

# Record of Letter Ballot Review by TC Chapter for Procedural Review

Region/Locale: **North America**

Global Technical Committee: **Liquid Chemicals**

TC Chapter Cochairs: **Don Hadder (INTEL), Frank Flowers (Peroxy Chemicals)**

Standards Staff: **Inna Skvortsova**

	Scheduled in Background Statement	Actual
Date	<b>04/04/2017</b>	<b>04/04/2017</b>
Location	<b>SEMI HQ, Milpitas, California</b>	<b>SEMI HQ, Milpitas, California</b>
Reason for Change of Date and/or Location (if changed)		

Note: See *Regulations* ¶ 9.5 Exception for allowable reason to change.

## I. Document Number and Title

Document Number	Document Title
<b>5943</b>	<b>Revision to SEMI E49.2-1104, GUIDELINE FOR THE QUALIFICATION OF POLYMER ASSEMBLIES USED IN ULTRAPURE WATER AND LIQUID CHEMICAL SYSTEMS IN SEMICONDUCTOR PROCESS EQUIPMENT</b>  with title change to:  <b>GUIDE FOR THE QUALIFICATION OF POLYMER ASSEMBLIES USED FOR LIQUID CHEMICAL SYSTEMS IN SEMICONDUCTOR EQUIPMENT</b>

## II. Tally

Standards staff to fill in.

Voting Tally: **As-cast tally after close of voting period**

Note: A minimum of 60% of the Voting Interests that have TC Members within the global technical committee that issued the Letter Ballot must return Votes. (*Regulations* ¶ 9.7.1.1)

**Voting Tally (with example values):**

Voting Interest:	Returned Votes	Distribution	Return Rate	
Letter Ballot	51	÷ 85	= 60.0%	≥60%
Intercommittee Ballot	20			
Voting Interest Reject(s)	0	Total Voters with Rejects		0
Voting Interest Accept(s)	34			

Note: See Regulations § 3.2.1 for definition of Voting Interest.

**III. Rejects**

No rejects received.

**IV. Other Technical Issues**

No other technical issues.

**V. Comments**

**V- (i) Voters' Comments**

**Commenter 1 (Terracina, Vincent/Solvay) - Comment 1**

<b>Comment</b>	*TF/TC Chapter to fill in section/paragraph #, if necessary.	
	2.2 Suggest changing 'clean room' to one word 'cleanroom'.	
	3.7 Suggest changing 'trouble shooting' to one word 'troubleshooting'.	
Also, there are numerous instances in the document where the word assemblies should be capitalized."		
<b>Action</b>	<b>The TC Chapter agreed to do one of the following actions.</b>	
	*No motion is required in this step.	
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #
	<input type="checkbox"/>	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New Business
<input checked="" type="checkbox"/>	Editorial Change	
<b>Options for editorial change (check one)</b>	<input type="checkbox"/>	<b>Case 1: No vote in this section:</b> To be included and voted on as a group in § VI. <i>Editorial Changes Other than Those Voted on in § V.</i>
	<input checked="" type="checkbox"/>	<b>Case 2: Voted in this section:</b> Original section number and at least one full sentence are required in "FROM" and "TO" fields.

<b>Editorial Changes</b>	1	<b>FROM: Section 2.2/Paragraph 1</b> Typical ultrapure water and liquid chemical delivery components and systems are addressed in SEMI F57 and F61. All clean room equipment requiring high purity UPW and liquid chemical assemblies are covered by this guide. Liquid chemical assemblies used in non-clean room systems that still require high quality and purity include, but are not limited to the following:
		<b>TO: Section 2.2/Paragraph 1</b> Typical ultrapure water and liquid chemical delivery components and systems are addressed in SEMI F57 and F61. All <del>clean-room</del> cleanroom equipment requiring high purity UPW and liquid chemical Assemblies are covered by this guide. Liquid chemical Assemblies used in non-clean room systems that still require high quality and purity include, but are not limited to the following:
		<b>Justification (If necessary)</b>
	2	<b>FROM: Section 3.7/Paragraph</b> This guide content is applicable for both initial assembly qualification as well as post start up trouble shooting and analysis.
		<b>TO: Section 3.7/Paragraph</b> This guide content is applicable for both initial assembly qualification as well as post start-up <del>trouble-shooting</del> troubleshooting and analysis.
		<b>Justification (If necessary)</b>
	3	<b>FROM: Section /Paragraph:</b> 4.5; 6.12; 6.13; 7 Table1; NOTE 6; NOTE 7; 10.4;13.c “assemblies” All instances in sections listed above when the word “assemblies” is not capitalized.
		<b>TO: Section /Paragraph:</b> 4.5; 6.12; 6.13; 7 Table1; NOTE 6; NOTE 7; 10.4;13.c “Assemblies” All instances in sections listed above the word “assemblies” should be capitalized.
		<b>Justification (If necessary)</b>
	<b>Motion</b>	To approve above editorial change(s)
<b>Motion by/2<sup>nd</sup> by</b>	Koh Murai (Mega Fluids Systems) / Bob McIntosh (GF Piping)	
<b>Discussion</b>	none	
<b>Vote</b>	7 Y-0 N; Motion passed.	

