



## EHS NA TC Chapter Meeting Summary and Minutes

SEMICON West

Thursday, July 11, 2018

9:00 AM – 5:00 PM

San Francisco Marriott Marquis, San Francisco, California

### TC Chapter Announcements

Next TC Chapter Meeting

Thursday, November 8, 2018 Milpitas, CA in conjunction with the NA Fall Standards Meeting 2018. Check [www.semi.org/en/standards](http://www.semi.org/en/standards) for the latest update.

### Table 1 Meeting Attendees

**Co-Chairs:** Chris Evanston (Salus Engineering International), Sean Larsen (Lam Research), Bert Planting (ASML)

**SEMI Staff:** Kevin Nguyen (SEMI HQ), Natalie Shim (SEMI Korea)

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
Lam Research	Claes	Brian	SAFE TECHNO LIMITED	Nageshar Rao	G.
Tokyo Electron	Clifton	Brick	SCREEN	Nishimura	Takayuki
Tokyo Electron	Crane	Lauren	ASML	Planting	Bert
Salus Engineering	Evanston	Chris	TUV Rheinland	Pochon	Stephan
Nikon Precision	Girlea	Lucian	Tokyo Electron	Rivera	Kalysha
Nikon Precision	Greenberg	Cliff	Nuflare	Sakura	Hidetoshi
ESTEC	Holm	Dan	ASM	Smithers	Tara
Samsung	Hoshi	Mehrdad	MURATA MACHINERY	Tominaga	Tadamasa
Lam Research	Larsen	Sean	Tokyo Electron	Tsuru	Mark
Tokyo Electron	Mashiro	Supika	Salus Engineering	Visty	John
KLA-Tencor	McDaid	Raymond	Seagate	Wong	Carl

*Italic indicates remote participant*

### Table 2 Leadership Changes

<i>WG/TF/SC/TC Name</i>	<i>Previous Leader</i>	<i>New Leader</i>
None		

### Table 3 Committee Structure Changes

<i>Previous WG/TF/SC Name</i>	<i>New WG/TF/SC Name or Status Change</i>
None	Restriction of Materials Task Force (New Task Force) (Leaders - Steven Roberge (Axelis) and Lauren Crane (TEL))



**Table 4 Ballot Results**

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
6171	<b>Line Item Revision to SEMI S2-1016, Environmental, Health, and Safety Guideline For Semiconductor Manufacturing Equipment</b>	
	Line Item 1 - Revision to Section 23 Related to Oxygen Deficiency Risk Assessment	Passed as balloted
	Line Item 2 - Revisions Related to Oxygen Deficiency Assessment Criteria	Failed and returned to TF for rework
6372	<b>Line Item Revision SEMI S2-1016b Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment (Revision to Delayed Revision 3 on Seismic)</b>	
	Line Item 1 -Delete the exception to section 19.1.2	Failed and returned to TF for rework
	Line Item 2 - Delete the exception to section 19.1.3	Passed as balloted
	Line Item 3 - Replace “facilities” with “utilities” in section 19.1.5	Passed as balloted
	Line Item 4 - Modifications to section 19.4	Passed as balloted
6366	<b>Line Item Revision to SEMI S2-1016, Environmental, Health, and Safety Guideline For Semiconductor Manufacturing Equipment</b>	
	Line Item 1 - Revision to Delayed Revision 2 on Anchorage	Failed and returned to TF for rework

#1 **Passed** ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.

#2 **Failed** ballots and line items were returned to the originating task forces for re-work and re-balloting or abandoning.

