

North America Liquid Chemicals Technical Committee Chapter Meeting Summary and Minutes

N.A. Standards Fall 2014 Meetings
 Tuesday, November 04, 2014, 2:00 PM – 5:00 PM Pacific Time
 SEMI Headquarters in San Jose, California

Next N.A. Liquid Chemicals TC Chapter Meeting

The next N.A. Liquid Chemicals TC Chapter meeting is tentatively scheduled for March 31, 2015 at SEMI Headquarters in San Jose, California in conjunction with the N.A. Standards Spring 2015 meetings. See § 9 of these minutes for full tentative schedule of all N.A. Liquid Chemicals Standards Meetings. Exact meeting date and details will be announced when finalized and available at <http://www.semi.org/node/54226>

Table 1 Meeting Attendees

Italics indicate virtual participants

Co-Chairs: Frank Parker (ICL), Frank Flowers (PeroxyChem)

SEMI Staff: Michael Tran

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
Air Liquide	Libman	Slava	KMG Chemicals	Salehi	Asaad
Air Liquide	Milstein	Lisa	Mega Fluid Systems	Kandiyeli	David
ICL	Stover	Frederick	PeroxyChem	Flowers	Frank
ICL	Parker	Frank			
Intel	Hadder Jr.	Don	SEMI N.A.	Tran	Michael

Table 2 Leadership Changes

<i>Group</i>	<i>Previous Leader</i>	<i>New Leader</i>
SEMI F40 Rewrite TF		Don Hadder Jr. (Intel)

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>TC Chapter Action</i>
5621A	New Standard: Test Method for Determining the Quality of Ion Exchanged Resin Used in Polish Applications of Ultrapure Water System	Failed TC Chapter review and will be returned to the TF for rework.
5528	Revision to SEMI F39-0699, Guideline for Chemical Blending Systems with title change to: Guide for Chemical Blending Systems	Passed TC Chapter review with editorial changes.
5641	Revision to SEMI C31-0708, Specification for Methanol	Passed TC Chapter review as balloted
5675A	New Standard: Test Method for Determining Roughness Of Polymer Surfaces Used In Ultrapure Water and Liquid Chemical Distribution Systems By Contact Profilometry	Passed TC Chapter review with editorial changes.

Table 4 Authorized Activities

Listing of all new TFOFs, SNARFs, and other activities approved by the TC Chapter.

#	Type	SC/TF/WG	Details
5810	SNARF	SEMI F40 Rewrite TF	New Standard: Test Method for Testing PFA Materials Used In Liquid Chemical Distribution Systems
5809	SNARF	Analytical Methods TF	Line item revision to SEMI C69-0611, Test Method for the Determination of Surface Areas of Polymer Pellets
5831	SNARF	Analytical Methods TF	Revision to SEMI C27-0708, Specifications and Guidelines for Hydrochloric Acid with title change to: Specification and Guide for Hydrochloric Acid

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

Listing of documents approved by the TC Chapter for letter balloting.

#	When	SC/TF/WG	Details
5621B	Cycle 8, 2014 or Cycle 1, 2015	Ion Exchange TF	New Standard: Test Method for Determining the Quality of Ion Exchanged Resin Used in Polish Applications of Ultrapure Water System
5810	Cycle 8, 2014 or Cycle 1, 2015	SEMI F40 Rewrite TF	New Standard: Test Method for Testing PFA Materials Used in Liquid Chemical Distribution Systems
5809	Cycle 1 or 2, 2015	Analytical Methods TF	Line item revision to SEMI C69-0611, Test Method for the Determination of Surface Areas of Polymer Pellets
5642A	Cycle 1 or 2, 2015	Analytical Methods TF	Revision to SEMI C35-0708, Specifications and Guideline for Nitric Acid with title change to: Specification and Guide for Nitric Acid
5831	Cycle 1 or 2, 2015	Analytical Methods TF	Revision to SEMI C27-0708, Specifications and Guidelines for Hydrochloric Acid with title change to: Specification and Guide for Hydrochloric Acid

Table 6 New Action Items

Item #	Assigned to	Details
2014Nov#01	Don Hadder Jr. and Michael Tran	To send invites to the SEMI F40 Revision TF for SEMI F57 volunteers.

