardous wastes," or to have engaged in "abandonment or discard" of unclean packagings. Both of these terms are from the federal CERCLA law ("Superfund") and both activities incur strict, retroactive, joint and several liability for any subsequent contamination and environmental response costs. Persons emptying containers should empty thoroughly and should proffer the container to professional reconditioners. In this manner, potential cleanup liabilities are minimized.
- Legal Liability for Improper Transportation An empty industrial packaging that contains residue of a DOT-regulated hazardous material must be closed, marked and labeled as if it were still full of product. Packagings containing residue of hazardous materials that are crushed or shredded without first being cleaned must be "overpacked" in DOT-authorized hazardous materials containers.
 Additionally, they must be offered for shipment with proper shipping papers, performance marks, and hazard labels. Failure to meet these regulations can result in high penalties. Rather then risk penalties, RPM recommends contacting professional reconditioners who will transport containers in full compliance with DOT hazmat rules.

EPA Empty Container Rule

Emptying personnel and their supervisors should know and understand the details of the EPA "empty container" definition. This rule, which appears in full in Appendix 6, applies separate emptiness criteria to drums and intermediate bulk packagings (IBCs). The EPA empty container rule may be found at 40 CFR §261.7.

With regard to drums, EPA states that if any hazardous material remains in a drum after emptying, that container will be considered hazardous waste unless the emptier removes

all the material from the drum "using the practices commonly employed to remove materials from that type of container, e.g., pouring, pumping, and aspirating" and, with regard to viscous materials, no more than one inch (or 3% of the capacity) of residue is left in the drum.

The rule was promulgated under the U.S. waste management law (RCRA). Containers that meet this emptiness standard are often described as "RCRA Empty". Many companies mistakenly believe this rule expressly allows up to one inch of residue in *all* empty drums, and even more in an empty IBC. In fact, the rule is often referred to as the "one–inch rule." Emptiers must understand that the EPA empty container rule consists of two provisions which must be read *together*. The first standard emptiers must meet is the removal of all flowable contents using methods commonly employed to empty the container (e.g., pouring, pumping, etc.). If, however, the contents are viscous or otherwise difficult to remove, EPA allows an inch of residue to remain in drums after appropriate efforts have been taken to remove the contents. Since many packagings are used for flowable products, the standard for empty, and the term reconditioners prefer, is "drip–dry".

With regard to IBCs (and all other packagings larger than 119 gallons), EPA defines "empty" to mean that no more than 0.3% of the total capacity of the container remains in the packaging or inner liner after emptying. For the most commonly used IBCs (e.g., 275 gallon composite units), this means that very little residue (less then a gallon) may be left in the packaging.

The California Empty Container Rule

Companies doing business in California should be aware that the state has adopted more stringent regulations for empty packagings. The relevant provisions of the California empty packaging regulation (Title 22 CCR 66730 et seq.) are summarized below.

California requires emptiers to comply with the federal empty container definition in all cases, taking care to ensure that the packagings have been emptied as much as possible

"using methods commonly employed to remove waste or material from packagings." In addition, if the contents are pourable, the emptier must empty the packaging "until no flow of waste or material can be poured from the packaging...when the packaging or inner liner is held in any orientation (e.g., tilted, inverted, etc.) and dripping has ceased...." If the waste or material is not pourable, the generator must have emptied the packaging or inner liner "...until no visible material remains in the packaging or inner liner which can be removed by scraping, chipping, etc."

Preparing Empty Packagings For Shipment to Reconditioners or Dealers

Maintain Labels and Marks

Before transporting empty packagings to a reconditioner or dealer, emptiers should be certain that such packagings meet EPA's empty container criteria, as well as all applicable DOT regulations. Labels and marks – especially the precautionary information – must be retained on any packaging formerly containing hazardous materials (49 CFR 173.29). Labels and marks are needed to communicate to all custodians of empty packagings important safety information until the packagings are cleaned and recertified by reconditioning or processed for scrap recycling.

