Verification Guidance Document for the "Guideline for the Environmental Management of Tin Stabilizers in Canada – April 2020" as referenced in the 2020-2025 Environmental Performance Agreement Respecting the Use of Tin Stabilizers in the Vinyl Industry (signed on May 15, 2020)

Mark with an "X"	Verification Type
	Initial Verification (for new facilities)
	Verification of the documentation for facilities that have undergone a Significant Change
	Re-Verification

Date of Verification:
Facility Name:
Facility Address:
Facility Participation (name and title):
Verification Team:
Observers (name and affiliation):

Context

The objective of the verification program is to confirm that the *Guideline for the Environmental Management of Tin Stabilizers in Canada* is being fully implemented by Participating Facilities in order to prevent the release of tin stabilizers to the environment. The verification program is also conducted to confirm that the commitment made by each company under the Agreement or by its facilities (as outlined in the Participating Company Commitment Form in Annex 2 of the Agreement) is being met.

Verification can include a documentation review, a site visit and follow-up activities.

The verifiers will use this Verification Guidance Document to conduct the verification of the Participating Facility. The purpose of this Verification Guidance Document is to facilitate note taking by verifiers, by identifying the requirements specified in the Guideline. This Verification Guidance Document is a form that details the activities identified in the Guideline and provides a space next to each of these activities for the verifiers to write down their assessment. It helps the verifiers ensure a complete implementation of the Guideline using a streamlined verification process. It may also benefit facilities that are being verified prepare for the verification, and may assist them in understanding the Guidelines' requirements.

The verification team will:

1. Conduct facility onsite verifications and participate in related preparatory activities as defined in the section 5.4 of this document;
2. Verify through documentation and other evidence, such as interviews and observations, how the facility is implementing the Guideline for New Facilities, Participating Facilities that will be verified as defined in the Agreement, and Participating Facilities that have undergone a Significant Change;
3. Document the results of verifications (New Facilities, Participating Facilities that will be verified as defined in the Agreement, and Participating Facilities that have undergone a Significant Change, if any);
4. Provide recommendations on areas where the Participating Facility should focus its attention;

Identify areas where the verification team is of the opinion that the Guideline has not been fully implemented, as well as continuous improvement opportunities of alternative practices and procedures that are not identified in the Guideline, but that are linked to the overall goal[1] of the Guideline.

[1] The goal of the Guideline is to prevent the release of tin stabilizers to the environment by ensuring that these substances and their packaging materials are handled, stored, used and disposed of in a responsible manner.

Facility Background: (not necessary for Re-Verification)

Facility history and vinyl products:

Form of tin stabilizer usage (drums/totes/bulk):

For Significant Change verifications please descript change(s) in detail:

Requirement (by Section in Guideline)	Typical Physical/Documentation Verification	Verification Team Assessment
4.1 Bulk Storage		
A) Materials of construction for storage tanks are suitable	observation / interview drawings & specifications • Verify materials of construction ○ e.g. stainless steel, HDPE (not steel)	
B) Secondary containment is adequate for all tin stabilizer bulk storage tanks	drawings, specifications and calculations maintenance and **inspection records** observation / interview • Confirm containment and check design criteria & installation to confirm condition: capacity (110%), materials of construction, impermeability	
C) Vessels are sealed against humidity in the case of extended storage with no use	Note: statement applies quality aspects of tin stabilizer only, and not an environmental concern. observation / interview work instructions	

Requirement (by Section in Guideline)	Typical Physical/Documentation Verification	Verification Team Assessment
4.2/4.3 Tote/Drum Storage		

A) Store totes/drums away from sources of flame, heat and sunlight	**work instructions / inspection records**
	• Inspect all tin stabilizer storage locations
	  ○ storage area marked / # of totes stored / delivered
	  ○ materials of construction / returnable?	

