Record of Letter Ballot Review by TC Chapter for Procedural Review

Region/Locale: North America
Global Technical Committee: Liquid Chemicals
TC Chapter Cochairs: Steve Rogers (CMC Materials), Don E. Hadder (Intel), Koh Murai (Mega Fluid Systems), Laura Ledenbach (Evonik)
Standards Staff: Laura Nguyen

	Scheduled in Background Statement	Actual
Date	07/11/2023-07/12/2023	07/12/2023
Location	Moscone, San Francisco, CA/USA	Moscone, San Francisco, CA/USA
Reason for Change of Date and/or Location (if changed)		

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

I. Document Number and Title

Document Number	Document Title
6917	Revision to SEMI F39-0621, Guide for Chemical Blending Systems

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)

Voting Tally (with example values):

Voting Interest:	Returned Votes		Distribution		Return Rate	
Letter Ballot	59	÷	97	=	60.8%	≥60%
Intercommittee Ballot	29					
Voting Interest Reject(s)	1		Total Voters with Rejects		1	
Voting Interest Accept(s)	29					

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

III. Rejects

Voting Interest Reject 1 (Voting Interest Name: Guru)
Voter Reject 1 (Voter: Eric Sklar / Safety Guru)

Negative 1

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 3.1 This Guide does not cover subject matter concerning chemical distribution capability of chemical blending equipment.			
		3.1			
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.			
		Negative: Change "cover subject matter concerning chemical distribution capability" to "address chemical distribution capabilities" *Reason/Justification: Improve readability.*			
	Withdrawal (check one)	X	No Negative withdrawal made by Voter.		GO TO "Related" subsection
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection
Persuasive	Motion and Reason (check one)	X	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		
			Reason	Reviewer's preference only, there is no technical justification for the change in wording	
	Motion by/ 2nd by	By: Koh Murai / Mega Fluid Systems, Inc. Second: David Kandiyeli / Mega Fluid Systems, Inc.			
	Discussion	None			
	Result of Vote (check one)	7 Y- 0 N; Motion passed.			
		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	
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)	

This table is needed for each Negative.

Negative 2

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 5.1.4 *blending* — the process in which two or more materials are combined to create a mixture which contains a desired proportion and quantity.					
		5.1.4					
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**					
		Negative: Change "a desired proportion and quantity" to either "the desired proportion of the constituents" or ""the desired proportion of the constituents in the desired quantity or at the desired rate". *Reason/Justification: "Quantity" is correct for batch blending, but not for continuous blending. For the latter, "rate" is the analogous characteristic.*					
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.				**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**				**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**				
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation					
	Discussion	None					
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.					
		X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	**X**	**Y**	**GO TO "Address by Technical Change Option" subsection**
			[Negative is related and not persuasive.] < 2/3			**N**	**GO TO "Final" subsection → (E)**

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 5.1.4** 5.1.4 *blending* — the process in which two or more materials are combined to create a mixture which contains a desired proportion and quantity.
		TO: Section/Paragraph 5.1.4 5.1.4 *blending* — the process in which two or more materials are combined to create a mixture which contains ~~a~~the desired proportion ~~and~~of the constituents in the desired quantity or at the desired rate.
		Justification (If necessary) The task force used the term "quantity" to denote a value. Values can be time dependent, such as the rates in 5.1.4. or could be fixed, physical entities. To remove ambiguity, the task force modified the statement to explicitly cover both applications of intent.

Motion	Negative is addressed by the technical change(s).
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation

	Discussion		None		
	Result of Vote (check one)		3 **Y**- 0 **N**; Motion passed.		
		X	2/3 ≤ [Negative is addressed by the technical change(s).]	**GO TO "Incorporation of the Technical Change" subsection**	
	Incorporation of the Technical **Motion**		To incorporate the technical change(s).		
	Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals		
	Discussion		None		
	Result of Vote (check one)		3 **Y**- 0 **N**; Motion passed.		
		X	90% ≤ [Agree to incorporate.]	**GO TO "Final" subsection → (F)**	
Final	**(check if applicable)**		**(A)**	Withdrawn **(counted under h in disposition)**	
			(B)	Not related **(counted under i in disposition)**	
			(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**
		X	**(F)**	Addressed by technical change **(counted under k disposition)**	

Negative 3

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** NOTE 1: By this definition, dilution is a blending. However, blending is a more general case where UPW is not always one of the constituents. Therefore, the term blending is used in the remainder of this Guide.		
		NOTE 1		
	Negative Text	*Negative: Change "a blending" to "blending".* *Reason/Justification: Correct grammar.*		
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**	**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**	
			Reason	Editorial to correct grammar.
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals		
	Discussion	None		
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.		
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	X	*Comment generated.* See Section V-(ii) Comment # NC-1.		

Negative 4

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. NOTE 1: By this definition, dilution is a blending. However, blending is a more general case where UPW is not always one of the constituents. Therefore, the term blending is used in the remainder of this Guide.			
		Note 1			
	Negative Text	*Negative: Change "Therefore, the term" to "The term".* *Reason/Justification: The use of "blending" throughout the Guide is not a necessary logical consequence of dilution being an example of blending.*			
	Withdrawal (check one)	X	No Negative withdrawal made by Voter.		GO TO "Related" subsection
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection
Persuasive	Motion and Reason (check one)	X	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		
			Reason	Editorial to correct grammar.	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	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)	X	*Comment generated.* See Section V-(ii) Comment # NC-2.		

Negative 5

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 5.1.6 *central limit theorem (CLT)* — a probability theorem which allows the approximation of normality for any distribution.
		5.1.6

	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**					
		Negative: Correct the definition. *Reason/Justification: The central limit theorem states that if a population is normally distributed, then the means of appropriate samples of it will also be approximately normally distributed. However, the theorem does not mean that all populations are normally distributed nor does it mean that the means of samples of all populations are normally distributed.*					
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.				**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**				**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**				
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation					
	Discussion	None					
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.					
		X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	**X**	**Y**	**GO TO "Address by Technical Change Option" subsection**
			[Negative is related and not persuasive.] < 2/3			**N**	**GO TO "Final" subsection → (E)**

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 5.1.6

5.1.6 *central limit theorem (CLT)* — a probability theorem which allows the approximation of normality for any distribution.

NOTE 2: The CLT applied to chemical blending states that if a sufficient number of random samples are taken from the distribution of all chemical produced by chemical blending equipment, then the average measurement of these samples can be approximated to follow a normal distribution. A rule of thumb for the "sufficient number of batches" is ten or greater.

TO: Section/Paragraph 5.1.6

~~5.1.6 *central limit theorem (CLT)* — a probability theorem which allows the approximation of normality for any distribution.~~

~~NOTE 2: The CLT applied to chemical blending states that if a sufficient number of random samples are taken from the distribution of all chemical produced by chemical blending equipment, then the average measurement of these samples can be approximated to follow a normal distribution. A rule of thumb for the "sufficient number of batches" is ten or greater.~~

Justification (If necessary)
per the PM, A3-8, (4) List definitions for terms used elsewhere in the Document. CLT is not defined in the Document, therefore 5.1.6 and the corresponding NOTE was removed.

Motion	Negative is addressed by the technical change(s).
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation
Discussion	None
Result of Vote	3 **Y**- 0 **N**; Motion passed.

	(check one)		X	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection
	Incorporation of the Technical	Motion	To incorporate the technical change(s).		
		Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals		
		Discussion	None		
		Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.		
			X	90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)

Final	(check if applicable)		(A)	Withdrawn (counted under h in disposition)	
			(B)	Not related (counted under i in disposition)	
			(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
		X	(F)	Addressed by technical change (counted under k disposition)	

Negative 6

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. NOTE 2: The CLT applied to chemical blending states that if a sufficient number of random samples are taken from the distribution of all chemical produced by chemical blending equipment, then the average measurement of these samples can be approximated to follow a normal distribution. A rule of thumb for the "sufficient number of batches" is ten or greater.		
		NOTE 2		
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.		
		Negative: Correct "then the average measurement of these samples can be approximated to follow a normal distribution". *Reason/Justification: The average is a single value, not a set of values, and does not follow a normal (or any other) distribution.*		
Withdrawal (check one)		X	No Negative withdrawal made by Voter.	GO TO "Related" subsection
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)	GO TO "Persuasive" subsection
Persuasive	Motion and Reason (check one)	X	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)	
			Reason	Addressed by Negative 5, above.
	Motion by/ 2nd by	By: Koh Murai / Mega Fluid Systems, Inc. Second: David Kandiyeli / Mega Fluid Systems, Inc.		
	Discussion	None		
	Result of Vote (check one)	7 **Y**- 0 **N**; Motion passed.		
		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	
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)	

Negative 7

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 5.1.7 *constituents* — solids, liquids and/or gases.					
		5.1.7					
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.					
		Negative: Change "and/or" to "or". *Reason/Justification: "Or" includes the possibility of more than one item. For example: "A or B" means any of "A", "B", or "A and B", Contrarily, "either A or B" means either "A" or "B", but excludes "A and B".*					
Withdrawal (check one)		X	No Negative withdrawal made by Voter.				GO TO "Related" subsection
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)				GO TO "Persuasive" subsection
Persuasive	Motion and Reason (check one)	X	Negative is related and persuasive. (Needs >1/3 votes to pass.)				
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation					
	Discussion	None					
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.					
		X	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	X	Y	GO TO "Address by Technical Change Option" subsection
			[Negative is related and not persuasive.] < 2/3			N	GO TO "Final" subsection → (E)
Address by Technical	Technical Change Recommendations Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.						
	Technical 1	FROM: Section/Paragraph 5.1.7 5.1.7 *constituents* — solids, liquids and/or gases.					

		TO: Section/Paragraph 5.1.7 5.1.7 *constituents* — solids, liquids, ~~and/~~or gases.			
		Justification (If necessary) Clarify wording to remove ambiguity and add Oxford comma.			
	Motion	Negative is addressed by the technical change(s).			
	Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation			
	Discussion	None			
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is addressed by the technical change(s).]	**GO TO "Incorporation of the Technical Change" subsection**	
	Incorporation of the Technical **Motion**	To incorporate the technical change(s).			
	Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.			
		X	90% ≤ [Agree to incorporate.]	**GO TO "Final" subsection → (F)**	
Final	**(check if applicable)**		**(A)**	Withdrawn **(counted under h in disposition)**	
			(B)	Not related **(counted under i in disposition)**	
			(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**
		X	**(F)**	Addressed by technical change **(counted under k disposition)**	

Negative 8

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 5.1.9 *dilution* — combination of a concentrated chemical and UPW to create a lower concentration of the aqueous chemical.			
		5.1.9			
	Negative Text	*Negative: Remove this term.* *Reason/Justification: "Dilution" is not used in the normative text of the document. It appears only in NOTE 1. Furthermore, water is not the only diluent.*			
Withdrawal (check one)		**X**	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**	
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**	**GO TO "Persuasive" subsection**	
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	The term "dilution" is not used anywhere in the document, so it is not necessary to define it. Per the *PM, A3-8, (4) List definitions for terms used elsewhere in the Document.*	

	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	**X**	*Comment generated.* ***See Section V-(ii)*** ***Comment #*** *NC-3.*		

Negative 9

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 5.1.19 *pot life* — a measure of the maximum time a chemical or slurry blend is useable after the addition of constituents.			
		5.1.19			
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**			
		Negative: Change "addition of" to "combination of". *Reason/Justification: "Addition" applies a hierarchy of constituents.*			
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**	
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**	**GO TO "Persuasive" subsection**	
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	The task force does not agree with the reviewer's rejection, addition does not necessarily imply a hierarchy, nor even an order, see www.merriam-webster.com/dictionary/addition definition 4 ":direct chemical combination of substances into a single product"	
	Motion by/ 2nd by	By: Koh Murai / Mega Fluid Systems, Inc. Second: David Kandiyeli / Mega Fluid Systems, Inc.			
	Discussion	None			
	Result of Vote (check one)	7 **Y**- 0 **N**; Motion passed.			
		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**	
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)**	

Negative 10

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 5.1.23 *statistical analysis* — basic statistical analysis and presentation of data for testing and verification of performance parameters. Refer to the ASTM MNL7, Manual on Presentation of Data and Control Chart Analysis.			
		5.1.23			
	Negative Text	*Negative: Remove the latter sentence from this definition.* *Reason/Justification: The latter sentence does not appear to be part of the definition. If the sentence is intended to suggest an educational resource, make it a NOTE. If the sentence is intended to mandate following the guidance in that Manual, make the second sentence part of a numbered paragraph in the appropriate part of this Guide.*			
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.		**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**		**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	Added note to separate from definition.	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	**X**	*Comment generated.* ***See Section V-(ii)*** ***Comment #*** *NC-4.*		

Negative 11

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 6.1.1 The blending section of the system should be designed with consideration to both the inputs to and demands from the downstream process.
		6.1.1

	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**			
		Negative: Change "consideration to" to "consideration of" *Reason/Justification: Conform to common English usage.*			
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.		**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**		**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	The choice of "to" or "of" or "for" in this instance doesn't change the material content of the sentence, despite whichever colloquial usage is employed.	
	Motion by/ 2nd by	By: Koh Murai / Mega Fluid Systems, Inc. Second: David Kandiyeli / Mega Fluid Systems, Inc.			
	Discussion	None			
	Result of Vote (check one)	7 **Y**- 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)**	

Negative 12

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.**		
		6.3.1.1.1		
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**		
		Negative: Correct this or add a statement that volumes are not always additive. *Reason/Justification: This assumes volumes are additive. That's not valid in all cases. For example, mixing ethanol and water results in a volume less than the sum of the volumes of the components.*		
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**	**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation		

	Discussion	None					
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.					
		X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	**X**	**Y**	**GO TO "Address by Technical Change Option" subsection**
			[Negative is related and not persuasive.] < 2/3			**N**	**GO TO "Final" subsection → (E)**

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 6.3.1.1.1

6.3.1.1.1 *Volumetric Basis*

$$BMRv = \frac{[\sum_{i=0}^{n} Vc_i]}{Tp} \quad 1)$$

where:

BMRv = batch make-up rate (volumetric basis),

Vc = constituent volume,

Tp = processing time to create and transfer batch, and

n = number of constituents

TO: Section/Paragraph 6.3.1.1.1

6.3.1.1.1 *Volumetric Basis*

BMRv=~~[Σ*Vcini=0*]~~(Vb)/*Tp*
where:
BMRv = batch make-up rate (volumetric basis),
V~~c~~b = ~~*constituent*~~ *batch volume, and*
Tp = processing time to create and transfer batch~~, and~~
~~n = number of constituents~~

Justification (If necessary)
Document is a Guide, not a Specification. The equation presented was used as a general guide to approximate make-up rate assuming an ideal liquid methodology, but not explicitly presented as such.

