Record of Letter Ballot Review by TC Chapter for Procedural Review

Region/Locale: North America
Global Technical Committee: EHS
TC Chapter Cochairs: Chris Evanston/Salus, Sean Larsen/KLA, Lucian Girlea/Nikon, Eric Sklar/Safety Guru
Standards Staff: Kevin Nguyen

	Scheduled in Background Statement	Actual
Date	10/15/2026	10/15/2026
Location	San Francisco/CA	San Francisco/CA
Reason for Change of Date and/or Location (if changed)	N/A	

Note: Refer to *Regulations* ¶ 9.5 Exceptions for allowable reason to change.

I. Document Number and Title

Document Number 7485	Document Title Revision of SEMI S14-0521 Safety Guideline for Fire Risk Assessment and Mitigation for Semiconductor Manufacturing Equipment

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* ¶ 9.6.2.1.1)

Note: Refer to *Regulations* § 3.2.1 for definition of Voting Interest.

Voting Interest:	Returned Votes		Distribution		Return Rate	
Letter Ballot	85	÷	141	=	60.28%	≥60%
Intercommittee Ballot	32					
Voting Interest Reject(s)	1		Total Voters with Rejects			1
Voting Interest Accept(s)	89					

III. Rejects

Voting Interest Reject 1 (Voting Interest Name: AMEC)
Voter Reject 1 (John Wang, AMEC)
Negative 1

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.**			
		6.1.3			
	Negative Text	it is not acceptable to remove "single-point"			
TF input (optional)		EHS TCC consensus, reached in work on several Documents, is that "single-point" is *not* a correct consideration because it ignores the probability of multiple-point failures. **Recommend NA EHS TCC find AMEC-1 Related, Not Persuasive.**			
Withdrawal (check one)		X	No Negative withdrawal made by Voter.		**GO TO "Related" subsection**
			Withdrawal document received by Standards staff on MM/DD/YYYY.		**GO TO "Final" subsection → (A)**
Related	**Motion and Reason (check one)**	X	'Related' is mutually agreed upon. **(Needs no motion.)**		**GO TO "Persuasive" subsection**
			Negative is not related. **(Needs ≥2/3 votes to pass.)**		
			Reason	XXXX	
	Motion by/ 2nd by	Name (Company)/Name (Company)			
	Discussion				
	Result of Vote (check one)	XX **Y**-XX **N**; Motion passed/failed.			
			[Negative is not related.] < 2/3		**GO TO "Persuasive" subsection**
			2/3 ≤ [Negative is not related.]		**GO TO "Final" subsection → (B)**
Persuasive	**Motion and Reason (check one)**		Negative is related and persuasive. **(Needs >1/3 votes to pass.)**		
		x	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	EHS TCC consensus, reached in work on several Documents, is that "single-point" is *not* a correct consideration because it ignores the probability of multiple-point failures.	
	Motion by/ 2nd by	**By:** Eric Sklar (Safety Guru, LLC) **Second:** Lucian Girlea (Nikon Precision)			
	Discussion				
	Result of Vote (check one)	14-Y 0-N Voting Result: Pass - 100%			
			[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	**Y**	**GO TO "Address by Technical Change Option" subsection**

			[Negative is related and not persuasive.] < 2/3			N	GO TO "Final" subsection → (E)
		x	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)			
			90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection			

