

ORAL ARGUMENT NOT YET SCHEDULED

No. 22-7063

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

AMERICAN SOCIETY FOR TESTING AND MATERIALS, et al.,
Appellants

v.

PUBLIC.RESOURCE.ORG, INC.,
Appellee

Appeal from the United States District Court
for the District of Columbia
Hon. Tanya S. Chutkan, No. 1:13-cv-1215-TSC

PUBLIC APPENDIX
VOLUME 7 (JA2818-JA4847)
MATERIAL UNDER SEAL IN SEPARATE SUPPLEMENT

Andrew P. Bridges
abridges@fenwick.com
Matthew B. Becker
mbecker@fenwick.com
FENWICK & WEST LLP
801 California Street
Mountain View, CA 94041
Tel: (415) 875-2300

David Halperin
davidhalperindc@gmail.com
1805 9th Street NW
Washington, DC 20005
Tel: (202) 905-3434

Counsel for Public.Resource.Org, Inc.

Donald B. Verrilli, Jr.
Rachel G. Miller-Ziegler
MUNGER, TOLLES & OLSON LLP
601 Massachusetts Avenue NW
Suite 500E
Washington, DC 20001
Tel: (202) 220-1100
donald.verrilli@mto.com

Kelly M. Klaus
MUNGER, TOLLES & OLSON LLP
560 Mission Street, 27th Floor
San Francisco, CA 94105
Tel: (415) 512-4000
kelly.klaus@mto.com

*Counsel for National Fire Protection
Association, Inc.*

January 20, 2023
(additional counsel on inside cover)

Corynne McSherry
corynne@eff.org
Mitchell L. Stoltz
mitch@eff.org
ELECTRONIC FRONTIER FOUNDATION
815 Eddy Street
San Francisco, CA 94109
Tel: (415) 436-9333

Counsel for Public.Resource.Org, Inc.

Jeffrey S. Bucholtz
David P. Mattern
KING & SPALDING LLP
1700 Pennsylvania Avenue NW
Washington, DC 20006
Tel: (202) 737-0500
jbucholtz@kslaw.com

Kenneth L. Steinthal
KING & SPALDING LLP
101 Second Street, Suite 2300
San Francisco, CA 94105
Tel: (415) 318-1200
ksteinthal@kslaw.com

*Counsel for American Society of Heating,
Refrigerating, and Air Conditioning
Engineers, Inc.*

Rose Leda Ehler
MUNGER, TOLLES & OLSON LLP
350 S. Grand Avenue, 50th Floor
Los Angeles, CA 90071
Tel: (213) 683-9100
rose.ehler@mto.com

*Additional Counsel for National Fire
Protection Association, Inc.*

J. Kevin Fee
Jane W. Wise
DLA PIPER LLP (US)
500 8th Street NW
Washington, DC 20004
Tel: (202) 799-4000
kevin.fee@us.dlapiper.com

Stanley J. Panikowski
DLA PIPER LLP (US)
401 B Street, Suite 1700
San Diego, CA 92101
Tel: (619) 699-2700
stanley.panikowski@us.dlapiper.com

*Counsel for American Society for
Testing and Materials d/b/a/ ASTM
International*

TABLE OF CONTENTS**VOLUME 1 (JA1-JA493)**

Docket Sheet, American Society for Testing and Materials, et al v. Public.Resource.Org, Inc., No. 13-cv-1215	JA1
Exhibit A to Complaint, DKT. 1-1	JA35
Transcript of 11/04/15 Status Hearing before Judge Tanya S. Chutkan, DKT. 116.....	JA45
Proposed Order Granting Plaintiffs’ Motion for Leave to File Under Seal, DKT. 117-1	JA66
Exhibit 1 to Declaration of Jordana S. Rubel in Support of Plaintiffs’ Motion for Summary Judgment, DKT. 117-2 (Material Under Seal).....	JA68
Plaintiffs’ Memorandum of Law in Support of Motion for Summary Judgment and Permanent Injunction, DKT. 118-1	JA182
Plaintiffs’ Statement of Material Facts in Support of Motion for Summary Judgment, DKT. 118-2.....	JA256
Declaration of Dennis J. Berry and Exhibits in Support of Plaintiffs’ Motion for Summary Judgment, DKT. 118-3	JA306
Declaration of Steven Cramer and Exhibits in Support of Plaintiffs’ Motion for Summary Judgment, DKT. 118-4	JA336
Declaration of James Golinveaux in Support of Plaintiffs’ Motion for Summary Judgment, DKT. 118-5	JA348
Declaration of Randy Jennings and Exhibit in Support of Plaintiffs’ Motion for Summary Judgment, DKT. 118-6	JA352
Declaration of Thomas B. O’Brien, Jr. and Exhibits in Support of Plaintiffs’ Motion for Summary Judgment, DKT. 118-7	JA362

VOLUME 2 (JA494-JA1297)

Declaration of Thomas B. O'Brien, Jr. and Exhibits in Support of Plaintiffs' Motion for Summary Judgment, DKT. 118-7 (continued).....	JA494
Declaration of James T. Pauley and Exhibits in Support of Plaintiffs' Motion for Summary Judgment, DKT. 118-8	JA629
Declaration of Kevin Reinertson in Support of Plaintiffs' Motion for Summary Judgment, DKT. 118-9	JA663
Declaration of Stephanie Reiniche and Exhibits in Support of Plaintiffs' Motion for Summary Judgment, DKT. 118-10	JA668
Declaration of James Thomas in Support of Plaintiffs' Motion for Summary Judgment, DKT. 118-11	JA697
Exhibit 1 to Declaration of Jordana S. Rubel in Support of Plaintiffs' Motion for Summary Judgment, DKT. 118-12 (Jarosz Report) (Material Under Seal).....	JA704
Exhibit 2 to Declaration of Jordana S. Rubel in Support of Plaintiffs' Motion for Summary Judgment, DKT. 118-12	JA818
Exhibit 3 to Declaration of Jordana S. Rubel in Support of Plaintiffs' Motion for Summary Judgment, DKT. 118-12 (Material Under Seal).....	JA896
Exhibit 8 to Declaration of Jordana S. Rubel in Support of Plaintiffs' Motion for Summary Judgment, DKT. 118-12	JA999
Exhibit 10 to Declaration of Jordana S. Rubel in Support of Plaintiffs' Motion for Summary Judgment, DKT. 118-12	JA1005
Defendant Public.Resource.Org's Statement of Material Facts in Support of Motion for Summary Judgment, DKT. 120-3 (Material Under Seal) (Public Version at DKT. 121-2)	JA1014
Declaration of Matthew Becker in Support of Public.Resource.Org's Motion for Summary Judgment, DKT. 120-4 (Material Under Seal).....	JA1050

Exhibit 4 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 120-6 (Material Under Seal).....	JA1072
Exhibit 22 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 120-9 (Material Under Seal).....	JA1092
Exhibit 53 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 120-10 (Material Under Seal).....	JA1100
Exhibit 74 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 120-11 (Material Under Seal).....	JA1119
Exhibit 80 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 120-14 (Material Under Seal).....	JA1122
Exhibit 87 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 120-20 (Material Under Seal).....	JA1125
Exhibit 88 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 120-21 (Material Under Seal).....	JA1136
Exhibit 89 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 120-22 (Material Under Seal).....	JA1149
Exhibit 90 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 120-23 (Material Under Seal).....	JA1204
Exhibit 91 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 120-24 (Material Under Seal).....	JA1206

Exhibit 92 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 120-25 (Material Under Seal)..... JA1208

Exhibit 93 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 120-26 (Material Under Seal)..... JA1231

Exhibit 94 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 120-27 (Material Under Seal)..... JA1238

Exhibit 129 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 120-29 (Material Under Seal)..... JA1245

Exhibit 146 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 120-33 (Material Under Seal)..... JA1254

Exhibit 150 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 120-34 (Material Under Seal)..... JA1257

Declaration of Carl Malamud in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 121-5 JA1260

Exhibits 1-10 to Public.Resource.Org’s Motion for Summary Judgment, DKT. 122-1..... JA1271

VOLUME 3 (JA1298-JA1677)

Exhibits 1-10 to Public.Resource.Org’s Motion for Summary Judgment, DKT. 122-1 (continued)..... JA1298

Exhibits 11-20 to Public.Resource.Org’s Motion for Summary Judgment, DKT. 122-2..... JA1569

VOLUME 4 (JA1678-JA2057)

Exhibits 11-20 to Public.Resource.Org’s Motion for Summary
Judgment, DKT. 122-2 (continued)..... JA1678

Exhibits 21-40 to Public.Resource.Org’s Motion for Summary
Judgment, DKT. 122-3..... JA1938

VOLUME 5 (JA2058-JA2437)

Exhibits 21-40 to Public.Resource.Org’s Motion for Summary
Judgment, DKT. 122-3 (continued)..... JA2058

Exhibits 41-60 to Public.Resource.Org’s Motion for Summary
Judgment, DKT. 122-4..... JA2107

Exhibits 61-80 to Public.Resource.Org’s Motion for Summary
Judgment, DKT. 122-5..... JA2204

Exhibits 61-80 to Public.Resource.Org’s Motion for Summary
Judgment, DKT. 122-5..... JA2258

Exhibits 81-100 to Public.Resource.Org’s Motion for Summary
Judgment, DKT. 122-6..... JA2296

VOLUME 6 (JA2438-JA2817)

Exhibits 81-100 to Public.Resource.Org’s Motion for Summary
Judgment, DKT. 122-6 (continued)..... JA2438

Exhibits 101-120 to Public.Resource.Org’s Motion for Summary
Judgment, DKT. 122-7..... JA2527

Exhibits 121-140 to Public.Resource.Org’s Motion for Summary
Judgment, DKT. 122-8..... JA2644

VOLUME 7 (JA2818-JA4847)

Exhibits 141-157 to Public.Resource.Org’s Motion for Summary
Judgment, DKT. 122-9..... JA2818

Exhibit 3 to Declaration of Kathleen Lu in Support of Public.Resource.Org’s Motion to Strike, DKT. 124-5	JA2952
Declaration of Steve Comstock in Support of Plaintiffs’ Reply to Opposition to Motion for Summary Judgment, DKT. 155-5	JA2955
Declaration of Christian Dubay in Support of Plaintiffs’ Reply to Opposition to Motion for Summary Judgment, DKT. 155-6	JA2960
Exhibit A to Declaration of Christian Dubay in Support of Plaintiffs’ Reply to Opposition to Motion for Summary Judgment, DKT. 155-6, exhibit A (Material Under Seal)	JA2965
Supplemental Declaration of Thomas B. O’Brien, Jr. in Support of Plaintiffs’ Reply to Opposition to Motion for Summary Judgment, DKT. 155-7	JA3849
Exhibit 10 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 163-6 (Material Under Seal).....	JA3925
Exhibit 11 to Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 163-7 (Material Under Seal).....	JA3928
Declaration of Matthew Becker in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 164-1	JA3930
Public.Resource.Org’s Supplemental Statement of Undisputed Material Facts in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 164-3	JA3934
Supplemental Declaration of Carl Malamud in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 164-8	JA3941
Exhibit 5 to Supplemental Declaration of Carl Malamud in Support of Public.Resource.Org’s Motion for Summary Judgment, DKT. 164-13	JA3943

Exhibit 6 to Supplemental Declaration of Carl Malamud in Support
of Public.Resource.Org’s Motion for Summary Judgment,
DKT. 164-14 JA3988

Memorandum Opinion, DKT. 175..... JA4003

Exhibit 156 to Declaration of Jane W. Wise in Support of Plaintiffs’
Second Motion for Summary Judgment, DKT. 198-40 JA4822

VOLUME 8 (JA4848-JA7295)

Exhibit 156 to Declaration of Jane W. Wise in Support of Plaintiffs’
Second Motion for Summary Judgment, DKT. 198-40 (continued)..... JA4848

Exhibit 167 to Declaration of Jane W. Wise in Support of Plaintiffs’
Second Motion for Summary Judgment, DKT. 198-48 JA4927

Exhibit 173 to Declaration of Jane W. Wise in Support of Plaintiffs’
Second Motion for Summary Judgment, DKT. 198-48 JA4934

Declaration of James S. Thomas and Exhibits in Support of Plaintiffs’
Second Motion for Summary Judgment, DKT. 198-49 JA4940

Supplemental Declaration of James T. Pauley in Support of Plaintiffs’
Second Motion for Summary Judgment, DKT. 198-50 JA4985

Plaintiffs’ Memorandum in Support of Second Motion for Summary
Judgment and for Permanent Injunction, DKT. 199-1
(Material Under Seal) (Public Version at DKT. 200)..... JA5001

Plaintiffs’ Second Supplemental Statement of Material Facts in
Support of Second Motion for Summary Judgment, DKT. 199-2
(Material Under Seal) (Public Version at DKT. 201)..... JA5059

Exhibit D to the Supplemental Declaration of James T. Pauley
in Support of Second Motion for Summary Judgment,
DKT. 199-15 (Material Under Seal) JA5121

Exhibit F to the Supplemental Declaration of James T, Pauley in Support of Second Motion for Summary Judgment, DKT. 199-17 (Material Under Seal)	JA5223
Exhibit P to the Supplemental Declaration of James T. Pauley in Support of Second Motion for Summary Judgment, DKT. 199-27 (Material Under Seal)	JA5571
Exhibit T to the Supplemental Declaration of James T. Pauley in Support of Second Motion for Summary Judgment, DKT. 199-31 (Material Under Seal)	JA6501
Exhibit V to the Supplemental Declaration of James T. Pauley in Support of Second Motion for Summary Judgment, DKT. 199-33 (Material Under Seal)	JA6916
Supplemental Declaration of Stephanie Reiniche in Support of Second Motion for Summary Judgment, DKT. 198-53	JA6944
Exhibit 1 to Supplemental Declaration of Stephanie Reiniche in Support of Second Motion for Summary Judgment, DKT. 199-34, exhibit 1 (Material Under Seal)	JA6948
Public Resource’s Second Motion for Summary Judgment, DKT. 202.....	JA7139
Public Resource’s Second Supplemental Statement of Material Facts in Opposition To Plaintiffs’ Motion for Summary Judgment and Permanent Injunction, and in Support of Public Resource’s Second Motion for Summary Judgment, DKT. 203-2 (Material Under Seal)	JA7142
Exhibit 77 to Public Resource’s Second Motion for Summary Judgment, DKT. 203-27 (Material Under Seal)	JA7197
Declaration of Carl Malamud in Support of Public Resource’s Second Motion for Summary Judgment, DKT. 204-4	JA7199
Declaration of Matthew Becker in Support of Public Resource’s Second Motion for Summary Judgment, DKT. 204-5	JA7216

Exhibit 34 to Public Resource’s Second Motion for Summary
Judgment, DKT. 204-40 JA7226

Exhibit 36 to Public Resource’s Second Motion for Summary
Judgment, DKT. 204-42 JA7228

VOLUME 9 (JA7296-JA7675)

Exhibit 36 to Public Resource’s Second Motion for Summary
Judgment, DKT. 204-42 (continued)..... JA7296

Exhibit 37 to Public Resource’s Second Motion for Summary
Judgment, DKT. 204-43 JA7317