Motion	Negative is addressed by the technical change(s).			
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation			
Discussion	None			
Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.			
	X	2/3 ≤ [Negative is addressed by the technical change(s).]	**GO TO "Incorporation of the Technical Change" subsection**	

Incorporation of the Technical

Motion	To incorporate the technical change(s).		
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals		
Discussion	None		
Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.		
	X	90% ≤ [Agree to incorporate.]	**GO TO "Final" subsection → (F)**

Final			**(A)**	Withdrawn **(counted under h in disposition)**

	(check if applicable)		(B)	Not related (counted under i in disposition)	
			(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
		X	(F)	Addressed by technical change (counted under k disposition)	

Negative 13

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.					
		6.3.1.2.1					
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.					
		Negative: Correct this or add a statement that volumes are not always additive. *Reason/Justification: This assumes volumes are additive. That's not valid in all cases. For example, mixing ethanol and water results in a volume less than the sum of the volumes of the components.*					
Withdrawal (check one)		X	No Negative withdrawal made by Voter.				GO TO "Related" subsection
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)				GO TO "Persuasive" subsection
Persuasive	Motion and Reason (check one)	X	Negative is related and persuasive. (Needs >1/3 votes to pass.)				
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation					
	Discussion	None					
	Result of Vote (check one)	3 Y- 0 N; Motion passed.					
		X	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	X	Y	GO TO "Address by Technical Change Option" subsection
			[Negative is related and not persuasive.] < 2/3			N	GO TO "Final" subsection → (E)
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 6.3.1.2.1 6.3.1.2.1 *Volumetric Basis* $ILMRv = [\sum_{i=0}^{n} Vc_I]$ (3) where: ILMRv = in-line system make-up rate (volumetric basis), Vc = constituent volumetric flow rate n = number of constituents				

			TO: Section/Paragraph 6.3.1.2.1 6.3.1.2.1 *Volumetric Basis (Ideal Liquid Estimation)* $ILMRv = \approx [(\Sigma Vci_{ni=0})]$ where: ILMRv = in-line system make-up rate (volumetric basis), Vc = constituent volumetric flow rate, and n = number of constituents NOTE 3: The equation above assumes the constituents when mixed behave as ideal liquids. A more rigorous determination of volumetric make-up rate can be constructed using mass balances if the density of the final product is known.		
			Justification (If necessary) Document is a Guide, not a Specification. The equation presented was used as a general guide to approximate make-up rate assuming an ideal liquid methodology, but not explicitly presented as such.		
	Motion		Negative is addressed by the technical change(s).		
	Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation		
	Discussion		None		
	Result of Vote (check one)		3 **Y**- 0 **N**; Motion passed.		
			X	2/3 ≤ [Negative is addressed by the technical change(s).]	**GO TO "Incorporation of the Technical Change" subsection**
	Incorporation of the Technical	**Motion**	To incorporate the technical change(s).		
		Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals		
		Discussion	None		
		Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.		
			X	90% ≤ [Agree to incorporate.]	**GO TO "Final" subsection → (F)**
Final	**(check if applicable)**		**(A)**	Withdrawn **(counted under h in disposition)**	
			(B)	Not related **(counted under i in disposition)**	
			(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**
		X	**(F)**	Addressed by technical change **(counted under k disposition)**	

Negative 14

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 6.4.1 Distribution Rate limitations may be classified by distribution network structure.
		6.4.1
	Negative Text	*Negative: Rewrite or explain this sentence.* *Reason/Justification: If what was meant was "distribution rate may be limitted by distribution network structure.", then substitute that for the sentence in the ballot. If something else was meant, rewrite ¶6.4.1 to state it clearly. I see no "limitations" to classify and no such classifications in §6.4.*

	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.		**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**		**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	Sections 6.4.2 through 6.4.6 describe classifications for distribution network design and operation for which guidance was provided. It appears that 6.4.2 through 6.4.6 were not indented properly in the ballot, providing ambiguity. Since there is only one indention beneath 6.4.1, and 6.4.2 through 6.4.6 have no sublevels and there is not required order, 6.4.2 through 6.4.6 were changed to bullets. See Style Manual Table 1, Rows 1-10 & 1-11.	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	**X**	*Comment generated.* ***See Section V-(ii)*** ***Comment #*** *NC-5.*		

Negative 15

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 6.4.5 If sequestration of the blended material in the blend section is required by the system designer for risk mitigation or other purposes, additional processing time may be required for homogenization, batch qualification with metrology, and if the blend section tank is separate from the distribution sum-unit tank, transfer operations.		
		6.4.5		
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**		
		Negative: Change "transfer operations" to "transfer" *Reason/Justification: Make this parallel with "homogenization".*		
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**	**GO TO "Persuasive" subsection**

Persuasive

Motion and Reason (check one)	X	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**				
Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation					
Discussion	None					
Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.					
	X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	X	Y	**GO TO "Address by Technical Change Option" subsection**
		[Negative is related and not persuasive.] < 2/3			N	**GO TO "Final" subsection → (E)**

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 6.4.5

6.4.5 If sequestration of the blended material in the blend section is required by the system designer for risk mitigation or other purposes, additional processing time may be required for homogenization, batch qualification with metrology, and if the blend section tank is separate from the distribution sum-unit tank, transfer operations.

TO: Section/Paragraph 6.4.5

6.4.5 If sequestration of the blended material in the blend section is required by the system designer for risk mitigation or other purposes, additional processing time may be required for homogenization, batch qualification with metrology, and if the blend section tank is separate from the distribution sub~~m~~-unit tank, transfer ~~operations~~.

Justification (If necessary)
Change to voter's suggestion and fix missed typo of "sum" to "sub"

Motion	Negative is addressed by the technical change(s).			
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation			
Discussion	None			
Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.			
	X	2/3 ≤ [Negative is addressed by the technical change(s).]	**GO TO "Incorporation of the Technical Change" subsection**	

Incorporation of the Technical

Motion	To incorporate the technical change(s).		
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals		
Discussion	None		
Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.		
	X	90% ≤ [Agree to incorporate.]	**GO TO "Final" subsection → (F)**

Final

(check if applicable)		
	(A)	Withdrawn **(counted under h in disposition)**
	(B)	Not related **(counted under i in disposition)**
	(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
		X	(F)	Addressed by technical change (counted under k disposition)	

Negative 16

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 6.4.6 If the demand cycle has a wide disparity between acute and average blended chemical or slurry consumption, and the downstream fluid demand is continuous, the system designer may consider an adaptive form of continuous (in-line) blending as a blend method or provide more blended product holdup in the distribution circuit than would be indicated to satisfy an average demand. The latter may warrant design consideration to the pot life of the blended chemical or slurry.			
		6.4.6			
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.			
		Negative: Change "consideration to" to "consideration of" *Reason/Justification: Conform to common English usage.*			
	Withdrawal (check one)	X	No Negative withdrawal made by Voter.		GO TO "Related" subsection
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection
Persuasive	Motion and Reason (check one)	X	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		
			Reason	The choice of "to" or "of" or "for" in this instance doesn't change the material content of the sentence, despite whichever colloquial usage is employed.	
	Motion by/ 2nd by	By: Koh Murai / Mega Fluid Systems, Inc. Second: David Kandiyeli / Mega Fluid Systems, Inc.			
	Discussion	None			
	Result of Vote (check one)	7 Y- 0 N; Motion passed.			
		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	
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)	

Negative 17

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 6.5.1 Device redundancy may be used for basic functional parts of importance in adding constituents, evaluating the resulting blended chemical, or distributing the blended chemical or slurry to the customer's downstream processing systems. Selection of said devices may be determined based on failure rate, ease of failure detection, or process severity upon failure. It may be necessary to employ an alternate type of device for redundancy which differs in some non-critical aspect to the device of focus but achieves the same process function. One such example is the utilization of both capacitive and RADAR level sensing for the fixed level metering of constituent addition quantities in a batch chemical blending process.						
		6.5.1						
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**						
		Negative: Change "process severity upon failure" to "process consequences of failure". Reason/Justification: It's not obvious what the "severity" of a process is, nor how the "severity" of a process is an appropriate basis for selecting redundancy, as the process "severity" is not necessarily changed by a foreseen failure. Contrarily, the consequences to the process that are foreseen to result from a foreseen failure appear to be an appropriate consideration in redundancy decisions.						
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.				**GO TO "Related" subsection**	
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**				**GO TO "Persuasive" subsection**	
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**					
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation						
	Discussion	None						
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.						
		X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	**X**	**Y**	**GO TO "Address by Technical Change Option" subsection**	
			[Negative is related and not persuasive.] < 2/3			**N**	**GO TO "Final" subsection → (E)**	

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 6.5.1** 6.5.1 Device redundancy may be used for basic functional parts of importance in adding constituents, evaluating the resulting blended chemical, or distributing the blended chemical or slurry to the customer's downstream processing systems. Selection of said devices may be determined based on failure rate, ease of failure detection, or process severity upon failure. It may be necessary to employ an alternate type of device for redundancy which differs in some non-critical aspect to the device of focus but achieves the same process function. One such example is the utilization of both capacitive and RADAR level sensing for the fixed level metering of constituent addition quantities in a batch chemical blending process.

		TO: Section/Paragraph 6.5.1 6.5.1 Device redundancy may be used for basic functional parts of importance in adding constituents, evaluating the resulting blended chemical, or distributing the blended chemical or slurry to the customer's downstream processing systems. Selection of said devices may be determined based on failure rate, ease of failure detection, or process ~~severity upon~~consequences of failure. It may be necessary to employ an alternate type of device for redundancy which differs in some non-critical aspect to the device of focus but achieves the same process function. One such example is the utilization of both capacitive and RADAR level sensing for the fixed level metering of constituent addition quantities in a batch chemical blending process.			
		Justification (If necessary) Updated wording to remove ambiguity.			
	Motion	Negative is addressed by the technical change(s).			
	Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation			
	Discussion	None			
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is addressed by the technical change(s).]	**GO TO "Incorporation of the Technical Change" subsection**	
	Incorporation of the Technical **Motion**	To incorporate the technical change(s).			
	Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.			
		X	90% ≤ [Agree to incorporate.]	**GO TO "Final" subsection → (F)**	
Final	**(check if applicable)**		**(A)**	Withdrawn **(counted under h in disposition)**	
			(B)	Not related **(counted under i in disposition)**	
			(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**
		X	**(F)**	Addressed by technical change **(counted under k disposition)**	

Negative 18

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 6.5.1 Device redundancy may be used for basic functional parts of importance in adding constituents, evaluating the resulting blended chemical, or distributing the blended chemical or slurry to the customer's downstream processing systems. Selection of said devices may be determined based on failure rate, ease of failure detection, or process severity upon failure. It may be necessary to employ an alternate type of device for redundancy which differs in some non-critical aspect to the device of focus but achieves the same process function. One such example is the utilization of both capacitive and RADAR level sensing for the fixed level metering of constituent addition quantities in a batch chemical blending process.
		6.5.1

	Negative Text	*Negative: Change "RADAR" to "radar"* *Reason/Justification: Although this is, etymologically, an acronym for "radio direction and ranging", the word is in common use and should be written in lower case. This is supported by SEMI's dictionary of choice:* *https://www.merriam-webster.com/dictionary/radar*			
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.		**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**		**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	Editorial in nature, change to lowercase.	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	**X**	*Comment generated.* ***See Section V-(ii)*** ***Comment #*** *NC-6*.		

Negative 19

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 6.5.2 Section redundancy may be required if multiple devices in a circuit may fault in such a manner as to bring an entire process offline. One such example is to employ multiple blend engines to a batch or semi-batch blending system.			
		6.5.2			
	Negative Text	*Negative: Change "fault" to "fail"* *Reason/Justification: "Fault" is noun and denotes a state in which something has gone wrong. The verb for entering such a state is "fail".*			
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.		**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**		**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	Editorial in nature to correct grammar.	

