

International Confederation of Container Reconditioners

International Code of Operating Practice

Steel Drums

Plastic Drums

Intermediate Bulk Containers

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Introduction

In 1991, the International Confederation of Container Reconditioners – then known as the International Confederation of Drum Reconditioners - adopted the first International Code of Practice for the steel drum reconditioning industry. This Code of Practice was the first to be adopted by any industrial packaging organization, and one of the first to be applied to its members by any industry group on an international basis.

The Steel Drum Code of Practice set forth a series of general management principles applicable to all ICCR member companies, including the need to operate reconditioning plants in a manner protective of employee health and environmental safety, responding to community concerns, and ensuring that drums are produced in a manner compliant with all applicable governmental requirements.

In the intervening years, the international packaging reprocessing industry has evolved and ICCR member companies have developed highly sophisticated manufacturing systems capable of cleaning and reprocessing for reuse not just steel drums, but a wide range of reusable industrial packagings of varying sizes and designs, including plastic drums and intermediate bulk containers.

In response to the needs of today's modern reusable industrial packaging business, ICCR has updated the original Code of Practice to include the three primary industrial packagings reprocessed on an international basis, i.e. steel and plastic drums, and intermediate bulk containers. The revised Code of Practice retains many of the original management principles and general recommendations that together offer a consistent and coherent framework for the responsible operation of an industrial packaging reprocessing facility anywhere in the world.

Packaging emptiers are encouraged to use this Code of Practice as a tool by which to measure and assess the quality of their reprocessing partners. In agreeing to abide by the International Code of Operating Practice, ICCR member companies have made a commitment to continuous improvement of their facilities and products, environmental and employee protection, pollution prevention, and regulatory compliance. ICCR encourages emptiers to visit ICCR member facilities and determine for themselves the quality of ICCR member firms.

International Code of Operating Practice

Reprocessing¹ industrial packagings for use in transporting dangerous goods

1.0 Principles of Responsible Container Management

Members of the International Confederation of Container Reconditioners (ICCR) are committed to support the continuing effort to improve the container reprocessing industry's performance of its role in dangerous goods transport safety, greenhouse gas reduction, waste source reduction, recycling, and responsible container management. We pledge to manage our business according to the following guiding principles. We shall:

- Adhere to the ICCR Codes of Operating Practice.
- Recognize and respond to community concerns about container disposal and operations of container reprocessing facilities.
- Produce containers that are effective in safely containing all appropriate materials in transportation and storage.
- Make health, safety and environmental considerations a priority in our planning for all existing and new processes.
- Counsel container users on the safe use, transportation, emptying, reuse and recycling of containers.
- 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 container 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 the International Code of Operating Practice by sharing our experiences and offering assistance to others who produce, use, reuse, transport or dispose of containers.

¹ The terms “reprocessing” and “reprocess,” as used in sections 1.0 through 5.0, encompass the following activities: “reconditioning,” “remanufacturing,” “repair,” and “routine maintenance.” Definitions for “reconditioning,” “remanufacturing,” “repair,” and “routine maintenance” are found in the UN Recommendations on the Transport of Dangerous Goods Model Regulations, or applicable national and regional laws and regulations.

2.0 Basic recommendation.

Packaging that is to be 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, must not be reused for the transport of dangerous goods without first being reprocessed. Performance of any step of these processes must be accompanied by performance of all enumerated steps. That is, if any element of reprocessing is done (e.g. cleaning, changing non-integral gaskets), then all of the applicable steps must be completed in accordance with this Code. This is to assure that any reference to reconditioning, remanufacturing, repair or routine maintenance provides the filler of a packaging with total packaging integrity.

3.0 Reprocessing firms.

3.1 *Proper equipment.* A business that properly reprocesses industrial packagings is one that possesses the necessary equipment and process capabilities in accordance with the provisions described in this International Code of Operating Practice. Where required, a reprocessing firm shall be registered or licensed by appropriate government authorities and shall mark reprocessed packagings for use in transporting dangerous goods with the firm's identification as its certification of regulatory compliance.

3.2 *Quality program.* The reprocessing firm shall maintain a written quality control program.

3.3 *Plant reviews.* The reprocessing firm shall encourage plant reviews during normal operating hours by any emptier or customer.

3.4 *Regulatory compliance.* In addition to meeting the details of this International Code of Operating Practice, the reprocessing firm shall be in compliance with all applicable government regulations pertaining to worker safety and health, and environmental protection.

4.0 Environmental and employee protection.

4.1 *Storage of empty packagings containing residues.* Packagings that have not been reprocessed must be stored with all closures in place and must be inspected periodically to assure no residual contents are leaking. All packagings that are unfit for reprocessing must be rejected immediately and prepared for scrap in accordance with applicable

provisions of this Code. Destructive corrosion of packaging inventory from atmospheric and ground moisture must be avoided.

4.2 *Accumulated residues from packagings.* All wastes generated while reprocessing packagings must be managed in full compliance with applicable regulations governing such wastes.

4.3 *Wastewater and air emissions.* Discharges of wastewater from a reprocessing 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 must be minimized whether subject to government controls or not.

4.4 *Employee protection.* Exposure of employees to any chemical in the workplace, including the contents of incoming packagings, must be reduced to the extent practicable. At a minimum, this necessitates the reprocessing firm providing and requiring the use of effective personal protective equipment.

4.5 *Training.* Employees must be trained in the proper performance of their work, including awareness of hazards of the chemicals to which they are exposed and of the importance of compliance with this Code and all applicable government regulations.

4.6 *Company vehicles and drivers.* Drivers employed by the reprocessing firm to operate company vehicles shall comply with all applicable government regulations pertaining to the qualifications of drivers.

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 *Integrity.* Member companies shall foster the integrity and reputation of the reusable industrial packaging industry by refraining from publishing knowingly false, misleading or commercially disparaging statements or advertisements.

5.2 *Public statements.* A member company'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 susceptible to independent measurement and verification.

STEEL DRUM RECONDITIONING

6.0 General requirements.

6.1 *Transportation of drums containing residues.* Drums that have been used for the transportation of dangerous goods that have not been cleaned and purged must be transported with all closures in place, including covers and locking rings, and with all original hazard markings and labels legible.

6.2 *Acceptance of drums containing residues; definition of “empty” 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. “Empty” means all the residue that can be removed from the drum by the emptier, has been removed using the practices commonly employed to remove such material, e.g. pouring, pumping, aspirating, scraping, shaking, etc., or any combination of these practices. For highly toxic chemicals it is recommended the drum be neutralized at the emptier’s location.

Note: Some national governments, including Japan, United States and Canada, have adopted definitions of “empty” packaging that include additional emptiness criteria.

6.3 *Empty drum certification.* Every person providing drums containing any residues to a reconditioning firm, regardless of prior contents, shall sign a “Empty Drum Certification” on each occasion that drums are offered, verifying that the drums are empty in accordance with the explanation of that term in 6.2, above.

6.4 *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, must be rejected if they appear to be unduly heavy because of the unintended retention of product. Drums brought to the reconditioning firm’s vehicle by the emptier’s employees, must be rejected at the reconditioning firm if, upon internal inspection, they are found to be not empty. Rejected drums shall be returned to the emptier as product and the emptier shall be advised of the reason for the rejection.

6.5 *Inspection of incoming drums.* The reconditioning firm must inspect each 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 not reconditionable and, therefore, must be prepared for scrap in accordance with 6.6, below.

6.6 *Drum rejection and scrap preparation.* Drums that have been rejected during the inspection processes and cannot be repaired for dangerous goods service are to be cleaned and directed to suitable non-dangerous goods 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. The drums then must be mechanically or hydraulically crushed or shredded. Alternately, the drums must be entrusted to scrap processing firms that hold permits issued by appropriate governmental authorities to scrap them in an environmentally acceptable manner.

7.0 Tight head drum reconditioning.

7.1 All prior contents and any corrosion must be removed. The interior must be treated for corrosion resistance. Controls must be established to prevent condensation.

7.2 After cleaning, an internal visual inspection shall be conducted. 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.