**Table 5 Activities Approved by the GCS between meetings of the TC Chapter**

<i>#</i>	<i>Type</i>	<i>SC/TF/WG</i>	<i>Details</i>
None			

**Table 6 Authorized Activities**

<i>#</i>	<i>Type</i>	<i>SC/TF/WG</i>	<i>Details</i>
tbd	SNARF	Restriction of Materials TF	New Standard: Specification for PFOA Restriction in Fluoromaterials (2 weeks TC Members review and GCS approval are required)

#1 SNARFs and TFOFs are available for review on the SEMI web site at: <http://downloads.semi.org/web/wstdsbal.nsf/tfofsnarf>

**Table 7 Authorized Ballots**

<i>#</i>	<i>When</i>	<i>TF</i>	<i>Details</i>
6366A	Cycle 6 or 7 -18	Anchorage TF	Line Item Revisions to SEMI S2, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment
6354	Cycle 6 or 7 -18	S2 Korean High Pressure Gas Safety TF	Line Item Revision to SEMI S2, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment <ul style="list-style-type: none"> <li>Addition of related information</li> </ul>
6049A	Cycle 6 or 7 -18	S10 Revision TF	Line Item Revision to SEMI S10, Safety Guideline for Risk Assessment and Risk Evaluation Process
5761D	Cycle 6 or 7 -18	Energetic Materials TF	New Standard: Safety Guideline for Use of Energetic Materials in Semiconductor R&D and Manufacturing Processes



#	When	TF	Details
5957	Cycle 6 or 7 -18	Control of Hazardous Energy TF	Line Item Revision of S2, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment
6372A	Cycle 6 or 7 -18	Seismic TF	Line Item Revisions to SEMI S2, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment
5969A	Cycle 6 or 7 -18	Fire Protection TF	Line Item Revisions to SEMI S2, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment (pertaining to Fire)
5970A	Cycle 6 or 7 -18	Fire Protection TF	Line Item Revisions to SEMI S14, Safety Guidelines for Fire Risk Assessment and Mitigation for Semiconductor Manufacturing Equipment
6172A	Cycle 6 or 7 -18	Fire Protection TF	Line item revision to SEMI S14 Safety Guidelines for Fire Risk Assessment and Mitigation for Semiconductor Manufacturing Equipment to correct nonconforming title
6309	Cycle 6 or 7 -18	Ergonomics TF	Line Item Revision to S8, Safety Guideline for Ergonomics Engineering of Semiconductor Manufacturing Equipment

**Table 8 SNARF(s) Granted a One-Year Extension**

#	TF	Title	Expiration Date
4975	S6 Revision TF	Revision to SEMI S6, EHS Guideline for Exhaust Ventilation of Semiconductor Manufacturing Equipment (Line item revisions for addressing gas detectors and other concerns)	July 2019
5761	Energetic Materials TF	New Standard: Safety Guideline for Use of Energetic Materials in Semiconductor R&D and Manufacturing Processes	July 2019

**Table 9 SNARF(s) Abolished**

#	TF	Title
5624	S2 Chemical Exposure TF	Revision to SEMI S2, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment. Changes related to representative sampling

**Table 10 Standard(s) to receive Inactive Status**

Standard Designation	Title
None	

**Table 11 New Action Items**

Item #	Assigned to	Details
July12-2018#1	Kevin Nguyen	To ask Dean Chang (SEMI Taiwan) to send Sean Larsen materials on Taiwan OSHA safety update
July12-2018#2	Kevin Nguyen	To ask SEMI IT for a virtual meeting demo at the next EHS TC Chapter meeting

**Table 12 Previous Meeting Action Items**

Item #	Assigned to	Details	Status
April122018#1	Kevin Nguyen	To ask Dean Chang (SEMI Taiwan) to copy Lauren Crane in the loop on Taiwan Seismic TF with Japan	Completed



## 1 Welcome, Reminders, and Introductions

Bert Planting called the meeting to order at 9:00 AM. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

## 2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

**Motion:** Accept the minutes as written  
**By / 2<sup>nd</sup>:** Lauren Crane/Bert Planting  
**Discussion:** None  
**Vote:** 11-0. Motion passed

## 3 Ballot Review

**Passed** ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.

**Failed** ballots and line items were returned to the originating task forces for re-work and re-balloting.

NOTE 1: TC Chapter adjudication on ballots reviewed is detailed in the Audits & Review (A&R) Subcommittee Forms for procedural review. The A&R forms are available as attachments to these minutes. The attachment number for each balloted document is provided under each ballot review section below.