	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals				
	Discussion	None				
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.				
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	**X**	*Comment generated.* ***See Section V-(ii)*** ***Comment #*** *NC-7.*			

Negative 20

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 6.6.3 When pilot development and testing of blend performance (proportion, throughput) cannot be practically achieved, predictive mechanisms for estimating the blend proportion and system blend performance may be substituted based on prior agreement between customer and supplier. It is beyond the scope of this treatment to provide a step-by-step account of how to perform these predictive calculations.				
		6.6.3				
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**				
		Negative: Change "treatment" to "Guide". *Reason/Justification: This appears to be a reference to F39, so the name of the Standard's subtype should be used. "Treatment" could be confused, particularly in translation, with a process, such as annealing.*				
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.			**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**			**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**			
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation				
	Discussion	None				
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.				
		X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	**X** **Y**	**GO TO "Address by Technical Change Option" subsection**
			[Negative is related and not persuasive.] < 2/3		**N**	**GO TO "Final" subsection → (E)**

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 6.6.3

6.6.3 When pilot development and testing of blend performance (proportion, throughput) cannot be practically achieved, predictive mechanisms for estimating the blend proportion and system blend performance may be substituted based on prior agreement between customer and supplier. It is beyond the scope of this treatment to provide a step-by-step account of how to perform these predictive calculations.

TO: Section/Paragraph 6.6.3

6.6.3 When pilot development and testing of blend performance (proportion, throughput) cannot be practically achieved, predictive mechanisms for estimating the blend proportion and system blend performance may be substituted based on prior agreement between customer and supplier. It is beyond the scope of this ~~treatment~~ Guide to provide a step-by-step account of how to perform these predictive calculations.

Justification (If necessary)
Treatment does not adequately describe the nature of the document, so suggestion to change "treatment" to "Guide" was incorporated. Change to clarify wording.

Motion		Negative is addressed by the technical change(s).	
Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation	
Discussion		None	
Result of Vote (check one)		3 **Y**- 0 **N**; Motion passed.	
		X	2/3 ≤ [Negative is addressed by the technical change(s).]	**GO TO "Incorporation of the Technical Change" subsection**
Incorporation of the Technical	**Motion**	To incorporate the technical change(s).	
	Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals	
	Discussion	None	
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.	
		X	90% ≤ [Agree to incorporate.]	**GO TO "Final" subsection → (F)**

Final

(check if applicable)			
	(A)	Withdrawn **(counted under h in disposition)**	
	(B)	Not related **(counted under i in disposition)**	
	(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**
X	**(F)**	Addressed by technical change **(counted under k disposition)**	

Negative 21

Negative

Referenced Section/ Paragraph	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 6.7.1.1 The human machine interface should provide the user with the ability to make process set point or timer adjustments, define the recipe proportion and flow throughput, and plan the order of activities. It can vary in complexity of features, ranging from a combination of digital push buttons, dials, simple text displays, or status lights, graduating up to a feature-rich touchscreen interface with multiple, focused application screens.

		6.7.1.1						
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**						
		Negative: Delete "graduating up" *Reason/Justification: The phrase is redundant with "ranging" and is rather too informal for a Standard.*						
	Withdrawal (check one)	X	No Negative withdrawal made by Voter.				**GO TO "Related" subsection**	
Related	**Motion and Reason (check one)**	X	'Related' is mutually agreed upon. **(Needs no motion.)**				**GO TO "Persuasive" subsection**	
Persuasive	**Motion and Reason (check one)**	X	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**					
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation						
	Discussion	None						
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.						
		X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	X	**Y**	**GO TO "Address by Technical Change Option" subsection**	
			[Negative is related and not persuasive.] < 2/3			**N**	**GO TO "Final" subsection → (E)**	

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 6.7.1.1

6.7.1.1 The human machine interface should provide the user with the ability to make process set point or timer adjustments, define the recipe proportion and flow throughput, and plan the order of activities. It can vary in complexity of features, ranging from a combination of digital push buttons, dials, simple text displays, or status lights, graduating up to a feature-rich touchscreen interface with multiple, focused application screens.

TO: Section/Paragraph 6.7.1.1

6.7.1.1 The human machine interface should provide the user with the ability to make process set point or timer adjustments, define the recipe proportion and flow throughput, and plan the order of activities. It can vary in complexity of features, ranging from a combination of digital push buttons, dials, simple text displays, or status lights, ~~graduating up~~ to a feature-rich touchscreen interface with multiple, focused application screens.

Justification (If necessary)
Remove redundant wording.

Motion	Negative is addressed by the technical change(s).		
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation		
Discussion	None		
Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.		
	X	2/3 ≤ [Negative is addressed by the technical change(s).]	**GO TO "Incorporation of the Technical Change" subsection**

Incorporation of the Technical	Motion	To incorporate the technical change(s).			
	Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.			
		X	90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)	

Final	(check if applicable)		(A)	Withdrawn (counted under h in disposition)	
			(B)	Not related (counted under i in disposition)	
			(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
		X	(F)	Addressed by technical change (counted under k disposition)	

Negative 22

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 6.7.1.2 If the system is to be automated, it should have devices which direct the sequencing of operations. These devices may include industrial process computers, process logic controllers, or even pneumatic or electrical relays.			
		6.7.1.2			
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.			
		Negative: Delete "even". *Reason/Justification: The word does not appear to add any meaning to the sentence and is rather too informal for a Standard.*			
	Withdrawal (check one)	X	No Negative withdrawal made by Voter.	GO TO "Related" subsection	
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)	GO TO "Persuasive" subsection	
Persuasive	Motion and Reason (check one)	X	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		
			Reason	Reviewer's preference only, there is no technical justification for the change in wording.	
	Motion by/ 2nd by	By: Koh Murai / Mega Fluid Systems, Inc. Second: David Kandiyeli / Mega Fluid Systems, Inc.			
	Discussion	None			
	Result of Vote (check one)	7 **Y**- 0 **N**; Motion passed.			
		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	

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)**	

Negative 23

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 6.7.1.3 Data storage may be requisite to store set points, timers, configurations, device states, sensor data for current use or recall. It may also be used to house programs for running the HMI interface. Storage hardware may be a hardware feature of the HMI or directive sequencing devices or may be provided as part of a separate industrial process computer.			
		6.7.1.3			
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**			
		Negative: Change "requisite" to "needed". *Reason/Justification: "Requisite" is more formal than is needed in this sentence and implies, to some readers, a requirement imposed by some authority or external document.*			
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.		**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**		**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	Reviewer's preference only, there is no technical justification for the change in wording.	
	Motion by/ 2nd by	By: Koh Murai / Mega Fluid Systems, Inc. Second: David Kandiyeli / Mega Fluid Systems, Inc.			
	Discussion	None			
	Result of Vote (check one)	7 **Y**- 0 **N**; Motion passed.			
		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**	
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)**	

Negative 24

Negative	Referenced Section/ Paragraph	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 6.7.1.3 Data storage may be requisite to store set points, timers, configurations, device states, sensor data for current use or recall. It may also be used to house programs for running the HMI interface. Storage hardware may be a hardware feature of the HMI or directive sequencing devices or may be provided as part of a separate industrial process computer.		
		6.7.1.3		
	Negative Text	*Negative: Change "device states, sensor data" to "device states, and sensor data".* *Reason/Justification: The list of things to be stored needs a conjunction to separate it from the list of reasons for storing those things.*		
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**	**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**	
			Reason	Editorial to correct grammar and add "and" to separate the list.
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals		
	Discussion	None		
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.		
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	**X**	*Comment generated.* ***See Section V-(ii)*** ***Comment #*** *NC-8.*	

Negative 25

Negative	Referenced Section/ Paragraph	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 6.8.2.1 Metrology used for qualification purposes are typically used as a pass/fail gate in batch and semi-batch blending processes. User-definable limits are often provided by the operator and tied to alarms and various control conditions.		
		6.8.2.1		
	Negative Text	*Negative: Change "purposes are typically" to "purposes is typically".* *Reason/Justification: Grammar: The number of the verb must agree with the number of the subject, which in this case is "Metrology".*		
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**

Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**		**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	Editorial in nature to correct grammar.	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	**X**	*Comment generated.* ***See Section V-(ii)*** ***Comment #*** *NC-9.*		

Negative 26

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 6.8.4.4 The metrology requires regular servicing or is a consumable and replacement may interrupt processing of the system if it was positioned in the primary process line.		
		6.8.4.4		
	Negative Text	*Negative: Change "The metrology requires regular service or is a consumable and replacement " to "The metrology requires regular service or uses consumable items and replacement "* *Reason/Justification: "Metrology" is a method. It can include the use of some consumable object, but it can't be one. Furthermore, "consumable" is an adjective, not a noun, although it is used colloquially as if it were a noun.*		
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**	**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**	
			Reason	Editorial to clarify correct use of wording.
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals		

	Discussion	None					
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.					
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	**X**	*Comment generated.* ***See Section V-(ii)*** ***Comment #*** *NC-10.*				

Negative 27

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 6.8.5.1 The metrology device should be capable of generating the measurement within the flow, pressure, and temperature constraints of the main process lines.					
		6.8.5.1					
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**					
		Negative: Change "within the flow…temperature constraints" to "throughout the flow…temperature ranges" *Reason/Justification: The device is needed to work throughout the foreseen ranges, not just at some point(s) within those ranges.*					
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.				**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**				**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**				
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation					
	Discussion	None					
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.					
		X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	**X**	**Y**	**GO TO "Address by Technical Change Option" subsection**
			[Negative is related and not persuasive.] < 2/3			**N**	**GO TO "Final" subsection → (E)**
Address	**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 6.8.5.1** 6.8.5.1 The metrology device should be capable of generating the measurement within the flow, pressure, and temperature constraints of the main process lines.			
		TO: Section/Paragraph 6.8.5.1 6.8.5.1 The metrology device should be capable of generating the measurement ~~within~~ throughout the flow, pressure, and temperature constraints of the main process lines.			
		Justification (If necessary) Clarify correct use of wording.			
	Motion		Negative is addressed by the technical change(s).		
	Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation		
	Discussion		None		
	Result of Vote (check one)		3 **Y**- 0 **N**; Motion passed.		
		X	2/3 ≤ [Negative is addressed by the technical change(s).]	**GO TO "Incorporation of the Technical Change" subsection**	
Incorporation of the Technical	**Motion**		To incorporate the technical change(s).		
	Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals		
	Discussion		None		
	Result of Vote (check one)		3 **Y**- 0 **N**; Motion passed.		
		X	90% ≤ [Agree to incorporate.]	**GO TO "Final" subsection → (F)**	

Final	(check if applicable)		**(A)**	Withdrawn **(counted under h in disposition)**	
			(B)	Not related **(counted under i in disposition)**	
			(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**
		X	**(F)**	Addressed by technical change **(counted under k disposition)**	

Negative 28

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** Table 1 in 6.9.1		
	Negative Text	*Negative: Delete one of, or merge, the "Precision" and "Repeatability" rows.* *Reason/Justification: 5.1.20 defines "precision" and "repeatability" as being synonyms.*		
Withdrawal (check one)		X	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	X	'Related' is mutually agreed upon. **(Needs no motion.)**	**GO TO "Persuasive" subsection**

Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	Editorial to merge rows since*5.1.20 defines "precision" and "repeatability" as being synonyms.*	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	**X**	*Comment generated.* ***See Section V-(ii)*** ***Comment #*** *NC-11.*		

Negative 29

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 8.2 Investigate the variability in the inputs. These may include:		
		8.2		
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**		
		Negative: Clarify what "variability" is intended to mean. *Reason/Justification: For example, is this intended to refer to the ranges through which the inputs may be adjusted? Is it intended to refer to the stability of the blend systems output when the inputs vary spontaneously?*		
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**	**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**	
			Reason	The task force does not believe the lack of the reviewer's understanding of intent is grounds for modification.
	Motion by/ 2nd by	By: Koh Murai / Mega Fluid Systems, Inc. Second: David Kandiyeli / Mega Fluid Systems, Inc.		
	Discussion	None		
	Result of Vote (check one)	7 **Y**- 0 **N**; Motion passed.		
		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	
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)	

Negative 30

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 8.3 Study the output response to these inputs. These may include: 8.3.1 Single or multiple variable effect analysis. • Total error over operating range • Repeatability of a specific range or target value • Accuracy or linearity over the target range • Reproducibility, if significant manual input • Response to a step change in input		
		8.3.1		
	Negative Text	*Negative: Make this a bullet item, not a numbered paragraph.* *Reason/Justification: This appears to have been a formatting error.*		
Withdrawal (check one)		X	No Negative withdrawal made by Voter.	GO TO "Related" subsection
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)	GO TO "Persuasive" subsection
Persuasive	Motion and Reason (check one)	X	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)	
			Reason	Editorial in nature, formatting error.
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals		
	Discussion	None		
	Result of Vote (check one)	3 Y 0 N; Motion passed.		
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	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)	X	*Comment generated. See Section V-(ii) Comment # NC-12.*	

Negative 31

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 9.1 Factory Acceptance Methods (FAT) at supplier site and acceptance methods at customer site (SAT) should be negotiated with the end-user prior to construction. Elements of this testing may include those items shown in § 9.2. Testing should be performed using UPW and then the intended chemical of use (if required) in that order. After testing any residual liquid impurities should be removed prior to shipment.					
		9.1					
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**					
		Negative: Rewrite "Factory Acceptance Methods (FAT) at supplier site and acceptance methods at customer site (SAT)", either removing what appear to have been intended to be initialisms or replace the phrases with phrases for which "FAT" and "SAT" are initialisms. Reason/Justification: "FAT" is the initialism of, for example "factory acceptance testing", but "Method" does not start with "T".					
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.				**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**				**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**				
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation					
	Discussion	None					
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.					
		X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	**X**	**Y**	**GO TO "Address by Technical Change Option" subsection**
			[Negative is related and not persuasive.] < 2/3			**N**	**GO TO "Final" subsection → (E)**
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 9.1** 9.1 Factory Acceptance Methods (FAT) at supplier site and acceptance methods at customer site (SAT) should be negotiated with the end-user prior to construction. Elements of this testing may include those items shown in § 9.2. Testing should be performed using UPW and then the intended chemical of use (if required) in that order. After testing any residual liquid impurities should be removed prior to shipment.				
			TO: Section/Paragraph 9.1 9.1 Factory ~~A~~acceptance ~~Methods~~tests (FAT) at supplier site and site acceptance ~~methods~~ tests (SAT) at the customer site ~~(SAT)~~ should be negotiated with the end-user prior to construction. Elements of this testing may include those items shown in § 9.2. Testing should be performed using UPW (or other surrogate) and then the intended chemical of use (if required) in that order. After testing any residual liquid impurities should be removed prior to shipment.				
			Justification (If necessary) Update to align with acronyms and add additional clarity to the section.				