Table 7 Previous Meeting Actions Items

Item #	Assigned to	Details	Status
2014Jul#01	Frederick Stover	To submit a SNARF for the revision of SEMI C27 and bring a draft of the revision of SEMI C27 to the N.A. Standards Fall 2014 Meetings for review.	Open
2014Jul#02	Michael Tran	To check whether Document 5421A from Japan has been published yet due to a patent issue while SEMI is awaiting the Letter of Assurance from the patent holder.	Open
2014Jul#03	Slava Libman and Michael Tran	To find out what is SEMI's position on the double standards issue between Document 5421A and SEMI C79 before Document 5421A is published.	Open
2014Apr#01	Frank Flowers	Contact the Liquid-Borne Particle Counter (LPC) Task Force for interest in SEMI C77-0912.	Open
2013Jul#03	Michael Tran	Send SEMI C63 (Organosilicate Precursors Used In Low K CVD Processes) to Wayne McDermott for 5 year review.	Open? Michael Tran will have to check.
2013Jul#05	Michael Tran	Distribute to the TC Chapter the list of updated 5 year review Documents.	Recurring.

1 Welcome, Reminders, and Introductions

1.1 Frank Parker (ICL) called the meeting to order at 2:01 PM. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: 01, SEMI Standards Required Meeting Elements

2 Review of Previous Meeting Minutes

2.1 The TC Chapter reviewed the minutes of the previous meeting held during the N.A. Standards Meetings at SEMICON West 2014.

Motion: To approve the minutes of the previous meeting as written.

By / 2nd: Frank Parker (ICL) / Frederick Stover (ICL)

Discussion: None.

Vote: 6-0 in favor. Motion passed.

Attachment: 02, N.A. Liquid Chemicals TC Chapter Meeting Minutes (West 2014)

3 Liaison Reports

3.1 Europe Gases and Liquid Chemicals TC Chapter

3.1.1 Michael Tran (SEMI N.A.) reported for the Europe Gases and Liquid Chemicals TC Chapter. Of note:

- Leadership Changes
 - Gumaar De Vos (Fujifilm) stepped down as co-chair of the Europe Gases and Liquid Chemicals TC Chapter and the Solvents in Advanced Processes TF
- Meeting Information
 - Last Meeting
 - October 7, 2014 at SEMICON Europa in Grenoble, France
 - Next Meeting
 - October 7, 2015 at SEMICON Europa in Dresden, Germany
- Ballot Results from the Last Meeting
 - Failed TC Chapter review and will be reballoted in 2015:
 - Doc. 5656, Revision to SEMI C65 0308 with title change to: Guide For Trimethylsilane (3MS), 99.995% Quality
 - Doc. 5657, Revision to SEMI C66 0308 with title change to: Guide For Trimethylaluminium (TMAI), 99.5% Quality
 - Doc. 5658, New Standard: Guide for Pentakis (Dimethylamino) Tantalum (PDMAT)
 - Passed TC Chapter review:
 - Doc. 5492, New Standard: Guide for Ethylene Glycol
- Upcoming Ballots
 - Document 5325, New Standard: Dimethyl Dimethoxy Silane (DMDMOS)
 - Document 5491, New Standard: Guide for Titanium Tetrachloride (TiCl₄)
 - Document 5493, New Standard: Guide for Octa Methyl Cyclo Tetra Siloxane (OMCTS)
 - Document 5494, New Standard: Guide for Tetra Methyl Cyclo Tetra Siloxane (TMCTS)

- Document 5495, New Standard: Guide for Cyclo Hexanone
- Document 5765, Revision to SEMI C15, Test Method for ppm and ppb Humidity Standards
- SEMI Europe Contact: Andrea Busch, abusch@semi.org

Attachment: 03, Europe Gases & Liquid Chemicals TC Chapter Report (Fall 2014)

3.2 Japan Liquid Chemicals TC Chapter

3.2.1 Michael Tran (SEMI N.A.) reported for the Japan Liquid Chemicals TC Chapter. There was no report because there was no Japan Liquid Chemicals TC Chapter meeting held after SEMICON West 2014 and before the NA Standards Fall 2014 Meetings.