B) Protect tin stabilizer totes/drums during storage and use, from accidental damage by mechanical devices and vehicular traffic.	**work instructions / inspection records**
	• Inspect all tin stabilizer storage locations
	  ○ # of totes stacked
	  ○ workers involved in moving totes	

C) Adequate measures have been taken to address potential release of tin stabilizer, from totes and drums in storage	• Inspect all tin stabilizer storage locations
	• nearby floor drains are closed
	• measures are in place to prevent releases to access sewer system inside and outside the facility
	  ○ spill prevention
	  ○ spill kit proximity / signage
	  ○ sealed when not in use?	

Requirement (by Section in Guideline)	Typical Physical/Documentation Verification	Verification Team Assessment
5.0 Handling and Dispensing		

A) Materials of construction for transfer lines/hoses, are suitable for the use	observation / interview
	• Inspect transfer lines functionality & condition
	  ○ (rubber / plastic / SS – supplier approved?)
	  ○ selling stabilizer or using in-house
	  ○ ever had to change a line? who does this?	

B) Proper precautions and adequate containment in place for transfers (to/from drum, tote, tank, etc.), with measures periodically reviewed for effectiveness	observation / interview
	work instructions / **training records** / inspection records
	• Verify that potential drip sources have been identified
	• Confirm adequate containment is in place (secondary barrier @ capacity, rails etc.)
	  ○ procedure for transferring (alarms, observed)
	  ○ any past issues?
	  ○ Confirm that nearby floor drains are closed
	  ○ Confirm measures are in place to prevent releases to access sewer system inside and outside the facility	

Requirement (by Section in Guideline)	Typical Physical/Documentation Verification	Verification Team Assessment
C) Potential for leaks during transfers from bulk trucks controlled using an adequate combination of: i) attendance by operator or carrier during unloading ii) protection against overfilling (e.g. alarms) iii) unloading controls including drip pans and spill prevention work instructions	observation / interview with operators review of procedures **work instructions / training records** ○ capacity of tank vs. load from tanker ○ spill prevention/containment important ○ use discretion to determine adequacy ○ Confirm that appropriate measures are in place during the unloading process to prevent releases into municipal sewer system, municipal storm water collection system or other water treatments systems (ex: by placing a spill matt on the sewer opening during unloading)	
D) Continuous improvement in reducing drips during routine operations.	interviews **work instructions**	

6.0 Rinsing Tanks, Totes, Drums or Lines		
Any vinyl compatible rinsate generated is reused in process or properly disposed	interviews **work instructions / production records** • Review rinsate reuse /disposal practices (section 9 relevant) ○ are different types of stabilizer used? ○ is rinsing required? ○ suitable rinsate = ESO (not water)	

Requirement (by Section in Guideline)	Typical Physical/Documentation Verification	Verification Team Assessment
7.0 Reusable Packaging		
A) Totes/drums/pails are sealed (e.g. valves, caps and lids are closed) when not in use to prevent loss and to limit contact with humidity.	observation / interviews **work instructions** / **training records** ○ hours of operation ○ empty tote storage area secured / inspected	
B) Previous contents of all empty packages (i.e. Tin Stabilizer) is shown on the container and any shipping documents (Bill of Lading)	observation / interview **work instructions** / **shipping records** indicate 'stabilizers' ○ process for draining packages ○ empty packages labeled ○ designated handler (checks labels)	

Requirement (by Section in Guideline)	Typical Physical/Documentation Verification	Verification Team Assessment
8.0 Spills		
A) Facility has a spill plan assessing potential spills and specific responses for each potential situation appropriate to the facility	interviews / **spill response plan** / **training records** ○ immediately close valve, empty tote available ○ use of resin as recovery medium ○ define “spill” ○ historical spills? ○ Confirm that prevention measures are in place to prevent spills into municipal sewer system, municipal storm water collection system and other water treatments systems during receiving, storage, handling and dispensing.	
B) Facility has documented reporting procedure(s)	interviews / **written procedures / spill report document** ○ spills reported to management? ○ who?	
C) Spills are tracked and reported on the Annual Compliance form as specified in the Guideline.	interviews / **spill reports** / **annual compliance form** ○ reportable spills include; spills occurring off-site (any volume); spills occurring on-site (any volume) not yet cleaned up; provincially reportable spills ○ not a spill = drip pan, spill on concrete floor immediately cleaned	