3.1 *Doc. 6171 Line Item Revision to SEMI S2-1016, Environmental, Health, and Safety Guideline For Semiconductor Manufacturing Equipment.*

- Line Item 1 - Revision to Section 23 Related to Oxygen Deficiency Risk Assessment
  - Passed as balloted
- Line Item 2 - Revisions Related to Oxygen Deficiency Assessment Criteria
  - Failed and returned to TF for rework
- Refer attachment below for details.

**Attachment: 6171 Procedural Review**

3.2 *Doc. 6372 Line Item Revision SEMI S2-1016, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment (Revision to Delayed Revision 3 on Seismic).*

- Line Item 1 - Delete the exception to section 19.1.2
  - Failed and returned to TF for rework
- Line Item 2 - Delete the exception to section 19.1.3
  - Passed as balloted
- Line Item 3 - Replace “facilities” with “utilities” in section 19.1.5
  - Passed as balloted
- Line Item 4 - Modifications to section 19.4
  - Passed as balloted
- Refer attachment below for details.

**Attachment: 6372 Procedural Review**



### 3.3 Doc. 6366 Line Item Revision to SEMI S2-1016, Environmental, Health, and Safety Guideline For Semiconductor Manufacturing Equipment

- Line Item 1 - Revision to Delayed Revision 2 on Anchorage
  - Failed and returned to TF for rework
- Refer attachment below for details.

**Attachment: 6366 Compiled Responses**

## 4 Liaison Reports

### 4.1 Japan TC Chapter

4.1.1 Supika Mashiro reported. Of notes:

- Last Meeting
  - April 24 at the Japan Spring 2018 Meetings
  - SEMI Japan office, Tokyo
- Next Meeting
  - September 4 at the Japan Fall 2018 Meetings
  - SEMI Japan office, Tokyo
- STEP/SEMI S2 will be held in November 2018 at SEMI Japan office.
- Ballot Results
  - Doc. 6289, Revision to SEMI S18-0312 “Environmental, Health and Safety Guideline for Flammable Silicon Compounds” with title change to “Environmental, Health, and Safety Guideline for Flammable Silicon Compounds”
    - Passed

**Attachment: 20180627\_EHS Japan\_SW\_v2**

### 4.2 Taiwan TC Chapter

4.2.1 Kevin Nguyen reported. Of notes:

- Last Meeting
  - March 22, 2018
  - SEMI Taiwan office, Hsinchu, Taiwan
- Next Meeting
  - October 4, 2018
  - SEMI Taiwan office, Hsinchu, Taiwan
- Equipment Safety TF
  - Robot Safety
    - Taiwan OSHA (Occupational Safety and Health Administration) announced Industrial Robots Hazard Prevention Standards” was updated by additional requirements for collaborative robots safety on Feb. 14, 2018.
    - This updated standard was adopted from ISO 10218-1 and ISO 10218-2.
    - Detailed safety guideline will be proposed by the end of year.
    - Discussion – Sean is interested in what will the update be? Action Item #1 – Kevin to ask Taiwan staff to provide materials.
  - Lithium battery safety



- Safety standard for the Thermal runaway control of lithium batteries for OHT(Overhead Hoist Transfer), AGV(Automated Guided Vehicle) or collaborative robots suggested to be proposed.
- Theresa Suen (ITRI) will study the Lithium battery safety issue.
- Seismic TF
  - Chai Juin-Fu (NCREE) will contact with the leader of SEMI Japan Seismic Protection TF to discuss the following issue:
    - In addition to preventing the process equipment and stocker systems from sliding, rocking and overturning by adequate design of anchorages, the design requirement for the structural integrity and functionality of such equipment and systems should be considered in the SEMI Standards.