3.3 North America Standards Staff Report

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

- Remaining SEMI Global Events in 2014
 - International Technology Partners Conference (ITPC)
 - November 9-12 in Big Island, Hawaii
 - Collaborative Alliance for Semiconductor Test (CAST) Workshop: Implementing Next Generation Data Logging
 - November 12-13 in San Jose, California
 - SEMI South America Semiconductor Strategy Summit
 - November 18-20 in Buenos Aires, Argentina
 - SEMICON Japan
 - December 3-5 in Tokyo
- Early SEMI Global Events in 2015
 - Industry Strategy Symposium
 - January 11-14 in Half Moon Bay, California
 - European 3D TSV Summit
 - January 19-21 in Grenoble, France
 - SEMICON Korea and LED Korea
 - February 4-6 in Seoul
 - ISS Europe
 - February 22-24 in Amsterdam, Netherlands
 - SEMICON China and FPD China
 - March 17-19 in Shanghai
 - LED Taiwan
 - March 25-28 in Taipei
- SEMI Standards Publications Stats
 - July 2014 – October 2014

- New Standards: 8
 - Revised Standards: 29
 - Reapproved Standards: 2
 - Withdrawn Standards: 2
- Total SEMI Standards in portfolio: 917
 - Includes 108 Inactive Standards
- Upcoming NA Standards Meetings in 2015
 - NA Standards Spring 2015 Meetings
 - (Tentative) March 30 – April 2 at SEMI HQ in San Jose, California
 - NA Compound Semiconductor Materials TC Chapter Meeting at CS MANTECH 2015
 - (Tentative) May 20 in Scottsdale, Arizona
 - NA Standards Meetings at SEMICON West 2015
 - (Tentative) July 13-16 in San Francisco, California
- SEMI NA Standards staff contact: Michael Tran, mtran@semi.org

Attachment: 04, N.A. Standards Staff Report (Fall 2014)

4 Ballot Review

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

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>TC Chapter Action</i>
5621A	New Standard: Test Method for Determining the Quality of Ion Exchanged Resin Used in Polish Applications of Ultrapure Water System	Failed TC Chapter review and will be returned to the TF for rework.
5528	Revision to SEMI F39-0699, Guideline for Chemical Blending Systems with title change to: Guide for Chemical Blending Systems	Passed TC Chapter review with editorial changes.
5641	Revision to SEMI C31-0708, Specification for Methanol	Passed TC Chapter review as balloted
5675A	New Standard: Test Method for Determining Roughness Of Polymer Surfaces Used In Ultrapure Water and Liquid Chemical Distribution Systems By Contact Profilometry	Passed TC Chapter review with editorial changes.

Motion: Document 5621A failed TC Chapter review and is returned to the TF for rework.

By / 2nd: David Kandiyeli (Mega Fluid Systems) / Frederick Stover (ICL)

Discussion: We moved to strategically fail the document to change the structure to a Guide on the basis of the criteria outline above.

Vote: 6-0 in favor. Motion passed.

Attachment: 05, Ballot Review Summary for Document #5621A

Motion: Document 5528 passed TC Chapter review with editorial changes and will be forwarded to the A&R SC for procedural review.

By / 2nd: Frederick Stover (ICL) / Don Hadder Jr. (Intel)

Discussion: None.

Vote: 6-0 in favor. Motion passed.

Attachment: 06, A&R SC Procedural Review form for Document #5528

Motion: Document 5641 passed TC Chapter review as balloted and will be forwarded to the A&R SC for procedural review.

By / 2nd: David Kandiyeli (Mega Fluid Systems) / Frederick Stover (ICL)

Discussion: None.

Vote: 6-0 in favor. Motion passed.

Attachment: 07, A&R SC Procedural Review Form for Document #5641

Motion: Document 5675A passed TC Chapter review with editorial changes and will be forwarded to the A&R SC for procedural review.

By / 2nd: Frank Flowers (PeroxyChem) / Frederick Stover (ICL)

Discussion: None.

Vote: 6-0 in favor. Motion passed.

Attachment: 08, A&R SC Procedural Review Form for Document #5675A

5 Subcommittee & Task Force Reports

5.1 Analytical Methods Task Force

5.1.1 Frank Flowers (PeroxyChem) reported for the TF. The TF reviewed documents due for five year reviews.

- The following documents are overdue for five year review were approved by the TC Chapter for letter balloting in Cycle 5 or 6, 2014 (see §7.2 of these minutes for TC Chapter approval details):
 - Revision to SEMI C27-0708, Specification for Methanol
 - Document 5642A, Revision to SEMI C35-0708, Specifications and Guideline for Nitric Acid with title change to: Specification and Guide for Nitric Acid

5.2 SEMI F40 (*Practice for Preparing Liquid Chemical Distribution Components for Chemical Testing*) Revision Task Force

5.2.1 Don Hadder Jr. (Intel) reported for the SEMI F40 Revision Task Force. The TF held bi-weekly teleconferences after SEMICON West 2014 to finish drafting Document 5810, *New Standard: Test Method for Testing PFA Materials Used in Liquid Chemical Distribution Systems*. The document was based on SEMI F40 and is ready for balloting in Cycle 8, 2014. See § 7.2 of these minutes for details.

5.2.2 The TC Chapter approved Don Hadder Jr. (Intel) as the new SEMI F40 Revision TF leader replacing Marty Burkhart (Hi-Pure Tech).

Motion: To approve Don Hadder Jr. (Intel) as the new SEMI F40 Revision TF leader.

By / 2nd: Frank Flowers (PeroxyChem) / Don Hadder Jr. (Intel)

Discussion: None.

Vote: 6-0 in favor. Motion passed.

5.3 SEMI F57 (*Specification for Polymer Materials and Components Used in Ultrapure Water and Liquid Chemical Distribution Systems*) Task Force / ITRS Alignment

5.3.1 Slava Libman (Air Liquide) reported for the Task Force. He said volunteers are needed from the supplier side join the TF to continue working on SEMI F57 and the ITRS alignment.

Action Item: 2014Nov#01, Don Hadder Jr. and Michael Tran to send invites to the SEMI F40 Revision TF for SEMI F57 volunteers.

5.4 *Polymer Surface Roughness Task Force*

5.4.1 Michael Tran (SEMI N.A.) reported for the Polymer Surface Roughness Task Force. The TF didn't meet, but Document 5675A (New Standard: Test Method for Determining Roughness of Polymer Surfaces Used in Ultrapure Water and Liquid Chemical Distribution Systems by Contact Profilometry) was approved by the TC Chapter see § 4 of these minutes for TC Chapter adjudication details.

5.5 SEMI F31 (*Guide for Bulk Chemical Distribution Systems*), SEMI F39 (*Guideline for Chemical Blending Systems*), and SEMI F41 (*Guide for Qualification of a Bulk Chemical Distribution System*) Rewrite TF

5.5.1 David Kandiyeli (Mega Fluid Systems) reported for the Task Force. Document 5528 (Revision to F39) was approved by the TC Chapter (see § 4 of these minutes for TC Chapter adjudication details). The TF will now focus on revising SEMI F41.

5.6 SEMI F63 (*Ultrapure Water Used in Semiconductor Processing*) Revision Task Force

5.6.1 Slava Libman (Air Liquide) reported for the TF. The TF is on hold until the next ITRS Roadmap is available to update SEMI F63.

5.7 *Ultrapure Water Filtration Efficiency Task Force*

5.7.1 Slava Libman (Air Liquide) reported for the TF. There have been no updates except discussion of Document 5421A (*Test Method for Particle Removal Performance of Liquid Filter Rated Below 30 nm with ICP-MS*) from Japan. The TF is awaiting further word regarding the intellectual property issues and the letter of assurance of the document.

5.8 *Ion Exchange (IX) Resin Task Force*

5.8.1 Slava Libman (Air Liquide) reported for the IX Resin TF. The TF reviewed the ballot results of Document #5621A. The TC Chapter failed the document per the TF recommendation. See § 4 of these minutes for TC Chapter adjudication details.