	Motion		Negative is addressed by the technical change(s).		
	Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation		
	Discussion		None		
	Result of Vote (check one)		3 **Y**- 0 **N**; Motion passed.		
		X	2/3 ≤ [Negative is addressed by the technical change(s).]	**GO TO "Incorporation of the Technical Change" subsection**	
	Incorporation of the Technical	**Motion**	To incorporate the technical change(s).		
		Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals		
		Discussion	None		
		Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.		
		X	90% ≤ [Agree to incorporate.]	**GO TO "Final" subsection → (F)**	
Final	**(check if applicable)**		**(A)**	Withdrawn **(counted under h in disposition)**	
			(B)	Not related **(counted under i in disposition)**	
			(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**
		X	**(F)**	Addressed by technical change **(counted under k disposition)**	

Negative 32

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.**		
		9.2		
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**		
		Negative: Remove the reference to UPW or state that UPW is to be used for systems that handle aqueous chemicals. *Reason/Justification: It is far from obvious that it is desirable, or even acceptable, to use UPW to test a system intended to blend nonaqueous materials.*		
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**	**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation		
	Discussion	None		
		3 **Y**- 0 **N**; Motion passed.		

Result of Vote (check one)	X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	X	Y	**GO TO "Address by Technical Change Option" subsection**
		[Negative is related and not persuasive.] < 2/3			N	**GO TO "Final" subsection → (E)**

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 9.1

9.1 Factory acceptance tests (FAT) at supplier site and site acceptance tests (SAT) at the customer site should be negotiated with the end-user prior to construction. Elements of this testing may include those items shown in § 9.2. Testing should be performed using UPW (or other surrogate) and then the intended chemical of use (if required) in that order. After testing any residual liquid impurities should be removed prior to shipment.

TO: Section/Paragraph 9.1

9.1 Factory acceptance tests (FAT) at supplier site and site acceptance tests (SAT) at the customer site should be negotiated with the end-user prior to construction. Elements of this testing may include those items shown in § 9.2. Testing should be performed using UPW (or other surrogate) and then the intended chemical of use (if required) in that order unless the chemicals being blended are not aqueous. In such cases, an alternative chemical can be used instead of UPW as the first chemical, see § 9.2.6.1. After testing any residual liquid impurities should be removed prior to shipment.

Justification (If necessary)

The document already mentions substituting other chemicals instead of UPW as test chemicals for non-aqueous blends. Modify 9.1 to improve the intent.

Motion		Negative is addressed by the technical change(s).	
Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation	
Discussion		None	
Result of Vote (check one)		3 **Y**- 0 **N**; Motion passed.	
	X	2/3 ≤ [Negative is addressed by the technical change(s).]	**GO TO "Incorporation of the Technical Change" subsection**

Incorporation of the Technical

Motion		To incorporate the technical change(s).	
Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals	
Discussion		None	
Result of Vote (check one)		3 **Y**- 0 **N**; Motion passed.	
	X	90% ≤ [Agree to incorporate.]	**GO TO "Final" subsection → (F)**

Final

(check if applicable)			
	(A)	Withdrawn **(counted under h in disposition)**	
	(B)	Not related **(counted under i in disposition)**	
	(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**
X	**(F)**	Addressed by technical change **(counted under k disposition)**	

Negative 33

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 9.2.1 *Tool Connection and Facilitization* — Physical tool hookup/connections should match the installed system environment, such as recirculating loop, back pressure loop, connection size and connection type.			
		9.2.1			
	Negative Text	*Negative: Insert the missing Oxford comma between "size" and "and".* *Reason/Justification: SEMI's Style Guide mandates the use of Oxford commas.*			
Withdrawal (check one)		X	No Negative withdrawal made by Voter.		GO TO "Related" subsection
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection
Persuasive	Motion and Reason (check one)	X	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		
			Reason	Editorial in nature, add comma.	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	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)	X	*Comment generated. See Section V-(ii) Comment # NC-13.*		

Negative 34

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 9.2.3 *Hydraulic Distribution Performance* — Ensure the system matches the end-user's flow and pressure requirements in UPW and the intended chemical of use (if required).		
		9.2.3		
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.*		
		Negative: Change "Ensure" to "Determine whether". *Reason/Justification: "Ensure" means to act, if and as necessary, to make something true. That's not a "Test Method".*		
Withdrawal (check one)		X	No Negative withdrawal made by Voter.	GO TO "Related" subsection

Related	**Motion and Reason (check one)**	**X**	‘Related’ is mutually agreed upon. **(Needs no motion.)**					**GO TO “Persuasive” subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**					
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation						
	Discussion	None						
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.						
		X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	**X**	**Y**		**GO TO “Address by Technical Change Option” subsection**
			[Negative is related and not persuasive.] < 2/3			**N**		**GO TO “Final” subsection → (E)**
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 9.2.3** 9.2.3 *Hydraulic Distribution Performance* — Ensure the system matches the end-user’s flow and pressure requirements in UPW and the intended chemical of use (if required).					
			TO: Section/Paragraph 9.2.3 9.2.3 *Hydraulic Distribution Performance* — ~~Ensure~~ Determine whether the system matches the end-user’s flow and pressure requirements in UPW and the intended chemical of use (if required).					
			Justification (If necessary) Agree with suggested wording, change “Ensure” to “Determine whether”					
	Motion	Negative is addressed by the technical change(s).						
	Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation						
	Discussion	None						
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.						
		X	2/3 ≤ [Negative is addressed by the technical change(s).]					**GO TO “Incorporation of the Technical Change” subsection**
	Incorporation of the Technical	**Motion**	To incorporate the technical change(s).					
		Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals					
		Discussion	None					
		Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.					
			X	90% ≤ [Agree to incorporate.]				**GO TO “Final” subsection → (F)**
Final	**(check if applicable)**		**(A)**	Withdrawn **(counted under h in disposition)**				
			(B)	Not related **(counted under i in disposition)**				

			(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**
		X	(F)	Addressed by technical change **(counted under k disposition)**	

Negative 35

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 9.2.4 *Impurities* — SEMI F57 and SEMI E49 should be used as general guidelines for allowable impurities in the construction and delivery of chemical blending systems. End-users and equipment manufacturers should develop acceptance criteria for each impurity for a given application. Appropriate test methods can be found in SEMI C1.					
		9.2.4					
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**					
		Negative: Expand or qualify the reference to SEMI C1. *Reason/Justification: Many of the relevant test methods are in other "C" documents, rather than in SEMI C1.*					
	Withdrawal (check one)	X	No Negative withdrawal made by Voter.				**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	X	'Related' is mutually agreed upon. **(Needs no motion.)**				**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	X	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**				
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation					
	Discussion	None					
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.					
		X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	X	Y	**GO TO "Address by Technical Change Option" subsection**
			[Negative is related and not persuasive.] < 2/3			N	**GO TO "Final" subsection → (E)**
Address by Technical Change	**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 9.2.4** 9.2.4 *Impurities* — SEMI F57 and SEMI E49 should be used as general guidelines for allowable impurities in the construction and delivery of chemical blending systems. End-users and equipment manufacturers should develop acceptance criteria for each impurity for a given application. Appropriate test methods can be found in SEMI C1.					

		TO: Section/Paragraph 9.2.4 9.2.4 *Impurities* — SEMI F57 and SEMI E49 should be used as general guidelines for allowable impurities in the construction and delivery of chemical blending systems. End-users and equipment manufacturers should develop acceptance criteria for each impurity for a given application. Appropriate test methods can be found in other SEMI Standards~~C1~~.			
		Justification (If necessary) Update reference to not be specific.			
	Motion	Negative is addressed by the technical change(s).			
	Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation			
	Discussion	None			
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is addressed by the technical change(s).]	**GO TO "Incorporation of the Technical Change" subsection**	
	Incorporation of the Technical **Motion**	To incorporate the technical change(s).			
	Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.			
		X	90% ≤ [Agree to incorporate.]	**GO TO "Final" subsection → (F)**	
Final	**(check if applicable)**		**(A)**	Withdrawn **(counted under h in disposition)**	
			(B)	Not related **(counted under i in disposition)**	
			(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**
		X	**(F)**	Addressed by technical change **(counted under k disposition)**	

Negative 36

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 9.2.6 *In Situ Chemical Testing* — Use SEMI S2 as a guideline, but your company and local government regulations should prevail.		
		9.2.6		
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**		
		Negative: Change or remove this or explain how SEMI S2, is to be used for testing a blending system. *Reason/Justification: I've been working with and on SEMI S2 for more than a quarter century and I have no idea what this is intended to mean.* *As SEMI S2 is an EHS Guideline, this appears to be an attempt to direct that some safety and environmental assessment be done.*		
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**

Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**					**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**					
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation						
	Discussion	None						
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.						
		X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	**X**	**Y**		**GO TO "Address by Technical Change Option" subsection**
			[Negative is related and not persuasive.] < 2/3			**N**		**GO TO "Final" subsection → (E)**
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 9.2.6** 9.2.6 *In Situ Chemical Testing* — Use SEMI S2 as a guideline, but your company and local government regulations should prevail. 9.2.6.1 The in situ chemical testing, when needed, will require the repeating of §§ 9.2.1 through 9.2.5 with the appropriate test chemical instead of UPW, however the requirements of using the exact chemical verses using UPW may differ. Consult the end customer for advice.					
			TO: Section/Paragraph 9.2.6 9.2.6 *In Situ Chemical Testing* — ~~Use SEMI S2 as a guideline, but your company and local government regulations should prevail.~~ ~~9.2.6.1~~ The in situ chemical testing, when needed, will require the repeating of §§ 9.2.1 through 9.2.5 with the appropriate test chemical instead of UPW, however the requirements of using the exact chemical verses using UPW may differ. Consult the end customer for advice.					
			Justification (If necessary) The original intention of the task force was to incorporate EHS testing in chemical. As there was ambiguity, we decided to remove the modifier in the header.					
	Motion		Negative is addressed by the technical change(s).					
	Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation					
	Discussion		None					
	Result of Vote (check one)		3 **Y**- 0 **N**; Motion passed.					
			X	2/3 ≤ [Negative is addressed by the technical change(s).]				**GO TO "Incorporation of the Technical Change" subsection**
	Incorporation	**Motion**	To incorporate the technical change(s).					
		Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals					

		Discussion	None					
		Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.					
			X	90% ≤ [Agree to incorporate.]				**GO TO "Final" subsection → (F)**
Final	**(check if applicable)**			**(A)**	Withdrawn **(counted under h in disposition)**			
				(B)	Not related **(counted under i in disposition)**			
				(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**
			X	**(F)**	Addressed by technical change **(counted under k disposition)**			

Negative 37

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 9.3 *Qualification Testing* — The supplier of the chemical blending system is to perform outgoing qualification testing with regard to on the incoming liquid constituents as well as the final blended material being transported through each blending system. Use SEMI F41 as a guideline, but your company regulations should prevail.						
		9.3						
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**						
		Negative: Rewrite this to clarify "with regard to on the incoming liquid constituents". Reason/Justification: I don't understand what was meant here and "to on" appears to be an error.						
	Withdrawal (check one)		**X**	No Negative withdrawal made by Voter.				**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**		**X**	'Related' is mutually agreed upon. **(Needs no motion.)**				**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**		**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**				
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation						
	Discussion	None						
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.						
			X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	**X**	**Y**	**GO TO "Address by Technical Change Option" subsection**
				[Negative is related and not persuasive.] < 2/3			**N**	**GO TO "Final" subsection → (E)**
Address	**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 9.3** 9.3 *Qualification Testing* — The supplier of the chemical blending system is to perform outgoing qualification testing with regard to on the incoming liquid constituents as well as the final blended material being transported through each blending system. Use SEMI F41 as a guideline, but your company regulations should prevail. 9.3.1 Qualification testing may include tests for:				
		TO: Section/Paragraph 9.3 9.3 *Qualification Testing* — The supplier of the chemical blending system is to perform outgoing qualification testing ~~with regard to on the~~of incoming liquid constituents as well as the final blended material being transported through each blending system. ~~Use~~ SEMI F41 can be used as a guideline, but your ~~company regulations~~customer's requirements should prevail. ~~9.3.1~~ Qualification testing may include tests for:				
		Justification (If necessary) Inclusion of "on" was inadvertently left in during a revision cycle. The statement was corrected to indicate "customer requirements" instead of "company regulations" to remove ambiguity.				
Motion		Negative is addressed by the technical change(s).				
Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation				
Discussion		None				
Result of Vote (check one)		3 **Y**- 0 **N**; Motion passed.				
		X	2/3 ≤ [Negative is addressed by the technical change(s).]		**GO TO "Incorporation of the Technical Change" subsection**	
Incorporation of the Technical	**Motion**	To incorporate the technical change(s).				
	Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals				
	Discussion	None				
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.				
		X	90% ≤ [Agree to incorporate.]		**GO TO "Final" subsection → (F)**	

Final	(check if applicable)		**(A)**	Withdrawn **(counted under h in disposition)**	
			(B)	Not related **(counted under i in disposition)**	
			(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**
		X	**(F)**	Addressed by technical change **(counted under k disposition)**	

Negative 38

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.**		
		9.3.1		
	Negative Text	*Negative: As this is the only paragraph subordinate to ¶9.3, merge it with ¶9.3 and promote each of the 9.3.1.x paragraphs to 9.3.x paragraphs..* *Reason/Justification: There is no ¶9.3.2, so there's no need for this level of numbering.*		
Withdrawal (check one)		**X**	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**

Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**		**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	Editorial to update format to bulleting.	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	**X**	*Comment generated.* ***See Section V-(ii)*** ***Comment #*** *NC-14.*		

Negative 39

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 9.3.1.1 Basic mechanical blend system function: verify the system is constructed as specified.		
		9.3.1.1		
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**		
		Negative: Rewrite this to state, clearly, what is to be verified. *Reason/Justification: "Function" does not "verify" construction, nor does having been "constructed as specified" ensure that the system will perform the desired function.*		
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**	**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation		
	Discussion	None		
		3 **Y**- 0 **N**; Motion passed.		