Closures

Proper reinsertion and closure of plugs, valves, covers, locking rings, etc. is extremely important for several reasons. First, this practice is required by DOT regulation (49 CFR 173.29). Second, and more importantly, packagings with improperly seated closures may leak residue during loading and unloading or while in transportation. A leak in transportation could expose drivers, clean-up personnel and the public to hazardous materials. Since liability for improper preparation of hazardous materials packagings rests with the emptier, the costs of environmental remediation and worker compensation would likely be borne by the emptier as well.

Control Procedures

Empty packagings should not be fully or partially refilled with products different from the original lading. Such packagings would contain a material that is no longer accurately described by the label. Moreover consolidating and mixing residues can create serious safety hazards endangering worker health and safety. Shipment of such a packaging – even to a reconditioner – may violate DOT regulations and expose transportation workers to unforeseen hazards. A packaging whose contents had been mixed or refilled with another material should be triple rinsed thoroughly prior to sending to a reconditioner.

All empty hazardous materials packagings should be accounted for and kept in a secure area prior to shipment. All packagings should be sent to a qualified reconditioner or dealer; the liability exposure associated with giving empty packagings away to the community or employees exceeds the goodwill benefit. Never allow anyone to cut into a closed drum that previously held (or may have held) a chemical material. Vapors can ignite, causing an explosion.

Empty Packaging Management Check List

RIPA has created an *Empty Packaging Management Check List* to help employers train their employees who are responsible for this important activity, and to ensure that basic good management practices are in place to reduce liability exposure. RIPA encourages employers to incorporate this check list in their various training programs as a means of assuring regulatory compliance.

Empty Packaging Management Check List		
Are the original labels and marks retained on empty packagings legible?	☐ Yes	□ No
Is there a policy to prevent empty packagings from being filled with other materials?	☐ Yes	□ No
If no, are all empty packagings completely cleaned and purged (e.g. triple rinsed)?	☐ Yes	□ No
Is there a quality control system to ensure that all packagings meet the EPA definition of "empty packagings"?	□ Yes	□ No
Do employees in emptying operations understand that the term "one-inch rule" applies only to viscous, non-flowable products, and that since the majority of ladings are flowable, an empty packagings should be "drip-dry?"	□ Yes	□ No
Is there a quality control system to prepare empty packagings properly for shipment?	☐ Yes	□ No
Are packagings handled, emptied and stored to minimize damage and deterioration?	☐ Yes	□ No
Are all closures tightly reinstalled on empty packagings?	□ Yes	□ No
Are covers and rings reinstalled on open head drums?	□ Yes	□ No
Are empty packagings maintained in a secure area, inaccessible to the public?	□ Yes	□ No
Is there a policy to prevent uncleaned packagings from being "donated" to employees or local charities?	☐ Yes	□ No
Is there a policy governing the destination of emtpy packagings?	☐ Yes	□ No
Is an empty packaging certification form signed and sent with each shipment of packagings?	□ Yes	□ No
If "No", does the facility have in place another means of guaranteeing that all empty packagings shipped to a dealer or reconditioner are RCRA-empty?	□ Yes	□ No
If packagings are shipped to a permitted Hazardous Waste Treatment, Storage and Disposal Facility, is a properly completed EPA manifest used?	□ Yes	□ No
Does the company have a procedure to select a qualified distributor or reconditioner to receive empty packaging?	☐ Yes	□ No
If the plant has had trouble getting empty packagings picked-up, have packaging selection criteria been reviewed such that reusable packagings are procured in the first place?	□ Yes	□ No



RIPA Code of Operation Practice

APPENDIX 1

RIPA Code of Operating Practice

Reconditioning and Remanufacturing Steel Drums for Use in Transporting Hazardous Materials

As a member of the Reusable Industrial Packaging Association (RIPA), this company is committed to support the continuing effort to improve the packaging reconditioning industry's responsible performance of its role in waste source reduction, recycling and responsible packaging management. We pledge to manage our business according to the following guiding principles. We:

