

API Ballot Summary Sheet

3/22/2005

Ballot: 17-05: 650-600, Aluminum Tank Appendix

AMS ID: 619

Start Date: 1/24/05

Closing Date: 3/14/05

Associate: Roland Goodman

Coordinator: Valeen Young

Proposal:

<u>Voter</u>	<u>Company</u>	<u>Comments</u>	<u>Vote Results</u>			
			<u>Affirmative</u>	<u>Negative</u>	<u>Abstain</u>	<u>Did Not Vote</u>
134629	Nelson Acosta	HMT Inspection	No	X		
131617	Joel Andreani	Equity Engineering Group, Inc., The	No	X		
38921	Robert Annett	Alyeska Pipeline	No			X
73074	Ronald Bailey	American Tank & Vessel, Inc.	No	X		
136219	Mark Baker	Baker Consulting Group, Inc.	No	X		
142888	Chris Bashor	Minnesota Pollution Control Agency	No	X		
134681	Ernie Blanchard	IMC-Phosphates	No	X		
109375	Jerry Boldra		No			X
22200	Dan Boley	DJA Inspection Services	No	X		
134782	Steve Caruthers	Tank Consultants, Inc.	No			X
7127	Earl Crochet	Kinder Morgan	No	X		
142685	Domingo de Para	ExxonMobil	No	X		
133403	Jeffrey DeArmond	BP p.l.c. Whiting Refinery	No	X		
146748	Terry Delong	Terasen Pipelines (USA) Inc.	No			X
135965	Kenneth Erdmann	Matrix Service Company	No	X		
105011	David Flight	Dow Chemical Company	No			X
134870	Laurence Foster	Marathon Ashland Petroleum LLC	No	X		
134880	John Fumbanks	Pond and Company Inc.	No			X
115033	Alan Geis	Colonial Pipeline Company	No		X	
83689	Ty Hagen	Hagen Engineering International, Inc.	Yes	X		
136619	Robert Hendrix	Voridian Engineering & Construction	Yes		X	
70596	Marty Herlevic	James Machine Works, Inc.	No			X
93133	Randy Kissell	TGB Partnership	Yes	X		
81918	Manfred Lengsfeld		No			X
135014	John Lieb	Tank Industry Consultants, Inc.	Yes	X		
136274	Thomas Lorentz	AEC Engineering, Inc.	No			X
135072	Francis Maitland	Quense LLC	No	X		

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78399	David Martin	Conservatek Industries, Inc.	No	X	
113545	James McBride	Petrex, Inc.	No	X	
139045	Craig Meier	ConocoPhillips	No		X
137255	Carl Mikkola	Enbridge Energy Partners. L.P.	No	X	
131185	Douglas Miller	Chicago Bridge & Iron Company(CB&I)	No	X	
69609	Bhana Mistry	TIW Steel Platework	No	X	
83736	John Mooney		Yes	X	
92212	George Morovich	TEMCOR	No	X	
136286	Philip Myers	ChevronTexaco Corporation	Yes	X	
132210	David Nasab	Kellogg Brown & Root	No		X
82544	John Oleyar	HMT, Inc.	No		X
5193	Richard Pinegar	Cargill Inc.	No	X	
102412	Roy Ralph	Petro-Canada	No		X
135169	Michael Richardson	International Paper	No	X	
73744	Bruce Roberts		Yes	X	
101360	Marilyn Shores	Sunoco Logistics	No		X
126019	Larry Speaks	Mass Technology Corporation	No	X	
134314	Tearle Taylor	Flint Hills Resources	No	X	
134325	Donald Thain	Shell Global Solutions (US) Inc.	No		X
145034	Leith Watkins	Explorer Pipeline Company	No		X
145896	Alan Watson	A.R. Watson, USA	No	X	
132209	Richard Whipple	Fluor, Inc.	No		X

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Proposal:

	<u>Affirmative</u>	<u>Negative</u>	<u>Abstain</u>	<u>Did Not Vote</u>
Balloting Totals:	30	1	2	16

Total Responses:	33			
Total Ballots:	49			
Response Rate :	61%		Must be > 50%	
Approval Rate:	97%		Must be > 67%	
Consensus:	YES			

API Template for Ballot Comments and Resolution

Ballot ID: 619	Date: March 22, 2005	Document: Ballot 17-05: 650-600
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#	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Voter/ Commenter	Company	Section No. (e.g. 3.1)	Type of comment	Comment (justification for change)	Proposed Change	Comment Resolution
1	Bruce Roberts			Technical	<p>Great job on this appendix.</p> <p>AL.1.1 Construction. This appendix provides material, design, fabrication, erection, and testing requirements for vertical, cylindrical, aboveground, closed- and open top, welded aluminum storage tanks constructed of the alloys specified in AL.4.</p> <p>[More information is needed: Are mixed material tanks covered or prohibited? Is this appendix required if an aluminum roof is in the project?]</p> <p>AL.4.1 General. Alloys shall be selected from Table AL.1. Dimensional tolerances shall meet the material specifications given in AL.4. Impact testing and toughness requirements verification are not required. [Editorial suggestion]</p> <p>Bullets for all purchaser options are needed.</p> <p>Will there be any data sheet changes required for this appendix?</p>		
2	Philip Myers	ChevronTexaco Corporation		Technical	<p>There is a typo in the 1 foot formulas of AL.5.3</p> <p>Only other comment is that I think we need a precaution statement that aluminum tank bottoms shall not be built on "green concrete" as corrosion may be severe and aggressive.</p>		
3	Philip Myers	ChevronTexaco Corporation		Technical	<p>There is a typo in the 1 foot formulas of AL.5.3</p> <p>Only other comment is that I think we need a precaution statement that aluminum tank bottoms shall not be built on "green concrete" as corrosion may be severe and aggressive.</p>		
4	Larry Hiner	Chicago Bridge & Iron Company(CB&I)	AL .5.3	Technical	<p>AL.5.3 Affirmative Comment - The shell design formulas use the term (H-A). "A " must be defined.</p>		

NOTE Columns 1, 2, 4, 6 are compulsory.