**Attachment: EHS TW Liaison Report\_20180322**

#### 4.3 Korea EHS Activities

4.3.1 Natalie Shim reported S2 revision to include a Related Information on Korean High Pressure Gas Safety Control Requirement for Specific Equipment is moving along. The TF is meeting biweekly via teleconference.

4.3.2 According to Natalie, the plan is start a Korean EHS TC Chapter Formation Group once this activity is successfully completed. Chris Evanston appreciated Korean support.

### 5 Subcommittee & Task Force Reports

#### 5.1 S10 Revision TF

5.1.1 Bert Planting reported the TF discussed changes to severity group from line item 1 and 2 of ballot 6049, which previously failed at SEMICON West.

5.1.2 There was lot of discussion of damages column. In the end, the majority agreed with limiting to equipment only and removing facilities. Bert also perform a straw poll. The vote was 8-1 in favor on follow approach documented on slide 3.

5.1.3 The TF will set up teleconferences ASAP and prepare for ballot for review at NA Fall meeting.

**Attachment: SEMI S10 report committee meeting SEMICON west 2018**

#### 5.2 Manufacturing Equipment Safety Subcommittee (MESSC)

5.2.1 Kalysha Rivera reported. Of notes:

- Reviewed both F7 & F12.
  - SEMI F7-92 (Reapproved 0299)
    - Test Method To Determine The Tensile Strength Of Tube Fitting Connections Made Of Fluorocarbon Materials
  - SEMI F12-0998
    - Test Method To Determine The Sealing Capabilities Of Fittings, Made Of Fluorocarbon Material, After Being Subjected To A Heat Cycle
  - These are not safety issues.



- Consensus was to let these standards inactive. No work needed
- New TFOF - Restriction of Materials Task Force was presented
  - Charter:
    - Aid the supply chain management of semiconductor equipment manufacturers by developing specifications for materials that identify selected restrictions on product material content where compliance challenges indicate that the selected restrictions will have a positive impact on the efficiency of industry wide compliance.
  - Scope:
    - Develop a Specification restricting the use of materials used to manufacture articles to be used in semiconductor manufacturing equipment.
  - Leaders - Steven Roberge (Axelis) and Lauren Crane (TEL)

**Motion:** Approve the new TFOF  
**By / 2<sup>nd</sup>:** Lauren Crane/Brian Claes  
**Discussion:** None  
**Vote:** 7-0. Motion passed

- New SNARF - New Standard: Specification for PFOA Restriction in Fluoromaterials, was presented

**Motion:** Approve new SNARF  
**By / 2<sup>nd</sup>:** Lauren Crane/Brian Claes  
**Discussion:** Since this is a new SNARF, Supika Mashiro asked if the SNARF was distributed for TC members review for two weeks. Kevin responded this is only preliminary approval. 2 weeks TC Members review and GCS approval will be followed after SEMICON West meeting.  
**Vote:** 10-0. Motion passed

See attachment below for TFOF & SNARF embedded in MESSC minutes.

**Attachment:** MESSC west 2018 minutes

### 5.3 *Energetic Materials TF*

5.3.1 Kalysha Rivera reported the TF continued reviewing negatives received from SEMI Draft Document #5167C: New Safety Guideline for Use of Energetic Materials in Semiconductor R&D and Manufacturing Process. The TF will have teleconferences and plan to issue for cycle 7-18 ballot.