5.8.2 The TF prepared a message to all the reject overs of Document 5621A:

“We are answering all the rejects received for Document 5621A. There were many rejects and the majority of them are related, but none of them are technically persuasive. We are changing this document subtype to a Guide and not a Test Method standard because the industry is not familiar with the technique (LNS) that was used for particle analysis at 10 nm. The previously published SEMI C79 has data verifying the accuracy of the LNS method.

Once we make these changes, we will ballot it as a Guide for Cycle 8, 2014 and add the criteria above to the background statement of Document 5621B.”

Motion: The TF moved to strategically fail the document to change the structure to a Guide on the basis of the criteria outline above.

By / 2nd: David Kandiyeli (Mega Fluid Systems) / Frederick Stover (ICL)

Discussion: None.
Vote: 6-0 in favor. Motion passed.

Motion: To approve making the changes to the document and adding the above criteria to the background statement of the document which will be letter balloted in Cycle 8, 2014.

By / 2nd: Frank Flowers (PeroxyChem) / Don Hadder Jr. (Intel)

Discussion: None.

Vote: 6-0 in favor. Motion passed.

6 Old Business

6.1 5-Year Review Update

6.1.1 The N.A. Liquid Chemicals TC Chapter reviewed and updated the master 5-year review documents file. Reviewers were assigned to each document that needed 5-year review and review updates for each was reported.

Attachment: 09, N.A. Liquid Chemicals Master 5-Year Review Summary (Fall 2014)

7 New Business

7.1 New SNARF (Standards New Activity Report Form)

7.1.1 The TC Chapter reviewed the following SNARFs:

#	Type	SC/TF/WG	Details
5810	SNARF	SEMI F40 Rewrite TF	New Standard: Test Method for Testing PFA Materials Used In Liquid Chemical Distribution Systems
5809	SNARF	Analytical Methods TF	Line item revision to SEMI C69-0611, Test Method for the Determination of Surface Areas of Polymer Pellets
5831	SNARF	Analytical Methods TF	Revision to SEMI C27-0708, Specifications and Guidelines for Hydrochloric Acid with title change to: Specification and Guide for Hydrochloric Acid

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

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

Motion: To approve SNARF #5810.
By / 2nd: Frederick Stover (ICL) / Frank Flowers (PeroxyChem)
Discussion: None.
Vote: 6-0 in favor. Motion passed.

Motion: To approve SNARF #5809.
By / 2nd: Frank Flowers (PeroxyChem) / Don Hadder Jr. (Intel)
Discussion: None.
Vote: 6-0 in favor. Motion passed.

Motion: To approve SNARF #5831.
By / 2nd: Frank Flowers (PeroxyChem) // Frederick Stover (ICL)
Discussion: None.
Vote: 6-0 in favor. Motion passed.

7.2 New Ballots Authorizations

7.2.1 The following documents were submitted for letter ballot authorization:

#	When	SC/TF/WG	Details
5621B	Cycle 8, 2014 or Cycle 1, 2015	Ion Exchange TF	New Standard: Test Method for Determining the Quality of Ion Exchanged Resin Used in Polish Applications of Ultrapure Water System
5810	Cycle 8, 2014 or Cycle 1, 2015	SEMI F40 Rewrite TF	New Standard: Test Method for Testing PFA Materials Used in Liquid Chemical Distribution Systems
5809	Cycle 1 or 2, 2015	Analytical Methods TF	Line item revision to SEMI C69-0611, Test Method for the Determination of Surface Areas of Polymer Pellets
5642A	Cycle 1 or 2, 2015	Analytical Methods TF	Revision to SEMI C35-0708, Specifications and Guideline for Nitric Acid with title change to: Specification and Guide for Nitric Acid
5831	Cycle 1 or 2, 2015	Analytical Methods TF	Revision to SEMI C27-0708, Specifications and Guidelines for Hydrochloric Acid with title change to: Specification and Guide for Hydrochloric Acid

Motion: To approve the letter balloting of Document 5621B in Cycle 8, 2014.

By / 2nd: Frank Flowers (PeroxyChem) / Don Hadder Jr. (Intel)

Discussion: None.