	Result of Vote (check one)	X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended?** (check one)	X	Y	**GO TO "Address by Technical Change Option" subsection**
			[Negative is related and not persuasive.] < 2/3			N	**GO TO "Final" subsection → (E)**

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 9.3.1.1

9.3.1.1 Basic mechanical blend system function: verify the system is constructed as specified.

TO: Section/Paragraph 9.3.1

9.3.1~~.1~~ Basic ~~mechanical~~ blend system function: verify the system ~~is constructed as specified~~performs the operational tasks and generates the product required by the end user to the end user's specifications.

Justification (If necessary)

The statement was too general, so the statement was reworded.

Motion	Negative is addressed by the technical change(s).		
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation		
Discussion	None		
Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.		
	X	2/3 ≤ [Negative is addressed by the technical change(s).]	**GO TO "Incorporation of the Technical Change" subsection**

Incorporation of the Technical

Motion	To incorporate the technical change(s).		
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals		
Discussion	None		
Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.		
	X	90% ≤ [Agree to incorporate.]	**GO TO "Final" subsection → (F)**

Final

(check if applicable)		(A)	Withdrawn **(counted under h in disposition)**
		(B)	Not related **(counted under i in disposition)**
		(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**
	X	(F)	Addressed by technical change **(counted under k disposition)**

Negative 40

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 9.3.1.4 *Trace Metals* — Refer to the current revision of SEMI E49.2, Table 1 for the specific metals that should be tested for a test method.
		9.3.1.4

	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**						
		Negative: Rewrite this to clarify whether the Table in E49.2 is to be consulted to determine for what substances one is to test or to determine how to test for the substances that have been identified by some other means. *Reason/Justification: I can't tell which was meant.*						
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.				**GO TO "Related" subsection**	
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**				**GO TO "Persuasive" subsection**	
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**					
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation						
	Discussion	None						
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.						
		X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	**X**	**Y**	**GO TO "Address by Technical Change Option" subsection**	
			[Negative is related and not persuasive.] < 2/3			**N**	**GO TO "Final" subsection → (E)**	
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 9.3.1.4** 9.3.1.4 *Trace Metals* — Refer to the current revision of SEMI E49.2, Table 1 for the specific metals that should be tested for a test method.					
			TO: Section/Paragraph 9.3.4 9.3~~.1~~.4 *Trace Metals* — Refer to the current revision of SEMI E49.2, Table 1 for ~~the~~a list of specific metals ~~that should be tested~~, suggested impurity limits, and references for ~~a test~~testing method.					
			Justification (If necessary) Reviewer did not read SEMI E49.2 Table 1, so did not realize the options they presented were both covered. To remove ambiguity, the task force added a few words to clarify.					
	Motion	Negative is addressed by the technical change(s).						
	Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation						
	Discussion	None						
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.						
		X	2/3 ≤ [Negative is addressed by the technical change(s).]				**GO TO "Incorporation of the Technical Change" subsection**	
	Incorporati	**Motion**	To incorporate the technical change(s).					
		Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals					

		Discussion	None			
		Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.			
			X	90% ≤ [Agree to incorporate.]		**GO TO "Final" subsection → (F)**

Final	**(check if applicable)**		**(A)**	Withdrawn **(counted under h in disposition)**	
			(B)	Not related **(counted under i in disposition)**	
			(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**
		X	**(F)**	Addressed by technical change **(counted under k disposition)**	

Negative 41

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 9.3.1.5 *Anions* — Refer to the current revision of SEMI E49.2, Table 1 for the specific anions that should be tested for a test method.					
		9.3.1.5					
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**					
		Negative: Rewrite this to clarify whether the Table in E49.2 is to be consulted to determine for what substances one is to test or to determine how to test for the substances that have been identified by some other means. *Reason/Justification: I can't tell which was meant.*					
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.				**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**				**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**				
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation					
	Discussion	None					
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.					
		X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	**X**	**Y**	**GO TO "Address by Technical Change Option" subsection**
			[Negative is related and not persuasive.] < 2/3			**N**	**GO TO "Final" subsection → (E)**
Address	**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 9.3.1.5** 9.3.1.5 *Anions* — Refer to the current revision of SEMI E49.2, Table 1 for the specific anions that should be tested for a test method.			
		TO: Section/Paragraph 9.3.5 9.3.~~1~~.5 *Anions* — Refer to the current revision of SEMI E49.2, Table 1 for the specific anions ~~that should be tested~~, suggested impurity limits, and references for ~~a test~~testing method.			
		Justification (If necessary) The statement was too general, so the statement was reworded.			
Motion		Negative is addressed by the technical change(s).			
Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation			
Discussion		None			
Result of Vote (check one)		3 **Y**- 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is addressed by the technical change(s).]	**GO TO "Incorporation of the Technical Change" subsection**	
Incorporation of the Technical	**Motion**	To incorporate the technical change(s).			
	Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.			
		X	90% ≤ [Agree to incorporate.]	**GO TO "Final" subsection → (F)**	

Final	(check if applicable)		**(A)**	Withdrawn **(counted under h in disposition)**
			(B)	Not related **(counted under i in disposition)**
			(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**
		X	**(F)**	Addressed by technical change **(counted under k disposition)**

Negative 42

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 9.3.1.7 *Total Organic Carbon* — Refer to the current revision of SEMI E49.2, § 9.4.2 for the total organics test method.		
		9.3.1.7		
	Negative Text	*Negative: Delete "the current revision of" or explain why it matter which revision one consults for TOC, but not for any of the other analytes.* *Reason/Justification: As stated in the NOTICE in Referenced Standards and Documents, the default is the latest edition for all of the references.*		
Withdrawal (check one)		**X**	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**

Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**		**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	Editorial to remove wording that is redundant. *As stated in the NOTICE in Referenced Standards and Documents, the default is the latest edition for all of the references, so it is not needed to say "current revision"*	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	**X**	*Comment generated.* ***See Section V-(ii)*** ***Comment #*** *NC-15.*		

Negative 43

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 9.4.1 Metallic impurities expressed as ppt, ppb or ppm. Refer the appropriate SEMI Standard for the chemical under consideration to determine the specific grade or tier necessary for the process.		
		9.4.1		
	Negative Text	*Negative: Insert the missing Oxford comma between "ppb" and "or".* *Reason/Justification: SEMI's Style Guide mandates the use of Oxford commas.*		
Withdrawal (check one)		**X**	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**	**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**	
			Reason	Editorial in nature, add comma.
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals		
	Discussion	None		
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.		

		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	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)	X	*Comment generated. See Section V-(ii) Comment # NC-16.*		

Negative 44

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 9.4.2 Anions expressed as ppt, ppb or ppm. Refer the appropriate SEMI Standard for the chemical under consideration to determine the specific grade or tier necessary for the process.			
		9.4.2			
	Negative Text	*Negative: Insert the missing Oxford comma between "ppb" and "or".* *Reason/Justification: SEMI's Style Guide mandates the use of Oxford commas.*			
Withdrawal (check one)		X	No Negative withdrawal made by Voter.	GO TO "Related" subsection	
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)	GO TO "Persuasive" subsection	
Persuasive	Motion and Reason (check one)	X	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		
			Reason	Editorial in nature, add comma.	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	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)	X	*Comment generated. See Section V-(ii) Comment # NC-17.*		

Negative 45

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 9.4.3 Particulate impurities are expressed as the number of particles of a specific size greater than some threshold per mL.					
		9.4.3					
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**					
		Negative: Change "of a specific size greater than some threshold" to "greater than a threshold size" *Reason/Justification: What is limitted is the number of particles above the threshold size, not the number of particles of a "specific" size.*					
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.				**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**				**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**				
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation					
	Discussion	None					
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.					
		X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	**X**	**Y**	**GO TO "Address by Technical Change Option" subsection**
			[Negative is related and not persuasive.] < 2/3			**N**	**GO TO "Final" subsection → (E)**

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 9.4.3** 9.4.3 Particulate impurities are expressed as the number of particles of a specific size greater than some threshold per mL.
			TO: Section/Paragraph 9.4.3 9.4.3 Particulate impurities are expressed as the number of particles ~~of a specific size~~ greater than some threshold diameter per mL.
			Justification (If necessary) Particulate impurities should be expressed as number of particles per unit volume greater than some size threshold, so the statement was reworded.
	Motion		Negative is addressed by the technical change(s).
	Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation
	Discussion		None
	Result of Vote		3 **Y**- 0 **N**; Motion passed.

	(check one)		X	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection
	Incorporation of the Technical	Motion	To incorporate the technical change(s).		
		Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals		
		Discussion	None		
		Result of Vote (check one)	3 Y- 0 N; Motion passed.		
			X	90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)

Final	(check if applicable)		(A)	Withdrawn (counted under h in disposition)	
			(B)	Not related (counted under i in disposition)	
			(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
		X	(F)	Addressed by technical change (counted under k disposition)	

Negative 46

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 9.4.4 Organic impurities are express as ppt, ppb or ppm. Refer to the appropriate SEMI Standard for the chemical under consideration to determine the specific grade or tier necessary for the process.			
		9.4.4			
	Negative Text	*Negative: Insert the missing Oxford comma between "ppb" and "or".* *Reason/Justification: SEMI's Style Guide mandates the use of Oxford commas.*			
	Withdrawal (check one)		X	No Negative withdrawal made by Voter.	GO TO "Related" subsection
Related	Motion and Reason (check one)		X	'Related' is mutually agreed upon. (Needs no motion.)	GO TO "Persuasive" subsection
Persuasive	Motion and Reason (check one)		X	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)	
				Reason	Editorial in nature, add comma.
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 Y 0 N; Motion passed.			
			X	2/3 ≤ [Negative is related and not persuasive.] < 90%	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)	**X**	*Comment generated.* ***See Section V-(ii)*** ***Comment #*** *NC-18.*		

Negative 47

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 10.1 (3 places)			
	Negative Text	*Negative: Change "KPI's" to "KPIs"* *Reason/Justification: The usage is plural, not possessive.*			
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.		**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**		**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	Editorial in to fix punctuation; apostrophe is inappropriately used.	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	**X**	*Comment generated.* ***See Section V-(ii)*** ***Comment #*** *NC-19.*		

Negative 48

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 10.1 Identification and implementation of key performance indicators (KPI's) for liquid chemical blending are situationally dependent. Comprehensive guidelines for KPI's are, therefore, outside the scope of this Guide. Each process owner is responsible for defining their KPI's through evaluation of several factors such as raw material quality, asset capability and reliability, quality management system requirements, and customer need. References to any applicable material supplier, equipment manufacturer, quality management system, and/or industry standards and limitations should be cited whenever possible. Several examples of previously accepted performance reporting data for liquid chemical blending (per SEMI F31) are provided below.

		10.1						
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**						
		Negative: Change "and/or" to "or". *Reason/Justification: "Or" includes the possibility of more than one item. For example: "A or B" means any of "A", "B", or "A and B", Contrarily, "either A or B" means either "A" or "B", but excludes "A and B".*						
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.				**GO TO "Related" subsection**	
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**				**GO TO "Persuasive" subsection**	
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**					
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation						
	Discussion	None						
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.						
		X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	**X**	**Y**	**GO TO "Address by Technical Change Option" subsection**	
			[Negative is related and not persuasive.] < 2/3			**N**	**GO TO "Final" subsection → (E)**	

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 10.1

10.1 Identification and implementation of key performance indicators (KPI's) for liquid chemical blending are situationally dependent. Comprehensive guidelines for KPI's are, therefore, outside the scope of this Guide. Each process owner is responsible for defining their KPI's through evaluation of several factors such as raw material quality, asset capability and reliability, quality management system requirements, and customer need. References to any applicable material supplier, equipment manufacturer, quality management system, and/or industry standards and limitations should be cited whenever possible. Several examples of previously accepted performance reporting data for liquid chemical blending (per SEMI F31) are provided below.