Exhibit 38 to Public Resource’s Second Motion for Summary
Judgment, DKT. 204-44 JA7439

Exhibit 40 to Public Resource’s Second Motion for Summary
Judgment, DKT. 204-46 JA7541

Exhibit 41 to Public Resource’s Second Motion for Summary
Judgment, DKT. 204-47 JA7655

VOLUME 10 (JA7676-JA8154)

Exhibit 41 to Public Resource’s Second Motion for Summary
Judgment, DKT. 204-47 (continued)..... JA7676

Exhibit 42 to Public Resource’s Second Motion for Summary
Judgment, DKT. 204-48 (Material Under Seal) JA7761

Exhibit 43 to Public Resource’s Second Motion for Summary
Judgment, DKT. 204-49 JA7861

Exhibit 44 to Public Resource’s Second Motion for Summary
Judgment, DKT. 204-50 JA7959

Exhibit 45 to Public Resource’s Second Motion for Summary
Judgment, DKT. 204-51 JA8045

VOLUME 11 (JA8155-JA8817)

Exhibit 45 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-51 (continued)	JA8155
Exhibit 46 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-52 (Material Under Seal)	JA8165
Exhibit 55 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-61 (Material Under Seal)	JA8269
Exhibit 56 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-62 (Material Under Seal)	JA8297
Exhibit 60 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-66	JA8324
Exhibit 72 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-78 (Material Under Seal)	JA8327
Exhibit 73 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-79 (Material Under Seal)	JA8352
Exhibit 74 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-80 (Material Under Seal)	JA8378
Exhibit 75 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-81 (Material Under Seal)	JA8405
Exhibit 76 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-82 (Material Under Seal)	JA8435
Exhibit 77 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-83 (Material Under Seal)	JA8438
Exhibit 78 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-84 (Material Under Seal)	JA8440
Exhibit 79 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-85 (Material Under Seal)	JA8446

Exhibit 80 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-86 (Material Under Seal)	JA8448
Exhibit 84 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-90	JA8450
Exhibit 85 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-91	JA8456
Exhibit 86 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-92	JA8471
Exhibit 87 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-93	JA8489
Exhibit 88 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-94	JA8491
Exhibit 89 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-95	JA8534
Exhibit 90 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-96	JA8538
Exhibit 91 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-97	JA8654
Exhibit 96 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-102	JA8667
Exhibit 97 to Public Resource’s Second Motion for Summary Judgment, DKT. 204-103 (Material Under Seal)	JA8729
Plaintiffs’ Statement of Disputed Facts and Objections in Opposition to Public Resource’s Second Supplemental Statement of Material Facts, DKT. 212-1 (Material Under Seal) (Public Version at DKT. 213-20).....	JA8733

VOLUME 12 (JA8818-JA9197)

Plaintiffs’ Statement of Disputed Facts and Objections in Opposition to Public Resource’s Second Supplemental Statement of Material Facts, DKT. 212-1 (Material Under Seal) (Public Version at DKT. 213-20) (continued).....	JA8818
Plaintiffs’ Third Supplemental Statement of Material Facts in Support of Second Motion for Summary Judgment, DKT. 213-1	JA8858
Exhibit 176 to Declaration of Jane W. Wise in Support of Second Motion for Summary Judgment, DKT. 213-6	JA8864
Supplemental Reply Declaration of Matthew Becker in Support of Public Resource’s Second Motion for Summary Judgment, DKT. 215-3.....	JA9005
Exhibit 98 to Supplemental Reply Declaration of Matthew Becker in Support of Public Resource’s Second Motion for Summary Judgment, DKT. 215-4	JA9010

VOLUME 13 (JA9198-JA9505)

Exhibit 98 to Supplemental Reply Declaration of Matthew Becker in Support of Public Resource’s Second Motion for Summary Judgment, DKT. 215-4 (continued).....	JA9198
Exhibit 99 to Supplemental Reply Declaration of Matthew Becker in Support of Public Resource’s Second Motion for Summary Judgment, DKT. 215-5	JA9249
Memorandum and Opinion re Plaintiffs’ Motion for Summary Judgment and Permanent Injunction, and Defendant’s Cross-Motion for Summary Judgment, DKT. 239.....	JA9265
Appendix to Memorandum and Opinion re Plaintiffs’ Motion for Summary Judgment and Permanent Injunction, and Defendant’s Cross-Motion for Summary Judgment, DKT. 239-1	JA9312
Order granting in part and denying in part Plaintiffs’ Motion for Summary Judgment; granting in part and denying in part Plaintiffs’	

Motion for Permanent Injunction; granting in part and denying in part Defendant’s Cross-Motion for Summary Judgment, DKT. 240 JA9499

Notice of Appeal JA9502

EXHIBIT 141

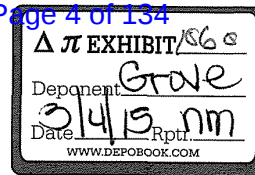
(FILED UNDER SEAL)

EXHIBIT 142

(FILED UNDER SEAL)

Case 1:13-cv-01215-TSC Document 122-9 Filed 12/22/15 Page 3 of 134

EXHIBIT 143



ASTM License Agreement (Reading Room)

The purpose of this site is to provide the public with access to ASTM International standards ("ASTM Documents") which have been referenced or incorporated into federal regulation or laws. Please use this site to review these standards. The ASTM Documents are provided as a public service, and you represent that you will not make any commercial use of the ASTM Documents available here. These ASTM Documents are available for review only, and hardcopies and printable versions will continue to be available for purchase. By clicking on any ASTM Document, you agree to be bound by the terms of this agreement both as to this and each subsequent use you make of the ASTM Document, and you are responsible for ensuring that the terms of this agreement are met.

IMPORTANT- READ THESE TERMS CAREFULLY BEFORE ACCESSING ANY ASTM DOCUMENT.
By accessing any ASTM Document you are entering into a contract, and acknowledge that you have read this License Agreement, that you understand it and agree to be bound by its terms. If you do not agree to the terms of this License Agreement, promptly exit this site.

License:

ASTM grants you, the ASTM visitor, a nonexclusive and nontransferable license to view online the content of the ASTM Document(s). The ASTM Document is designed to be viewed online only - there are no "print," "save," or "cut and paste" options - and the license granted to you by this agreement does not include the right to download, reproduce, store in a retrieval system, modify, make available on a network, use to create derivative works, or transmit the content of the ASTM Document in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise.

This license is specifically granted conditioned on your completion of the on-line registration form and you represent that the information you provided is truthful and accurate.

Copyright:

This site and all of its content are protected by copyright pursuant to U.S. and international copyright laws. You may not copy or download any of the material contained on this site in whole or in part without the express authorization of ASTM. You may not publish, modify, transmit, reproduce, create new works from, distribute, sell, loan, nor in anyway exploit any of the material contained on this site in whole or in part, without the express authorization of ASTM.

Trademark:

Except as indicated, ASTM owns all trademarks, service marks, certification marks, and logos featured on this site, including the terms "ASTM," "ASTM International" and the "American Society for Testing and Materials." Use of these marks without the express written permission of ASTM is expressly prohibited.

Indemnification:

You agree to indemnify and hold ASTM, its directors, officers, members, and employees harmless from any claims, demands, or damages, including attorney fees, asserted by any third party due to or arising out of your use of or conduct on the site or of any ASTM Document.

Disclaimer of Warranty and Liability:

ASTM MAKES NO REPRESENTATION THAT THE DOCUMENTS ON THIS SITE ARE THE MOST RECENT OR UP-TO-DATE VERSION OF THE ASTM STANDARDS CURRENTLY AVAILABLE. IT IS THE VISITOR'S RESPONSIBILITY TO DETERMINE IF THE DOCUMENT MEETS THEIR REQUIREMENTS OR PURPOSES.

ASTM SHALL NOT BE LIABLE FOR ANY DIRECT, SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS, WHICH MAY RESULT FROM THE USE OF, ACCESS TO, OR INABILITY TO USE THESE MATERIALS. UNDER NO CIRCUMSTANCES WILL THE TOTAL LIABILITY OF ASTM TO YOU BASED ON ANY CAUSE OF ACTION EXCEED \$100.

Miscellaneous:

As a condition of your use of this site, you agree not to use the site for any purpose that is unlawful or prohibited by this agreement.

Use of the site by you is unauthorized in any jurisdiction that does not give effect to all provisions contained in this agreement.

ASTM001814

JA02821

If any part of these terms and conditions is held to be invalid or unenforceable for any reason including, but not limited to, the warranty disclaimers and liability limitations specified above, then the invalid or unenforceable provision will be deemed superseded by a valid enforceable provision that most closely matches the intent of the original provision and the remainder of the agreement will remain in full force and effect.

A printed version of this agreement shall be admissible in judicial or administrative proceedings based upon or relating to this agreement to the same extent and subject to the same conditions as other business documents and records originally generated and maintained in printed form.

These terms and conditions constitute the entire agreement between you and ASTM with respect to your use of the site. You acknowledge that, in providing you access to and use of the site, ASTM has relied on your agreement to be legally bound by these terms and conditions.

This agreement shall be construed and interpreted pursuant to the laws of the Commonwealth of Pennsylvania applicable to agreements wholly entered into and performed in Pennsylvania, excluding that body of law dealing with conflict of laws. Any legal action, suit, or proceeding arising out of or relating to this agreement or the breach thereof shall be instituted in a court of competent jurisdiction in Pennsylvania, and each party hereby consents and submits to the personal jurisdiction of such court, waives any objection to venue in such court and consents to the service of process by registered or certified mail, return receipt requested, at the last known address of such party.

You may not assign or transfer your rights or obligations under this agreement.

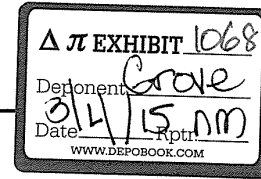
ASTM001815

JA02822

Case 1:13-cv-01215-TSC Document 122-9 Filed 12/22/15 Page 6 of 134

EXHIBIT 144

From: Hooper, Kathe </O=ASTM/OU=FIRST ADMINISTRATIVE GROUP/CN=RECIPIENTS/CN=KHOOPER>
Sent: Friday, June 5, 2009 8:44 AM
To: 'sales@ninjapaintball.com'
Cc: Sierk, Christine <csierk@astm.org>
Subject: RE: ASTM Copyrights



Dear Mr. Trimble,

This is in response to your emails to Christine Sierk.

Please be advised that ASTM policy does not permit the posting of our material on the public internet.

Should you have any questions, please contact me (phone: 610-832-9634, fax: 610-832-9635, e-mail: khooper@astm.org).

Kind regards,

*Kathe Hooper
ASTM International
100 Barr Harbor Drive, PO Box C700
West Conshohocken, PA 19428-2959
phone: 610-832-9634
fax: 610-832-9635
email: khooper@astm.org*

From: Sierk, Christine
Sent: Wednesday, June 03, 2009 2:07 PM
To: Hooper, Kathe
Subject: FW: ASTM Copyrights

Hi Kathe,
They just resent another email, please see below...
Many Thanks and feel better!
Christi

From: Ninja Paintball [<mailto:sales@ninjapaintball.com>]
Sent: Wednesday, June 03, 2009 1:09 PM
To: Sierk, Christine
Subject: ASTM Copyrights

Christine,

Sorry to bother you but tried to e-mail ASTM and never got a reply.

I am a member for F08-24 Paintball and am having a discussion with some people on a public forum about some standards. What is the policy of ASTM regarding copying parts of a standard for discussion on the internet? Do I need written permission and is there a fee involved?

Thank you for your time,

Ray Trimble
Sales Manager

ASTM095371

JA02824

Ninja Paintball
186 Virginia Rd.
Crystal Lake, IL 60014
877-NinjaUSA (646-5287)
815-477-0007 ext 306
Fax 815-477-7395
www.ninjabpaintball.com
Proudly Made in the USA

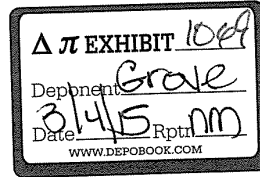
Case 1:13-cv-01215-TSC Document 122-9 Filed 12/22/15 Page 9 of 134

EXHIBIT 145

From: Hooper, Kathe </O=ASTM/OU=FIRST ADMINISTRATIVE GROUP/CN=RECIPIENTS/CN=KHOOPER>
Sent: Friday, January 11, 2013 9:48 AM
To: Koury, Joe <jkoury@astm.org>
Subject: RE: Information usage on the internet

Thank so much, Joe!!!

*Kathe Hooper
ASTM International
100 Barr Harbor Drive, PO Box C700
West Conshohocken, PA 19428-2959
phone: 610-832-9634
fax: 610-834-7018
email: khooper@astm.org*



From: Koury, Joe
Sent: Friday, January 11, 2013 9:28 AM
To: Hooper, Kathe
Subject: RE: Information usage on the internet

Kathe,

Just talked to the chair. He pretty much said if ASTM is fine with this, then he's fine. His only concern is this person lifting large chunks of info from D2000 and pasting it on the website. I told him we have the same concerns, but there's nothing yet that indicates this person is going to that.

So I guess your response below is good to go.

Thanks
Joe

From: Hooper, Kathe
Sent: Thursday, January 10, 2013 3:17 PM
To: Koury, Joe
Subject: FW: Information usage on the internet

Hi Joe.

Hate to bug you... Have you had a chance to talk with your committee officers on the email request below?

Thanks. Kathe

From: Hooper, Kathe
Sent: Thursday, December 20, 2012 9:53 AM
To: Koury, Joe
Subject: FW: Information usage on the internet

Hi Joe,

At John's request, I'll wait to hear from you before moving forward.

Have a great day. If I don't see you tomorrow... Merry Christmas!

Kathe

From: Pace, John
Sent: Thursday, December 20, 2012 9:50 AM
To: Hooper, Kathe
Subject: RE: Information usage on the internet

OK by me after you get input back from Joe and he needs to touch base first with his committee heads. - JP

From: Hooper, Kathe
Sent: Thursday, December 20, 2012 9:27 AM
To: Pace, John; Koury, Joe
Subject: RE: Information usage on the internet

John/Joe,

Thanks for your comments on this request. Unless I hear from you otherwise, I will grant Richard Ludlam/Eriks UK permission to build the guide on their website around the values and parameters in the standard and ask that they use the following credit line, "The values in this guide have been extracted, with permission, from ASTM D2000-12 Standard Classification System for Rubber Products in Automotive Applications. A copy of the complete standard may be obtained from ASTM, www.astm.org."

I will also note that they may not lift any other text, figures or charts from the standard, use our logo, or imply ASTM endorses or certifies his product.

Thanks again. Have a good day. Kathe

From: Pace, John
Sent: Wednesday, December 19, 2012 6:36 PM
To: Koury, Joe
Cc: Hooper, Kathe
Subject: FW: Information usage on the internet

Joe-

Just for safety's sake, why don't you touch base with the committee chair of this particular standards activity and make him aware. There are many many products out there like this in other areas....as long as they don't lift text, figures, charts, verbatim, and don't claim an official designation status, and don't use our logo, there isn't really too much we can do other than my recommendation.

Thanks!
John P.