**Attachment:** EnergeticsTF\_12Jul18

### 5.4 *S6 Revision TF*

5.4.1 John Visty reported S6-0618 is published, mainly editorial changes and title. The TF also discussed items to work on including:

- Previous Line Item 1 - change to Flow rate definitions
- Previous Line items 2 - release rate determination
  - Including issues with RFOs not being installed by end-users
- Previous Line items 3 - internal testing requirement for flammability – test guidelines
- Realities of PDCB testing with hydrides
  - Technical Issue due to low OELs and restrictions placed on SF6 and other PFCs
- Alternative for performance based gas detection certification (7.7.1.2)–



- Small sub-group formed, questions to ask gas detector suppliers to be formulated and then individual phone calls to be made
- Metal Organics release rates, byproducts, etc.
  - To be developed as an RI

**Attachment: S6 Task Force\_GH-07\_12\_18-Summary**

*5.5 Fire Protection TF*

5.5.1 Matt Wyman reported the TF will need SEMI staff assistance in reissuing title correction ballot for Doc. 6172: Line Item Revision to SEMI S14-1016: Safety Guidelines for Fire Risk Assessment and Mitigation for Semiconductor Manufacturing Equipment (To correct nonconforming title)

5.5.2 Previous Ballot:

5.5.2.1 SEMI Draft Document # 5969: Addition of criteria to determine which method of assessing fire risk is to be used. Failed, returned to TF for rework. The plan is to rebalot before Fall Meetings.

5.5.3 New Topics:

- Interest to modify the relationship between S14 and S2.
- Change the Title and Scope of S14 to include Fire Risk Assessment & Protection Guidelines
- Move Fire Detection & Suppression Sections to S14 (was there originally)
- Modify the Fire Detection Only section to be more applicable to industry needs and practice
- Add fire protection design, integration, and fire detection performance criteria
- Add energetic materials fire safety guidelines

5.5.4 Other Topics

- Previous comments on particle detection vs “fire/smoke” detection could be better defined with “performance criteria” changes above.
- Assessment of smoke risk in fabs
- Inclusion of FPD, solar, solid state light sources, et al. equipment in the Scope of S14
- Further Alignment of S14 with S10 (awaiting S10 TF’s action on S10’s Severity table)

5.5.5 Future Plans

- Rebalot of 6172A & 5969A before Fall Meetings
- TF to define SNARFs necessary to proceed with proposed plans

**Attachment: FPTF\_tf10Jul18mw**

*5.6 S3 Revision TF*

5.6.1 Sean Larsen reported the TF has been discussing scoping of new version of SEMI S3, currently discussions include expansion of scope.

- Is Expansion too broad?
- Could some of proposed expansion be handled by RI instead of within Standard?
- Are there problem areas of current standard that need to be addressed
- SEMI S3 reference - coordination

**Attachment: S3rev\_tf071018-gh**





### 5.7 S2 Korea High Pressure Gas Safety TF

5.7.1 Sean Larsen reported the TF is meeting biweekly via teleconference, Thursdays, 5 PM pacific time. The goal is to issue the ballot for review at the NA Fall Standards Meetings in November 2018.

### 5.8 Control of Hazardous Energy (CoHE) TF

5.8.1 Sean Larsen report the TF is editing ballot SEMI Draft Document #5957 (Line Item Revision of S2, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment. (Re: Control of Hazardous Energy)) draft rewrite of SEMI S2 Section 17. There were several questions that need to be resolved. Teleconferences are being planned.

### 5.9 S8 (Ergonomics) TF

5.9.1 Sean Larsen reported the TF is working on the following items in SNARF #5996 in preparation for a new ballot (perhaps Cycle 7 or 8)

- Design guidelines for one-handed handling of small objects
- Knob design criteria

5.9.2 The TF will start web meetings shortly to discuss ballot details.

**Attachment: SEMI\_S8\_11JUL2018\_TF\_meeting\_summary**

### 5.10 Other Interest Documents

5.10.1 Sean Larsen reported Power Harmonic TF under NA Facilities is working on doc. 6037, New Standard, Specification for Power Grid Harmonics Compatibility. The TF did not meet at SEMICON West. He is unsure of the status.

5.10.2 Also, Lauren reported I&C Committee is discussing on controlled mode issue. They are struggling on deciding who is responsible, is it the host or user?