Requirement (by Section in Guideline)	Typical Physical/Documentation Verification	Verification Team Assessment
D) Process established for investigating tin stabilizer spills including identifying causes and corrective action(s).	interviews **written investigation procedure** / **spill investigation reports**	
E) Spilled material is collected in a sealed container for later reuse or disposal	observation / interview **work instructions** / **training records** ○ identify waste disposal policy and training	
The Verification Team expects the opportunity to observe spill response practices and review investigation practices in the unlikely event a spill should occur during verification, subject to site emergency procedures and personnel safety		

9.0 Waste Disposal		
Waste containing tin stabilizers is disposed of at a landfill or incinerator, that is certified to accept hazardous materials	interview operators / **review policies** / **work instructions** / **waste shipping documents** ○ Confirm that written assurance has been received from the waste management contractor that tin-containing waste is disposed of at a landfill or incinerator that is certified to handle hazardous materials.	

Requirement (by Section in Guideline)	Typical Physical/Documentation Verification	Verification Team Assessment
9.1 Material		
A) Liquid wastes (including rinsate and spilled material) containing tin stabilizer are disposed of appropriately	review work practices / interview **policies and procedures** / **training records** ○ practices confirmed with recycler ○ Confirm that liquid wastes are disposed appropriately to prevent release of tin stabilizers into municipal sewer system, municipal storm water collection systems, other water treatment systems, receiving water or surface water courses.	
B) Liquid wastes containing tin stabilizer are collected and stored in a sealed container while awaiting reuse or disposal	review work practices / interview / observation **policies and procedures** / **training records** ○ rinsing of lines etc.	
C) Liquid wastes containing tin stabilizer are shipped with the required documents meeting applicable legislation as a minimum	interviews / **waste shipping documents** / **provincial registration document** • Check that users have provincial registration for applicable waste codes ○ bill of lading meets Provincial requirements for transfer/ disposal of liquid wastes (waste #)	
D) Solid waste containing tin stabilizer (e.g. absorbent, rags, gloves, etc.), collected and stored in a sealed container while awaiting disposal	review work practices / interview / observation **waste shipping documents** / **provincial registration document / work instructions** / **training records** ○ drums for storage of solids wastes	

9.2 Non-Reusable Packaging (shipment of empty containers does not require special permits; use reputable disposal)		
A) Totes/drums/pails are sealed (e.g. valves, caps and lids are closed) when not in use to prevent loss and to limit contact with humidity.	observation / interview **work instructions** / **training records**	
B) Previous contents of all empty packages is shown on containers and shipping documents (i.e. Tin Stabilizers)	observation / interview **work instructions** / **shipping records of empty packaging**	
C) Facility has confirmed that the receivers of empty packaging are appropriately licensed and do not release tin stabilizers into the aquatic environment	interview / policy and procedure / **documentation** ○ Confirm that non-reusable packaging is disposed appropriately ○ Confirm that written assurance has been received from service provider for non-reusable packaging, and review shipping document(s) of returnable and non-returnable empty container(s).	
Requirement (by Section in Guideline)	**Typical Physical/Documentation Verification**	**Verification Team Assessment**
10.0 Management System		
Facility has the specified work instructions with appropriate documentation	interview / **work instructions** / **training records** ○ receiving; handling; storage; inspection; H&S; handling of empty packaging; waste materials collection and storage; disposal; spill containment/reporting	
11.0 Documentation		

Facility has the specified records	**records**, within the specified retention period (2 years) o waste manifest; o Bill of Lading and paperwork for : designated received of solid waste containing tin stabilizer; returnable packaging; waste packaging; o documentation that verifies receivers of rinsate, waste, or returnable packaging showing they meet regulatory requirements; o documentation related to spills	

Summary of Findings:

Successful Practices (to be share with the VIC and the Participating Companies):

Verbal Remarks:

Work in Progress (self-identified improvement opportunity or gap where the company has initiated corrective action):

Improvement(s) Requested:

Continuous Improvement Opportunities: