



## North America Facilities Committee Meeting Summary and Minutes



SEMI®  
International  
Standards

**North America Standards Spring 2015 Meetings**  
31 March 2015, 0900 – 1200 Pacific Time  
SEMI Headquarters in San Jose, California

### Committee Announcements

#### *Next Committee Meeting*

NA Standards Meetings at SEMICON West 2015  
Tuesday, July 14, 2015; 0900 – 1200 Pacific Time  
San Francisco Marriott Marquis Hotel in San Francisco, California

### Table 1 Meeting Attendees

*Italics indicate virtual participants*

**Co-Chairs:** Steve Lewis (DPS Engineering)

**SEMI Staff:** Michael Tran

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
AP Tech	Kiikvee	Bill	Ultra Clean Technology	Milburn	Matt
Applied Materials	Mohammed	Bala	Ultra Clean Technology (UCT)	Chen	Joyce
DPS Engineering	Lewis	Steve	WIKA Instrument	Fritz	Thomas
Fujikin of America	Saleem	Mohamed	WIKA Instrument	Christian	Jeff
Pall Corporation	Barth	Douglas			
Parker Hannifin	Lis	Joseph	SEMI	Tran	Michael

### Table 2 Leadership Changes

<i>Group</i>	<i>Previous Leader</i>	<i>New Leader</i>
None		

### Table 3 Ballot Results

**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.

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
<b>5080A</b>	Revision of SEMI F51-0200, Guide for Elastometric Sealing Technology	<b>Failed</b> , to be reballoted

### Table 4 Authorized Activities

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

Note: SNARFs and TFOFs are available for review on the SEMI Web site at:

<http://downloads.semi.org/web/wstdsbal.nsf/TFOFSNARF>



**Table 5 Authorized Ballots**

#	When	SC/TF/WG	Details
5080B	Cycle 4 or 5, 2015	SEMI F51 (Perfluoroelastomer) TF	Revision of SEMI F51-0200, Guide for Elastometric Sealing Technology

**Table 6 New Action Items**

Item #	Assigned to	Details
2015Mar #01	Michael Tran	Compile latest list of NA Facilities Standards due for 5-Year Review
2015Mar #02	Michael Tran	Compile list of published NA Facilities Standards with nonconforming titles.

**Table 7 Previous Meeting Actions Items**

Item #	Assigned to	Details	Status
2014Nov#01	Alan Crockett	To follow up with the BIM TF for new members and current BIM activities.	Open
2014Apr#07	Michael Tran and Jimmy Boyles	Michael Tran to work with Jimmy Boyles to form the potential TF for tool templates.	Open
2014Apr#08	Michael Tran	To send out the updated list of documents due for five year review to everyone who attended this NA Facilities and Gases TC Chapter meeting.	Open and recurring.

**1 Welcome, Reminders, and Introductions**

Steve Lewis, committee co-chair, called the meeting to order at 9:10 AM. After welcoming all attendees, a round of introductions followed. The SEMI meeting reminders on membership requirements, antitrust, patentable technology, and meeting guidelines were then presented and explained.

**Attachment:** 01, SEMI Standards Required Meeting Elements

**2 Review of Previous Meeting Minutes**

The committee reviewed the minutes of the previous meeting held November 4 in conjunction with the NA Standards Fall 2014 meetings.

- Motion:** Accept the minutes of the previous meeting as written.
- By / 2<sup>nd</sup>:** Tim Volin (Parker Hannifin) / Mohamed Saleem (Fujikin)
- Discussion:** None
- Vote:** 10-0 in favor. Motion passed.

**Attachment:** 02, NA Facilities Fall 2014 meeting (November 4) minutes

**3 Liaison Reports**

*3.1 Japan Facilities Committee*

Michael Tran presented the Japan Facilities liaison report. The key items were as follows:

- Committee Co-chairs
  - Hiromichi Enami/ Hitachi High Technologies
  - Isao Suzuki/ MKS Japan



- Next Meeting: April 24 in conjunction with the Japan Spring 2015 Meetings (SEMI Japan, Tokyo)
- F51 Revision TF – no activity
- Staff Contact: Naoko Tejima (ntejima@semi.org)

**Attachment:** 03, Japan Facilities Liaison Report

#### 4 SEMI Staff Report

Michael Tran (SEMI) gave the SEMI Staff Report. The key items were as follows:

- 2015 Global Calendar of Events
  - SEMICON Southeast Asia (April 22-24, Penang, Malaysia)
  - Advanced Semiconductor Manufacturing Conference [ASMC] (May 3-6, Saratoga Springs, New York)
  - Intersolar Europe (June 10-12, Munich Germany)
  - SEMICON Russia (June 17-18, Moscow)
  - SEMICON West (July 14-16, San Francisco, California)
  - SEMICON Taiwan (September 2-4, Taipei)
  - European MEMS Summit (September 17-18, Milan, Italy)
  - Strategic Materials Conference [SMC] (September 22-23, Mountain View, California)
  - SEMICON Europa (October 6-8, Dresden, Germany)
  - SEMICON Japan (December 16-18, Tokyo)
- NA Standards Spring 2015 Meetings (March 29 to April 2)
  - Committees meeting at SEMI Headquarters (San Jose)
    - 3DS-IC | EHS | Facilities & Gases | HB-LED | Information & Control | Liquid Chemicals | MEMS/NEMS | Metrics | PV Materials
  - SEMI thanks Intel (Santa Clara) for hosting the Physical Interfaces & Carriers (PIC) committee and task force meetings.
  - SEMI thanks KLA-Tencor (Milpitas) for hosting the Silicon Wafer committee and task force meetings.
- Upcoming North America Meetings (2015)
  - 2015:
    - NA Compound Semiconductor Materials TC Chapter Meeting (May 20 in conjunction with CS MANTECH, Scottsdale, Arizona)
    - NA Standards Meetings at SEMICON West 2015 (July 13-16, San Francisco, California)
    - NA Standards Fall 2015 Meetings (November 2-5, San Jose, California)
  - 2016:
    - NA Standards Spring 2016 Meetings (April 4-7, San Jose, California)
- Technical Ballot Critical Dates for NA Standards meetings at SEMICON West 2015
  - Cycle 4: due April 10 / Voting Period: April 21 – May 21
  - Cycle 5: due May 8 / Voting Period: May 22 – June 22



- Standards Publications Report

Cycle	New	Revised	Reapproved	Withdrawn
November 2014	1	4	1	0
December 2014	3	4	3	0
January 2015	5	2	0	1
February 2015	3	7	3	0

- Total in portfolio – 928 (includes 110 Inactive Standards)

- New Requirements/Process Reminders for TC Chapter Meetings

- Standards Document Development Project Period
    - Project period shall not exceed 3 years (Regs 8.3.2)
      - SNARF approval to TC Chapter approval
    - If document development activity is found to be continuing, but cannot be completed within the project period, TC Chapter may grant one-year extension at a time, as many times as necessary.
  - SNARF Review Period
    - A submitted SNARF for a new, or for a major revision to an existing, Standard or Safety Guideline is made available to all members of a TC Chapter's parent global technical committee for two weeks for their review and comment. (Regs 8.2.1)
      - If the SNARF is submitted at a TC Chapter meeting, the committee can review and approve, but the SNARF will need to be distributed for two weeks and then approved via GCS.
  - New SNARF & TFOF forms *{embedded in Staff Report, see Attachment 03 of these minutes}*
  - Procedures for Correcting Nonconforming Titles of Published Standards Document (PM Appendix 4)
    - Some Standards qualify for a special procedure where a line item change can be used to correct the titles. Otherwise, the corrective action will likely require a major revision.
  - Table of Content (TOC)
    - No section of a Standard or Safety Guideline may contain a list of section numbers and titles (e.g., similar to a Table of Contents).
    - Table of content can be approved editorially during Reapproval
  - Assignment of Draft Document Numbers
    - Upon successful publication of a Document, or termination of work on it by the TF, Standards staff retires the Document number and its associated SNARF, and they are not to be used for further Document development activity.
    - For a Document with Line Item(s) that passed while others failed, the same SNARF may be used to rebalot only those failed Line Item(s).
    - A new SNARF is required to introduce new Line Item(s).
  - SNARF
    - SNARFs may be submitted and approved for new, revised, reapproved, or reinstated Documents that have been approved by the TC Chapter, but not yet published (i.e., no new Publication Date Code exists yet). (PM NOTE 8)
  - Minority Report (MR)
    - The motion passes if a simple majority of the total GCS voting membership (i.e., not just those who return votes) approve the motion (Regs 9.9)

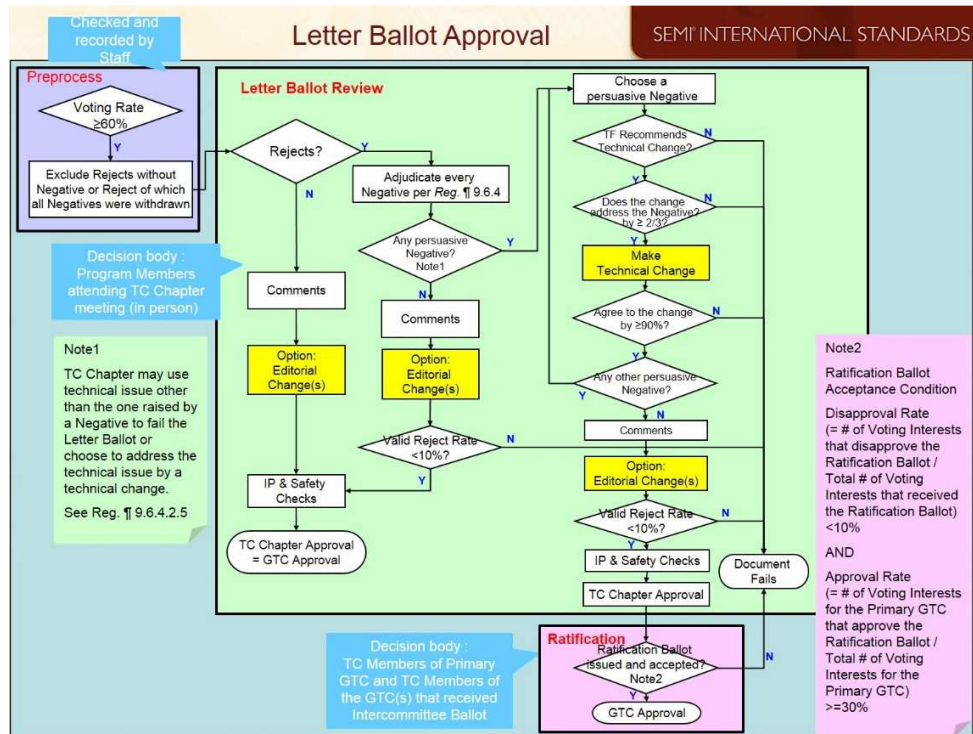


- Latest Approvals/Next Revisions
  - Follow-up revisions of Regulations and Procedure Manual were published on 27 March, 2015 for use in NA Spring Standard meetings.
- Regulations/PM Ballot Revisions

<i>Group #</i>	<i>Title</i>	<i>Regs</i>	<i>PM</i>
1	Clarification on Standards Document Development Project Period	Y	Y
2	GCS Voting Period for Minority Reports	Y	Y
3	Improvement on Minority Report Handling for Shorter Time to Publication	Y	Y
4	TC Membership Requirement	Y	N
5	Ballot Adjudication Process Improvement	Y	Y
6	Revision to Procedural Review	Y	Y
7	Clarification of TC Chapter Review and Adjudication Term	Y	Y
8	Clarification of Procedure Guide to Procedure Manual	Y	Y
9	Miscellaneous Changes of Regulations	Y	N
10	Add New Requirements Related to Notices	N	Y
11	Add New Guidance Related to Note	N	Y
12	Clarification on SNARF and TFOF submitter	N	Y
13	Clarification on SNARF approval procedures for New Standards/Safety Guidelines and major revision of existing Standards/Safety Guidelines	N	Y
14	Update Appendix 4 Related to Correction of Nonconforming Titles	N	Y
15	Clarifications of Procedures Related to Table of Contents	N	Y
16	Clarifications on Use of Shall, Must, and Should	N	Y
17	Miscellaneous Changes to Procedure Manual	N	Y

Indicates follow-up from Oct-Nov 2014 Regs ballot

- Ballot Adjudication Process Improvement (Group 5)
  - Problem
    - Publications of Documents can be delayed by the need to go through another cycle of Letter Ballot issuance and adjudication at a TC Chapter meeting to make any technical change.
  - Proposed Solution
    - Allow TC Chapter to make technical changes on balloted Standard Document during its adjudication under certain conditions. Conduct a Ratification Ballot in order to ensure global consensus on supporting the technical changes made by the TC Chapter.
  - NOTE: This Group was originally proposed as Group 10 in the previous Regulations Ballot to ISC and failed.
    - Taking suggestion of ISC at its SEMICON Japan 2014 meeting in December, the scope of the Ratification Ballot is now limited to technical changes made by TC Chapter during adjudication of a Letter Ballot.



- GCS Voting Period for Minority Report (Group 2)
  - Problem
    - Voting period for Minority Report is too short to solicit sufficient votes from GCS voting members.
  - Proposed Solution
    - To let GCS member have 2 weeks voting period, which is same length as the Minority Report submission window.
  - NOTE: This problem was raised by the NARSC at its Fall 2014 meeting at which the ISC Ballot on Regulations change was discussed. Following-up on this problem by additional changes in the Regulations was suggested by the Regulations SC Chair at the time.
- Improvement on Minority Report Handling for Shorter Time to Publication (Group 3)
  - Problem
    - Despite the rare occurrence of MR submission, every Document approved by the TC Chapter has to wait at least a month before it qualifies for A&R procedural review, which in turn results in a longer time to publish.
  - Proposed Solution
    - Expedite the process by allowing A&R procedural review to be commenced as soon as record of ballot review made available.
    - If an MR is submitted on a Document, Publication will be on hold until responsible parties reach conclusion on the MR. If the Document is returned to the TF for rework based on consideration of the MR, A&R approval is nullified.
  - NOTE: This problem was raised by JARSC at its SEMICON Japan 2014 meeting. ISC members expressed their support on improvement toward faster publication.

**Attachment:** 04, SEMI Standards Staff Report



## 5 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: Committee adjudication on Cycle 8, 2015 ballot is detailed in the Audits & Reviews (A&R) Subcommittee Forms for procedural review. The A&R form is available as an attachment to these minutes. The attachment number for each document is provided below the summary tables.

### 5.1 Cycle 8, 2014 Ballot

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
<b>5080A</b>	Revision of SEMI F51-0200, Guide for Elastometric Sealing Technology	<b>Failed</b> , to be reballoted

**Attachment:** 05, Ballot Review for Doc. 5080A

## 6 Task Force Reports

### 6.1 F51 (Perfluoroelastomer) Revision Task Force

Ballot 5080A was failed and will be reballoted for Cycle 4 or 5 voting period (to adjudicated at SEMICON West 2015).

**Attachment:** 06, F51 (Perfluoroelastomer) Revision Task Force Report

### 6.2 Building Information Modeling (BIM) for Semiconductor Capital Equipment Task Force

No updates.