5.10.3 Outside of SEMI, Sean mentioned revision on IEC 62061 Safety of machinery - Functional safety of safety-related electrical, electronic and programmable electronic control systems, is in progress.

5.10.3.1 The draft document appears to be removing the limitation of applicability only to electronic circuits, potentially making it useful for systems that interlock chemistry valves or have other pneumatic interlock circuits

## 6 Leadership & Liaison Reports

### 6.1 ICRC Liaison

6.1.1 Lauren Crane reported the group discussed PFOA on material restrictions. Also, various external regulations may impact equipment suppliers.

### 6.2 RSC / Committee Leadership Report

6.2.1.1 Sean Larsen reported. Of notes.

- New Regulations and Procedural Manual
  - Improvements on Rules for Handling of Patented Technology (Regulations § § 16.1-16.3)
- Virtual Meetings
  - How quickly EHS wants to do Virtual Meetings



- EHS's preference will be a late adopter.
- Action Item # 2 – Kevin to ask IT to do a demo on virtual meeting for the EHS TC.

## 7 SEMI Staff Report

7.1.1 Kevin Nguyen (SEMI) gave the SEMI Staff Report. Of note:

- Next meetings
  - November 5-8, 2018
  - SEMI HQ in Milpitas, California
- 2018 Critical Dates for SEMI Standards Ballots
  - Cycle 6, 2018
    - Ballot Submission Date: July 20
    - Voting Period Starts: August 1
    - Voting Period Ends: August 31
  - Cycle 7, 2018
    - Ballot Submission Date: August 22
    - Voting Period Starts: September 5
    - Voting Period Ends: October 5
- SEMI Standards Publications
  - Total SEMI Standards in portfolio: 987
    - Includes 236 Inactive Standards
- New Forms, Regulations & Procedure Manual
  - New version of Regulations (June 8, 2018)
    - Improvements on Rules for Handling of Patented Technology (Regulations § § 16.1-16.3)
      - Patented Technology that might be material to the Standard is disclosed at the end stage of document development
        - Disclosed after the ballot is issued
        - Assessment for potential materiality and technical justifiability for inclusion shall be postponed to the next scheduled meeting.
    - A TF sometimes decides to use patented technology after it has started the document development project.
      - To require subsequent update of SNARF regarding use of Patented Technology and subsequent LOI process to ensure that TC Chapter agrees to the course of action recommended by the TF.
    - Additional Official Virtual TC Chapter Meeting Related Rules (Regulations ¶ 7.4.2 and § 9.5)
      - Loss of necessary infrastructure at the meeting location described in the Background Statement of the Letter Ballot
        - The necessary infrastructure (e.g., electrical power, internet connection, required software applications)
  - New version of Procedure Manual (June 8, 2018)
  - New TFOF & SNARF
  - New Ballot Review Templates
  - [www.semi.org/standards](http://www.semi.org/standards)
    - Bottom left, under Resources!

**Attachment: Staff Report July 2018\_SA rev1**



## 8 Old Business

### 8.1 SNARF Extensions (older than 3 years)

8.1.1 The following SNARFs have July 2018 expiration date. These SNARFs were reviewed.

#	TF	Title	Expiration Date
4975	S6 Revision TF	Revision to SEMI S6, EHS Guideline for Exhaust Ventilation of Semiconductor Manufacturing Equipment (Line item revisions for addressing gas detectors and other concerns)	July 2018
5761	Energetic Materials TF	New Standard: Safety Guideline for Use of Energetic Materials in Semiconductor R&D and Manufacturing Processes	July 2018
5624	S2 Chemical Exposure TF	Revision to SEMI S2, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment. Changes related to representative sampling	July 2018