TO: Section/Paragraph 10.1

10.1 Identification and implementation of key performance indicators (KPI's) for liquid chemical blending are situationally dependent. Comprehensive guidelines for KPI's are, therefore, outside the scope of this Guide. Each process owner is responsible for defining their KPI's through evaluation of several factors such as raw material quality, asset capability and reliability, quality management system requirements, and customer need. References to any applicable material supplier, equipment manufacturer, quality management system, ~~and/~~or industry standards and limitations should be cited whenever possible. Several examples of previously accepted performance reporting data for liquid chemical blending (per SEMI F31) are provided below.

Justification (If necessary)
Clarify wording to remove ambiguity.

Motion	Negative is addressed by the technical change(s).

	Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation		
	Discussion		None		
	Result of Vote (check one)		3 **Y**- 0 **N**; Motion passed.		
		X	2/3 ≤ [Negative is addressed by the technical change(s).]		**GO TO "Incorporation of the Technical Change" subsection**
	Incorporation of the Technical — **Motion**		To incorporate the technical change(s).		
	Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals		
	Discussion		None		
	Result of Vote (check one)		3 **Y**- 0 **N**; Motion passed.		
		X	90% ≤ [Agree to incorporate.]		**GO TO "Final" subsection → (F)**

Final	**(check if applicable)**		**(A)**	Withdrawn **(counted under h in disposition)**	
			(B)	Not related **(counted under i in disposition)**	
			(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**
		X	**(F)**	Addressed by technical change **(counted under k disposition)**	

Negative 49

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 10.1.1 *Error* — The error of the blend is the sum of the errors resulting from accuracy. This is expressed as a %.						
		10.1.1						
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**						
		Negative: Rewrite this to explain or eliminate the reference to "sum". *Reason/Justification: There is only one "accuracy".*						
	Withdrawal (check one)		**X**	No Negative withdrawal made by Voter.				**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**		**X**	'Related' is mutually agreed upon. **(Needs no motion.)**				**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**		**X**	Negative is related and persuasive. **(Needs >1/3 votes to pass.)**				
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation						
	Discussion	None						
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.						
			X	[Negative is related and persuasive.] > 1/3	**Is a technical change recommended? (check one)**	**X**	**Y**	**GO TO "Address by Technical Change Option" subsection**

			[Negative is related and not persuasive.] < 2/3			N	GO TO "Final" subsection → (E)

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 10.1.1

10.1.1 *Error* — The error of the blend is the sum of the errors resulting from accuracy. This is expressed as a %.

TO: Section/Paragraph 10.1.1

10.1.1 *Error* — Inaccuracies in the proportion, quantity, or addition rate will affect the blend error. The blend error of ~~the blend is the sum of~~each constituent in the ~~errors resulting from accuracy. This is~~final blend is typically expressed ~~as a~~in mass % or volume %.

Justification (If necessary)
The word "sum" was ambiguously used to describe the impact on blend error due to the "contribution" of errors from the various activities performed to generate the blended chemical.

Motion		Negative is addressed by the technical change(s).	
Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation	
Discussion		None	
Result of Vote (check one)		3 **Y**- 0 **N**; Motion passed.	
		X — 2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection
Incorporation of the Technical	**Motion**	To incorporate the technical change(s).	
	Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals	
	Discussion	None	
	Result of Vote (check one)	3 **Y**- 0 **N**; Motion passed.	
		X — 90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)

Final

(check if applicable)			
	(A)	Withdrawn **(counted under h in disposition)**	
	(B)	Not related **(counted under i in disposition)**	
	(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
X	**(F)**	Addressed by technical change **(counted under k disposition)**	

Negative 50

Negative

Referenced Section/ Paragraph	
	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 10.1.5 *Repeatability/Precision* — An estimate of how close the measured values for a given actual value match each other. This should be done on a per value basis. This is reported as a difference over the range of sample size.
	10.1.5

	Negative Text	*Negative: Change "close" to "closely".* *Reason/Justification: The word modifies a verb, not a noun.*			
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.		**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**		**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	Editorial to correct grammar.	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	**X**	*Comment generated.* ***See Section V-(ii)*** ***Comment #*** *NC-20.*		

Negative 51

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.** 10.1.6 *Mean Time Between Failure (MTBF)* — Report MTBF in units of time between failure events. The definition of failure should be determined by agreement between the vendor and the customer, but typically is defined as an inability to produce the required blend.			
		10.1.6			
	Negative Text	*Negative: Change "vendor" to "supplier" or explain what the difference is.* *Reason/Justification: There's no obvious difference between what is meant by "vendor" here and what is meant by "supplier" elsewhere in the document. If there is no difference in meaning, use the same term. If there is a difference in meaning, explain it.*			
	Withdrawal (check one)	**X**	No Negative withdrawal made by Voter.		**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**		**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	"supplier" and "vendor" can be used interchangeably dependent on the reference point of the person reading the document. Change does not affect technical content of statement.	

	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	**X**	*Comment generated.* ***See Section V-(ii)*** ***Comment #*** *NC-21.*		

Negative 52

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.*** 10.1.7 *Mean Time Between Assists (MTBA)* — Report MTBA in the units of time between assist events. The definition of an assist should be determined by agreement between the vendor and the customer, but typically assist is defined as the required intervention by maintenance or operating personnel to return the system to the normal operational routine present before the event causing the assist occurred.		
		10.1.7		
	Negative Text	*Negative: Change "vendor" to "supplier" or explain what the difference is.* *Reason/Justification: There's no obvious difference between what is meant by "vendor" here and what is meant by "supplier" elsewhere in the document. If there is no difference in meaning, use the same term. If there is a difference in meaning, explain it.*		
Withdrawal (check one)		**X**	No Negative withdrawal made by Voter.	**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	**X**	'Related' is mutually agreed upon. **(Needs no motion.)**	**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	**X**	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**	
			Reason	"supplier" and "vendor" can be used interchangeably dependent on the reference point of the person reading the document. Change does not affect technical content of statement.
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals		
	Discussion	None		
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.		
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	X	*Comment generated. See Section V-(ii) Comment # NC-22.*		

Negative 53

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 10.1.8 *Particles* — Particle performance should be expressed in the same manner as bulk chemical distribution systems (BCDS) (i.e., < x particles/mL at > 0.y µm).			
		10.1.8			
	Negative Text	*Negative: Change "bulk chemical" to "for bulk chemical".* *Reason/Justification: Correct grammar.*			
	Withdrawal (check one)	X	No Negative withdrawal made by Voter.	GO TO "Related" subsection	
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)	GO TO "Persuasive" subsection	
Persuasive	Motion and Reason (check one)	X	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		
			Reason	Editorial to clarify grammar.	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	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)	X	*Comment generated. See Section V-(ii) Comment # NC-23.*		

Negative 54

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 10.1.9 *Trace Metals* — Metallic purity performance should be expressed in a similar manner as BCDS. However, blending systems, by definition, have several source materials, which could include water. Each source material contributes to the 'baseline contamination level' (equivalent to drum contamination level in BCDS). A volumetric combination (based on the volumetric combination of source materials) of the contamination levels should be used to construct the baseline contamination level.

		10.1.9			
	Negative Text	*Negative: Change "manner as BCDS" to "manner as for BCDS".* *Reason/Justification: Correct grammar.*			
Withdrawal (check one)		X	No Negative withdrawal made by Voter.		**GO TO "Related" subsection**
Related	**Motion and Reason (check one)**	X	'Related' is mutually agreed upon. **(Needs no motion.)**		**GO TO "Persuasive" subsection**
Persuasive	**Motion and Reason (check one)**	X	Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)**		
			Reason	Editorial to clarify grammar.	
	Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals			
	Discussion	None			
	Result of Vote (check one)	3 **Y** 0 **N**; Motion passed.			
		X	2/3 ≤ [Negative is related and not persuasive.] < 90%	**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)	X	*Comment generated.* ***See Section V-(ii)*** ***Comment #*** *NC-24.*		

Disposition of Voting Interest Reject 1

Check only when the Document has not been failed.

54	Original number (#) of Negatives			**(g)**
0	Number of Negatives withdrawn			**(h)**
0	Number of Negatives found not related			**(i)**
0	Number of Negatives found not significant			**(j)**
20	Number of Negatives addressed by technical change **(Negative becomes not significant)**			**(k)**
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**

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
None

V. Comments
V- (i) Voters' Comments
None

V-(ii) Comments Created by Handling Negative

Comment (Created by Handling Negative) NC – 1 (SG03)

Comment	*TF/TC Chapter to fill in		
	Note 1 Negative: Change "a blending" to "blending". Reason/Justification: Correct grammar.		
Action	**The TC Chapter agreed to do one of the following actions.**		
	*No motion is required in this step.		
		Already addressed by Commenter #, Comment #	
		No further action was taken by the TC Chapter.	
		Refer to the TF for more consideration.	
		New business	
	X	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.
		X	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 NOTE 1 NOTE 1: By this definition, dilution is a blending. However, blending is a more general case where UPW is not always one of the constituents. Therefore, the term blending is used in the remainder of this Guide.	
		TO: Section/Paragraph NOTE 1 NOTE 1: By this definition, dilution is a form of blending. However, blending is a more general case where UPW is not always one of the constituents. Therefore, the term blending is used in the remainder of this Guide.	
		Justification (If necessary) Editorial in nature to clarify the grammar being used.	

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 2 (SG04)

Comment	*TF/TC Chapter to fill in		
	Note 1 Negative: Change "Therefore, the term" to "The term". Reason/Justification: The use of "blending" throughout the Guide is not a necessary logical consequence of dilution being an example of blending.		
Action	**The TC Chapter agreed to do one of the following actions.**		
	*No motion is required in this step.		
	X	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.
		X	**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 NOTE 1** NOTE 1: By this definition, dilution is a blending. However, blending is a more general case where UPW is not always one of the constituents. Therefore, the term blending is used in the remainder of this Guide.	
		TO: Section/Paragraph NOTE 1 NOTE 1: By this definition, dilution is a form of blending. However, blending is a more general case where UPW is not always one of the constituents. Therefore, the term blending is used in the remainder of this Guide to also include diluting.	
		Justification (If necessary) Editorial in nature to clarify the grammar being used.	

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 3 (SG08)

Comment	*TF/TC Chapter to fill in		
	5.1.9 *Negative: Remove this term.* *Reason/Justification: "Dilution" is not used in the normative text of the document. It appears only in NOTE 1. Furthermore, water is not the only diluent.*		
Action	**The TC Chapter agreed to do one of the following actions.**		
	*No motion is required in this step.		
	X	Editorial change	
			Case 1: No vote in this section:

	Options for editorial change **(check one)**		**To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.**
		X	**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 5.1.9** 5.1.9 *dilution* — combination of a concentrated chemical and UPW to create a lower concentration of the aqueous chemical.	
		TO: Section/Paragraph 5.1.9 ~~5.1.9 *dilution* — combination of a concentrated chemical and UPW to create a lower concentration of the aqueous chemical.~~	
		Justification (If necessary) The term "dilution" is not used anywhere in the document, so it is not necessary to define it. Per the *PM, A3-8, (4) List definitions for terms used elsewhere in the Document.*	

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 4 (SG10)

Comment	***TF/TC Chapter to fill in**		
	5.1.23 *Negative: Remove the latter sentence from this definition.* *Reason/Justification: The latter sentence does not appear to be part of the definition. If the sentence is intended to suggest an educational resource, make it a NOTE. If the sentence is intended to mandate following the guidance in that Manual, make the second sentence part of a numbered paragraph in the appropriate part of this Guide.*		
Action	**The TC Chapter agreed to do one of the following actions.**		
	***No motion is required in this step.**		
			Already addressed by Commenter #, Comment #
			No further action was taken by the TC Chapter.
			Refer to the TF for more consideration.
			New business
		X	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.
		X	**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 5.1.23** 5.1.23 *statistical analysis* — basic statistical analysis and presentation of data for testing and verification of performance parameters. Refer to the ASTM MNL7, Manual on Presentation of Data and Control Chart Analysis.
		TO: Section/Paragraph 5.1.23 5.1.23 *statistical analysis* — basic statistical analysis and presentation of data for testing and verification of performance parameters. NOTE "X": An educational resource or primer in this area can be found in ~~Refer to the~~ ASTM MNL7, Manual on Presentation of Data and Control Chart Analysis.
		Justification (If necessary) Editorial to separate as a note and clarified sentence to intend to suggest an educational resource. (Note number to be updated during final publications)

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 5 (SG14)