From: Koury, Joe
Sent: Wednesday, December 19, 2012 4:18 PM
To: Hooper, Kathe
Cc: Pace, John
Subject: RE: Information usage on the internet

D2000 is a pretty important standard in the rubber industry, so I'm totally in favor of John's suggestion below regarding the disclaimer.

However, if you both think this doesn't warrant time and energy, then I'm fine with that as well.

D2000 is going to be a good seller regardless of what this person does on his website.

Thanks

Joe

From: Hooper, Kathe
Sent: Tuesday, December 18, 2012 2:20 PM
To: Koury, Joe
Cc: Pace, John
Subject: RE: Information usage on the internet

Joe, Any comments before I respond?

Thank you. Kathe

Kathe Hooper
ASTM International
100 Barr Harbor Drive, PO Box C700
West Conshohocken, PA 19428-2959
phone: 610-832-9634
fax: 610-834-7018
email: khooper@astm.org

From: Pace, John
Sent: Wednesday, December 12, 2012 8:20 AM
To: Hooper, Kathe; Koury, Joe
Subject: RE: Information usage on the internet

Kathe/Joe-

I looked briefly but had troubles and didn't spend much time trying to navigate the site. Bottom line....he cannot use our logo and imply ASTM endorses or certifies his product. He cannot use exact text lifted from the standard or replication of figures and tables as they may possibly reside in the standard (if such is the case). If he has built a product based around the values and parameters included in the ASTM standard without any violations which I've briefly highlighted above, although this is a derivative type product and borderline as to stepping on our toes, there isn't much we can do to legally stop him. We could possibly bluff him and ask him to put a disclaimer that "ASTM has granted him ERIKS permission to use values from D2000 but for legal and liability purposes, users should reference and confirm results with the originally published version of ASTM D2000"....but I'm not sure that is worth the time and energy. Is the owner of this product an active member?

So let me know if you discover more that might push this over the edge into something for which we need to address and challenge more directly. Otherwise, he has a mouse trap for which if we had the expertise, time, resources, etc, we possibly should have developed ourselves!!!

Thanks!
John Pace

From: Hooper, Kathe
Sent: Tuesday, December 11, 2012 3:40 PM
To: Pace, John; Koury, Joe
Subject: FW: Information usage on the internet

Hello, John and Joe.

Please see the request below. It appears to me that they are creating a derivative work of the D2000 and that we should not allow this.

Let me know your thoughts.

Thank you.
Kathe

*Kathe Hooper
ASTM International
100 Barr Harbor Drive, PO Box C700
West Conshohocken, PA 19428-2959
phone: 610-832-9634
fax: 610-834-7018
email: khooper@astm.org*

From: Richard Ludlam [<mailto:Richard.Ludlam@eriks.co.uk>]
Sent: Tuesday, December 11, 2012 10:37 AM
To: Hooper, Kathe
Subject: Information usage on the internet

I'd just like to check with you what we need to do to use the information contained within your American Society for Testing and Materials D-2000 Line call-outs on a web site that guides our customers through the process, we have built a test area at <http://oring-groove-wizard.eriks.co.uk/ASTMlookup.aspx>, this simple screen is something our customers have asked for but uses your processes and data.

Can you advise if there is any licensing implication please.

Richard Ludlam
Marketing Manager

ERIKS UK
Amber Way | Halesowen | West Midlands | B62 8WG
t: 0121 508 6000 | f: 0121 508 6255
www.eriks.co.uk

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed.
If you are not the intended recipient, please notify us immediately and do not disclose, distribute, or retain this email or any part of it.
Unless expressly stated, opinions in this email are those of the individual sender, and not of ERIKS Group.
We believe, but do not warrant, that this email and any attachments are virus free. You must therefore take full responsibility for virus checking.
ERIKS Group and its subsidiaries reserve the right to monitor all email communications through their networks.

ERIKS Industrial Services Ltd
Company number 3142338 Registered in England and Wales
Registered office: Amber Way, Halesowen, West Midlands B62 8WG

EXHIBIT 146

(FILED UNDER SEAL)

Case 1:13-cv-01215-TSC Document 122-9 Filed 12/22/15 Page 15 of 134

EXHIBIT 147



PRODUCTS & SERVICES | GET INVOLVED | ABOUT | NEWS

Languages | Contact | Cart

Products and Services / Standards & Publications / Standards Products

Standards & Publications

All Standards & Publications

Standards Products

Symposia Papers & STPs

Manuals, Monographs, & Data Series

Journals

Reading Room

Authors

Book of Standards

Product Updates

Catalogs

Digital Library

Enterprise Solutions

Proficiency Testing

Training Courses

Certification & Declaration

Lab Directory

Cement & Concrete Reference Lab

ASTM D396 - 98

Standard Specification for Fuel Oils

SUPERSEDED ([click for Active standard](#))

Format	Pages	Price	
PDF	5	\$52.80	ADD TO CART

[Active](#) (view current version of standard)

[Other Historical Standards](#)

[ASTM License Agreement](#)

[MORE D02.E0.01 STANDARDS](#)

[RELATED PRODUCTS](#)

1. Scope

1.1 This specification (Note 1) covers grades of fuel oil intended for use in various types of fuel-oil-burning equipment under various climatic and operating conditions. These grades are described as follows:

1.1.1 Grades 1, 1 Low Sulfur, 2 and 2 Low Sulfur are middle distillate fuels for use in domestic and small industrial burners. Grades 1 and 1 Low Sulfur are particularly adapted to vaporizing type burners or where storage conditions require low pour point fuel.

1.1.2 Grades 4 (Light) and 4 are heavy distillate fuels or distillate/residual fuel blends used in commercial/industrial burners equipped for this viscosity range.

1.1.3 Grades 5 (Light), 5 (Heavy), and 6 are residual fuels of increasing viscosity and boiling range, used in industrial burners. Preheating is usually required for handling and proper atomization.

Note 1--For information on the significance of the terminology and test methods used in this specification, see Appendix X1.

Note 2--A more detailed description of the grades of fuel oils is given in X1.3.

1.2 This specification is for the use of purchasing agencies in formulating specifications to be included in contracts for purchases of fuel oils and for the guidance of consumers of fuel oils in the selection of the grades most suitable for their needs.

1.3 Nothing in this specification shall preclude observance of federal, state, or local regulations which can be more restrictive.

1.4 All values are stated in SI units and are regarded as standard.

Note 3--The generation and dissipation of static electricity can create problems in the handling of distillate burner fuel oils. For more information on the subject, see Guide D 4865.

2. Referenced Documents (*purchase separately*)

ASTM Standards

Recommended

[Standards Tracker](#)

[Standards Subscriptions](#)

Recommended



ASTM Training:
Apply standards more effectively

Train at our location or yours, and get instruction on the most important standards you use

[D56](#) Test Method for Flash Point by Tag Closed Cup Tester

[D86](#) Test Method for Distillation of Petroleum Products at Atmospheric Pressure

[D93](#) Test Methods for Flash Point by Pensky-Martens Closed Cup Tester

[D95](#) Test Method for Water in Petroleum Products and Bituminous Materials by Distillation

[D97](#) Test Method for Pour Point of Petroleum Products

[D445](#) Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and Calculation of Dynamic Viscosity)

[D473](#) Test Method for Sediment in Crude Oils and Fuel Oils by the Extraction Method

[D482](#) Test Method for Ash from Petroleum Products

[D664](#) Test Method for Acid Number of Petroleum Products by Potentiometric Titration

[D1266](#) Test Method for Sulfur in Petroleum Products (Lamp Method)

[D1298](#) Test Method for Density, Relative Density, or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method

[D2500](#) Test Method for Cloud Point of Petroleum Products

[D4294](#) Test Method for Sulfur in Petroleum and Petroleum Products by Energy Dispersive X-ray Fluorescence Spectrometry

[D4306](#) Practice for Aviation Fuel Sample Containers for Tests Affected by Trace Contamination

[D5854](#) Practice for Mixing and Handling of Liquid Samples of Petroleum and Petroleum Products

[D6892](#) Test Method for Pour Point of Petroleum Products (Robotic Tilt Method)

[D7039](#) Test Method for Sulfur in Gasoline, Diesel Fuel, Jet Fuel, Kerosine, Biodiesel, Biodiesel Blends, and Gasoline-Ethanol Blends by Monochromatic Wavelength Dispersive X-ray Fluorescence Spectrometry

[D7094](#) Test Method for Flash Point by Modified Continuously Closed Cup (MCCCFP) Tester

[D7220](#) Test Method for Sulfur in Automotive, Heating, and Jet Fuels by Monochromatic Energy Dispersive X-ray Fluorescence Spectrometry

[D7371](#) Test Method for Determination of Biodiesel (Fatty Acid Methyl Esters) Content in Diesel Fuel Oil Using Mid Infrared Spectroscopy (FTIR-ATR-PLS Method)

Keywords

Burner Fuels - Fuel Oils - Heating And Lighting Fuel Oils - Heavy Distillate Fuels - Liquid Fuels - Middle Distillate Fuels - Residual Fuel Oils

ICS Code

ICS Number Code 75.160.20 (Liquid fuels)

UNSPSC Code

UNSPSC Code 15101700(Fuel Oils)

Referencing This Standard

DOI: 10.1520/D0396-98



ASTM International is a member of CrossRef.

Citation Format

ASTM D396-98, Standard Specification for Fuel Oils, ASTM International, West Conshohocken, PA, 2001, www.astm.org

BACK TO TOP



All

Search topic, title, author, A53



[Home](#) | [About ASTM](#) | [Site Map](#) | [Support](#) | [Contact](#) | [Policies](#) | [Copyright/Permissions](#)

Copyright © 1996 - 2015 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA

Case 1:13-cv-01215-TSC Document 122-9 Filed 12/22/15 Page 19 of 134

EXHIBIT 148

AE

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

FILED

FEB 28 2005
FEB 28 2005
MICHAEL W. DOBBINS
CLERK, U.S. DISTRICT COURT

INTERNATIONAL CODE COUNCIL,)
INC., and BUILDING OFFICIALS AND)
CODE ADMINISTRATORS)
INTERNATIONAL, INC.,)

Plaintiffs,)

v.)

NO. 02C 5610

Judge Rebecca R. Pallmeyer

NATIONAL FIRE PROTECTION)
ASSOCIATION, INC.,)

Defendant.)

NOTICE OF FILING and CERTIFICATE OF SERVICE

TO: Alan S. Wernick, Esq., Querrey & Harrow, 175 West Jackson Boulevard, Suite 1600,
Chicago, IL 60604
James Hamilton, Esq., Swidler Berlin Shereff Friedman, 3000 K Street, NW, Suite 300,
Washington DC 20007

PLEASE TAKE NOTICE that on February 28, 2005 there was filed with the Clerk of the United States District Court for the Northern District of Illinois, Eastern Division, Defendant National Fire Protection Association's Memorandum in Support of Defendant's Motion for Summary Judgment, a copy of which is attached hereto and was served upon counsel.

Peter C. John

Peter C. John, Esq.

Williams Montgomery & John Ltd.
2100 Civic Opera Building
Twenty North Wacker Drive
Chicago, IL 60606
(312) 443-3200

Thomas F. Holt, Jr.
Tara C. Clancy
Christopher Centurelli
Kirkpatrick & Lockhart LLP
75 State Street
Boston, MA 02109
(617) 261-3100

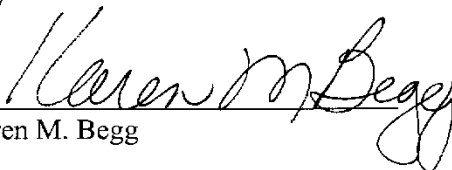
CERTIFICATE OF SERVICE

Karen M. Begg being first duly sworn on oath states that on February 28, 2005 a true copy of the foregoing Notice of Filing and Memorandum were served on the following via hand delivery:

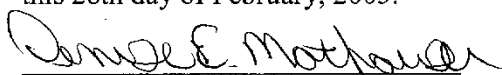
Alan S. Wernick, Esq.
Quarles & Brady LLC
500 West Madison Street
Suite 3700
Chicago, IL 60661-2511

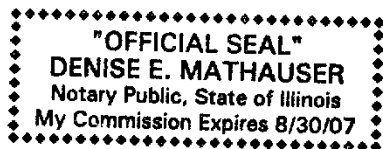
and to the following via regular U.S. Mail

kramer@swidlaw.com
jhamilton@swidlaw.com
Kevin R. Amer
James Hamilton, Esq.
Swidler Berlin Shereff Friedman
3000 K Street, NW
Suite 300
Washington, D.C. 20007


Karen M. Begg

Subscribed and sworn to before me
this 28th day of February, 2005.


NOTARY PUBLIC



AE

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

FILED

FEB 9 2005
FEB 28 2005
MICHAEL W DOHRNS
CLERK: U.S. DISTRICT COURT

INTERNATIONAL CODE COUNCIL,
INC.,

Plaintiff,

v.

NATIONAL FIRE PROTECTION
ASSOCIATION, INC.,

Defendant.

CIVIL ACTION NO. 02C 5610

Judge Rebecca R. Pallmeyer

**MEMORANDUM IN SUPPORT OF DEFENDANT'S
MOTION FOR SUMMARY JUDGMENT**

Both the plaintiff, International Code Council, Inc. ("ICC"), and the defendant, National Fire Protection Association, Inc. ("NFPA"), produce model building codes for private self regulation as well as government use and adoption. In this copyright infringement action, ICC alleges that NFPA copied certain provisions from its model building code, the IBC 2000. ICC, however, cannot prove any of the elements of copyright infringement.

First, ICC does not own the code language it asserts against NFPA. The ICC's model code, like the accused NFPA code, was prepared by committees of volunteer public officials and *not* by employees of the ICC. The asserted code provisions were either drafted by the committee members, extracted from pre-existing standards and code, or adopted from proposals submitted by the public. ICC received no assignments from the committee members or from the contributing public for the text they created. It therefore has no right to claim ownership of the code provisions and assert them against NFPA.

Second, NFPA did not copy ICC's code. NFPA developed its own building code independently, and the works are not substantially similar. In fact, ICC recently reduced its allegations considerably, and now alleges that NFPA copied only portions of 5% of the provisions in its building code.

Finally, even if ICC could prove that it owned the asserted code provisions and that NFPA copied language from them, the allegedly copied material is not protectible subject matter. The allegedly copied language is merely statements of facts and ideas, following mandatory conventions, and is therefore precluded from copyright protection under the merger doctrine.

For each of these three reasons, NFPA is entitled to summary judgment.

I. FACTS

A. The Parties

Plaintiff ICC was formed in 1994 from three regional code-writing organizations: Building Officials and Code Administrators International, Inc. ("BOCA"), International Conference of Building Officials ("ICBO"), and Southern Building Code Congress International, Inc. ("SBCCI"). Each of these regional organizations had developed their own model building codes ("the legacy codes"), and these codes had grown similar over the decades due to development of common code formats. (Ex. A at 24.)¹ In 1994, the regional organizations formed the ICC to jointly prepare a single model code. (Ex. A at 24-25.) In 2000, ICC released the International Building Code 2000 ("IBC 2000"), its first joint model building code.

Defendant NFPA has been developing model fire codes and other building safety codes for more than 100 years. In 1999, NFPA began a project to integrate and expand its existing

¹ Ex. ___ refers to the exhibits to the Declaration of Christopher Centurelli, filed herewith.

safety codes into a comprehensive set of building related codes. (Ex. B at Attachment A.) This project led to the NFPA's Building Construction and Safety Code ("NFPA 5000"), the code accused of infringement in this case.

B. The IBC 2000 Model Code

The IBC 2000 model code was developed between 1996 and 2000 in a complex iterative process involving a large number of people. The process was run by committees of volunteer public officials. The committees selected language for the code provisions by: (a) adopting language from existing legacy codes; (b) adopting language submitted by industry groups or other members of the public; or (c) drafting or revising language themselves. (See Ex. A at 36-37.) Staff employees of the ICC assisted the committees in a "secretariat" role, but did not author or select code language. (Ex. A at 65; Ex. C at 39, 49-50; Ex. D. at 67-68.)

1. The Committees

The IBC 2000 was developed by six committees: a steering committee that set the procedures for creating the code and five technical subcommittees that developed the specific code language. (Ex. D at 33-34.) The technical subcommittees each had nine members, (Ex. P at vii.), all of whom were either public employees responsible for enforcement of building regulations in their jurisdiction or, in some cases, industry representatives. (Ex. D at 19-20; Ex. F at 37-38; Ex. A at 136.) None were employees of the ICC, (Ex. A at 16-17, 26-28; Ex. D at 19-20), and all volunteered their time (Ex. C at 43). The technical subcommittee members were selected to serve based on their expertise in an area, their familiarity with the code development process, and their willingness to devote time to the project. (Ex. C at 45-46.)

The committee members who developed the IBC 2000 did not assign their copyright rights to ICC, nor did they enter into any work-for-hire contracts with ICC.² The only grant ICC requested from the Committee members was a *nonexclusive license* to use the materials:

I agree that ICC shall have nonexclusive, royalty-free license to use any material that I may provide to or develop for the Committee. I hereby grant ICC a nonexclusive, royalty-free license to all rights in copyright that I may have as an author of the materials produced by an ICC Committee.

(Ex. H at 4.)³ Thus, ICC never acquired any ownership rights to the code language contributed by the committees.⁴

2. The Code Drafting Procedure and Contributions from the Public

The IBC 2000 was developed through an iterative process to allow contributions from the public. In each iteration, the subcommittees would prepare a draft of the code and release it to the public for comment. Industry groups and other members of the public would then submit suggested code revisions. After a hearing, the subcommittees would adopt or reject the suggestions and prepare a revised draft for further public comment. (Ex. A at 36-37; Ex. J.)

² There was one exception. Three members of the fire safety subcommittee, William R. Bryant, Michael McReynolds, and Donald R. Mercer, signed explicit work for hire agreements with ICC in June and July 1997. (Ex. G.) However, these agreements were all signed after completion of the first working draft of the IBC 2000. (Ex. F at 190-92.) The agreements are therefore irrelevant unless the ICC can demonstrate that one of these individuals contributed code language after completion of the first working draft. *Respect Inc. v. Committee on Status of Women*, 815 F. Supp. 1112, 1117 n.10 (N.D. Ill. 1993). ICC's Rule 30(b)(6) witness could not identify any specific sections drafted by these three committee members. (Ex. F at 198.)

³ Ex. H, which contains the nonexclusive license grant, is an ICC Committee Application dated May 31, 2001. (Ex. H, at 3.) One of ICC's Rule 30(b)(6) witnesses, Dominic Sims, testified that similar applications were likely used for the members of technical subcommittees which developed the IBC 2000. (Ex. A at 139-40.)

⁴ After NFPA pointed out ICC's lack of ownership during this litigation, the ICC began asking all the volunteers to sign work for hire agreements as part of their application to serve on a committee. (Ex. I at 4.) This 2004 change, however, is too late to help ICC in this case.

There were a total of four iterations. A first Working Draft was published in May 1997. (Ex. D at 46.) Industry groups and other members of the public then submitted hundreds, perhaps thousands of comments and proposed code language. (Ex. F at 56-57.) The technical subcommittees held a public hearing at which they adopted, rejected, or took submissions under consideration for further review. (Ex. D at 47-49.) A subsequent “First Draft” was completed in November 1997, followed by another round of submissions of proposed code changes. (Ex. D at 51-54.) In this second round, more than 600 proposed changes were received by the fire safety subcommittee alone, and the other four subcommittees likely received a similar volume. (Ex. F at 139.) After a second public hearing, a “Final Draft” was published in July 1998. (Ex. D at 55-56.) The Final Draft was followed by another round of submissions and a final hearing. The resulting text was then approved by the constituent members of the ICC (BOCA, SBCCI, and ICBO) and published as the IBC 2000. (Ex. D at 57-61.)

When members of the public submitted proposed code language, they did *not* assign any copyright in the language to the ICC. Rather, like the committee membership application, the comment submission form granted the ICC only a nonexclusive license to use the proposed language in its model code:

I hereby grant the International Code Council the nonexclusive, royalty-free rights, including nonexclusive, royalty-free rights in copyright, in this proposal and I understand that I acquire no rights in any publication of the International Code Council in which this proposal in this or another similar analogous form is used.

(Ex. J; Ex. K; Ex. L.) The purpose of this provision was simply to give the ICC “authority to utilize [the] material,” not to gain full ownership rights. (Ex. F at 42.) Thus, ICC has no right to exclude others from using the code language submitted by the public.⁵

3. The BCMC Reports

In addition to contributions from legacy codes, committee members, and the public, a fourth source of material for the IBC 2000 was reports created by the Board for the Coordination of Model Codes. During the 1980’s and early 1990’s, the four major model code organizations—the predecessors of ICC (BOCA, SBCCI, and ICBO) and the defendant, NFPA—participated in a program to harmonize provisions in their model codes. The four organizations sent representatives to meetings of a board, called the Board for the Coordination of Model Codes (“BCMC”). (Ex. N at 29.) The BCMC prepared reports which recommended model code provisions for all four member organizations. (Ex. O at 3.) Importantly, all four organizations agreed “to waive copyright protection for the benefit of the other participating organizations with respect to any code language developed from a code or standard copyright by such participating organization.” (Ex. O at 2.) In other words, any model code language in the BCMC reports was fair game for all four organizations.

In preparing the IBC 2000 model code, the ICC committees used provisions from the BCMC reports “as often as possible.” (Ex. F at 94.) Because the BCMC reports “included almost every subject addressed by a building code,” (Ex. D at 115-16; Ex. N), BCMC language

⁵ Notably, after this lawsuit began, ICC tried to change its comment submission form to require copyright assignments from members of the public submitting proposed code language. However, this change met with resistance from some industry groups, who wanted to retain their copyright rights. ICC backed off and presented an alternative form to submitters who objected to assignment. (See Ex. M.)

is found in a number of the code provisions ICC now accuses NFPA of infringing. (*See, e.g.*, Koffel Decl., ¶ 22.)

4. Role of ICC Staff in Preparing the IBC 2000

The ICC assigned three staff employees to assist each of the technical subcommittees. (Ex. P at 5.) The staff served only in a supporting, “secretariat” role. (Ex. C at 39; Ex. A at 65.) They were *not* members of the committees, did not select code language, and did not have a vote in any committee decisions. (Ex. C at 39, 54; Ex. D at 22; Ex. A at 63, 76, 102.) One of the ICC staff members described staff’s role as follows:

We were secretariats, took notes. We facilitated the meetings again. If there was a procedural question or some other type of question that they [the subcommittee members] felt staff could answer, they would ask us it seemed, that kind of thing. We had to maintain the temperature in the room, you know, all that fun stuff.

(Ex. C at 49-50.)

Most importantly for purposes of this motion, the ICC staff employees did *not* draft the asserted code language. This fact is established by the ICC’s Rules and Procedures documents, the Rule 30(b)(6) testimony of ICC witnesses, and ICC’s interrogatory answers.

First, the ICC’s Rules and Procedures define the role of “staff liaisons” in sections 2.2 and 3.1. These duties do not include drafting of code provisions. (Ex. Q at 1, 2.) Similarly, an IBC Scope, Objectives and Process Statement from 1996 makes clear that “[s]taff serves only in a supporting capacity.” (Ex. R at 1.) Dominic Sims, an ICC staff member and Rule 30(b)(6) witness confirmed that this was how the process worked in practice. (Ex. A at 63.)

Second, in addition to the above Rule 30(b)(6) testimony of Mr. Sims and Mr. Armstrong, a third ICC 30(b)(6) witness, John Battles, testified explicitly that staff members did not draft any of the IBC 2000 chapters:

Q. In your support role on the occupancy subcommittee, did you write any chapters of the IBC 2000?

- A. No.
- Q. Did Mr. Frost [another staff member] write any chapters?
- A. Not that I'm aware of, no.
- Q. Did Mr. McCreary [another staff member] write any chapters?
- A. No.
- Q. Did any of the staff members listed on this technical subcommittee rosters, did any of the staff members write any chapters?
- A. No, sir, not that I'm aware of. We may have assisted in clarification, putting together the—the information that somebody had given us.
- Q. And who's that somebody that would have given it to you?
- A. It would be the—the subcommittee would have given us an assignment to do a certain thing for them.
- Q. And when you state subcommittee, you're referring to the code officials?
- A. The code officials, yes, sir.

(Ex. D at 67-68.)⁶

Finally, in its Supplemental Response to Interrogatory No. 3, ICC states explicitly that the “actual process of drafting the IBC was undertaken by several *committees*,” and that “[e]ach *committee* drafted its assigned sections of the IBC.” (Ex. S at 4, emphasis added.) As discussed above, staff were not members of the committees. (Ex. C at 39.)

Thus, the only sources of code language in the IBC 2000 were: (a) the government official committee members; (b) submissions from the public; (c) BCMC reports; and (d) the legacy codes. No employees of the ICC authored any of the asserted sections of the IBC 2000.

5. Development of the Legacy Codes

At a December 10, 2004 hearing, ICC stipulated that its legacy codes (the codes of its predecessor organizations, BOCA, ICBO, and SBCCI) were developed using the same process as the IBC 2000. (Ex. T at 18.) ICC's counsel agreed that “the Court's ruling with respect to the IBC-2000 would have the same force and effect with respect to the legacy codes,” and that “whatever findings the Court makes with respect to the IBC-2000 will cover the universe for

⁶ A fourth ICC 30(b)(6) witness, Michael Pfeiffer, contradicted the testimony of the other three, and stated that staff did draft a few of the asserted provisions of the IBC 2000. (Ex. F at 89, 95-96, 100.) Mr. Pfeiffer's contentions are discussed in detail in the Argument section below.

legacy codes as well.” (Ex. T at 17, 20.) ICC also stipulated that it would not identify any “authors” of the legacy codes other than the individuals it has already disclosed as authors of the IBC-2000. (Ex. T at 30-31.) The Court memorialized the stipulation as follows in its December 10, 2004 Minute Order:

Plaintiff has stipulated in court that the process for creating the “legacy codes” was the same as the process for creating the IBC 2000 and its three preliminary drafts. Accordingly, the court will not require production by Plaintiff of the names of individuals involved in the drafting of the legacy codes or source documents, to the extent they have not already been identified.

(Ex. U.) This means that, for purposes of this motion, the legacy codes: (a) were drafted by committees of volunteer government officials; (b) the government officials and contributing members of the public did not assign or exclusively license their copyright rights to the ICC; and (c) ICC will not identify any previously undisclosed staff members as drafters of the legacy codes.

C. The Defendant’s NFPA 5000 Code

In 1999, before the IBC 2000 was published, NFPA began working on developing a complete building code from existing NFPA codes and standards. (Koffel Decl. ¶ 10.) As its first step, NFPA hired a consultant, Wayne “Chip” Carson, to prepare a first draft using existing NFPA code and the EPCOT building code.⁷ (Carson Decl. ¶¶ 1-2.) He did not base any of his draft on the IBC 2000 or any of the ICC legacy codes. (Carson Decl. ¶ 3.) Mr. Carson completed a first draft in January 2000 and a second draft in February 2000, and then turned it over to NFPA. (Carson Decl. ¶ 4.)

⁷ Disney developed its own building code for the EPCOT center, which NFPA licensed. (Ex. V.)

In April 2000, NFPA began its formal process for developing and ratifying its building code. (Koffel Decl. ¶ 11.) Beginning from the Carson draft, NFPA developed the NFPA 5000 using the same time tested consensus process, accredited by the American National Standards Institute, that it has used to develop and maintain all of its approximately 300 model codes and standards. NFPA set up sixteen technical committees to develop code and a technical correlating committee to oversee the technical committees to ensure consistency. The committee members included some of the same code officials who served on the ICC's committees, as well as numerous other government officials, special experts, insurers, manufacturers, and other interested parties. (*Id.*)

Drafts of the NFPA code were twice released for public review, and many proposed revisions submitted by the public were incorporated into the working drafts. (Koffel Decl. ¶ 12.) NFPA released its final version, the NFPA 5000, in July 2002. (*Id.*)

D. ICC's Shrinking Copyright Infringement Allegations

The IBC 2000 has 5,290 numbered code sections, 246 tables, and 60 figures. (Koffel Decl. ¶ 19.) The NFPA 5000 has 8,532 code provisions, 128 tables, and 73 figures. (Koffel Decl. ¶ 13.)

In its original interrogatory answers, ICC recited 460 numbered allegations, accusing NFPA of copying roughly 560 code provisions, tables, and figures from the IBC 2000. At the December 10 hearing, NFPA pointed out that these allegedly infringed IBC code provisions included, e.g.: (a) language ICC (and NFPA) copied from the Code of Federal Regulations; (b) code provisions taken from third party sources, such as the American Society of Civil Engineers; and (c) language ICC adopted from pre-existing *NFPA* codes. In many cases, ICC's own code provisions identified these sources. (Ex. T at 6-13.)

On February 9, 2005, less than three weeks before the deadline for this motion, ICC served a new list of allegations, withdrawing about half of its previous contentions. And then on February 17, ICC served yet another revised list of allegations, deleting more code provisions and adding others. ICC's (presumably) final allegations, attached as Ex. W, accuse NFPA of infringing about 270 sections and 14 tables of the IBC 2000. This is roughly 5% of the provisions in the IBC 2000 code.

Notably, ICC has not accused NFPA of infringing the arrangement or presentation of the IBC 2000. Nor can it. The NFPA code is organized according to occupancy, rather than building structure, and therefore has a very different organizational format and numbering system. (Koffel Decl. ¶ 14; Ex. X at 98.) ICC accuses NFPA *only* of copying some language from 5% of its code provisions.

ICC did not reduce its allegations far enough. As demonstrated below, ICC has no ownership interest in these remaining provisions either, no evidence that NFPA copied from ICC materials, and the allegedly copied material, in any event, is not protectible subject matter. This lawsuit should never have been filed in the first place, and should now be dismissed on summary judgment.

II. ARGUMENT

A. Legal Standards

1. Summary Judgment

Summary judgment is warranted when “there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(c).

“Summary judgment must be entered against a party who fails to make a showing sufficient to establish the existence of an element essential to that party’s case, and on which that party will

bear the burden at trial.” *Mid America Title Co. v. Kirk*, 59 F.3d 719, 721 (7th Cir. 1995). The party that bears the burden of proof at trial “may not rest on the pleadings, but must affirmatively demonstrate, by specific factual allegations, that there is a genuine issue of material fact that requires trial.” *Pickett v. Prince*, 52 F. Supp.2d 893, 898 (N.D. Ill. 1999) (citing *Celotex Corp. v. Catrett*, 477 U.S. 317, 324 (1986)). On factual issues, the Court should view the evidence and draw all reasonable inferences in favor of the nonmoving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986).

2. Copyright Infringement

To establish a claim of copyright infringement, ICC must prove two elements: (1) ownership of a valid copyright, and (2) copying of constituent elements of the work that are original. *Feist Publications, Inc. v. Rural Telephone Service Co., Inc.*, 499 U.S. 340, 361 (1991); *Publications Int’l, Inc. v. Meredith Corp.*, 88 F.3d 473, 479 (7th Cir. 1996).

(a) Ownership—The Work for Hire Doctrine

Copyright ownership vests initially in the author of a work. 17 U.S.C. § 201(a). An organization, like ICC, will own a copyright only if: (a) the author assigns his or her copyright to the organization; or (b) the work is made for hire. *See Community for Creative Non-Violence v. Reid*, 490 U.S. 730, 737 (1989); *Billy-Bob Teeth, Inc. v. Novelty, Inc.*, 329 F.3d 586, 591 (7th Cir. 2003).

Under 17 U.S.C. § 101, a work is “made for hire” if: (1) the work is “prepared by an employee within the scope of his or her employment;” or (2) “if the parties expressly agree in a written instrument signed by them that the work shall be considered a work made for hire,” and the work falls within one of the categories set forth in 17 U.S.C. § 101(2). *Respect Inc. v. Committee on the Status of Women*, 815 F. Supp. 1112, 1116-17 (N.D. Ill. 1993).

Copyright ownership, including the question of whether an author is an “employee” under 17 U.S.C. § 101(1), is a question of law. *Kirk v. Harter*, 188 F.3d 1005, 1007 (8th Cir. 1999); *Nimmer on Copyright*, § 13.01(B) (2004).

(b) Illicit Copying

The second element of copyright infringement requires that the defendant prove “copying of constituent elements of the work that are original.” *Feist*, 499 U.S. at 361. This element, sometimes called “illicit copying,” requires proof that: (a) the defendant actually copied the plaintiff’s work; and (b) that the material copied was “original,” i.e., protected, copyrightable subject matter. *Wallace Computer Services, Inc. v. Adams Business Forms, Inc.*, 837 F. Supp. 1413, 1416 & n.7 (N.D. Ill. 1993); *Pampered Chef, Ltd. v. Magic Kitchen, Inc.*, 12 F. Supp.2d 785, 790-91 (N.D. Ill. 1998).

Absent direct evidence, actual copying “may be inferred where the defendant had access to the copyrighted work and the accused work is substantially similar to the copyrighted work.” *Theotokatos v. Sara Lee Personal Products*, 971 F. Supp. 332, 340 (N.D. Ill. 1997). “If the similarities between works are insufficient to prove copying, or if it is established that the accused work was independently created without copying, the plaintiff cannot prevail.” *Id.* Whether the defendant actually copied the plaintiff, i.e., “used the plaintiff’s material as a model,” is a question of fact. *Wallace*, 837 F. Supp. at 1416.

Even if a defendant is found to have copied the plaintiff, the copying will only be “illicit” (i.e., unlawful) if the material appropriated was copyrightable. *Id.* at 1417; *Pampered Chef*, 12 F. Supp.2d at 791-92. Copyrightability is a question of law. *Wallace*, 837 F. Supp. at 1417; *Nimmer on Copyright*, § 13.01(B) (2004).

3. Burden of Proof

The ICC, as plaintiff, has the burden of proof on both ownership and illicit copying. *See Feist*, 499 U.S. at 361.

The existence of a valid certificate of registration creates a prima facie presumption of the validity of a copyright. *Mid Atlantic Title Co. v. Kirk*, 59 F.3d 719, 721 (7th Cir. 1995).

However, “this is simply a rebuttable presumption.” *Id.* Once the defendant introduces evidence that disputes or rebuts the plaintiff’s prima facie case, the burden shifts back to the plaintiff to prove the elements of its case. *See id.* (“the burden of proof in the sense of the risk of nonpersuasion ... remains throughout the trial upon the party on whom it was originally cast” (citing Fed. R. Evid. 301)); *Pickett v. Prince*, 52 F. Supp.2d 893, 901 (N.D. Ill. 1999) (“Plaintiff’s copyright registration will not be sufficient to demonstrate a valid copyright in light of contrary evidence.”)

Here, ICC cannot meet its burden as to ownership, cannot prove that NFPA copied from the plaintiff, and cannot prove that the material allegedly copied was protectible expression.

B. ICC Does Not Own the Asserted Provisions of the IBC 2000

The authors of the asserted code language for the IBC 2000 were: (a) the members of the technical subcommittees; and (b) the members of the public who submitted proposed code language ultimately adopted into the code.

Here, ICC does not allege it has received any assignments for the asserted code language, or that it executed “work for hire” contracts with the authors of the IBC 2000. It received, at most, only nonexclusive licenses from the committee members and the public commentators. (Ex. H; Ex. A at 139-40; Ex. K; Ex. L.) Thus, ICC’s ownership allegation turns entirely on whether the committee members and public commentators were “employees” of the ICC, acting

“within the scope of their employment,” under 17 U.S.C. § 101(1). ICC’s counsel conceded as much at the December 10 hearing, where he stated “our claim basically is going to rest upon provision 1 of 101, which is whether the people that created these codes were employees under the statutory interpretation.” (Ex. T at 18-19.)

Neither the committee members nor the public commentators were “employees” of the ICC under 17 U.S.C. § 101(1), and consequently, ICC does not own the code.

1. The Committee Members Were Not Employees

To determine if an author is an “employee” within the scope of 17 U.S.C. § 101(1), the question is whether the hiring party has the “right to control the manner and means by which the product is accomplished.” *Reid*, 490 U.S. at 751. In *Reid*, the Supreme Court identified twelve factors potentially relevant to this analysis: (1) the skill required; (2) the source of the instrumentalities and tools; (3) the location of the work; (4) the duration of the relationship between the parties; (5) whether the hiring party has the right to assign additional projects to the hired party; (6) the extent of the hired party’s discretion over when and how long to work; (7) the method of payment; (8) the hired party’s role in hiring and paying assistants; (9) whether the work is part of the regular business of the hiring party; (10) whether the hiring party is in business; (11) the provision of employee benefits; and (12) and the tax treatment of the hired party. *Id.* at 751-52. These factors are nonexhaustive, and no one factor is determinative. *Id.* at 752; *Respect*, 815 F. Supp. at 1117.

The Second Circuit has held that, while some of the *Reid* factors will often have minimal significance, others “will be significant in virtually every situation.” *Aymes v. Bonelli*, 980 F.2d 857, 861 (2nd Cir. 1992). The most significant factors, according to *Aymes*, are factors (1), (5), (11), and (12) above. The *Aymes* decision was cited favorably by a court in this district in *Respect*, 815 F. Supp. at 1117.

The ICC did not dictate “the manner and means by which” the volunteer committee members prepared the IBC 2000. In fact, it was exactly the opposite. The members of the steering committee set the procedures for creating the code, and the members of the technical subcommittees voted upon the actual language for the code. (Ex. D at 33-34.) The ICC staff liaisons assigned to assist the committees could not vote on any of these decisions. (Ex. C at 54; Ex. D at 22; Ex. A at 63, 76, 102.)

Analysis of the twelve *Reid* factors bears this out. The four factors identified by *Aymes* as always significant—(1) the skill required; (5) whether the ICC had the right to assign additional projects; (11) the provision of employee benefits; and (12) and the tax treatment of the hired party—all demonstrate that the committee members were not employees. Regarding factor (1), the committee members were all highly skilled code officials. As explained by ICC’s Rule 30(b)(6) witness, Paul Armstrong, the committee members were selected because they had “expertise,” were “experienced in the code development process,” and, for some of the technical subcommittees, “were...licensed engineers.” (Ex. C at 45-46.) Regarding factors (5), (11), and (12), since the committee members were all unpaid volunteers, (Ex. C at 43), the ICC did not have the right to assign additional projects to them, did not provide employee benefits, and did not treat them as employees for tax purposes. At least one court in this District has found compensation and tax treatment to be the most important of all the *Reid* factors. *See Natkin v. Winfrey*, 111 F. Supp.2d 1003, 1008-09 (N.D. Ill. 2000) (“Most importantly, neither photographer was ever treated like an employee in terms of compensation, benefits, and taxes.”)

The remaining eight *Reid* factors, to the extent they are relevant, also dictate that the committee members were not ICC employees. First, since the committee members were

volunteers, the ICC did not have “discretion over when and how long” the committee members would work.

Second, since the committee members continued to work for their government employers while serving on the committees, the “duration of the relationship between the parties” favors non-employee status. As explained in *Respect*, where an individual continues to work for others (or as an entrepreneur) while generating the disputed product, the relationship “lack[s] the hallmarks of common law employment.” 815 F. Supp. at 1118. *See also Aymes*, 980 F.2d at 864 (“Although *Aymes* worked two years for Island, he did occasional work for others at the same time. Moreover, there were undisputed gaps in his employment, which suggests that he was not a full time employee.”)

Third the “method of payment” factor favors non-employment, since the committee members were not paid.

Fourth, “the location of the work” also favors non-employment, since the committee meetings largely took place at public venues, such as hotels. (*See Exhibits 2-4 to the Koffel Declaration.*)

The remaining factors are of marginal relevance. There were no special “instrumentalities or tools” used for the work and no evidence that any assistants were hired. The fact that the ICC is “in business,” and the work may have been part of the ICC’s “regular business” is of little import, since nearly all work done by a company will generally be part of its “regular business.” *See Aymes*, 980 F.2d at 863.

The facts of other cases from this District further confirm that the committee members were not “employees” of the ICC under § 101(1). In *Respect*, the Committee on Status of Women (“CSW”) hired Coleen Mast to draft some educational workbooks on sexual abstinence.

815 F. Supp. at 1115. CSW paid Mast, paid for her typewriter, withheld payroll taxes from Mast's checks, and had some input into the workbooks, "for example, by suggesting revisions" *Id.* at 1118. Nevertheless, the Court found Mast to be an independent contractor, and not an employee, since Mast was "an experienced teacher" (i.e., high level of skill), continued to "act as an entrepreneur" while working for CSW, did not receive employee benefits, and worked from home using her own research materials. *Id.* at 1118-19.

In *Natkin*, photographers hired by Oprah Winfrey's company (Harpo) to photograph Ms. Winfrey at her television studio were held to be independent contractors, rather than employees, even though: (a) Harpo controlled the duration of the employment; (b) Harpo exercised some control over the manner and means of creating the disputed photographs; (c) "the location of the work" was Oprah's set; (d) the photographers were paid, and were identified as "staff photographers." 111 F. Supp.2d at 1008-10.

Numerous cases from other jurisdictions, with facts leaning considerably closer to employment than the facts of this case, have also found the hired party to be an independent contractor. *See Respect*, 815 F. Supp. at 1118, citing *Reid*, 490 U.S. 730, *Aymes*, 980 F.2d 857, and *Marco v. Accent Publishing Co.*, 969 F.2d 1547 (3rd Cir. 1992). *See also Kirk v. Harter*, 188 F.3d 1005, 1008-09 (8th Cir. 1999) (finding a computer programmer to be an independent contractor, since he received no employment benefits and was not treated as an employee for tax purposes, even though several of the *Reid* factors strongly favored employment).

Finally, ICC's contention that the committee members were employees is inconsistent with its own actions and the testimony of its own witnesses. First, at the time the IBC 2000 was drafted, ICC asked committee members to grant a *nonexclusive license* to use materials they created. (Ex. H; Ex. A at 139-40.) If they were employees, and ICC owned the rights under §

101(1), why would ICC need to request a nonexclusive license? Second, two of ICC's 30(b)(6) witnesses—in fact, the only two who were asked the question—both testified explicitly that the committee members were *not* employees of ICC. (Ex. A at 16; Ex. D at 20.) Given this testimony, given the request for a nonexclusive license, and given the above analysis of the *Reid* factors, it is difficult to see how ICC can now argue otherwise.

2. The Public Commentators Were Not Employees

In addition to the committee members, some industry representatives and other members of the public drafted code language in the IBC 2000, pursuant to the public comment and review procedures. These members of the public, as should be clear, were also not “employees” of ICC under § 101(1). They submitted comments and proposed code language voluntarily, subject to only a nonexclusive license, for their own purposes. The ICC maintained no control over “the manner and means” by which the third parties drafted the code language, and none of the twelve *Reid* factors remotely suggest they were ICC employees, acting within the scope of ICC employment.

3. The ICC Staff Members Did Not Draft the Asserted Code

The only ICC employees remotely connected to the code preparation process were the staff liaisons. As discussed in detail in the Facts section, these staff members served only in a supporting, “secretariat” role, and did not author the code. This fact is confirmed by ICC's interrogatory response, the ICC Rules and Procedures documents, and the testimony of three of ICC's Rule 30(b)(6) witnesses, John Battles, Dominic Sims, and Paul Armstrong. (See Part I.B.4 above.)

Despite this contrary evidence, late in discovery, a fourth ICC Rule 30(b)(6) witness, Mike Pfeiffer, testified that staff did indeed draft portions of the IBC 2000. (Ex. F at 89, 95-96, 100.) However, at his deposition, Mr. Pfeiffer could only identify five of the currently asserted

IBC code provisions as having been drafted by staff: Table 503 and four subparts of section 903.⁸ (Provisions attached as Ex. Y, pp. 71, 156.) Mr. Pfeiffer could not state which staff member drafted table 503, and testified that section 903 was drafted by a former staff member named Mark Chubb, who now lives in New Zealand. (Ex. F at 89, 95, 101.)

Even assuming that ICC is allowed to contradict its own interrogatory answers, documents, and other 30(b)(6) testimony, Mr. Pfeiffer's allegations are easily refuted. The IBC committee responsible for Table 503, the "Heights and Area Table," was the Occupancy Subcommittee. (Koffel Decl., ¶ 20.) A review of the meeting minutes of this subcommittee shows that Table 503 was based on legacy codes and a BCMC Report,⁹ and *not* on any new staff expression. (Koffel Decl., ¶¶ 21-22.) The only role played by staff was to calculate values for inclusion in the table using methodologies from the legacy codes and the BCMC Report.¹⁰ At all points in the process, staff was acting under the direction of the subcommittee. (Koffel Decl., ¶ 22.) Notably, according to the minutes, one of the staff members who assisted the subcommittee with calculations for Table 503 was John Battles, who testified in his own deposition that he did *not* draft any chapters of the IBC 2000 code. (Koffel Decl., ¶ 23; Ex. D at 67-68.)

Regarding section 903, in its latest list of allegations, ICC accuses NFPA of copying four subparts of the section: 903.2.2, 903.2.3, 903.2.5, and 903.2.10. (Ex. W at 3.) These subparts, which concern sprinkler systems, were all derived from either the legacy codes or public submissions. None were drafted by ICC staff. (Koffel Decl., ¶ 24.)

⁸ Mr. Pfeiffer identified other portions of the IBC 2000 as allegedly drafted by staff, but these portions are not at issue.

⁹ See Part I.B.3 above for a description of the BCMC code harmonization process from the 1980's and early 1990's.

¹⁰ Calculated mathematical values are facts, and are therefore not copyrightable expression. *See Feist*, 499 U.S. at 344.

Thus, ICC's Procedure documents, ICC's interrogatory response, and the testimony of the ICC's other Rule 30(b)(6) witnesses were all correct: ICC staff employees did not author any of the asserted IBC 2000 code.

ICC, therefore, does not own any of the asserted code language, and has no right to assert the code against NFPA.

C. NFPA Did Not Copy the Asserted Provisions of the IBC 2000

To prove NFPA copied the asserted IBC 2000 code provisions, ICC must show: (a) that the NFPA drafters had access to the allegedly copied IBC provisions; and (b) that the NFPA 5000 and IBC 2000 are substantially similar enough to infer copying. *Wallace*, 837 F. Supp. at 1416.

In the Seventh Circuit, substantial similarity is determined by the ordinary observer test: "whether the accused work is so similar to the plaintiff's work that an ordinary reasonable person would conclude that the defendant unlawfully appropriated the plaintiff's protectible expression by taking material of substance and value." *Atari, Inc. v. N. Am. Philips Consumer Electronics Corp.*, 672 F.2d 607, 614 (7th Cir. 1982).

Here, even applying the "ordinary observer" test in the light most favorable to ICC, it is impossible to conclude that the NFPA 5000 and the IBC 2000 are "substantially similar." ICC has accused NFPA of copying from only 5% of its code provisions, and does not allege that NFPA copied the layout or presentation of the overall code. And even within that 5%, the language of the two codes is far from identical.

Consider, for example, ICC's first allegation with respect to section 903, the sprinkler system code discussed above. ICC alleges that NFPA's section 17.3.5.1 is copied from IBC 2000's section 903.2.2. The two provisions are reproduced below:

IBC 2000 Section 903.2.2	NFPA 5000 Section 17.3.5.1
<p>903.2.2 Group E. An automatic sprinkler system shall be provided throughout all Group E fire areas greater than 20,000 square feet (1858 m²) in area. An automatic sprinkler system shall also be provided for every portion of educational buildings below the level of exit discharge. Exception: Where each classroom has at least one exterior exit door at ground level.</p>	<p>17.3.5.1 Educational occupancy buildings with a fire compartment exceeding 20,000 ft² (1860 m²) shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 55.3.</p>

(Ex. Y at 156; Ex. Z at 179.) The only similarity between the two sections is the number 20,000 ft², which, as discussed below, is a fact, not copyrightable expression.

So that the Court can perform a complete “ordinary observer” test, we have submitted, with Exhibit I to Mr. Koffel’s declaration, the text of each of the allegedly copied IBC 2000 code sections, next to the allegedly infringing sections of the NFPA 5000 code.

The two codes are dissimilar because NFPA did not use the IBC 2000 “as a starting point for” its own code, as required for infringement. *Stillman v. Leo Burnett Co., Inc.*, 720 F. Supp. 1353, 1357 (N.D. Ill. 1989). NFPA’s consultant, Mr. Carson, prepared the first draft from existing NFPA codes and standards and from the EPCOT building code, which NFPA was licensed to use, without reviewing or considering the IBC or the legacy codes. (Carson Decl., ¶¶ 1-3; Ex. V.) After Mr. Carson finished his draft, the NFPA launched a committee/public review process to complete the code. If there are any similarities between specific code provisions, it is because: (a) both parties used language submitted by industry representatives during the comment processes (often the same industry representatives); (b) both parties used code officials on their drafting committees (in some cases, the same officials); (c) both parties made use of BCMC Reports, which were prepared jointly by the parties and cross-licensed; (d) both parties adopted code from pre-existing, third party codes and standards; and (e) as discussed in part D

below, the asserted code provisions are largely statements of facts, which can only be expressed in a limited number of ways.

As evidence of NFPA's independent development, Mr. Koffel's Declaration identifies the source of each of the accused NFPA code sections. These sources were: (i) The Code of Federal Regulations; (ii) pre-existing NFPA codes and standards; (iii) ASCE 7 (a third party standards document); (iv) the EPCOT Building Code; (v) other industry standards; (vi) the Uniform Fire Code; (vii) the BCMC Reports; (viii) public proposals and comments; and (ix) proposals from NFPA committee members. (Koffel Decl. ¶ 18 & Ex. 1.) NFPA did not copy code from the IBC 2000 or the asserted legacy codes for any of these provisions. This independent creation precludes any finding of infringement. *Theotokatos*, 971 F. Supp. at 340.

D. The Asserted IBC Code Language Is Not Copyrightable

In addition to ownership and actual copying, ICC must show that any material appropriated is protectible under copyright law. *Wallace*, 837 F. Supp. at 1416. Here, the material ICC alleges NFPA copied is largely statements of facts, following mandatory code drafting conventions, and is therefore not protectible subject matter.

Two legal limitations on copyrightability apply here: (a) facts and ideas are not copyrightable, *Feist*, 499 U.S. at 344; and (b) the merger doctrine.

Much of the asserted language of the IBC 2000 code is recitations of numbers, limits, and data. (See, e.g., the 20,000 ft² data point in section 903, and the height and area data in the Heights and Area Table 503, attached as Ex. Y.) These data points are facts and ideas, and are therefore not copyrightable. Only original expression of the facts is protected by copyright. *Id.* at 1289.

One case from this circuit is particularly instructive. In *Publications International Limited v. Meredith Corp.*, 88 F.3d 473 (7th Cir. 1996), the Court held that a collection of recipes consisting of ingredients and basic instructions was not copyrightable. *Id.* at 480. The Court found that “there is no expressive element in each listing,” and each author “was not giving literary expression to his individual creative labors. Instead he was writing down an idea....” *Id.* See also *Nash v. CBS*, 899 F.2d 1537, 1541 (7th Cir. 1990) (CBS’s use of facts from a copyrighted book about John Dillinger was not infringement).

In the asserted IBC 2000, the standards and data are recited, not with “literary expression” or “creative labors.” *Meredith*, 88 F.3d at 480. Rather, they are recited according to mandatory code drafting conventions. As explained by one of ICC’s Rule 30(b)(6) witnesses, codes must be written “in enforceable, mandatory language”:

Q. ...What’s an example of mandatory language versus—would there be—

A. Yeah. Let’s say, for example, it is preferred that the bottom of that window sill be not less than 12 inches in height. The word “preferred” does not make it mandatory. It makes it effectively a suggestion.

Q. Sure.

A. --versus a text that says the bottom of that sill height shall not be less than 12 inches. That’s a definitive, enforceable statement.

Q. Okay. So codes are typically written in definitive, enforceable statements?

A. That’s correct.

* * *

Q. Okay. Is this—this mandatory language, is that language that’s common throughout all codes, regardless of whether or not they are limited to building?

A. I believe so.

(Ex. F at 123-24.)

This “mandatory language” invokes the merger doctrine, which states that “where an idea is incapable of being expressed in more than one manner, there can be no copyright in the expression.” *Mid America Title Co. v. Kirk*, 867 F. Supp 673, 683-684 (N.D. Ill. 1994), *aff’d*, 59

F.3d 719 (7th Cir. 1995). The doctrine also applies where there are only a limited number of ways to express a fact or idea. See *Morrissey v. Proctor & Gamble Co.*, 379 F.2d 675, 678 (1st Cir. 1967) (“When the uncopyrightable subject matter is very narrow, so that ‘the topic necessarily requires,’ if not only one form of expression, at best only a limited number, to permit copyrighting would mean that a party or parties, by copyrighting a mere handful of forms, could exhaust all possibilities of future use of the substance.”) See also *Alberto-Culver Co. v. Andrew Dumon, Inc.*, 466 F.2d 705, 711 (7th Cir. 1972) (Stevens, J.) (descriptive “ordinary phrase” not subject to copyright protection). Here, given that the allegedly copied code language simply recites facts, following mandatory conventions, there is at best a limited number of ways to express the facts. The expression therefore “merges” into the idea, and the language is not copyrightable.

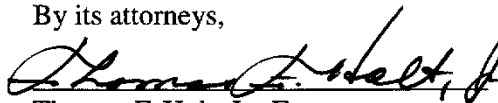
III. CONCLUSION

ICC cannot prove: (a) that it owns the code language it asserts; (b) that NFPA copied the IBC 2000 code provisions as a factual matter; and (c) that the allegedly copied code language is protectible subject matter. For the above reasons, the Court should grant summary judgment in favor of NFPA and dismiss ICC's complaint.

NATIONAL FIRE PROTECTION
ASSOCIATION, INC.,

By its attorneys,

Dated: February 25, 2005



Thomas F. Holt, Jr., Esq.

Tara C. Clancy, Esq.

Christopher Centurelli, Esq.

Kirkpatrick & Lockhart Nicholson Graham LLP

75 State Street

Boston, MA 02109

(617) 261-3100

Peter C. John, Esq.

Williams Montgomery & John Ltd.

2100 Civic Opera Building

Twenty North Wacker Drive


Chicago, IL 60606

(312) 443-3200

Case 1:13-cv-01215-TSC Document 122-9 Filed 12/22/15 Page 48 of 134


EXHIBIT 149

Membership Renewal



[Home](#)
[About ASTM](#)
[Site Map](#)
[Support](#)
[Contact](#)
[Policies](#)
[Copyright/Permissions](#)

Copyright © 2006 - 2015 ASTM. All Rights Reserved. ASTM International, 100 Bar Harbor Drive, PO Box C700, West Conshohocken, PA, 19380-2995 USA




[Home](#)
[About ASTM](#)
[Site Map](#)
[Support](#)
[Contact](#)
[Policies](#)
[Copyright/Permissions](#)

Copyright © 2006 - 2015 ASTM. All Rights Reserved. ASTM International, 100 Bar Harbor Drive, PO Box C700, West Conshohocken, PA, 19380-2995 USA

[Home](#)
[About ASTM](#)
[Site Map](#)
[Support](#)
[Contact](#)
[Policies](#)
[Copyright/Permissions](#)

Copyright © 2006 - 2015 ASTM. All Rights Reserved. ASTM International, 100 Bar Harbor Drive, PO Box C700, West Conshohocken, PA, 19380-2995 USA



[Home](#)
[About ASTM](#)
[Site Map](#)
[Support](#)
[Contact](#)
[Policies](#)
[Copyright/Permissions](#)

Copyright © 2006 - 2015 ASTM. All Rights Reserved. ASTM International, 100 Bar Harbor Drive, PO Box C700, West Conshohocken, PA, 19380-2995 USA

PARTICIPATING MEMBER



Search ASTM

LANGUAGES CONTACT CART (0)

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

Home > Membership > Membership Renewal

Digital Library Home MyAccount Help

Membership Renewal

Welcome, Kara Laufel

Thank you for renewing your Participating membership. Your 2014 Membership renewal fee is \$75 U.S.

You agree, by your participation in ASTM and enjoyment of the benefits of your annual membership, to have transferred and assigned any and all interest you possess or may possess, including copyright, in the development or creation of ASTM standards or ASTM IP to ASTM. For additional information, please see the ASTM IP Policy.

Click "Continue" to place your membership renewal in the ASTM shopping cart.



Home About ASTM Site Map Search Contact Policies Copyright/Permissions

Copyright © 2006 - 2014 ASTM. All Rights Reserved. ASTM International, 100 Bar Harbor Drive, PO Box C700, West Conshohocken, PA 19380-2900 USA



Search ASTM

LANGUAGES CONTACT CART (0)

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

Home > Membership > Member Your Volume

Digital Library Home MyAccount Help

Membership Renewal

Kara Laufel

Your membership entitles you to a free issue: Volume from the Annual Book of ASTM Standards

1. Select Section of Interest:

*

2. Select Volume:

*

Note: Volume titles have been truncated for display purposes. Click here for a list of full volume titles and publication dates for Print/CD-ROM versions.

3. Select Format:

*

Click here to learn more about your Volume format options.

No, I do not want a member volume


Click "Continue" to place your free Volume in your ASTM shopping cart.



Home About ASTM Site Map Search Contact Policies Copyright/Permissions

Copyright © 2006 - 2014 ASTM. All Rights Reserved. ASTM International, 100 Bar Harbor Drive, PO Box C700, West Conshohocken, PA 19380-2900 USA

Note: Items will be added to the shopping cart after this screen.



4 All Search ASTM

LANGUAGES CONTACT CART (2)

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

Get Involved / Membership / Membership Renewal

Membership Renewal

Kara Luefer

Member Volume 01.01 Online Basic (Click [here](#) to change your selection) has been added to your shopping cart.

For \$33 you can change your Member Online Basic Volume to the online premium Volume called Online Plus. This Online Plus Volume includes not only active standards, but also redefined, historical and withdrawn standards. Click [here](#) for more information on Online Plus.


Would you like to change your Online Basic Volume to the Online Plus Volume?

Yes, change my Basic Volume to the Plus Volume.

No, I prefer the Basic Volume.

Home About ASTM Site Map Support Contact Policies Copyright/Permissions

Copyright © 2005 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 84128-1299 USA.



4 All Search ASTM

LANGUAGES CONTACT CART (2)

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

Get Involved / Membership / Membership Renewal

Membership Renewal

Kara Luefer

Volume 01.01 (Click [here](#) to change your selection) has been added to your shopping cart.

Would you like to maintain any other Volumes from the Annual Book of ASTM Standards and add them to your cart?

Yes, please show me a list of available Volumes.

No, take me to my shopping cart.

Home About ASTM Site Map Support Contact Policies Copyright/Permissions

Copyright © 2005 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 84128-1299 USA.



Search ASTM

LANGUAGES CONTACT CART (2)

PRODUCTS AND SERVICES

GET INVOLVED

ABOUT

NEWS

You might also consider:



Standards Tracker

Free



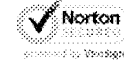
Your Shopping Cart:

Description	Qty.	Price	Total	
Participating Membership	1	\$75.00	\$75.00	delete
Member Volume (IRON AND STEEL PRODUCTS ONLY) Seal-Piping, Tubing, Flanges-Online Book	1	\$0.00	\$0.00	delete


Checkout

Subtotal: \$75.00

CONTINUE SHOPPING



ORGANIZATIONAL MEMBER




[All](#) |

[LANGUAGES](#) | [CONTACT](#) | [CART \(0\)](#)

[PRODUCTS AND SERVICES](#) | [GET INVOLVED](#) | [ABOUT](#) | [NEWS](#)

[Home](#) | [About ASTM](#) | [Site Map](#) | [Support](#) | [Contact](#) | [Policies](#) | [Copyright/Permissions](#)

Copyright © 2006 - 2012 ASTM. All Rights Reserved. ASTM International, 100 Bar Harbor Drive, PO Box C700, West Conshohocken, PA, 19380-2999, USA



[All](#) |

[LANGUAGES](#) | [CONTACT](#) | [CART \(1\)](#)

[PRODUCTS AND SERVICES](#) | [GET INVOLVED](#) | [ABOUT](#) | [NEWS](#)

Membership Renewal

Welcome, William Sturley

Thank you for renewing your Organizational membership. Your 2014 Membership renewal fee is \$400 U.S.