## 7 Old Business

### 7.1 Status update on action items generated from the previous meetings:

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>	<i>Status</i>
2014Nov#01	Alan Crockett	To follow up with the BIM TF for new members and current BIM activities.	Open
2014Nov#02	Michael Tran	To follow up with Steve Lewis regarding SEMI F97 for five year review.	Completed. Closed.
2014Apr#07	Michael Tran and Jimmy Boyles	Michael Tran to work with Jimmy Boyles to form the potential TF for tool templates.	Open
2014Apr#08	Michael Tran	To send out the updated list of documents due for five year review to everyone who attended this NA Facilities and Gases TC Chapter meeting.	Open and recurring.



## 7.2 SNARFs Past Three Year Document Development Period

Per *Regulations* section 8.3.2, the Standard Document Development Project Period shall not exceed three years. The EXCEPTION for *Regulations* section 8.3.2 enables the TC Chapter to grant a one-year extension at a time if Document development activity is found to be continuing.

The following activities under the NA Facilities TC Chapter are past the three-year document development period:

- SNARF # 5080 – Revision of SEMI F51-0200, Guide for Elastometric Sealing Technology
- SNARF # 5155 – New Standard: Guide for Building Information Modeling (BIM) for Semiconductor Capital Equipment

**Motion:** Find development of Documents 5080 and 5155 as continuing.

**By / 2<sup>nd</sup>:** Mohamed Saleem (Fujikin) / Tim Volin (Parker Hannifin)

**Discussion:** None

**Vote:** 10-0 in favor. Motion passed.

## 8 New Business

### 8.1 Authorizations for Ballot Submission

#	When	SC/TF/WG	Details
5080B	Cycle 4 or 5, 2015	SEMI F51 (Perfluoroelastomer) TF	Revision of SEMI F51-0200, Guide for Elastometric Sealing Technology

**Motion:** Approve submission of Document 5080B for Cycle 4 or 5 voting period.

**By / 2<sup>nd</sup>:** Tim Volin (Parker Hannifin) / Mohamed Saleem (Fujikin)

**Discussion:** None

**Vote:** 10-0 in favor. Motion passed.

## 9 Action Item Review

### 9.1 Open Action Items

Michael Tran (SEMI) reviewed the open action items. These can be found in the Open Action Items table at the beginning of these minutes.

### 9.2 New Action Items

Michael Tran (SEMI) reviewed the new action items. These can be found in the New Action Items table at the beginning of these minutes.

## 10 Next Meeting and Adjournment

The next NA Facilities TC Chapter meeting is scheduled for July 14 in conjunction with SEMICON West 2015 in San Francisco, California. The tentative schedule is provided below:





**SEMICON West 2015 Meetings**

July 13-16, 2015  
San Francisco Marriott Marquis Hotel  
780 Mission Street  
San Francisco, California 94103  
U.S.A.

Monday, July 13

- SEMI F51 (Perfluoroelastomer) TF (12:30 PM to 2:30 PM)
- Building Information Modeling (BIM) TF (3:00 PM to 5:00 PM)

Tuesday, July 14

- Joint Facilities & Gases TC Chapter (9:00 AM to 12:00 Noon)

Having no further business, a motion was made to adjourn the NA Facilities Committee meeting on March 31 in conjunction with the NA Standards Spring 2015 Meetings. Adjournment was at 12:00 Noon.

**Respectfully submitted by:**

Michael Tran  
Senior Manager, North America Standards  
SEMI North America  
Phone: +1.408.943.7041  
Email: ptrio@semi.org

**Minutes approved by:**

Steve Lewis (DPS Engineering), TC Chapter Chair	
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**Table 8 Index of Available Attachments #1**

#	Title
1	SEMI Standards Required Meeting Elements
2	NA Facilities Fall 2014 (November 4) meeting minutes
3	Japan Facilities Liaison Report
4	SEMI Standards Staff Report
5	Ballot Review for Doc. 5080A
6	F51 (Perfluoroelastomer) Revision TF Report

#1 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 Michael Tran at the contact information above.