**V-(ii) Comments Created by Handling Negative  
NONE**

**VI. Editorial Changes Other than Those Voted on in § V**

Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.  
**NONE**

## VII. Approval Conditions Check

### VII. - (i). Approval Rate

**APPROVAL CONDITION 1:** All Negatives have been discussed and were withdrawn, found not related, found not persuasive, or addressed by a technical change. (*Regulations ¶ 9.7.1.2*)

**APPROVAL CONDITION 2:** At least 90% of the sum of valid Voting Interest Accept and Voting Interest Reject Votes must be Accept. (*Regulations ¶ 9.7.1.3*)

**Note:** If both approval conditions are not satisfied, the Document fails.

		Accepts		(Accepts + Valid Rejects)			
Approval Rate	=	34	/	34	=	100.0%	≥90%

### VII. – (ii) Approval Level (check one)

**Note:** See *Regulations § 9.7.2* for further information.

#### Globally Approved (No Ratification Ballot needed):

The Letter Ballot meets the Letter Ballot approval conditions for the global technical committee.

#### Need a Ratification Ballot:

The Letter Ballot meets the Letter Ballot approval conditions for the TC Chapter and a Ratification Ballot will be issued to validate technical changes.

## VIII. Safety Check

**Note:** See *Regulations § 15* for further information.

Motion	<input checked="" type="checkbox"/>	<b>This is not a Safety Document</b> , when all safety-related information is removed, the Document is still technically sound and complete. ( <i>Regulations ¶ 8.7.1</i> )
	<input type="checkbox"/>	<b>This is a Safety Document</b> , when all safety-related information is removed, the Document is not technically sound and complete. ( <i>Regulations ¶ 8.7.2</i> )
	<input type="checkbox"/>	Safety Checklist ( <i>Regulations ¶ 15.3</i> ) is complete and has been included with the Document throughout the balloting process. ( <i>Regulations ¶ 15.1.2</i> )
Motion by/2 <sup>nd</sup> by		Koh Murai (Mega Fluids Systems) / Chuck Dale (GE)
Discussion		None
Vote		7 Y-0 N; Motion passed

## IX. Intellectual Property (IP) Check

**Note: This Letter Ballot may cover all or part of a Standard or Safety Guideline. This IP check applies to the entire Standard or Safety Guideline. See *Regulations § 16* for further information.**

<b>X</b>	The TC Chapter meeting chair asked those participating, if they were aware of any potentially material patented technology or copyrighted items* in the Standard or Guideline. ( <i>Regulations ¶ 8.8.1</i> )	
	<b>X</b>	No potentially material patented technology or reproduction of copyrighted items is known.
		<b>GO TO SECTION X.</b>

**\* Note: Such potentially material patented technology or copyrighted items might have become known since the Standard or Safety Guideline was last reviewed, or might become relevant due to this Letter Ballot.**

## X. Action for This Document

<b>Motion</b>		This Document passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.
	<b>X</b>	This Document passed TC Chapter review with editorial changes and will be forwarded to the ISC A&R SC for procedural review.
		This Document passed TC Chapter review with technical changes and with or without editorial changes and will be forwarded to the ISC A&R SC for procedural review. A Ratification Ballot will be issued to verify the technical changes.
		This Document failed TC Chapter review and will be returned to the TF for rework.
		This Document failed TC Chapter review and work will be discontinued.
<b>Motion by/ 2<sup>nd</sup> by</b>		Koh Murai (Mega Fluids Systems) / Chuck Dale (GE)
<b>Discussion</b>		None
<b>Vote</b>		7 Y- 0 N
<b>Final Action</b>		<b>X</b> Motion passed

**Standards staff to record the result of the A&R procedural review here:**

<b>A&amp;R</b>		<b>Approved for publication</b>
		<b>Approved pending acceptance of the Ratification Ballot</b>
		<b>Not approved</b>
	<b>Reason:</b>	