You agree, by your participation in ASTM and enjoyment of the benefits of your annual membership, to have transferred and assigned any and all interest you possess or may possess, including copyright, in the development or creation of ASTM standards or ASTM IP to ASTM. For additional information, please see the [ASTM IP Policy](#).

Now, Your renewal will be submitted under your Representative Account 000420807.

Click "Continue" to place your membership renewal in the ASTM shopping cart.



You might also consider



Standards Tracker

Free



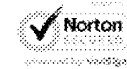
Your Shopping Cart:

Description	Qty.	Price	Total	
Organizational Membership	1	\$400.00	\$400.00	delete

[Go to Cart](#)

Subtotal: \$400.00

[Checkout](#)



ISO MEMBERS



Search ASTM

LANGUAGES CONTACT MY CART

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

Get Involved / Membership / Membership Renewal

- Digital Library Home
- My Account
- Help

Membership Renewal


Welcome Giancarlo Mazzoleni

ISC members do not need to go through the membership renewal process. For questions regarding your membership, please contact your staff manager.



Home About ASTM Site Map Support Contact Policies Copyright/Permissions
Copyright © 2006 - 2015 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19380-5000, USA

SPECIAL MEMBERS



Search ASTM

[LANGUAGES](#)
[CONTACT](#)
[CART \(0\)](#)

[PRODUCTS AND SERVICES](#)
[GET INVOLVED](#)
[ABOUT](#)
[NEWS](#)

[Home](#)
[About ASTM](#)
[Site Map](#)
[Support](#)
[Contact](#)
[Policies](#)
[Copyright/Permissions](#)

Copyright © 2009 - 2016 ASTM International, 100 Barr Harbor Drive, PO Box C, Philadelphia, PA, 19103-2900 USA


- [Digital Library Home](#)
- [MyAccount](#)
- [Help](#)

Membership Renewal

Welcome Les Jansarik!

Special members do not need to go through the membership renewal process; your membership type does not require a fee for renewal.

LIFETIME MEMBERS



Search ASTM

[LANGUAGES](#)
[CONTACT](#)
[CART \(0\)](#)

[PRODUCTS AND SERVICES](#)
[GET INVOLVED](#)
[ABOUT](#)
[NEWS](#)

[Home](#)
[About ASTM](#)
[Site Map](#)
[Support](#)
[Contact](#)
[Policies](#)
[Copyright/Permissions](#)

Copyright © 2009 - 2016 ASTM International, 100 Barr Harbor Drive, PO Box C, Philadelphia, PA, 19103-2900 USA

- [My Choices](#)
- [Digital Library Home](#)
- [MyAccount](#)
- [Help](#)

Membership Renewal

Welcome, Bernard Pevzlin

Thank you for renewing your Lifetime membership. Your 2016 Membership renewal fee is \$0 U.S.

You agree, by your participation in ASTM and enjoyment of the benefits of your annual membership, to have transferred and assigned any and all interest you possess or may possess, including copyright, in the development or creation of ASTM standards or ASTM IP to ASTM. For additional information, please see the [ASTM IP Policy](#).

Click "Continue" to place your membership renewal in the ASTM shopping cart.





Search ASTM

LANGUAGES CONTACT CART (0)

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

Get Involved / Membership / Membership Renewal

- MyChoices
- Digital Library Home
- MyAccount
- Help

Membership Renewal

Richard Peppin

Your membership entitles you to a free basic Volume from the Annual Book of ASTM Standards.

Currently your Member Online Volume in your MyStandards collection gives you access to the following:

- Member Online Volume
 - 0409 Basic (expiration March 30, 2016)

Would you like to renew for the same Member Online Volume?

[Yes](#), please renew the above Online Volume

[No](#), I would like to renew for a different Member Volume

If you select a different online volume, it will replace your current online volume.

[No](#), I'm not ready to pick my free Volume at this time



Home About ASTM Site Map Support Contact Policies Copyright/Permissions
Copyright © 2006 - 2015 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C7000, West Conshohocken, PA 19380-2099 USA



Search ASTM

LANGUAGES CONTACT CART (0)

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

Get Involved / Membership / Membership Renewal

- MyChoices
- Digital Library Home
- MyAccount
- Help

Membership Renewal

Richard Peppin

Member Volume 0409 Online Basic (Click [here](#) to change your selection) has been added to your shopping cart.

For \$49 you can change your Member Online Basic Volume to the online premium Volume called Online Plus. This Online Plus Volume includes not only active standards, but also reclassified, historical and withdrawn standards. Click [here](#) for more information on Online Plus.

Would you like to change your Online Basic Volume to the Online Plus Volume?

[Yes](#), change my Basic Volume to the Plus Volume.

[No](#), I prefer the Basic Volume.



Home About ASTM Site Map Support Contact Policies Copyright/Permissions
Copyright © 2006 - 2015 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C7000, West Conshohocken, PA 19380-2099 USA



AP Search ASTM

LANGUAGES CONTACT W CART (1)

PRODUCTS AND SERVICES

GET INVOLVED

ABOUT

NEWS

You might also consider:



Standards Tracker

Free



Your Shopping Cart:

Description	Qty.	Price	Total	
Lifetime Membership	1	\$0.00	\$0.00	delete

Checkout

Subtotal: \$0.00

Checkout

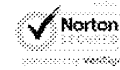
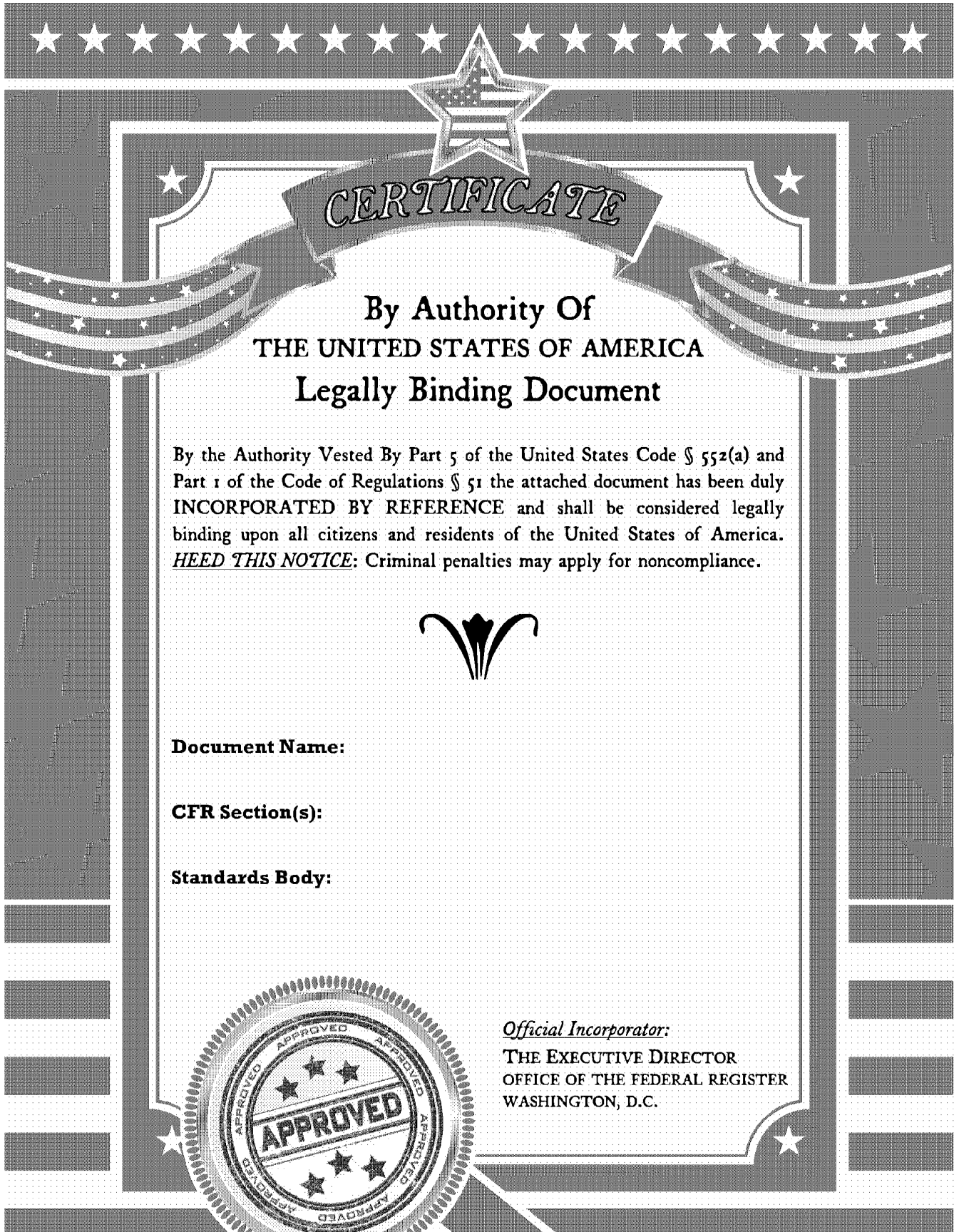


EXHIBIT 150

(FILED UNDER SEAL)

Case 1:13-cv-01215-TSC Document 122-9 Filed 12/22/15 Page 59 of 134

EXHIBIT 151





Designation: D 1217 – 93 (Reapproved 1998)

Standard Test Method for Density and Relative Density (Specific Gravity) of Liquids by Bingham Pycnometer¹

This standard is issued under the fixed designation D 1217; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This test method covers the measurement of the density of pure hydrocarbons or petroleum distillates boiling between 90 and 110°C that can be handled in a normal fashion as a liquid at the specified test temperatures of 20 and 25°C.

1.2 This test method provides a calculation procedure for conversion of density to relative density (specific gravity).

1.3 The values stated in SI units are to be regarded as the standard.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.* Specific precautionary statements are given in Note 1, Note 2, and Note 3.

2. Referenced Documents

2.1 *ASTM Standards:*

E 1 Specification for ASTM Thermometers²

3. Terminology

3.1 *Definitions:*

3.1.1 *density*—the weight in vacuo, (that is, the mass) of a unit volume of the material at any given temperature.

3.1.2 *relative density (specific gravity)*—the ratio of the mass (weight in vacuo) of a given volume of material at a temperature, t_1 , to the mass of an equal volume of water at a reference temperature, t_2 ; or it is the ratio of the density of the material at t_1 to the density of water at t_2 . When the reference temperature is 4.00°C, the temperature at which the relative density of water is unity, relative density (specific gravity) and density are numerically equal.

4. Summary of Test Method

4.1 The liquid sample is introduced into a pycnometer, equilibrated to the desired temperature, and weighed. The relative density (specific gravity) or density is then calculated

from this weight and the previously determined weight of water that is required to fill the pycnometer at the same temperature, both weights being corrected for the buoyancy of air.

5. Significance and Use

5.1 Density is a fundamental physical property which can be used in conjunction with other properties to characterize pure hydrocarbons and their mixtures.

5.2 This test method was originally developed for the determination of the density of the ASTM Knock Test Reference Fuels *n*-heptane and *isooctane*, with an accuracy of 0.00003 g/mL. Although it is no longer employed extensively for this purpose, this test method is useful whenever accurate densities of pure hydrocarbons or petroleum fractions with boiling points between 90 and 110°C are required.

6. Apparatus

6.1 *Pycnometer*, Bingham-type,³ conforming to the dimensions given in Fig. 1, constructed of borosilicate glass and having a total weight not exceeding 30 g.

6.2 *Constant-Temperature Bath*, provided with suitable pycnometer holders or clips and means for maintaining temperatures constant to $\pm 0.01^\circ\text{C}$ in the desired range.

6.3 *Bath Thermometer*, graduated in 0.1°C subdivisions and standardized for the ice point and the range of use to the nearest 0.01°C . ASTM Saybolt Viscosity Thermometer 17C as prescribed in Specification E 1, designed for tests at 21.1°C and 25°C, is recommended. A standardized platinum resistance thermometer may also be used, and offers the best means for observing minute temperature changes in the bath. Whichever means are available, it must be realized that for most hydrocarbons the density coefficient is about 0.0008 units/ $^\circ\text{C}$, and therefore an error of $\pm 0.013^\circ\text{C}$ would cause an error of ± 0.00001 in density.

6.4 *Hypodermic Syringe*, 30-mL capacity, of chemically resistant glass, equipped with a 152-mm (6-in.) needle made of stainless steel tubing as shown in Fig. 2.

6.5 *Draw-Off Needle*, made of stainless steel tubing as shown in Fig. 2.

¹ This test method is under the jurisdiction of ASTM Committee D-2 on Petroleum Products and Lubricants and is the direct responsibility of Subcommittee D02.04 on Hydrocarbon Analysis.

Current edition approved Feb. 15, 1993. Published May 1993. Originally published as D 1217 – 52 T. Last previous edition D 1217 – 91.

² *Annual Book of ASTM Standards*, Vol. 14.03.

³ Pycnometer available from Reliance Glass Co., 220 Gateway Rd., Bensenville, IL 60106-0825, has been found satisfactory.

D.1217

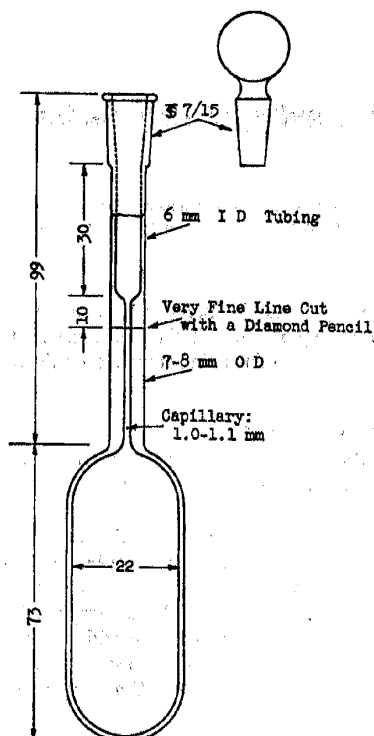


FIG. 1 Bingham-Type Pycnometer, 25 mL

6.6 *Solvent-Cleaning Assembly*, as shown in Fig. 3.

6.7 *Chromic Acid Cleaning Apparatus*, similar to that shown in Fig. 4.

6.8 *Balance*, capable of reproducing weighings within 0.1 mg. Mechanical balances should have sensitivity which causes the pointer to be deflected 2 or 3 scale divisions per 1 mg when carrying a load of 30 g or less on each pan. The balance should be located in a room shielded from drafts and fumes and in which the temperature changes between related weighings (empty and filled pycnometer) do not cause a significant change in the ratio of the balance arms. Otherwise weighings shall be made by the method of substitution, in which the calibrated weights and pycnometer are alternately weighed on the same balance pan. The same balance shall be used for all related weighings.

6.9 *Weights*, whose relative values are known to the nearest 0.05 mg or better. The same set of weights shall be used for the calibration of the pycnometer and the determination of densities.

