

PACKAGED CHLORINE DISTRIBUTOR CUSTOMER SAFETY AND SECURITY CHECKLIST

**(FOR USE BY DISTRIBUTORS IN EVALUATING
THEIR CUSTOMERS)**

**Edition 1
January 2017**



Table of Contents

1. INTRODUCTION.....	3
1.1 PURPOSE AND USE	3
1.2 CHLORINE INSTITUTE STEWARDSHIP PROGRAM	4
1.3 APPROVAL.....	4
1.4 REVISIONS.....	4
1.5 SIGNIFICANT REVISIONS IN CURRENT EDITION	4
2. REFERENCES.....	5
2.1 CHLORINE INSTITUTE PAMPHLETS*	5
2.2 OTHER CHLORINE INSTITUTE REFERENCES	5
APPENDIX A: PACKAGED CHLORINE DISTRIBUTOR CUSTOMER AND SECURITY CHECKLIST	6
1. GENERAL CUSTOMER INFORMATION.....	6
2. SECURITY	6
3. PERSONNEL SAFETY & TRAINING	6
4. EMERGENCY RESPONSE.....	7
5. STORAGE AND USE AREAS	7

1. INTRODUCTION

1.1 PURPOSE AND USE

The Chlorine Institute Member Safety and Security Commitment (MSSC) requires chlorine suppliers to assure that each chlorine customer has an effective risk management program in place for the proper handling of chlorine.

This checklist has been prepared to help chlorine distributors evaluate the capability of North American customers of packaged chlorine (typically 150# cylinders) to safely handle chlorine at the facility where the chlorine is used. The checklist is intended only to provide limited information to assist both the distributor of chlorine and its customer. The checklist emphasizes key chlorine-specific recommendations as developed by the Chlorine Institute. The checklist is intended to supplement Institute publications, not replace them. It is not meant to incorporate regulatory or other requirements that may be applicable at the facility. In the United States, facilities using or otherwise handling chlorine may be affected by OSHA's Process Safety Management (PSM) Rule for Highly Hazardous Chemicals, 29 CFR 1910.119, and/or EPA's Accidental Release Prevention Requirement: Risk Management Programs (RMP), 40 CFR Part 68. Canadian and Mexican facilities may have similar or other regulatory requirements.

The Packaged Chlorine Distributor Customer Safety and Security Checklist (Appendix A) should be completed by either a representative(s) of the distributor's customer facility or by a representative(s) of the chlorine distributor. Both the customer and the distributor should agree in advance who will complete the checklist and how it will be used. The completed checklist should be kept confidential between the parties unless it is mutually agreed to release it to other parties. The chlorine distributor and customer should have a record retention policy for this checklist and should advise the other party what the policy is. The Institute recommends the checklist be completed and used as follows:

- (1) Complete General Customer Information as indicated in Appendix A.
- (2) For Sections 1-5, answer each question with a "Yes," "No," or "Not applicable (N/A)" and/or provide a written comment.
 - A "N/A" response is indicated when the item is not applicable to the facility.
 - It is not intended that each item in the completed checklist will have a written comment. Typically, a "Yes" or "N/A" response will not require a comment. Comments should be included when necessary to clarify a response. Such clarification may be helpful to a subsequent reviewer if the response is negative. Some companies may prefer to provide a written comment as a response to a question rather than providing a "Yes" or "No" response. That is perfectly acceptable. Comments should be fact-based.
- (3) Applicable CI Pamphlets & references are included next to most checklist items. It references where the item is discussed in more detail in specific Chlorine Institute publications. Section 2 provides a complete listing of such references. It is recommended that the pamphlets referenced be consulted when completing the checklist to ensure the item is fully understood.
- (4) Upon completion of the checklist, the chlorine supplier and customer should discuss it and agree to any needed actions that would enhance the capability of the chlorine customer to safely unload and handle chlorine at the involved facility.
- (5) The customer should have a process in place to ensure deficiencies are corrected in a timely manner.

1.2 CHLORINE INSTITUTE STEWARDSHIP PROGRAM

The Chlorine Institute exists to support the chlor-alkali industry in advancing safe, secure, environmentally compatible, and sustainable production, distribution, and use of its mission chemicals¹.

Institute members are committed to adopting CI's safety and stewardship initiatives, including pamphlets, checklists, and incident sharing, that will assist members in achieving measurable improvement. For more information on the Institute's stewardship program, visit CI's website at www.chlorineinstitute.org.

1.3 APPROVAL

The Chlorine Institute's Product Stewardship Issue Team approved Edition 1 of this checklist on January 26, 2017.

1.4 REVISIONS

Suggestions for revisions should be directed to the Secretary of the Institute.

1.5 SIGNIFICANT REVISIONS IN CURRENT EDITION

This edition (1) is a simplified version of the Packaged Chlorine Customer Safety and Security Checklist Edition 3. It is specifically designed for use by small distributors in evaluating the safety and security programs of their packaged chlorine customers. It is anticipated that large distributors that are signatories to Responsible Care® and/or Responsible Distribution® initiatives will use checklist in evaluating the programs and practices of their customers.

¹ CI's mission chemicals: chlorine, sodium and potassium hydroxides, sodium hypochlorite, the distribution of vinyl chloride monomer (VCM), and the distribution and use of hydrogen chloride.

2. REFERENCES

2.1 CHLORINE INSTITUTE PAMPHLETS*

Chlorine Basics, ed. 8; Pamphlet 1; The Chlorine Institute: Arlington, VA, **2014**.

First Aid, Medical Management/Surveillance and Occupational Hygiene Monitoring Practices for Chlorine, ed. 8; Pamphlet 63; The Chlorine Institute: Arlington, VA, **2011**.

Emergency Response Plans for Chlor-Alkali, Sodium Hypochlorite, and Hydrogen Chloride Facilities, ed. 7; Pamphlet 64; The Chlorine Institute: Arlington, VA, **2014**.

Personal Protective Equipment for Chlor-Alkali Chemicals, ed. 6; Pamphlet 65; The Chlorine Institute: Arlington, VA, **2015**.

Guidelines for the Safe Motor Vehicular Transportation of Chlorine Cylinders and Ton Containers, ed. 5; Pamphlet 76; The Chlorine Institute: Arlington, VA, **2012**.

Water and Wastewater Operators Chlorine Handbook, ed. 3; Pamphlet 155; The Chlorine Institute: Arlington, VA, **2014**

Instruction Booklet: Chlorine Institute Emergency Kit "A" for 100-lb. and 150-lb. Chlorine Cylinders, ed. 12, R2; IB/A; The Chlorine Institute: Arlington, VA, **2014**.

Instruction Booklet: Chlorine Institute Emergency Kit "B" for Chlorine Ton Containers, ed. 11, IB/B; The Chlorine Institute: Arlington, VA, **2014**.

Instruction Booklet: CI Recovery Vessel for 100-lb. and 150-lb. Chlorine Cylinders, ed. 2, IB/RV; The Chlorine Institute; Arlington, VA, **2009**.

*These pamphlets refer to issues raised in this checklist. See CI's website for other pamphlets that are currently available: www.chlorineinstitute.org

2.2 OTHER CHLORINE INSTITUTE REFERENCES

Security Management Plan for the Transportation and On-Site Storage and Use of Chlorine Cylinders, Ton Containers and Cargo Tanks; The Chlorine Institute: Arlington, VA, **2003**.

CI Guidance – Chlorine Ton Container & Cylinder Inventory Accountability; The Chlorine Institute: Arlington, VA, **2012**.

**APPENDIX A:
PACKAGED CHLORINE DISTRIBUTOR CUSTOMER SAFETY AND SECURITY CHECKLIST**

1. General Customer Information					
Company Name:					
Facility Address:					
Contact Name:					
Email:				Phone:	
Checklist completed by (name):		Title:		Date:	
Checklist Items	Applicable CI Pamphlets & References	Yes	No	N/A	Comments
1.1 Is the company a member of the Chlorine Institute?	CI Member Safety & Security Commitment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.2 Does the facility participate in ACC or CIAC Responsible Care®, NACD or CACD Responsible Distribution or SOCMA ChemStewards® programs?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.3 Is the facility subject to the requirements of the U.S. OSHA Process Safety Management (PSM) rule, 29 CFR 1910.119, or the U.S. EPA Risk Management Plan (RMP) regulations, 40 CFR 68?	CI Pamphlet 64 CI Pamphlet 155 , Appendix C: Process Safety Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.4 What is the maximum number of chlorine cylinders or ton containers that are stored at this site?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.5 Does the facility/company transport chlorine containers?	CI Pamphlet 76	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.6 Is the facility located near any sensitive receptors (e.g. residential or commercial area, hospital, school, body of water, wildlife preserve, other sensitive environmental area or major highways)?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Security					
2.1 Has the facility developed a security plan?	CI Security Management Plan for the Transportation and On-Site Storage and Use of Chlorine Cylinders, Ton Containers and Cargo Tanks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Personnel Safety & Training					
3.1 Does the facility have a chlorine-specific training program on safe use and handling of chlorine for employees, new hires and contractors?	CI Pamphlet 1 Section 6: Employee Training & Safety CI Pamphlet 65 Section 12: Training in the use of personal protective equipment CI Pamphlet 155 Section 9: Employee Training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

3.2 Are accidents and incidents investigated and reviewed with operating personnel?				
3.3 Is a current SDS available for chlorine, and are warning signs, wall charts and/or other safety information used and visible?	CI Pamphlet 1 Section 6: Employee Training & Safety			
3.4 Does the facility have a Personal Protective Equipment (PPE) policy for chlorine handling and emergency response?	CI Pamphlet 1 Section 6: Employee Training & Safety CI Pamphlet 63 CI Pamphlet 65			
3.5 Does the facility have a policy for respiratory protection in all aspects of chlorine handling and emergency response?	CI Pamphlet 1 Section 6: Employee Training & Safety CI Pamphlet 63 CI Pamphlet 65			
4. Emergency Response				
4.1 Does the facility have an up-to-date Emergency Response Plan that includes chlorine, and has it been discussed with the local fire department and Local Emergency Planning Commission?	CI Pamphlet 1 Section 5: Emergency Measures CI Pamphlet 64 Section 2: Organizational planning			
4.2 Have emergency responders received training and are periodic drills performed?	CI Pamphlet 64 Section 3: Planning for handling the emergency			
4.3 Does the facility have access to basic emergency response equipment, e.g. * A or B Kit * Recovery vessel *Self-contained breathing apparatus?	CI Pamphlet 1 Section 5: Emergency Measures CI pamphlet 155 Section 10: Handling Emergencies CI Pamphlet 49 Section 3: Emergency Response CI Pamphlet 66 Section 3: Emergency Response CI Instruction Booklets IB/A, IB/B & IB/RV			
4.4 Would you require off-site assistance to respond to a release of chlorine?				
5. Storage and Use Areas				
5.1 Are cylinders and ton containers segregated and properly secured as defined by the applicable fire and building codes?	CI Pamphlet 155			
5.2 Are cylinders and ton containers stored away from any heat source?	CI Pamphlet 1 CI Pamphlet 155			
5.3 Does the facility have an inventory management accountability system for tracking chlorine containers?	CI Guidance – Chlorine Ton Container & Cylinder Inventory Accountability			