- Adhere to RIPA's Code of Operating Practice for Steel Drums.
- Recognize and respond to community concerns about packaging disposal and the operations of packaging reconditioning facilities.
- Produce packagings that are effective in safely containing all appropriate materials in transportation.
- Make health, safety and environmental considerations a priority in our planning for all existing and new processes.
- Counsel packaging users on the safe use, transportation, emptying, reuse, and recycling of packagings.
- Operate our plants in a manner that protects the environment and the health and safety of our employees and the public.
- Work with others to resolve problems created by past packaging disposal practices.
- Participate with government and others in creating responsible laws, regulations, and standards to safeguard the community, workplace and environment.
- Promote the principles and practices of *Responsible Packaging Management* by sharing our experiences and offering assistance to others who produce, use, transport, and/or dispose of packagings.

 Foster the integrity and reputation of the industry by refraining from publishing knowingly false, misleading, or commercially disparaging statements or advertisements about our products and services, or the products and services of competitors.

1.0 Basic recommendation.

Packaging that is reformed, de-dented, remarked, repainted, or mechanically altered, or that must be mechanically processed in any way to be able to meet the design-type tests, may not be reused without first being reconditioned. Performance of any step of the reconditioning process should be accompanied by performance of all reconditioning steps. That is, if any element of reconditioning is done (e.g., cleaning, changing non-integral gaskets) then the entire reconditioning process should be completed in accordance with this Code, including cleaning to original materials of construction, replacement of gaskets, inspection for quality and testing for leaks. This is to assure that any reference to reconditioning provides the filler of a drum with total packaging integrity.

2.0 Reconditioning firm.

- 2.1 A business that properly reconditions steel drums for use in transporting hazardous materials possesses the necessary equipment, and processes drums in accordance with all of the provisions described in this Code of Operating Practice. A drum reconditioning firm shall be registered and licensed by appropriate government authorities and shall mark reconditioned packagings with the firm's identification or registered symbol as its certification of the packaging's performance capability.
- 2.2 The reconditioning firm must maintain a documented quality control program.
- 2.3 The reconditioning firm shall provide for plant reviews during normal operating hours by emptiers or customers.

2.4 In addition to meeting the details of this Code of Operating Practice, the reconditioning firm shall be in compliance with all applicable government regulations pertaining to health, safety and environmental protection.

3.0 Steel drum reconditioning, general.

- 3.1 *Transportation of drums containing residues*. Drums that have been used for the transportation of hazardous materials that have not been cleaned and purged of all hazards must be transported with all closures in place, and with all original hazard markings and labels legible.
- 3.2 Acceptance of steel drums containing residues; "empty"steel drums. No drums may be accepted that are not empty, unless the reconditioning firm holds permits issued by appropriate environmental authorities to receive and process hazardous wastes. The federal standard states that drums must be as empty as possible using practices commonly employed to remove materials from drums, including pouring, pumping, and aspirating. In addition, no more than 2.5 cm (1 inch) of residual non-flowable material may remain in the bottom of the drum. If more material may be poured out of the drum, then the drum is not empty. If everything is poured out, but more than 2.5 centimeters (1 inch) remain on the bottom, the drum is not empty. If the residual material is listed by EPA in 40 CFR 261.33(e) as a "P-listed" acute hazardous waste, the drum is not deemed empty unless it has been triple-rinsed using an effective solvent, or has been cleaned by a method shown to achieve equivalent removal.

California reconditioners may not accept drums that do not comply with the state's empty packaging rule (22 CCR 66261.7).

3.3 *Empty drum certification*. Every person providing drums containing any residues to a reconditioning firm, regardless of prior contents, shall sign an "Empty Drum Certification" on each occasion that drums are offered, verifying that the drums are empty and prepared in accordance with the explanation of that term in 3.1 and 3.2, above.