Address by Technical Change Option	**Technical Change Recommendations** **Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.**						
	Technical Changes	**1**	**FROM: Section/Paragraph XXX**				
			TO: Section/Paragraph xxx				
			Justification (If necessary)				
		2	**FROM: Section/Paragraph XXX**				
			TO: Section/Paragraph xxx				
			Justification (If necessary)				
	Motion		Negative is addressed by the technical change(s).				
	Motion by/2nd by		Name (Company)/Name (Company)				
	Discussion						
	Result of Vote (check one)		XX **Y**-XX **N**; Motion passed/failed.				
				2/3 ≤ [Negative is addressed by the technical change(s).]			GO TO "Incorporation of the Technical Change" subsection
				[Negative is not addressed by the technical change(s).] < 2/3			GO TO "Final" subsection → (E)
	Incorporation of the Technical Change	**Motion**	To incorporate the technical change(s).				
		Motion by/2nd by	Name (Company)/Name (Company)				
		Discussion					
		Result of Vote (check one)	XX **Y**-XX **N**; Motion passed/failed.				
				90% ≤ [Agree to incorporate.]			GO TO "Final" subsection → (F)
				[Disagree to incorporate.]>10%			GO TO "Final" subsection → (E)
Not Significant Finding Option	**This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (*Regulations* ¶ 9.6.1.4.5.2)**						
	Use of "Not significant finding option" (check one)		It is mutually agreed upon to term the Negative "not significant".				GO TO "Final" subsection → (D)
			It is mutually agreed upon to term the Negative "significant".				GO TO "Final" subsection → (C)
			Whether or not the Negative is "not significant" is decided by a vote.				
	Motion		The Negative is "not significant".				
	Motion by/ 2nd by		Name (Company)/Name (Company)				
	Vote		XX **Y**-XX **N**; Motion passed with simple majority				GO TO "Final" subsection → (D)
			XX **Y**-XX **N**; Motion failed with simple majority				GO TO "Final" subsection → (C)
Final	**(check if applicable)**		**(A)**	Withdrawn **(counted under h in disposition)**			
			(B)	Not related **(counted under i in disposition)**			
		x	**(C)**	Related and not persuasive (significant)			

			(D)	Not significant **(counted under j in disposition)**	
			(E)	Related and persuasive and not addressed by technical change	**DOCUMENT FAILS**
			(F)	Addressed by technical change **(counted under k disposition)**	
	(check if applicable)		*Comment generated.* ***Refer to Section V-(ii) Comment # X.***		

This table is needed for each Negative.

Disposition of Voting Interest Reject 1

Check only when the Document has not been failed.

1	Original number (#) of Negatives			**(g) 1**
0	Number of Negatives withdrawn			**(h) 0**
0	Number of Negatives found not related			**(i) 0**
0	Number of Negatives found not significant			**(j)0**
#	Number of Negatives addressed by technical change **(Negative becomes not significant)**			**(k)0**
Final			**g** - (**h** + **i** +**j** + **k**) = 0	**Reject is Not Valid and is not included in the denominator of § VI.** ***Approval Conditions Check***
		x	**g** - (**h** + **i** +**j** + **k**) >0	**Reject is included in the denominator of § VI.** ***Approval Conditions Check***
			Reject without a Negative	**Not Valid**

This table is needed for each Voting Interest Reject.

Note: If all of the Negatives included with a Reject Vote are withdrawn, determined to be not related, or determined to be not significant, the Reject Vote is not valid. (*Regulations* ¶ 9.4.3.3)
Note: A Negative addressed by a technical change is automatically considered to be not significant. (*Regulations* ¶ 9.6.1.4.5.2)

IV. Other Technical Issues

Note: TC Chapter may choose to address a technical issue that is not part of a Negative received on a Letter Ballot (i.e., a Comment or a reason not addressed by a Vote response) by handling it as a Negative and finding it related and technically persuasive. The TC Chapter may then fail the Document or address such technical issue by using the procedure defined in *Regulations* § 9.6.1.4.3 to make a technical change to the Document. (*Regulations* ¶ 9.6.1.4.2.5)