**Motion:** To approve SNARFs 4975 & 5761 for a year extension and abolish SNARF 5624

**By / 2<sup>nd</sup>:** John Visty/Sean Larsen

**Discussion:** None

**Vote:** 9-0. Motion passed

## 9 New Business

### 9.1 Upcoming Ballot Authorizations

9.1.1 The following ballots are authorized for the next meeting.

#	When	TF	Details
6366A	Cycle 6 or 7 -18	Anchorage TF	Line Item Revisions to SEMI S2, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment
6354	Cycle 6 or 7 -18	S2 Korean High Pressure Gas Safety TF	Line Item Revision to SEMI S2, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment <ul style="list-style-type: none"> <li>Addition of related information</li> </ul>
6049A	Cycle 6 or 7 -18	S10 Revision TF	Line Item Revision to SEMI S10, Safety Guideline for Risk Assessment and Risk Evaluation Process
5761D	Cycle 6 or 7 -18	Energetic Materials TF	New Standard: Safety Guideline for Use of Energetic Materials in Semiconductor R&D and Manufacturing Processes
5957	Cycle 6 or 7 -18	Control of Hazardous Energy TF	Line Item Revision of S2, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment
6372A	Cycle 6 or 7 -18	Seismic TF	Line Item Revisions to SEMI S2, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment
5969A	Cycle 6 or 7 -18	Fire Protection TF	Line Item Revisions to SEMI S2, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment (pertaining to Fire)
5970A	Cycle 6 or 7 -18	Fire Protection TF	Line Item Revisions to SEMI S14, Safety Guidelines for Fire Risk Assessment and Mitigation for Semiconductor Manufacturing Equipment
6172A	Cycle 6 or 7 -18	Fire Protection TF	Line item revision to SEMI S14 Safety Guidelines for Fire Risk Assessment and Mitigation for Semiconductor Manufacturing Equipment to correct nonconforming title
6309	Cycle 6 or 7 -18	Ergonomics TF	Line Item Revision to S8, Safety Guideline for Ergonomics Engineering of Semiconductor Manufacturing Equipment



**Motion:** To authorize above documents for ballots for cycle 6 and 7 of 2018.

**By / 2<sup>nd</sup>:** Sean Larsen/John Visty

**Discussion:** None

**Vote:** 10/0. Motion passed

## 9.2 Fall Scheduling

- The following is the draft schedule for Fall. If there is any changes, please inform Sean before the first week of Oct 2018.

**Attachment: Fall tentative schedule**

## 10 Next Meeting and Adjournment

10.1 The next meeting is scheduled for Thursday, Nov 8, 2018 at SEMI HQ, Milpitas, CA. See <http://www.semi.org/en/events> for the current list of meeting schedules.

Having no further business, a motion was made to adjourn. Adjournment was at 1:30 PM.

Respectfully submitted by:

Kevin Nguyen,  
SEMI Standards Operations Manager  
Phone: 408-943-7997  
Email: [knguyen@semi.org](mailto:knguyen@semi.org)

Minutes tentatively approved by:

Sean Larsen (Lam Research)	August 13, 2018
Chris Evanston (Salus Engineering International)	<Date approved>
Bert Planting (ASML)	August 13, 2018

**Table 13 Index of Available Attachments<sup>#1</sup>**

<i>Title</i>	<i>Title</i>
6171 Procedural Review	EnergeticsTF_12Jul18
6372 Procedural Review	S6 Task Force_GH-07_12_18-Summary
6366 Compiled Responses	FPTF_tf10Jul18mw
20180627_EHS Japan_SW_v2	S3rev_tf071018-gh
EHS TW Liaison Report_20180322	SEMI_S8_11JUL2018_TF_meeting_summary
SEMI S10 report committee meeting SEMICON west 2018	Staff Report July 2018_SA rev1
MESSC west 2018 minutes	Fall tentative schedule

<sup>#1</sup> Due to file size and delivery issues, attachments must be downloaded separately. A .zip file containing all attachments for these minutes is available at [www.semi.org](http://www.semi.org). For additional information or to obtain individual attachments, please contact [SEMI Staff Name] at the contact information above.