7.3 Chimes must be mechanically straightened to reform and reseal them. Drums must be dedented using a mechanical system that restores the original shape and contour. Minor dents are allowed, provided they do not reduce the original integrity of the drum.

7.4 The drum exterior must be chemically cleaned, mechanically brushed, or abrasive blasted to remove labels, coatings and corrosion. The exterior surface shall be properly prepared for painting.

7.5 The cleaned drum must be leakproofness tested in accordance with 6.1.5 of the UN Recommendations on the Transport of Dangerous Goods Model Regulations (“UN Model Regulations”). Drums found to be leaking must be rejected or repaired by welding or brazing.

7.6 Before painting, drums must be inspected for deterioration and drums having visible pitting, signification reduction in metal thickness from rust or corrosion, or other material defects, or which have not been returned to their original shape and contour, must be rejected.

7.7 All closures must be removed, cleaned, and reinserted with suitable new gaskets, or replaced if necessary. Plugs and flanges must show no damaged threads and must ensure a leakproof seal.

7.8 The drum must be painted with a new exterior coating to provide a protective and decorative finish.

7.9 The completed drum must be marked in accordance with 6.1.3 of the UN Model Regulations. The reconditioning firm's marking constitutes a certification that the drum meets all applicable regulations and this Code of Operating Practice.

8.0 Open head drum reconditioning.

8.1 Open head drums and tight head drums from which the top heads have been removed must be cleaned thoroughly. All prior contents and corrosion must be removed.

8.2 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. The charred material and former linings and coatings, as well as rust, must be removed through abrasive blasting on the interior and exterior, reducing the drum to bare metal.

8.3 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. Minor dents are allowed, provided they do not reduce the original integrity of the drum.

8.4 When required by applicable regulations, each open head drum, except its cover and adjacent bead area, must be leakproofness tested in accordance with 6.1.5 of the UN Model Regulations. Drums found to be leaking must be rejected or repaired by welding or brazing.

8.5 Drums must be inspected for deterioration and those having visible pitting, significant reductions in metal thickness from rust or corrosion, other material defects, or which have not been returned to original shape and contour, must be rejected.

8.6 All closures must be removed, cleaned, and reinserted with suitable new gaskets, or replaced if necessary. Plugs and flanges must show no damaged threads and must ensure a leakproof seal.

8.7 The closing rings must be reformed and, if necessary, cleaned, painted or replaced.

8.8 The drum must be painted with a new exterior coating to provide a protective and decorative finish. The interior coating or treatment, if required, must be applied and cured in accordance with the coating manufacturer's specifications.

8.9 The completed drum must be marked in accordance with 6.1.3 of the UN Model Regulations.

9.0 Remanufactured drums.

9.1 Steel drum remanufacturing is:

- (i) The conversion of a drum to a UN type;
- (ii) The conversion of a drum meeting one UN type to another UN type; or
- (iii) The replacement of integral structural components of the drum (such as non-removable heads).

9.2 Drums that are remanufactured are subject to the requirements for manufacturing of that drum.

PLASTIC DRUM RECONDITIONING

10.0 General requirements.

10.1 *Transportation of drums containing residues.* Drums that have been used for the transportation of dangerous goods that have not been cleaned and purged must be transported with all closures in place, including covers and locking rings, and with all original hazard markings and labels legible.

10.2 *Acceptance of drums containing residues; Definition of "empty" 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. "Empty" means all the residue that can be removed from the container by the emptier, has been removed using the practices commonly employed to remove such material, e.g. pouring, pumping, aspirating, scraping, shaking, etc., or any combination of these practices. For highly toxic chemicals it is recommended the drum be neutralized at the emptier's location.

Note: Some national governments, including Japan, United States and Canada, have adopted definitions of "empty" packaging that include additional emptiness criteria.

10.3 *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 in accordance with the explanation of that term in 10.2, above.

10.4 *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 must 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 that are loaded on the reconditioning firm's vehicle by the emptier's employees, must be

rejected at the reconditioning firm if, upon internal inspection, they are found to be not empty. Rejected drums shall be returned to the emptier as product and the emptier shall be advised of the reason for the rejection.