- 3.4 Rejection of drums that are not empty. Drums containing residues of prior contents, that are to be loaded on the reconditioning firm's trucks by the reconditioning firm's employees, shall be rejected if they appear to be unduly heavy because of the unintended retention of product. Drums brought to the reconditioning firm's plant, or loaded onto the reconditioning firm's vehicle by the emptier's employees, shall be rejected at the reconditioning firm if, upon inspection, they are found to be not empty. Rejected drums shall be returned to the emptier as unused product and the emptier shall be advised of the reason for the rejection.
- 3.5 *Inspection of incoming drums*. The reconditioning firm must inspect each raw drum when it is unloaded from transportation equipment. All drums must be inspected to make certain they are empty, to determine the original specification of the drum, and to determine whether the drum is damaged or unreconditionable and therefore must be prepared for scrap in accordance with 3.9, below.
- 3.6 Reconditioning Closed Head Steel Drums
- 3.6.1 All former contents and any corrosion must be removed. The interior is typically treated for corrosion resistance (rust inhibitor rinse). Controls must be established to prevent condensation.
- 3.6.2 An internal visual inspection must be performed. If any of the prior contents remain after performance of the reconditioning process, or if rust is evident, the drum must be rejected or be subjected to further processing.
- 3.6.3 Where necessary chimes must be mechanically straightened to reform and reseal them. Drums in need of de-denting shall be subjected to internal pressure sufficient to restore original shape and contour.
- 3.6.4 The drum exterior shall be chemically cleaned, mechanically brushed, and/or abrasive blasted to remove labels, coatings, and corrosion. The exterior surface shall be properly prepared for painting.

- 3.6.5 The cleaned drum must be leakproofness tested, typically by complete immersion in water and application of an internal air pressure of at least 20 kPa (3 psi) for Packing Group II and III drums and 30 kPa (4 psi) for Packing Group I drums, for at least 5 seconds. Alternative test methods of equal or greater sensitivity may be used subject to approval from U.S. DOT. Drums found to be leaking must be rejected or repaired by welding or brazing.
- 3.6.6 Before painting, drums must be inspected for deterioration and drums having visible pitting, significant reduction in parent metal thickness from rust, corrosion, or other material defects, or which have not been returned to original shape and contour, must be rejected for hazardous materials service.
- 3.6.7 All closures must be removed, cleaned, and reinserted with effective, clean gaskets. Bungs and flanges must show no damaged threads and must ensure a leakproof seal.
- 3.6.8 The drum must be painted with a new exterior coating to provide a protective and decorative finish.
- 3.6.9 The completed drum must be marked with the reconditioning firm's name and address or registered symbol (e.g.,"M Number"), the year of testing (last two digits), the symbol of the nation in which the reconditioning was performed, the letter "R" for reconditioned, and the letter "L" for drums that have been successfully leakproofness tested. If the original manufacturer's durable full UN marking has been removed in the reconditioning process, it must be replaced by the reconditioner before the drum may be used again to transport hazardous materials. The reconditioner's replacement mark may show a performance level lower than that originally marked by the drum manufacturer, but in no case may a reconditioner mark a higher performance level than was embossed on the bottom of the drum. The reconditioning firm's identity and "R" marking is a certification that the drum meets its marked performance rating, is capable of passing the design type qualification tests and meets this Code of Operating Practice.