Comment			***TF/TC Chapter to fill in**
			6.4.1 Negative: Rewrite or explain this sentence. Reason/Justification: If what was meant was "distribution rate may be limitted by distribution network structure.", then substitute that for the sentence in the ballot. If something else was meant, rewrite ¶6.4.1 to state it clearly. I see no "limitations" to classify and no such classifications in §6.4.
Action			**The TC Chapter agreed to do one of the following actions.**
			***No motion is required in this step.**
			Already addressed by Commenter #, Comment #
			No further action was taken by the TC Chapter.
			Refer to the TF for more consideration.
			New business
	X		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.
		X	**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 6.4.1** 6.4 *Distribution Rate* 6.4.1 Distribution Rate limitations may be classified by distribution network structure. 6.4.2 In a global fluid distribution network designed as a circulating loop, the distribution rate should be greater than the customer's demand rate at any given time to ensure a continuous supply of blended product to the customer's downstream process equipment. 6.4.3 If the global distribution network is designed without circulation capability, then the distribution rate should equal the customer's demand rate. 6.4.4 The distributing section may also function as the blend section, either concurrently if the system is designed with a continuous (in-line) blending methodology, or at different times if designed with a batch or semi-batch blending methodologies. 6.4.5 If sequestration of the blended material in the blend section is required by the system designer for risk mitigation or other purposes, additional processing time may be required for homogenization, batch qualification with metrology, and if the blend section tank is separate from the distribution sum-unit tank, transfer operations. 6.4.6 If the demand cycle has a wide disparity between acute and average blended chemical or slurry consumption, and the downstream fluid demand is continuous, the system designer may consider an adaptive form of continuous (in-line) blending as a blend method or provide more blended product holdup in the distribution circuit than would be indicated to satisfy an average demand. The latter may warrant design consideration to the pot life of the blended chemical or slurry.
		TO: Section/Paragraph 6.4.1 6.4 *Distribution Rate* 6.4.1 Distribution Rate limitations may be classified by distribution network structure. • ~~6.4.2~~ In a global fluid distribution network designed as a circulating loop, the distribution rate should be greater than the customer's demand rate at any given time to ensure a continuous supply of blended product to the customer's downstream process equipment. • ~~6.4.3~~ If the global distribution network is designed without circulation capability, then the distribution rate should equal the customer's demand rate. • ~~6.4.4~~ The distributing section may also function as the blend section, either concurrently if the system is designed with a continuous (in-line) blending methodology, or at different times if designed with a batch or semi-batch blending methodologies. • ~~6.4.5~~ If sequestration of the blended material in the blend section is required by the system designer for risk mitigation or other purposes, additional processing time may be required for homogenization, batch qualification with metrology, and if the blend section tank is separate from the distribution sum-unit tank, transfer operations. • ~~6.4.6~~ If the demand cycle has a wide disparity between acute and average blended chemical or slurry consumption, and the downstream fluid demand is continuous, the system designer may consider an adaptive form of continuous (in-line) blending as a blend method or provide more blended product holdup in the distribution circuit than would be indicated to satisfy an average demand. The latter may warrant design consideration to the pot life of the blended chemical or slurry.
		Justification (If necessary) Sections 6.4.2 through 6.4.6 describe classifications for distribution network design and operation for which guidance was provided. It appears that 6.4.2 through 6.4.6 were not indented properly in the ballot, providing ambiguity. Since there is only one indention beneath 6.4.1, and 6.4.2 through 6.4.6 have no sublevels and there is not required order, 6.4.2 through 6.4.6 were changed to bullets. See Syle Manual Table 1, Rows 1-10 & 1-11.

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 6 (SG18)

Comment	***TF/TC Chapter to fill in**		
	6.5.1 *Negative: Change "RADAR" to "radar"* *Reason/Justification: Although this is, etymologically, an acronym for "radio direction and ranging", the word is in common use and should be written in lower case. This is supported by SEMI's dictionary of choice:* *https://www.merriam-webster.com/dictionary/radar*		
Action	**The TC Chapter agreed to do one of the following actions.**		
	***No motion is required in this step.**		
		Already addressed by Commenter #, Comment #	
		No further action was taken by the TC Chapter.	
		Refer to the TF for more consideration.	
		New business	
	X	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.
		X	**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 6.5.1** 6.5.1 Device redundancy may be used for basic functional parts of importance in adding constituents, evaluating the resulting blended chemical, or distributing the blended chemical or slurry to the customer's downstream processing systems. Selection of said devices may be determined based on failure rate, ease of failure detection, or process severity upon failure. It may be necessary to employ an alternate type of device for redundancy which differs in some non-critical aspect to the device of focus but achieves the same process function. One such example is the utilization of both capacitive and RADAR level sensing for the fixed level metering of constituent addition quantities in a batch chemical blending process.	
		TO: Section/Paragraph 6.5.1 6.5.1 Device redundancy may be used for basic functional parts of importance in adding constituents, evaluating the resulting blended chemical, or distributing the blended chemical or slurry to the customer's downstream processing systems. Selection of said devices may be determined based on failure rate, ease of failure detection, or process severity upon failure. It may be necessary to employ an alternate type of device for redundancy which differs in some non-critical aspect to the device of focus but achieves the same process function. One such example is the utilization of both capacitive and ~~RADAR~~ radar level sensing for the fixed level metering of constituent addition quantities in a batch chemical blending process.	
		Justification (If necessary) Editorial in nature, change to lowercase.	

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 7 (SG19)

Comment	*TF/TC Chapter to fill in		
	6.5.2 *Negative:* Change "fault" to "fail" *Reason/Justification:* "Fault" is noun and denotes a state in which something has gone wrong. The verb for entering such a state is "fail".		
Action	**The TC Chapter agreed to do one of the following actions.**		
	*No motion is required in this step.		
	X	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.
		X	**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 6.5.2** 6.5.2 Section redundancy may be required if multiple devices in a circuit may fault in such a manner as to bring an entire process offline. One such example is to employ multiple blend engines to a batch or semi-batch blending system.	
		TO: Section/Paragraph 6.5.2 6.5.2 Section redundancy may be required if multiple devices in a circuit may ~~fault~~ fail in such a manner as to bring an entire process offline. One such example is to employ multiple blend engines to a batch or semi-batch blending system.	
		Justification (If necessary) Editorial in nature to correct grammar.	

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 8 (SG24)

Comment	*TF/TC Chapter to fill in		
	6.7.1.3 *Negative:* Change "device states, sensor data" to "device states, and sensor data". *Reason/Justification:* The list of things to be stored needs a conjunction to separate it from the list of reasons for storing those things.		
Action	**The TC Chapter agreed to do one of the following actions.**		
	*No motion is required in this step.		
	X	Editorial change	
			Case 1: No vote in this section:

	Options for editorial change **(check one)**		**To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.**
		X	**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 6.7.1.3** 6.7.1.3 Data storage may be requisite to store set points, timers, configurations, device states, sensor data for current use or recall. It may also be used to house programs for running the HMI interface. Storage hardware may be a hardware feature of the HMI or directive sequencing devices or may be provided as part of a separate industrial process computer.	
		TO: Section/Paragraph 6.7.1.3 6.7.1.3 Data storage may be requisite to store set points, timers, configurations, device states, and sensor data for current use or recall. It may also be used to house programs for running the HMI interface. Storage hardware may be a hardware feature of the HMI or directive sequencing devices or may be provided as part of a separate industrial process computer.	
		Justification (If necessary) Editorial to correct grammar and add "and" to separate the list.	

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 9 (SG25)

Comment	***TF/TC Chapter to fill in**		
	6.8.2.1 *Negative: Change "purposes are typically" to "purposes is typically".* *Reason/Justification: Grammar: The number of the verb must agree with the number of the subject, which in this case is "Metrology".*		
Action	**The TC Chapter agreed to do one of the following actions.**		
	***No motion is required in this step.**		
	X	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.
		X	**Case 2: Voted in this section:**
			Original section number and at least one full sentence are required in "FROM" and "TO" fields.
Editorial	**1**	**FROM: Section/Paragraph 6.8.2.1** 6.8.2.1 Metrology used for qualification purposes are typically used as a pass/fail gate in batch and semi-batch blending processes. User-definable limits are often provided by the operator and tied to alarms and various control conditions.	

		TO: Section/Paragraph 6.8.2.1 6.8.2.1 Metrology used for qualification purposes ~~are~~ is typically used as a pass/fail gate in batch and semi-batch blending processes. User-definable limits are often provided by the operator and tied to alarms and various control conditions.
		Justification (If necessary) Editorial in nature to correct grammar.

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 10 (SG26)

Comment			***TF/TC Chapter to fill in**
			6.8.4.4 *Negative: Change "The metrology requires regular service or is a consumable and replacement " to "The metrology requires regular service or uses consumable items and replacement "* *Reason/Justification: "Metrology" is a method. It can include the use of some consumable object, but it can't be one. Furthermore, "consumable" is an adjective, not a noun, although it is used colloquially as if it were a noun.*
Action			**The TC Chapter agreed to do one of the following actions.**
			***No motion is required in this step.**
	X		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.
		X	**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 6.8.4.4** 6.8.4.4 The metrology requires regular servicing or is a consumable and replacement may interrupt processing of the system if it was positioned in the primary process line.
			TO: Section/Paragraph 6.8.4.4 6.8.4.4 The metrology requires regular service~~ing~~ or ~~is a~~uses consumable items and replacement may interrupt processing of the system if it was positioned in the primary process line.
			Justification (If necessary) Editorial to clarify correct use of wording.

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 11 (SG28)

Comment

*TF/TC Chapter to fill in

Table 1 in 6.9.1
Negative: Delete one of, or merge, the "Precision" and "Repeatability" rows.
Reason/Justification: 5.1.20 defines "precision" and "repeatability" as being synonyms.

Action

The TC Chapter agreed to do one of the following actions.

*No motion is required in this step.

	Already addressed by Commenter #, Comment #
	No further action was taken by the TC Chapter.
	Refer to the TF for more consideration.
	New business
X	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.
	X	**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 Table 1 in 6.9.1

Table 1 Guideline for Evaluation and Selection of Blend Technique

Feature	*Batch*	*Semi-Batch*	*Continuous*
Feed-forward Control	-	=	+
Feedback Control	-	=	+
Production Rate	-	=	+
Accuracy	+	=	-
Precision	+	-	-
Repeatability	+	-	-
Real-time Analysis	-	=	+
Parsed Analysis	+	+	-
Homogeneity	+	-	=
Duty Cycle	-	-	+
Material Phase Limitations	+	-	-
Throughput/Size Scalability#1	-	-	+
Process Stability#2	+	=	-

#1 Throughput/size scalability is the available change in supply flow as a function of available changes in physical system size.

#2 Process stability is a measure of the blend system robustness to changes in the physical (not chemical) input properties.

TO: Section/Paragraph Table 1 in 6.9.1

Table 1 Guideline for Evaluation and Selection of Blend Technique

Feature	*Batch*	*Semi-Batch*	*Continuous*
Feed-forward Control	-	=	+
Feedback Control	-	=	+
Production Rate	-	=	+
Accuracy	+	=	-
Precision and Repeatability	+	-	-
~~Repeatability~~	~~+~~	~~-~~	~~-~~
Real-time Analysis	-	=	+
Parsed Analysis	+	+	-
Homogeneity	+	-	=
Duty Cycle	-	-	+
Material Phase Limitations	+	-	-
Throughput/Size Scalability#1	-	-	+
Process Stability#2	+	=	-

#1 Throughput/size scalability is the available change in supply flow as a function of available changes in physical system size.

#2 Process stability is a measure of the blend system robustness to changes in the physical (not chemical) input properties.

Justification (If necessary)

Editorial to merge rows since *5.1.20 defines "precision" and "repeatability" as being synonyms.*

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 12 (SG30)

Comment

***TF/TC Chapter to fill in**

8.3.1

Negative: Make this a bullet item, not a numbered paragraph.

Reason/Justification: This appears to have been a formatting error.

Action

The TC Chapter agreed to do one of the following actions.

***No motion is required in this step.**

X	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.
X	**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 8.3.1** 8.3 Study the output response to these inputs. These may include: 8.3.1 Single or multiple variable effect analysis. • Total error over operating range • Repeatability of a specific range or target value • Accuracy or linearity over the target range • Reproducibility, if significant manual input • Response to a step change in input
		TO: Section/Paragraph 8.3 8.3 Study the output response to these inputs. These may include: • ~~8.3.1~~ Single or multiple variable effect analysis. • Total error over operating range • Repeatability of a specific range or target value • Accuracy or linearity over the target range • Reproducibility, if significant manual input • Response to a step change in input
		Justification (If necessary) Editorial in nature, formatting error.

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 13 (SG33)

Comment			***TF/TC Chapter to fill in**
			9.2.1 *Negative: Insert the missing Oxford comma between "size" and "and".* *Reason/Justification: SEMI's Style Guide mandates the use of Oxford commas.*
Action			**The TC Chapter agreed to do one of the following actions.**
			***No motion is required in this step.**
	X		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.
		X	**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 9.2.1** 9.2.1 *Tool Connection and Facilitization* — Physical tool hookup/connections should match the installed system environment, such as recirculating loop, back pressure loop, connection size and connection type.
			TO: Section/Paragraph 9.2.1 9.2.1 *Tool Connection and Facilitization* — Physical tool hookup/connections should match the installed system environment, such as recirculating loop, back pressure loop, connection size, and connection type.

		Justification (If necessary) Editorial in nature, add comma.
Motion		To approve above editorial change(s)
Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion		None
Vote		3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 14 (SG38)

Comment			***TF/TC Chapter to fill in**
			9.3.1 *Negative: As this is the only paragraph subordinate to ¶9.3, merge it with ¶9.3 and promote each of the 9.3.1.x paragraphs to 9.3.x paragraphs..* *Reason/Justification: There is no ¶9.3.2, so there's no need for this level of numbering.*
Action			**The TC Chapter agreed to do one of the following actions.**
			***No motion is required in this step.**
			Already addressed by Commenter #, Comment #
			No further action was taken by the TC Chapter.
			Refer to the TF for more consideration.
			New business
	X		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.
		X	**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 9.3.1** 9.3.1 Basic mechanical blend system function: verify the system is constructed as specified. 9.3.2 Control system function integrity to include cables and cable harnesses: compare unit under test to the functional test matrix and sequence of operations. 9.3.3 *Utility Consumption* — Measure actual utility consumptions versus predicted consumption at normal, idle, and maximum operation. Measure the flow rates and pressure for process fluids, drains, and gases; electrical power consumption (voltage and current); flow rate and pressure of exhaust and vacuum, at the three conditions. 9.3.4 *Trace Metals* — Refer to the current revision of SEMI E49.2, Table 1 for the specific metals that should be tested for a test method. 9.3.5 *Anions* — Refer to the current revision of SEMI E49.2, Table 1 for the specific anions that should be tested for a test method. 9.3.6 *Particles* — Refer to SEMI E49.2, Table 1 to select an appropriate method for measuring particles coming from the system. 9.3.7 *Total Organic Carbon* — Refer to the current revision of SEMI E49.2, § 9.4.2 for the total organics test method.