10.5 *Inspection of incoming drums.* The reconditioning firm must inspect each 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 not reconditionable and, therefore, must be prepared for scrap in accordance with 10.6 below.

10.6 *Drum rejection and scrap preparation.* Drums that have been rejected during the inspection processes and cannot be repaired for dangerous goods service are to be cleaned and directed to non-dangerous goods service or prepared for scrap. When preparing drums for scrap, the drum interior and exterior must be cleaned using an effective cleaning agent, thereby removing all foreign matter, prior residues, labels and decorative coatings, and the drum then must be mechanically cut, shredded or granulated.

10.7 *Granulation of drums.* Drums that are granulated may need to be separated by manufacturer and color, with consideration given to prior contents. Material that is contaminated (e.g., paint, odor) should be packaged separately. Material intended for recycling should be handled in accordance with a written quality assurance program. Each batch should be verified to ensure it has the proper melt-flow rate, density and other factors necessary for the intended purpose. Material that fails any test should be rejected.

10.8 *Disposal of off-specification material.* Material which cannot be sold to an end user for any reason should be disposed of in compliance with all applicable laws and regulations.

11.0 Tight head drum reconditioning.

11.1 All prior contents must be removed. Minimal permeation in the drum of prior contents is acceptable if it does not affect the structural integrity of the drum, or cause unsafe incompatibility problems with future contents.

11.2 The exterior of the drum must be cleaned to the original materials of construction, removing labels, adhesives and coatings. Surface treatments may be utilized to improve external appearance.

11.3 After cleaning, an internal and external inspection of the drum must be conducted. If any of the prior contents remain, except as noted in 11.1, the drum must be rejected or subjected to further processing. The drum must be inspected for flange damage, permanent discoloration, excessive odors, stress cracking, and surface damage that reduces the structural integrity of the drum. Drums that show evidence of these problems should not be used for dangerous goods transportation.

11.4 The thoroughly cleaned drum must be leakproofness tested in accordance with 6.1.5 of the UN Model Regulations. Drums found to be leaking must be rejected.

11.5 All closures must be removed, cleaned, and reinserted with suitable new gaskets, or replaced if necessary. Closures and flanges must show no damaged threads and must ensure a leakproof seal.

11.6 The completed drum must be marked in accordance with 6.1.3 of the UN Model Regulations. The reconditioning firm's marking constitutes a certification that the drum meets all applicable regulations and this Code of Operating Practice.

12.0 Open head drum reconditioning.

12.1 Open head drums and covers, and closed head drums from which the top heads have been removed, must be cleaned thoroughly. All prior contents must be removed. Minimal permeation in the drum of prior contents is acceptable if it does not affect the structural integrity of the drum, or cause unsafe incompatibility problems with future contents.

12.2 The exterior of the drum must be cleaned to the original materials of construction, removing labels, adhesives and coatings. Surface treatments may be utilized to improve external appearance.

12.3 After cleaning, an internal and external inspection of the drum and its cover must be conducted. If any of the prior contents remain, except as noted in 12.1, the drum must be rejected or subjected to further processing. The drum and cover must be inspected for flange damage, permanent discoloration, excessive odors, stress cracking, and surface damage that reduces the structural integrity of the drum. Drums and covers that show evidence of these problems must be rejected. Drums that show evidence of significant shrinkage must be restored to their original shape and contour, or rejected.

12.4 When required by applicable regulations, each open head drum, except its removable head, must be leak tested in accordance with 6.1.5 of the UN Model Regulations. Drums found to be leaking must be rejected.

12.5 All closures must be removed, cleaned, and reinserted with suitable new gaskets, or replaced if necessary. Closures and flanges must show no damaged threads and must ensure a leakproof seal.

12.6 The closing rings must be reformed and, if necessary, cleaned, painted or replaced.

12.7 The completed drum must be marked in accordance with 6.1.3 of the UN Model Regulations. The reconditioning firm's identity marking constitutes a certification that the drum meets all applicable regulations and this Code of Operating Practice.

13.0 Converted and remanufactured drums.

13.1 Drums converted from one UN type to another UN type (e.g., 1H1 to 1H2); or which undergo the replacement of integral structural components are remanufactured drums. All requirements applicable to the manufacturer of new drums of that specification apply to these drums.