3.7 Reconditioning open head steel drums

- 3.7.1 Open head drums and closed head drums from which the top heads have been removed must be cleaned thoroughly. All former contents and corrosion must be removed. If the top head is removed by cutting or unrolling, the side wall must be curled or beaded to accept an open head cover.
- 3.7.2 When thermal processing is utilized, drums with covers removed must be conveyed through a drum reclamation furnace which subjects both the interior and the exterior of the drum to temperatures sufficient to prepare the drum for abrasive cleaning (e.g. shot blast). The charred material and former linings and coating, as well as rust, must be removed through abrasive blasting on the interior and exterior, reducing the drum to bare metal.
- 3.7.3 Where necessary, the contour of the drum must be mechanically restored. Chimes must be mechanically straightened to reform and reseal them. Drums must be expanded or re-rolled to restore original shape and contour.
- 3.7.4 When required by applicable regulations, each open head drum, except its removable head and adjacent bead area, must be leak tested by complete immersion in water and application of an internal air pressure of at least 20 kPa (3 psi) for Packing Group II and III drums and 30 kPa (4 psi) for Packing Group I drums, for at least 5 seconds. Alternative test methods of equal sensitivity may be used subject to approval from U.S. DOT. Drums found to be leaking must be rejected or repaired by welding or brazing.
- 3.7.5 Drums must be inspected for deterioration and those having visible pitting, significant reduction in metal thickness from rust or corrosion, other material defects, or which have not been returned to original shape and contour, must be rejected for hazardous materials service.
- 3.7.6. All closures must be removed, cleaned, and reinserted with effective, clean gaskets. Bungs and flanges must show no damaged threads and must ensure a leakproof seal.

- 3.7.7 The closing rings must be reformed and cleaned, or replaced.
- 3.7.8 The drum must be painted with a new exterior coating to provide a protective and decorative finish. The interior coating or treatment (the lining), if required by the customer, must be applied and cured in accordance with the lining manufacturer's specifications.
- 3.7.9 The completed drum must be marked on the top or side with the "First Line" UN mark: the reconditioning firm's name and address or registered symbol (e.g. "M Number"), the last two digits of the year of testing, the nation in which the reconditioning was performed (USA), the letter "R" for reconditioned, and the letter "L" for drums that have been successfully leakproofness tested. If the original manufacturer's durable full UN marking has been removed in the reconditioning process, it must be replaced by the reconditioner before the drum may be used again to transport hazardous materials. The reconditioner's replacement mark may show a performance level below than that originally marked by the drum manufacturer, but in no case may a reconditioner mark a higher performance level than was embossed on the bottom of the drum. The reconditioning firm's identity marking constitutes a certification that the drum meets its marked performance rating, is capable of passing the design type qualification tests and meets this Code of Operating Practice.
- 3.8 Remanufactured drums. Steel drum remanufacturing is: 1) The conversion of a drum into a UN type; 2) The conversion of drum meeting one UN type to another type, or 3) the replacement of integral structural components. All requirements applicable to the manufacture of new drums apply to these drums.
- 3.9 Rejected drums. Drums that have been rejected during the inspection process and which cannot be repaired for hazardous materials service are to be cleaned and directed to nonhazardous material service or prepared for scrap. When preparing drums for scrap, the drum interior and exterior must be cleaned using an effective cleaning agent, or must be thermally neutralized in a drum reclamation furnace, thereby removing all foreign matter,

prior residues, labels and decorative coatings. Typically, drums are then mechanically or hydraulically crushed or shredded.

4.0 Environmental and employee protection.

- 4.1 Storage of drums containing residues. Unreconditioned drums must be stored with all closures in place, and must be inspected periodically to assure no residual contents are leaking. All drums that are obviously unfit for reconditioning should be rejected immediately and should be prepared for scrap in accordance with this Code and applicable regulations. Destructive corrosion of drum inventory from atmospheric and ground moisture must be avoided.
- 4.2 Accumulated residues from drums. All wastes generated in the reconditioning process must be managed in full compliance with applicable regulations governing such wastes.
- 4.3 Wastewater and air emissions. Discharges of wastewater from the reconditioning plant to the environment or to the sewer system, and emissions to the atmosphere, must meet applicable water and air pollution regulations for that geographical area. Offensive emissions (odors) must be minimized.
- 4.4 *Employee protection*. Exposure of employees to any chemicals in the workplace, including the contents of incoming drums, must be reduced to the extent practicable. At a minimum, this necessitates the reconditioning firm providing and requiring the use of effective personal protective equipment (PPE). Additionally, the firm must have in place a written program of Hazard Communication for employees, including federally mandated access to Material Safety Data Sheets (MSDS's).
- 4.5 *Employee Training*. The U.S. Department of Transportation (DOT) requires employees whose jobs have a connection to hazardous materials transportation to be trained about the recognition, regulation and proper handling of these materials. Training is required at different levels depending on an employee's level of involvement with actual hazmat ladings or packagings. "General awareness" training applies to all hazmat