Vote: 6-0 in favor. Motion passed.

Motion: To approve the letter balloting of Document 5810 in Cycle 8, 2014.

By / 2nd: Don Hadder Jr. (Intel) / Frank Flowers (PeroxyChem)

Discussion: None.

Vote: 6-0 in favor. Motion passed.

Motion: To approve the letter balloting of Document 5809 in Cycle 1 or 2, 2015

By / 2nd: Don Hadder Jr. (Intel) / Frederick Stover (ICL)

Discussion: None.

Vote: 6-0 in favor. Motion passed.

Motion: To approve the letter balloting of Document 5642A in Cycle 1 or 2, 2015

By / 2nd: Frank Flowers (PeroxyChem) / Frederick Stover (ICL)

Discussion: None.

Vote: 6-0 in favor. Motion passed.

Motion: To approve the letter balloting of Document 5831 in Cycle 1 or 2, 2015.

By / 2nd: Frank Flowers (PeroxyChem) / Frederick Stover (ICL)

Discussion: None.

Vote: 6-0 in favor. Motion passed.

8 Action Item Review

8.1 Open Action Items

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

8.2 New Action Items

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

9 Next Meeting and Adjournment

9.1 The next N.A. Liquid Chemicals Standards Meetings are tentatively scheduled for March 30-31, 2015 at SEMI Headquarters in San Jose, California in conjunction with the N.A. Standards Spring 2015 meetings. Exact meeting dates and details will be announced when finalized and will be available at <http://www.semi.org/node/54226>

Tentative Schedule:

Monday, March 30*

- Polymer Surface Roughness TF (1:00 PM to 2:00 PM)
- SEMI IX Resin TF (2:00 PM to 3:00 PM)
- UPW Filtration TF / F63 TF (3:00 PM to 5:00 PM)

Tuesday, March 31*

- F57 Discussion / ITRS Alignment (8:00 AM to 9:00 AM)
- F39, F31 & F41 Rewrite TF (9:00 AM to 10:00 AM)
- Analytical Methods TF (10:00 AM to 12 Noon)
- N.A. Liquid Chemicals TC Chapter (2:00 PM to 5:00 PM)

*All times are Pacific Times. Times and dates are subject to change without notice.

For meeting details, registration, the latest schedule, and travel information please visit:

<http://www.semi.org/node/54226>

9.2 Having no further business, the N.A. Liquid Chemicals TC Chapter meeting held on November 04, 2014 in conjunction with the N.A. Standards Fall 2014 Meetings at SEMI Headquarters in San Jose, California was adjourned at 4:56 PM Pacific Time.

Motion: To adjourn the N.A. Liquid Chemicals TC Chapter meeting held on November 04, 2014 in conjunction with the N.A. Standards Fall 2014 Meetings at SEMI Headquarters in San Jose, California

By / 2nd: Slava Libman (Air Liquide) / Don Hadder Jr. (Intel)

Discussion: None.

Vote: Unanimous in favor. Motion passed.

Respectfully submitted by:

Michael Tran
Senior Standards Engineer
SEMI North America
Phone: 1-408-943-7019
Email: mtran@semi.org

Minutes approved by:

Frank Parker (ICL), Co-chair	January 29, 2015
Frank Flowers (PeroxyChem), Co-chair	January 30, 2015

Table 8 Index of Available Attachments #1

#	<i>Title</i>	#	<i>Title</i>
01	SEMI Standards Required Meeting Elements	06	A&R SC Procedural Review form for Document #5528
02	N.A. Liquid Chemicals TC Chapter Meeting Minutes (West 2014)	07	A&R SC Procedural Review Form for Document #5641
03	Europe Gases & Liquid Chemicals TC Chapter Report (Fall 2014)	08	A&R SC Procedural Review Form for Document #5675A
04	N.A. Standards Staff Report (Fall 2014)	09	N.A. Liquid Chemicals Master 5-Year Review Summary (Fall 2014)
05	Ballot Review Summary for Document #5621A		

#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. For additional information or to obtain individual attachments, please contact Michael Tran at the contact information above.