None

V. Comments

V- (i) Voters' Comments

Commenter 1 (Takayuki Nishimura /SCREEN) - Comment 1

Comment	6.1.3		
	Comment: I support the alignment of SEMI S14 with SEMI S10. However, clarification is requested regarding the transition of existing SEMI S14 fire risk assessment reports and evaluation records that were prepared using previous S14-specific Severity, Likelihood, and Risk criteria. Additional guidance on whether re-evaluation is expected for existing assessments would be helpful.		
	TF Recommendation SEMI S14 does not include a "grandfather clause", However, SEMI S2, which invokes SEMI S14, does. That clause specifically exempts unchanged SME from re-assessment, despite changes in SEMI S2. Therefore, for most applications, SEMI S14 has, in effect, a grandfather clause. **Recommend NA EHS TCC take no action in response to this Comment.**		
Action	**The TC Chapter agreed to do one of the following actions.**		
	***No motion is required in this step.**		
		Already addressed by Commenter #, Comment #	
	X	No further action was taken by the TC Chapter.	
		Refer to the TF for more consideration.	
		New Business	
		Editorial Change	
	Options for editorial change **(check one)**		**Case 1: No vote in this section:**
			To be included and voted on as a group in § VI. *Editorial Changes Other than Those Voted on in § V.*
			Case 2: Voted in this section:
			Original section number and at least one full sentence are required in "FROM" and "TO" fields.
Editorial Changes	1	**FROM: Section/Paragraph xxx**	
		TO: Section/Paragraph xxx	
		Justification (If necessary)	
	2	**FROM: Section/Paragraph xxx**	
		TO: Section/Paragraph xxx	
		Justification (If necessary)	
Motion		To approve above editorial change(s)	
Motion by/2nd by		Name (Company)/Name (Company)	
Vote		*XX **Y**-XX **N**; Motion passed/failed.*	

Commenter 2 (Tsutomu Takahashi /TEL) - Comment 1

Comment	6.1.3		
	Due to the change from "reasonably foreseeable single-point failures" to "reasonably foreseeable failures," the scope of failure combinations subject to evaluation has become unclear. • It is necessary to clarify the criteria for residual risk reporting after the deletion of Appendix 1, as well as the applicable edition/version of SEMI S10.		
	TF Recommendation: Doesn't see what is "unclear". The criteria of SEMI S10 have been found, by the adoption of SEMI S10 by the EHS TC, to be adequately clear. Which version of SEMI S10 is to be used is stated by the NOTICE at the end of Section 4, "Unless otherwise stated, all documents cited shall be the latest published editions.". **Recommend NA EHS TCC take no action in response to this Comment**		
Action	**The TC Chapter agreed to do one of the following actions.**		
	***No motion is required in this step.**		
		Already addressed by Commenter #, Comment #	
	X	No further action was taken by the TC Chapter.	
		Refer to the TF for more consideration.	
		New Business	
		Editorial Change	
	Options for editorial change **(check one)**		**Case 1: No vote in this section:**
			To be included and voted on as a group in § VI. *Editorial Changes Other than Those Voted on in § V*.
			Case 2: Voted in this section:
			Original section number and at least one full sentence are required in "FROM" and "TO" fields.
Editorial Changes	1	**FROM: Section/Paragraph xxx**	
		TO: Section/Paragraph xxx	
		Justification (If necessary)	
	2	**FROM: Section/Paragraph xxx**	
		TO: Section/Paragraph xxx	
		Justification (If necessary)	

Motion	To approve above editorial change(s)
Motion by/2nd by	Name (Company)/Name (Company)
Discussion	XXXX
Vote	*XX **Y**-XX **N**; Motion passed/failed.*