		TO: Section/Paragraph 9.3.1 ~~1.1.1.1~~ • Basic mechanical blend system function: verify the system is constructed as specified. ~~1.1.1.2~~ • Control system function integrity to include cables and cable harnesses: compare unit under test to the functional test matrix and sequence of operations. ~~1.1.1.3~~ • *Utility Consumption* — Measure actual utility consumptions versus predicted consumption at normal, idle, and maximum operation. Measure the flow rates and pressure for process fluids, drains, and gases; electrical power consumption (voltage and current); flow rate and pressure of exhaust and vacuum, at the three conditions. ~~1.1.1.4~~ • *Trace Metals* — Refer to the current revision of SEMI E49.2, Table 1 for the specific metals that should be tested for a test method. ~~1.1.1.5~~ • *Anions* — Refer to the current revision of SEMI E49.2, Table 1 for the specific anions that should be tested for a test method. ~~1.1.1.6~~ • *Particles* — Refer to SEMI E49.2, Table 1 to select an appropriate method for measuring particles coming from the system. ~~1.1.1.7~~ • *Total Organic Carbon* — Refer to the current revision of SEMI E49.2, § 9.4.2 for the total organics test method.
		Justification (If necessary) Subordinate sections can be bulleted since there is no order to these. See Style Manual Table 1, Rows 1-10 & 1-11.

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 15 (SG42)

Comment			***TF/TC Chapter to fill in**
			9.3.1.7 *Negative: Delete "the current revision of" or explain why it matter which revision one consults for TOC, but not for any of the other analytes.* *Reason/Justification: As stated in the NOTICE in Referenced Standards and Documents, the default is the latest edition for all of the references.*
Action			**The TC Chapter agreed to do one of the following actions.**
			***No motion is required in this step.**
	X		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.
		X	**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 9.3.1.7** 9.3.1.7 *Total Organic Carbon* — Refer to the current revision of SEMI E49.2, § 9.4.2 for the total organics test method.
		TO: Section/Paragraph 9.3.1.7 9.3.1.7 *Total Organic Carbon* — Refer to ~~the current revision of~~ SEMI E49.2, § 9.4.2 for the total organics test method.
		Justification (If necessary) Editorial to remove wording that is redundant. *As stated in the NOTICE in Referenced Standards and Documents, the default is the latest edition for all of the references, so it is not needed to say "current revision"*

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 16 (SG43)

Comment			***TF/TC Chapter to fill in**
			9.4.1 *Negative: Insert the missing Oxford comma between "ppb" and "or".* *Reason/Justification: SEMI's Style Guide mandates the use of Oxford commas.*
Action			**The TC Chapter agreed to do one of the following actions.**
			***No motion is required in this step.**
	X		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.
		X	**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 9.4.1** 9.4.1 Metallic impurities expressed as ppt, ppb or ppm. Refer the appropriate SEMI Standard for the chemical under consideration to determine the specific grade or tier necessary for the process.
			TO: Section/Paragraph 9.4.1 9.4.1 Metallic impurities expressed as ppt, ppb, or ppm. Refer the appropriate SEMI Standard for the chemical under consideration to determine the specific grade or tier necessary for the process.
			Justification (If necessary) Editorial in nature, add comma.

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 17 (SG44)

Comment	*TF/TC Chapter to fill in		
	9.4.2 *Negative: Insert the missing Oxford comma between "ppb" and "or".* *Reason/Justification: SEMI's Style Guide mandates the use of Oxford commas.*		
Action	**The TC Chapter agreed to do one of the following actions.**		
	*No motion is required in this step.		
	X	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.
		X	**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 9.4.2** 9.4.2 Anions expressed as ppt, ppb or ppm. Refer the appropriate SEMI Standard for the chemical under consideration to determine the specific grade or tier necessary for the process.	
		TO: Section/Paragraph 9.4.2 9.4.2 Anions expressed as ppt, ppb, or ppm. Refer the appropriate SEMI Standard for the chemical under consideration to determine the specific grade or tier necessary for the process.	
		Justification (If necessary) Editorial in nature, add comma.	

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 18 (SG46)

Comment	*TF/TC Chapter to fill in		
	9.4.4 *Negative: Insert the missing Oxford comma between "ppb" and "or".* *Reason/Justification: SEMI's Style Guide mandates the use of Oxford commas.*		
Action	**The TC Chapter agreed to do one of the following actions.**		
	*No motion is required in this step.		
	X	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.
		X	**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 9.4.4** 9.4.4 Organic impurities are express as ppt, ppb or ppm. Refer to the appropriate SEMI Standard for the chemical under consideration to determine the specific grade or tier necessary for the process.
		TO: Section/Paragraph 9.4.4 9.4.4 Organic impurities are express as ppt, ppb, or ppm. Refer to the appropriate SEMI Standard for the chemical under consideration to determine the specific grade or tier necessary for the process.
		Justification (If necessary) Editorial in nature, add comma.

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 19 (SG47)

Comment			***TF/TC Chapter to fill in**
			10.1 *Negative: Change "KPI's" to "KPIs"* *Reason/Justification: The usage is plural, not possessive.*
Action			**The TC Chapter agreed to do one of the following actions.**
			***No motion is required in this step.**
	X		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.
		X	**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 10.1** 10.1 Identification and implementation of key performance indicators (KPI's) for liquid chemical blending are situationally dependent. Comprehensive guidelines for KPI's are, therefore, outside the scope of this Guide. Each process owner is responsible for defining their KPI's through evaluation of several factors such as raw material quality, asset capability and reliability, quality management system requirements, and customer need. References to any applicable material supplier, equipment manufacturer, quality management system, and/or industry standards and limitations should be cited whenever possible. Several examples of previously accepted performance reporting data for liquid chemical blending (per SEMI F31) are provided below.

		TO: Section/Paragraph 10.1 10.1 Identification and implementation of key performance indicators (KPI's) for liquid chemical blending are situationally dependent. Comprehensive guidelines for KPI's are, therefore, outside the scope of this Guide. Each process owner is responsible for defining their KPI's through evaluation of several factors such as raw material quality, asset capability and reliability, quality management system requirements, and customer need. References to any applicable material supplier, equipment manufacturer, quality management system, and/or industry standards and limitations should be cited whenever possible. Several examples of previously accepted performance reporting data for liquid chemical blending (per SEMI F31) are provided below.
		Justification (If necessary) Editorial in to fix punctuation; apostrophe is inappropriately used

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 20 (SG50)

Comment			***TF/TC Chapter to fill in**
			10.1.5 *Negative: Change "close" to "closely".* *Reason/Justification: The word modifies a verb, not a noun.*
Action			**The TC Chapter agreed to do one of the following actions.**
			***No motion is required in this step.**
	X		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.
		X	**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 10.1.5** 10.1.5 *Repeatability/Precision* — An estimate of how close the measured values for a given actual value match each other. This should be done on a per value basis. This is reported as a difference over the range of sample size.
			TO: Section/Paragraph 10.1.5 10.1.5 *Repeatability/Precision* — An estimate of how closely the measured values for a given actual value match each other. This should be done on a per value basis. This is reported as a difference over the range of sample size.
			Justification (If necessary) Editorial to correct grammar.

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 21 (SG51)

Comment	*TF/TC Chapter to fill in		
	10.1.6 *Negative: Change "vendor" to "supplier" or explain what the difference is.* *Reason/Justification: There's no obvious difference between what is meant by "vendor" here and what is meant by "supplier" elsewhere in the document. If there is no difference in meaning, use the same term. If there is a difference in meaning, explain it.*		
Action	**The TC Chapter agreed to do one of the following actions.**		
	*No motion is required in this step.		
	X	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.
		X	**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 10.1.6** 10.1.6 *Mean Time Between Failure (MTBF)* — Report MTBF in units of time between failure events. The definition of failure should be determined by agreement between the vendor and the customer, but typically is defined as an inability to produce the required blend.	
		TO: Section/Paragraph 10.1.6 10.1.6 *Mean Time Between Failure (MTBF)* — Report MTBF in units of time between failure events. The definition of failure should be determined by agreement between the ~~vendor~~ supplier and the customer, but typically is defined as an inability to produce the required blend.	
		Justification (If necessary) "supplier" and "vendor" can be used interchangeably dependent on the reference point of the person reading the document. Change does not affect technical content of statement.	

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 22 (SG52)

Comment	*TF/TC Chapter to fill in	
	10.1.7 *Negative: Change "vendor" to "supplier" or explain what the difference is.* *Reason/Justification: There's no obvious difference between what is meant by "vendor" here and what is meant by "supplier" elsewhere in the document. If there is no difference in meaning, use the same term. If there is a difference in meaning, explain it.*	
Action	**The TC Chapter agreed to do one of the following actions.**	
	*No motion is required in this step.	
	X	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.
		X	**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 10.1.7** 10.1.7 *Mean Time Between Assists (MTBA)* — Report MTBA in the units of time between assist events. The definition of an assist should be determined by agreement between the vendor and the customer, but typically assist is defined as the required intervention by maintenance or operating personnel to return the system to the normal operational routine present before the event causing the assist occurred.
		TO: Section/Paragraph 10.1.7 10.1.7 *Mean Time Between Assists (MTBA)* — Report MTBA in the units of time between assist events. The definition of an assist should be determined by agreement between the ~~vendor~~ supplier and the customer, but typically assist is defined as the required intervention by maintenance or operating personnel to return the system to the normal operational routine present before the event causing the assist occurred.
		Justification (If necessary) "supplier" and "vendor" can be used interchangeably dependent on the reference point of the person reading the document. Change does not affect technical content of statement.

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 23 (SG53)

Comment	***TF/TC Chapter to fill in**
	10.1.8 *Negative: Change "bulk chemical" to "for bulk chemical".* *Reason/Justification: Correct grammar.*
Action	**The TC Chapter agreed to do one of the following actions.**
	***No motion is required in this step.**
	X 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.
		X	**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 10.1.8** 10.1.8 *Particles* — Particle performance should be expressed in the same manner as bulk chemical distribution systems (BCDS) (i.e., < x particles/mL at > 0.y µm).
		TO: Section/Paragraph 10.1.8 10.1.8 *Particles* — Particle performance should be expressed in the same manner as for bulk chemical distribution systems (BCDS) (i.e., < x particles/mL at > 0.y µm).
		Justification (If necessary) Editorial to clarify grammar.

Motion	To approve above editorial change(s)
Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion	None
Vote	3 **Y**-0 **N**; Motion passed.

Comment (Created by Handling Negative) NC – 24 (SG54)

Comment			***TF/TC Chapter to fill in**
			10.1.9 *Negative: Change "manner as BCDS" to "manner as for BCDS".* *Reason/Justification: Correct grammar.*
Action			**The TC Chapter agreed to do one of the following actions.**
			***No motion is required in this step.**
	X		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.
		X	**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 10.1.9** 10.1.9 *Trace Metals* — Metallic purity performance should be expressed in a similar manner as BCDS. However, blending systems, by definition, have several source materials, which could include water. Each source material contributes to the 'baseline contamination level' (equivalent to drum contamination level in BCDS). A volumetric combination (based on the volumetric combination of source materials) of the contamination levels should be used to construct the baseline contamination level.
			TO: Section/Paragraph 10.1.9 10.1.9 *Trace Metals* — Metallic purity performance should be expressed in a similar manner as for BCDS. However, blending systems, by definition, have several source materials, which could include water. Each source material contributes to the 'baseline contamination level' (equivalent to drum contamination level in BCDS). A volumetric combination (based on the volumetric combination of source materials) of the contamination levels should be used to construct the baseline contamination level.

		Justification (If necessary) Editorial to clarify grammar.
Motion		To approve above editorial change(s)
Motion by/2nd by		By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Scott Mehr / MGC Pure Chemicals
Discussion		None
Vote		3 **Y**-0 **N**; Motion passed.

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

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	=	**29**	/	**30**	=	**96.7%**		**≥90%**

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

Note: See *Regulations* § 9.6.2 for further information.

	Globally Approved (No Ratification Ballot needed): **The Letter Ballot meets the Letter Ballot approval conditions for the global technical committee.**
X	**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	X	**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)

Motion by/2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation
Discussion	None
Vote	3 **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. Regardless of the coverage, this IP check applies to the entire Standard or Safety Guideline*. See *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 (see *Regulations* ¶ 16.3.1.1) to the Standard or Safety Guideline; or, any copyrighted items or trademarks that are used/reproduced (see *Regulations* ¶ 16.4.1.2) in the Standard or Safety Guideline. (Also see, *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.**

X. Action for This Document

Motion	X	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.

Motion by/ 2nd by	By: David Kandiyeli / Mega Fluid Systems, Inc. Second: Alexander Tregub / Intel Corporation	
Discussion	None	
Vote	3 **Y**- 0 **N**	
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.