employees, including those working in administrative positions (i.e., the front office). More in-depth "function specific" training is required for employees with tasks that put them into direct contact with hazmat ladings, packagings and/or residues. For instance, those employees tasked with testing packagings should be trained in all procedures for conducting the tests correctly and recording the test results in a comprehensive test report. Refresher training is required every 3 years. All new hazmat employees must receive training within 90 days. Training can be conducted by other employees and need not be out-sourced. A record of each training session must be dated, signed and filed for each employee. DOT inspectors typically ask to see these records, so they should be readily available for inspection by agency officials. As part of *Responsible Packaging Management*, RIPA makes available to its member companies a comprehensive training slide show designed specifically for the reconditioning industry. Updates are made as necessary. The training module is offered in both English and Spanish. Reconditioners and packaging dealers should make certain to highlight their training program with customers as well as regulators.

- 4.6 Company vehicles and drivers. The reconditioning firm shall employ drivers to operate company vehicles in compliance with standards of the Federal Motor Carrier Safety Administration. These standards address the qualification of drivers, including provisions relating to alcohol or other substance abuse. Company vehicles shall be maintained in safe operating condition.
- 4.7 *Fire Safety*. All practical precautions against fires must be implemented, including having adequate fire extinguishing capability, contingency planning, effective coordination with local emergency response authorities, and good housekeeping to minimize opportunities for ignition and to facilitate employee evacuation in emergencies.

5.0 Public statements and advertising

5.1 Each RIPA member shall foster the integrity and reputation of the packaging industry, generally, and the RIPA membership specifically by refraining from publishing knowingly false, misleading or commercially disparaging statements or advertisements.

5.2 Member's public statements and advertisements shall not knowingly misrepresent fact or law, or create a negative impression or expectation about competitive products and services unless such statement or advertisement is based upon facts which are amenable to independent measurement and verification.



The Process for Safe, Responsible & Efficient Container Recycling



"The Process for Safe, Responsible & Efficient Container Recycling"

- Used Containers that meet compliance (see EPA 40CFR261.7) are loaded and documented for transport to our segregation and staging facility in South Amboy, New Jersey.
- Containers are sorted by design and construction then reloaded on transports to the facility best suited to process container type.
- "UN" rated steel drums are processed for reuse by a facility that has incineration capacity this assures all prior materials are neutralized to ash.
- Plastic Containers are rinsed with a chemical solution prior to shredding... The clean shredded material is sold for feedstock to be used in the manufacture of molded HDPE products as well as plastic drums.
- All other drums and intermediate containers that are non reconditionable or deemed scrap are decontaminated and de-identified prior to final disposition at a scrap steel facility.
- Drum Service of Richmond is an approved member of "The Reusable Industrial Packaging Association" and adheres to the association's global code of operating practice which promotes the safe handling, preparation and processing of haz-mat containers.
- Education and training of the EPA/ DOT container regulations is a must for all manufacturing operators who handle new as well as used containers, we are pleased and encourage our customers to allow us to provide this added program to your training schedule.





"SUSTAINABILITY" of used industrial packaging:

Drum Service of Richmond is dedicated to helping our customers achieve their sustainability goals. Drum Service of Richmond is committed to operating responsibly, protecting the environment as well as the health and safety of the people who work with us. Our stewardship is based on a whole-system perspective that begins with new container, continues with the reconditioning / remanufacturing of industrial drums and their reintroduction into the supply chain, and ends with the recycling of materials past their useful life. By relying on us, our customers are secure in the knowledge that we help reduce the waste they generate, divert reusable materials from landfills.

We are building on our 30 year history of employing practices what constitutes environmentally responsible reconditioning, remanufacturing and recycling practices.