Commenter 3 (Yu-Chun Yeh /Individual) - Comment 1

Comment	6.5.3.1		
	Since the revised Appendix 1 now directs users to SEMI S10 for the risk assessment method and tables, please consider clarifying the reference to the applicable SEMI S10 criteria in 6.5.3.1. This may help ensure consistent interpretation and documentation of residual risks during conformity assessment.		
	TF Recommendation: All of the SEMI S10 criteria are applicable. TF does not see anything in need of clarification. **Recommend NA EHS TCC take no action in response to this Comment**		
Action	**The TC Chapter agreed to do one of the following actions.**		
	***No motion is required in this step.**		
		Already addressed by Commenter #, Comment #	
	X	No further action was taken by the TC Chapter.	
		Refer to the TF for more consideration.	
		New Business	
		Editorial Change	
	Options for editorial change **(check one)**		**Case 1: No vote in this section:**
			To be included and voted on as a group in § VI. *Editorial Changes Other than Those Voted on in § V.*
			Case 2: Voted in this section:
			Original section number and at least one full sentence are required in "FROM" and "TO" fields.
Editorial Changes	1	**FROM: Section/Paragraph xxx**	
		TO: Section/Paragraph xxx	
		Justification (If necessary)	
	2	**FROM: Section/Paragraph xxx**	
		TO: Section/Paragraph xxx	
		Justification (If necessary)	

Motion	To approve above editorial change(s)
Motion by/2nd by	Name (Company)/Name (Company)
Discussion	XXXX
Vote	*XX* ***Y****-XX* ***N****; Motion passed/failed.*

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* ¶ 9.6.2.1.2)

APPROVAL CONDITION 2: At least 90% of the sum of valid Voting Interest Accept and Voting Interest Reject Votes must be Accept. (*Regulations* ¶ 9.6.2.1.3)

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

		Accepts		(Accepts + Valid Rejects)				
Approval Rate	=	89		90	=	99%		≥90%

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

Note: Refer to *Regulations* § 9.6.2 for further information.

x	**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: Refer to *Regulations* § 15 for further information.

Motion		
		This is not a Safety Document, when all safety-related information is removed, the Document is still technically sound and complete. (*Regulations* ¶ 8.7.1)
	x	**This is a Safety Document**, when all safety-related information is removed, the Document is not technically sound and complete. (*Regulations* ¶ 8.7.2)
	x	Safety Checklist (*Regulations* ¶ 15.3) is complete and has been included with the Document throughout the balloting process. (*Regulations* ¶ 15.1.2)
Motion by/2nd by		**By:** Eric Sklar (Safety Guru, LLC) **Second:** Lauren Crane (Lam Research)
Discussion		XXXX
Vote		15-Y 0-N Voting Result: Pass - 100%

IX. Intellectual Property (IP) Check

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

x	The TC Chapter meeting chair asked those participating, if they were aware of any patented technology that might be relevant (refer to *Regulations* ¶ 16.3.1.1) to the Standard or Safety Guideline; or, any copyrighted items or trademarks that are used/reproduced (refer to *Regulations* ¶ 16.4.1.2) in the Standard or Safety Guideline. (Also refer to *Regulations* § 8.8)					
	x	The question is NOT answered in affirmative (No potentially material patented technology or use/reproduction of copyrighted items/trademarks is known.)	**GO TO SECTION X.**			
		The question is answered in affirmative	Is any of the known IPs a patented technology?		**Yes, at least one of them is a patented technology**	**GO TO IX (a) "Patented Technology" subsection**
					No	**GO TO IX (b) "Copyright items" subsection**

IX(a) Patented Technologies subsection

IX(a1) Total numbers of Patented Technologies to be dealt with

# **Fill number**	**(l)** Known Patented Technology that might be relevant to the Standard/Safety Guideline	**#** **Fill number**	**(m)** Number of patented technologies first became known to the TC Chapter on or after the day of the issuance of this Letter Ballot	**Postpone assessment of such patented technologies to be performed at the next scheduled TC Chapter meeting.**
		# **Fill number**	**(n)** Number of patented technologies first became known to the TC Chapter before the day of the issuance of this Letter Ballot	**GO TO IX (a2)**

IX(a2) Assessment of disclosed patented technologies

Disclosed patented technology #1 (***Brief description, e.g., patent title and number***):			**Date of Assessment** **(If different from the date of Letter Ballot adjudication)** MM/DD/YYYY			
Is disclosed patented technology #1 found to be "might be material" to the Standard/Safety Guideline?		YES (It is a PMPT)	Is the use of this PMPT technically justified?		**YES**	**PROCEED to assess NEXT one, or if this is the last one, GO TO IX(a3)**
					NO	**The Document is failed and returned to the TF**
		NO	No further action is needed for patented technology #1			

This table is needed for each disclosed patented technology.