INTERMEDIATE BULK CONTAINER REPROCESSING

14.0 General requirements.

14.1 *Transportation of intermediate bulk containers containing residues.* IBCs that have been used for the transportation of dangerous goods that have not been cleaned and purged must be transported with all closures, service and structural equipment in place, with all original hazard markings, and labels or placards, legible.

14.2 *Acceptance of intermediate bulk containers containing residues; definition of "empty" IBCs.* No IBC that previously contained dangerous goods may be accepted that is not empty, unless the reprocessing firm holds permits issued by appropriate environmental authorities to receive and process hazardous wastes. "Empty" means all the residue that can be removed from the container by the emptier, has been removed using the practices commonly employed to remove such material, e.g. pouring, pumping, aspirating, scraping, shaking, etc., or any combination of these practices. For highly toxic chemicals it is recommended the IBC be neutralized at the emptier's location.

Note: Some national governments, including Japan, United States and Canada, have adopted definitions of "empty" packaging that include additional emptiness criteria.

14.3 *Empty IBC certification.* Every person providing IBCs containing any residues to a reprocessing firm, regardless of prior contents, shall sign an "Empty IBC Certification" on each occasion that IBCs are offered, verifying that the IBCs are empty in accordance with the explanation of that term in 14.2, above. Reprocessors operating unique non-hazardous empty container management programs should fully document such programs.

14.4 *Rejection of IBCs that are not empty.* IBCs containing residues of prior contents, that are to be loaded on the reprocessing firm's trucks by that firm's employees, may be rejected if they appear to contain excessive amounts of retained product. IBCs brought to the reprocessing firm's plant, or loaded on the reprocessing firm's vehicle by the emptier's employees, must be rejected at the reprocessing firm, if, upon internal inspection, they are found to be not empty. Rejected IBCs shall be returned to the emptier as product and the emptier shall be advised of the reason for the rejection.

14.5 *Inspection of incoming IBCS.* The reprocessing firm must inspect each IBC when it is unloaded from the transport vehicle. All IBCs must be inspected to make certain they are empty, to determine the original specification of the IBC, and to determine whether the IBC is damaged or not able to be reprocessed and therefore must be prepared for scrap in accordance with 14.7 below.

14.6 *IBC rejection and scrap preparation.* IBCs that have been rejected during the inspection processes and cannot be repaired for hazardous materials service are to be cleaned and directed to non-dangerous goods service or prepared for scrap. When preparing IBCs for scrap, the interior and exterior must be cleaned using an effective cleaning agent, thereby removing all foreign matter, prior residues, labels and decorative coatings, and the IBC then must be mechanically prepared for scrap.

14.7 *Granulation of IBC plastics.* IBC plastics that are granulated may need to be separated by manufacturer and color, with consideration given to prior contents. Material that is contaminated (e.g., paint, odor) should be packaged separately. Material intended for recycling should be handled in accordance with a written quality assurance program. Each batch should be verified to ensure it has the proper melt-flow rate, density and other factors necessary for the intended purpose. Material that fails any test should be rejected.

14.8 *Disposal of off specification material.* Material which cannot be sold to an end user for any reason should be disposed of in compliance with all applicable laws and regulations.

15.0 IBC reprocessing.

15.1 All prior contents must be removed. Minimal absorption of prior contents in a rigid plastic IBC or the bottle of a composite IBC is acceptable if it does not affect the structural integrity of the IBC, or cause unsafe incompatibility problems with future contents.

15.2 The exterior of the IBC, including pallets or cages, must be cleaned of all residues and contamination (unless required for reuse programs), removing labels, adhesives and coatings. Surface treatments may be utilized to improve external appearance.

15.3 After cleaning, an internal and external inspection of the IBC must be conducted. If any of the prior contents remain, except as noted in 15.1, the IBC must be rejected, repaired or subjected to further processing. The exterior of the IBC and its associated components must be inspected for damage that would significantly weaken the IBC, such as stress cracking and surface damage that reduces the structural integrity of the unit, and for other damage that would render the IBC unusable, including permanent discoloration or excessive odors.

15.4 All service and structural equipment must be cleaned and reinstalled, or replaced, if necessary. Filling, discharge, pressure relief and venting devices must show no damage and must ensure a leak-tight seal.

15.5 Reprocessed IBCs must be marked in accordance with 6.5.2 of the UN Model Regulations.

16.0 IBC remanufacturing.

16.1 IBCs that are produced as a UN type from a non-UN type, or that are converted from one UN design type to another UN design type are remanufactured IBCs. All remanufactured IBCs are subject to the same regulatory requirements, including markings, as newly manufactured IBCs.

16.2 All applicable design type tests (e.g. bottom lift, stacking, vibration, leakproofness, hydraulic pressure and drop) shall be performed successfully on each new IBC design type.

16.3 A test report must be prepared in accordance with 6.5.6.14 of the UN Model Regulations for each design type tested. The test report must be signed and retained by the tester, and a copy of the signed report shall be readily available to the competent authority, and made available to users.

17.0 IBC repair.

17.1 Metal, rigid plastic and composite IBCs that have been damaged by impact or otherwise show evidence of reduced strength (e.g., corroded metal, embrittled plastic), may be restored (i.e. repaired) for reuse. IBCs so restored must conform to the original design type and must be able to withstand the design type tests. The bodies of rigid plastic IBCs, and the inner receptacle of composite IBCs, may not be repaired.

17.2 The term “repair” includes the replacement of the rigid inner receptacle of a composite IBC with another receptacle that conforms to the original design type from the same manufacturer.

17.3 The person who tests and inspects an IBC that has been repaired shall durably mark the IBC in accordance with 6.5.2 of the UN Model Regulations. The reprocessing

firm's identity marking constitutes a certification that the IBC meets all applicable regulations and this Code of Operating Practice.

17.4 All IBCs intended to contain liquids for filling and discharge under pressure, shall be leakproofness tested after being repaired.

17.5 A test report prepared in accordance with 6.5.6.14 of the UN Model Regulations shall be created for all IBCs that have been successfully repaired and leakproofness tested. The IBC owner shall make the report available to users and competent authorities upon request.

18.0 Routine maintenance of IBCs.

18.1 Routine maintenance of IBCs includes cleaning, removal and reinstallation or replacement of body closures (including gaskets), or of service equipment (e.g., filling and discharge valves, pressure relief devices). Routine maintenance also includes restoration of structural equipment (e.g., fasteners, stabilizers) that does not directly perform a containment, discharge or pressure retention function. For example, IBC legs and lifting attachments may be straightened.

18.2 The leaktightness of a routinely maintained IBC must be verified if body closures or service equipment have been removed or replaced.

18.3 Each completed IBC shall be marked with the identification of the person performing routine maintenance. The firm's identity marking constitutes a certification that the IBC meets all applicable regulations and this Code of Operating Practice.

19.0 Periodic retest requirements.

19.1 A leakproofness test must be performed every 2.5 years on all IBCs intended to contain liquids, or solids loaded or discharged under pressure, starting from the date of manufacture, or the most recent repair. In addition, an external inspection of the IBC must be performed to ensure the IBC is properly marked, service and structural equipment is sound and functioning, and the IBC is generally safe for use in the storage and transportation of dangerous goods.

19.2 Following a periodic retest, the person performing the retest must ensure that all required marks are on the IBC, and he shall create a report showing that the inspection and tests have been completed. The IBC owner is responsible for maintaining this report.

International Confederation of Container Reconditioners

The International Confederation of Container Reconditioners (ICCR) is a world-wide group representing private container reconditioning companies. ICCR is governed by the three principal trade associations representing Japan, Europe and North America. ICCR membership also includes reconditioning firms operating throughout Australasia.

ICCR provides a coordinated effort on international regulatory, legislative and standards issues. The group holds observer status at the UN Sub-Committee on the Transport of Dangerous Goods, the International Maritime Organization and the International Civil Aviation Organization. ICCR plays an active role in standards development, and its members participate in national, regional, and international standards organizations.

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