API Template for Ballot Comments and Resolution

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#	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Voter/ Commenter	Company	Section No. (e.g. 3.1)	Type of comment	Comment (justification for change)	Proposed Change	Comment Resolution
5	Ty Hagen	Hagen Engineering International, Inc.	AL 5.3	Technical	I could not find a definition for the variable "A" and the variable "E", joint efficiency does not show up in the equations.	Define "A". The allowable stresses "S" should be multiplied by E, not 2.	
6	Robert Hendrix	Voridian Engineering & Construction	AL.4.7	Technical	Consider use of A 193 B8 bolts and matching A 194 nuts in addition to those listed since these are common for corrosion resistant applications.		
7	Robert Hendrix	Voridian Engineering & Construction	AL.5	Technical	Where are the different rules for the pressure classes 1, 2, and 3? This document is quite small compared to B96.1. Is it only a subset of aluminum tank design that was covered by B96.1?		
8	John Mooney		AL.5.3	Editorial	...OR the hydrostatic...		
9	Randy Kissell	TGB Partnership	AL.5.3	Editorial	Table AL.3 should be Table AL.6; In defining E, reference should be to Table AL-2 not AL-5; For Sd and St, reference should be to Table AL-7 not AL-4; Table AL-4 should be Table AL-7.		
10	Randy Kissell	TGB Partnership	AL.5.4	Editorial	Change Table AL.6 to Table AL-8 in 5.4.2 (3) and in Table itself.		
11	John Lieb	Tank Industry Consultants, Inc.	AL.5.6.3	Technical	"ADM" reference toward end of section is not clear.	Add "(ADM)" between "Aluminum Design Manual" and "Specifications for Aluminum Structures" in first sentence.	
12	John Lieb	Tank Industry Consultants, Inc.	AL.5.6.4	Technical	Reference is made to Figure 12. I believe this is a carry-over from B96.1. This reference should be corrected or removed.	See above comments.	
13	Randy Kissell	TGB Partnership	AL.5.6.4	Technical	We need to add B96.1 Figure 12 as Figure AL6-1.		
14	John Lieb	Tank Industry Consultants, Inc.	AL.5.6.5, AL5.6.6	Technical	I think a reference to Table AL.3 should be added to the definition of "E" in these sections so that there is no confusion as to what E to use in these equations.	Add "(See Table AL.3)" to the definition of "E = modulus of elasticity of the roof".	

NOTE Columns 1, 2, 4, 6 are compulsory.

API electronic balloting commenting template/version 2002-12

API Template for Ballot Comments and Resolution

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#	(1) Voter/ Commenter	(2) Company	(3) Section No. (e.g. 3.1)	(4) Type of comment	(5) Comment (justification for change)	(6) Proposed Change	(7) Comment Resolution
15	Larry Hiner	Chicago Bridge & Iron Company(CB&I)	All Formulas	Technical	Affirmative Comment - The design units of measure for both SI and US Customary must be defined to make the formulas work in each case. Or alternatively, make a general statement for all formulas. (Example of a discrepancy - 3.6.1.1 defines the Diameter units as feet or meters whereas the shell design formulas requires the thickness and diameter to be input in inches or millimeters.)		
16	John Lieb	Tank Industry Consultants, Inc.	Figure AL 5-1	Technical	Note (1) in Figure AL 5-1 refers to Figs. 10 and 13, which I believe are carry-overs from B96.1. If Figs. 10 and 13 are going to be incorporated in Appendix AL, the new numbers should be referenced. If not, this note should be deleted.	See above comment.	
17	John Lieb	Tank Industry Consultants, Inc.	Figure AL 5-2	Technical	Note (1) refers to Figs. 10 and 13. Same comments as on Figure AL 5-1.	See above comments.	
18	John Lieb	Tank Industry Consultants, Inc.	Figure AL 5-2 "Bottom Reinforcing Plate Thickness	Technical	Should this be Figure AL 5-3 so as not to confuse with Figure AL 5-2, "Flange Plate Thickness for Shell Manholes and Cleanout Fittings"? The text below the curves refers to paragraphs 3.3.3(a), 3.3.2(d) and 3.3.3(d), which I believe are carry-overs from ANSI B96.1. These references should be corrected or deleted.	See above comments.	
19	Randy Kissell	TGB Partnership	Table 1-1	Technical	We need to add Appendix AL to Table 1-1 as follows: AL Aluminum Storage Tanks Requirements		
20	Larry Hiner	Chicago Bridge & Iron Company(CB&I)	Table AL.2	Technical	Table AL.2 Affirmative Comment - Remove the joint efficiency for lap welds. We do not use in formulas and will cause confusion.		

NOTE Columns 1, 2, 4, 6 are compulsory.

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