IX(a3) LOA status check of PMPT of which inclusion assessed to be justified

LOA Status of PMPT #1					
Has an LOA for this patented technology been received from every owner ?		YES	**PROCEED to check NEXT one, or if this is the last one, GO TO IX(b)**		
		NO	MOTION		Ask ISC for special permission to publish.
				Quit activity.	**The Document is failed and returned to the TF**
				Wait for LOA	**PROCEED to check NEXT one, or if this is the last one, GO TO IX(b1)**
			Motion by/ 2nd by		Name (Company)/Name (Company)
			Discussion		XXXX
			Vote		XX **Y**-XX **N**; Motion passed (or failed)

This table is needed for each PMPT of which inclusion assessed to be justified.

IX(b1) Total numbers of copyrighted items to be dealt with

# **Fill number**	**(o)** Known copyrighted items that are used or reproduced to the Standard/Safety Guideline		**o > 0** There is at least one known copyrighted items that might be relevant to the Standard/Safety Guideline	**GO TO IX (b2)**
			o = 0 There is no disclosed copyrighted item	**GO TO IX (c)**

IX(b2) Assessment of disclosed copyrighted items

Disclosed copyrighted item #1 (***Brief description of its use in the Document***):						
Is disclosed copyrighted item #1 used or reproduced in the Standard/Safety Guideline?		YES	Is the use/reproduction of this copyrighted item technically justified?		YES	**PROCEED to assess NEXT one, or if this is the last one, GO TO IX(b3)**
					NO	**The Document is failed and returned to the TF**
		NO	No further action is needed for copyrighted item #1			

This table is needed for each disclosed copyrighted item.

IX(b3) Copyright release status check of copyrighted item of which inclusion assessed to be justified

Copyright release Status of copyrighted item #1					
Has the copyright release been received from its owner ?.		YES	**PROCEED to assess NEXT one, or if this is the last one, GO TO IX(c)**		
		NO	MOTION		Ask ISC for special permission to publish.

					Quit activity.	**The Document is failed and returned to the TF**
					Wait for copyright release letter	**PROCEED to check NEXT one, or if this is the last one, GO TO IX(c)**
			Motion by/ 2nd by			Name (Company)/Name (Company)
			Discussion			XXXX
			Vote			XX **Y**-XX **N**; Motion passed (or failed)

This table is needed for each copyrighted item of which use/reproduction assessed to be justified.

IX(c) Assessment of disclosed (identified) trademark

Is there any trademark in the Standard/Safety Guideline?		YES	Is every instance of trademark use technically justified?		YES	**GO TO** IX(d)
					NO	**The Document is failed and returned to the TF**
		NO	**GO TO IX(d)**			

IX(d) IP check completion condition check

The co-chair checks if any Patented Technologies first become known to the TC Chapter on or after the day of the issuance of this Letter Ballot? i.e., m>0 in IX(a1)		YES	**Sections IX(a2) and IX(a3) shall be completed and recorded for such patented technologies at next scheduled meeting of the TC Chapter. Until then, the TC Chapter shall NOT go to X** (making motion to pass/fail this Document) **(refer to *Regulations* ¶16.4.1.2)** **Until then this Letter Ballot Review is on hold.**
		NO	**GO TO X**

X. Action for This Document

Motion	**x**	This Document passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.
		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.
Motion by/ 2nd by		**By:** Eric Sklar (Safety Guru, LLC) **Second:** Lauren Crane (Lam Research)
Discussion		XXXX
Vote		13-Y 0-N Voting Result: Pass - 100%
Final Action	x	Motion passed
		Motion failed

Note: If the use of PMPT or copyrighted item is justified by the TC Chapter, LOA or release form must be received before publication can proceed.