7. Reagents and Materials

7.1 *Acetone*—(Warning—See Note 1).

NOTE 1—Warning: Extremely flammable. Use adequate ventilation.

7.2 *Isopentane*—(Warning—See Note 2).

NOTE 2—Warning: Extremely flammable. Avoid buildup of vapors and remove all sources of ignition, especially non-explosion proof electrical apparatus.

7.3 *Chromic Acid (Potassium Dichromate/Conc. Sulfuric Acid)*—(Warning—See Note 3).

NOTE 3—Warning: Causes severe burns. A recognized carcinogen. Do not get in eyes, or on skin or clothing.

8. Preparation of Apparatus

8.1 Thoroughly clean the pycnometer with hot chromic acid cleaning solution by means of the assembly shown in Fig. 4 (Warning—See Note 3). Chromic acid solution is the most effective cleaning agent. However, surfactant cleaning fluids have also been used successfully. Mount the apparatus firmly and connect the trap to the vacuum. Warm the necessary amount of cleaning acid in the beaker, place the pycnometer on the ground joint, and evacuate by opening the stopcock to vacuum. Fill the pycnometer with acid by turning the stopcock, repeat several times or remove the filled pycnometer, and allow it to stand for several hours at 50 to 60°C. Remove the acid from the pycnometer by evacuation, empty the acid from the trap, and flush the pycnometer with water. Cleaning should be made in this manner whenever the pycnometer is to be calibrated or whenever liquid fails to drain cleanly from the walls of the pycnometer or its capillary. Ordinarily, the pycnometer may be cleaned between determinations by washing with a suitable solvent, rinsing with pure, dry acetone, followed by isopentane, and vacuum drying.

8.2 Transfer the pycnometer to the cleaner assembly shown in Fig. 3, with vacuum line and trap attached to the side tube as indicated. Place the pycnometer on the cleaner with the upper hypodermic needle extending upward into the pycnometer, and press the edge of the ground joint on the rubber stopper until the vacuum holds it in place. Draw out all the liquid or sample. Immerse the lower end of the hypodermic tube in a suitable solvent and draw 20 to 25 mL through the pycnometer. Leaving the pycnometer in place, draw air through it until it is dry. Clean the hypodermic syringe with the same apparatus.

9. Calibration of Pycnometer

9.1 Proceeding as directed in Section 10, determine the weight of freshly-boiled and cooled distilled water (distilled from alkaline permanganate through a tin condenser) held by the pycnometer when equilibrated to volume at the bath temperature to be used in the determination. Repeat until at least three values agree to ± 0.2 mg.

10. Procedure

10.1 Using another 25-mL pycnometer as a tare (Note 4), weigh the clean, dry pycnometer to 0.1 mg and record the weight.

NOTE 4—It is convenient to use the lightest of a set of pycnometers as a tare. For best results the treatment and environment of both pycnometer and tare should be identical for some time prior to weighing.

10.2 Cool the sample to 5 to 10°C below the test temperature, and fill the clean 30-mL hypodermic syringe. Transfer the sample to the pycnometer through the filling needle; avoid trapping air bubbles (Note 2) in the bulb or capillary of the pycnometer. If any are present, draw them into the syringe where possible. Also remove with the syringe or draw-off

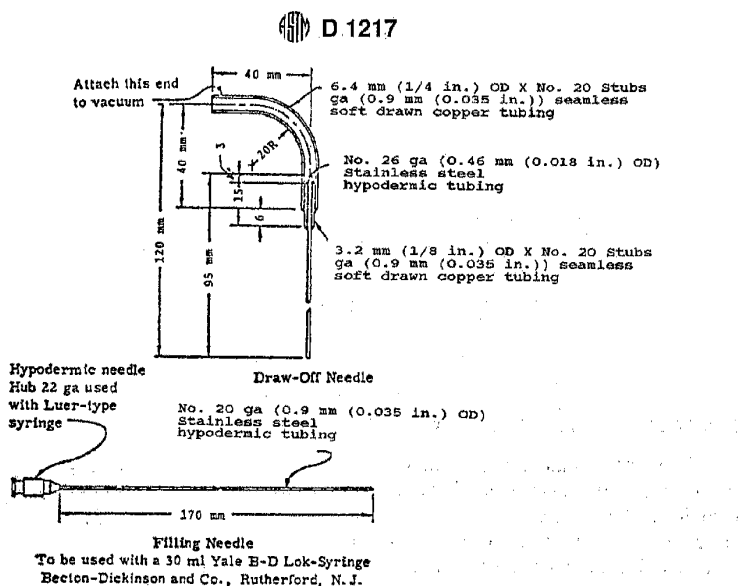


FIG. 2 Accessories for Bingham-Type Pycnometer

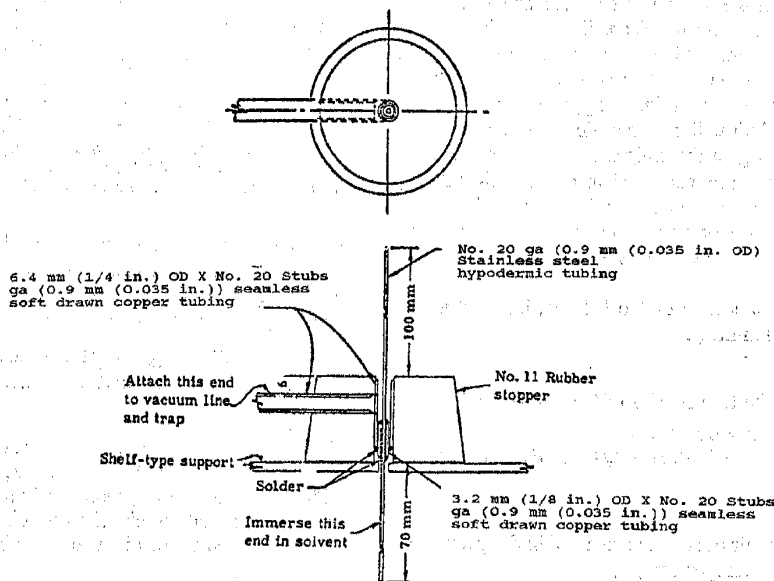


FIG. 3 Cleaner Assembly for Bingham-Type Pycnometer

needle any liquid above the calibration mark in the capillary or overflow reservoir. Dry the remainder with a cotton fiber pipe cleaner or cotton swab which has been dampened slightly with acetone.

NOTE 5—For work of highest accuracy on pure compounds, dissolved air may be removed from the sample by repeated freezing and remelting of the sample under vacuum in the pycnometer.

10.3 Close the pycnometer with the glass stopper and immerse it to a point above the calibration mark in the constant-temperature bath adjusted to a constancy of $\pm 0.01^\circ\text{C}$

at the desired temperature. Periodically, or before the liquid expands into the overflow chamber, remove the stopper, raise the pycnometer sufficiently to expose the calibration mark to view, and readjust the liquid level to the mark by withdrawing liquid through the steel draw-off needle until expansion has stopped, indicating that the liquid has reached the temperature of the thermostat. Do not allow the liquid to expand more than 10 mm above the calibration mark at any time, to minimize errors caused by faulty drainage. Allow the contents to equilibrate an additional 10 min and draw the level down exactly to

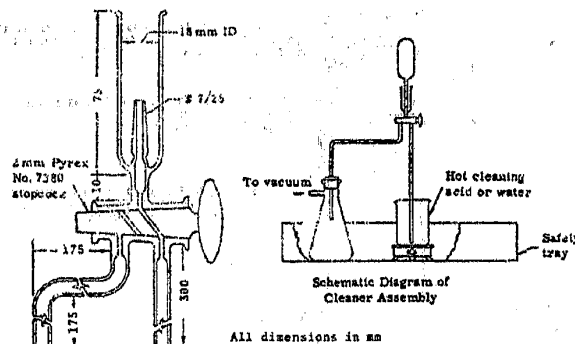


FIG. 4 All-Glass Pycnometer Cleaner Assembly for Use with Hot Chromic Acid Cleaning Solution

the calibration line, avoiding parallax and using a magnifier, if necessary, to obtain good visibility. Remove any liquid adhering to the walls above the calibration mark, with the draw-off needle or pipe cleaner, depending upon the volatility of the sample. Portions in the overflow bulb may be removed with a cotton swab moistened with acetone.

10.4 Replace the glass stopper, remove the pycnometer from the bath, wash the outside surface with acetone, and dry thoroughly with a chemically clean, lint-free, slightly damp cloth. Place the pycnometer in or near the balance case for 20 min and weigh to the nearest 0.1 mg. In atmospheres of low humidity (60 % or lower), drying the pycnometer by rubbing with a dry cotton cloth will induce static charges equivalent to a loss of about 1 mg in the weight of the pycnometer. This charge need not be completely dissipated in less than 30 min. The use of about 0.1-mg radium bromide- or polonium-coated foil in the balance case, or maintaining the relative humidity at 60 % or higher, aids in reducing weighing difficulties due to static charges.

10.5 Record temperature of the balance, barometric pressure, and relative humidity.

11. Calculation

11.1 Calculate the true density of the sample as follows:

$$\text{Density, g/mL at } ^\circ\text{C} = \frac{W_s(1 + (d_w/d_s)) - (d_w/d_w)}{d_w(W_w(1 + (d_w/d_w)) - (d_w/d_w))} \quad (1)$$

where:

W_s = weight in air of sample contained in the pycnometer at the test temperature, g,

W_w = weight in air of the water contained in the pycnometer at the calibration temperature, g,

d_w = density of water at the calibration temperature, as obtained from Table 1,

d_a = density of air in balance case at the time of weighing, as calculated from 10.3,

d_{wt} = density of weights used in weighing the sample and water (brass = 10.4 g/mL, stainless steel = 7.75 g/mL), and

d_s = approximate density of sample or $(W_s \times d)/W_w$ (2)

11.2 The equation assumes that the weighings of the pycnometer empty and filled are made in such a short time interval

TABLE 1 Density of Water^A

Temperature, °C	Density, g/mL	Temperature, °C	Density, g/mL	Temperature, °C	Density, g/mL
0	0.999840	21	0.997891	40	0.992212
3	0.999864	22	0.997769	45	0.990208
4	0.999872	23	0.997537	50	0.988030
5	0.999864	24	0.997295	55	0.985688
10	0.999699	25	0.997043	60	0.983191
15	0.999099	26	0.996782	65	0.980546
15.56	0.998012	27	0.996511	70	0.977759
16	0.998943	28	0.996231	75	0.974837
17	0.998774	29	0.995943	80	0.971785
18	0.998595	30	0.995645	85	0.968606
19	0.998404	35	0.994029	90	0.965305
20	0.998203	37.78	0.993042	100	0.958345

^ADensities conforming to the International Temperature Scale 1990 (ITS 90) were extracted from Appendix G, *Standard Methods for Analysis of Petroleum and Related Products 1991*, Institute of Petroleum, London.

that the air density has not changed. If significant change should occur, the calculated apparent weight of the sample, W_s , in this equation, must be corrected for the difference in air buoyancy exerted on the pycnometer as follows:

$$W_s = W_{PS}^2 - W'_p(1 + (d'_a/2.2) - (d'_a/d_w)) / (1 + (d_a^2/2.2) - (d_a^2/d_w)) \quad (3)$$

where:

W_{PS}^2 = weight of pycnometer and contained sample under second or final air density,

W'_p = weight of pycnometer in air of first density,

d'_a = density of air when weighing empty pycnometer,

d_a^2 = density of air when weighing filled pycnometer,

and


d_{wt} and 2.2 = density of weights and borosilicate glass, respectively.

Likewise, if the pycnometer, empty and filled with water for calibration, is weighed under different air densities a similar correction for different air buoyancies shall be applied.

11.3 Calculate the relative density (specific gravity) of the sample by dividing the density as obtained in 11.1 by the relative density of water at the reference temperature obtained from Table 1.

11.4 Calculate the density of air in the balance room as follows:

Air density (d_a), g/mL

 D 1217

$$= [(B - 0.3783 Hp)(0.000465)] / (273 + t) \quad (4)$$

where:

- B = barometric pressure, mm Hg, corrected to 0°C,
 H = relative humidity, decimal fraction,
 p = vapor pressure of water at temperature t , mm Hg, and
 t = room temperature, °C.

NOTE 6—If this test method is to be used frequently, a considerable amount of calculation can be avoided by use of a gas density balance to determine the air density. Weigh a sealed 250-mL glass bulb at several different air densities and plot the weight against the air density. To determine the air density at some later time, weigh the bulb and read the air density from the point on the curve corresponding to the weight.

11.5 To calculate the density or relative density (specific gravity) at any test temperature, t , other than the calibration temperature, t_c (to correct for the cubical coefficient of thermal expansion of borosilicate glass), divide the value obtained in 10.1 or 10.2 by the following expression:

$$1 + 9.6 \times 10^{-6} (t - t_c) \quad (5)$$

12. Report

12.1 In reporting density, give the test temperature and the units (for example, density, 20°C = x.xxxxx g/mL). In report-

ing relative density (specific gravity), give both the test temperature and the reference temperature, but no units (for example, relative density (specific gravity), 20/4°C = x.xxxxx). Carry all calculations to one digit beyond the last significant figure, but report the final result to the fifth decimal place (0.00001).

13. Precision and Bias

13.1 *Precision*—Results, using the 25-mL Bingham-type pycnometer, should not differ from the mean by more than the following amounts:

Repeatability One Operator and Apparatus	Reproducibility Different Operators and Apparatus
0.00002	0.00003

NOTE 7—The precision for this method was not obtained in accordance with RR:D02-1007.

13.2 *Bias*—The difference of results from the established values when compared to pure reference materials is not expected to be more than ± 0.00003 g/mL. Specific bias has not been established by cooperative testing.

14. Keywords

14.1 Density; pycnometer; relative density; specific gravity

The American Society for Testing and Materials takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, 100 Barr Harbor Drive, West Conshohocken, PA 19428.

Case 1:13-cv-01215-TSC Document 122-9 Filed 12/22/15 Page 67 of 134

EXHIBIT 152

INTERNET ARCHIVE
Wayback Machine
[1,562 captures](#)
 29 Oct 96 - 29 Nov 15

APR FEB
 1999 2000
 29



American Society for Testing and Materials

Technical Standards for Industries Worldwide



- **ASTM Store**
- **Technical Committees/ Membership**
- **Training Courses**
- **Quality Assurance Programs**
- **News & Information**

- **Search Lab Directory**
- **Search Consultants Directory**
- **Mission Statement**
- **Privacy Policy Statement**

STANDARDIZATION NEWS ASTM's Monthly Magazine

Copyright 1996-2000
 American Society For Testing and Materials
 All rights reserved
 ASTM, 100 Barr Harbor Drive
 West Conshohocken,
 Pennsylvania, USA 19428-2959

[SITE MAP](#) | [CONTACT](#) | [FAQs](#)

[Intellectual Property Policy](#)

INTERNET ARCHIVE
Wayback Machine
<http://www.astm.org/>
 1,562 captures
 29 Oct 96 - 29 Nov 15
 FEB APR
 27
 1998 1999



Technical Standards for Industries Worldwide



- [Search Lab Directory](#)
- [Search Consultants Directory](#)
- [Mission Statement](#)
- [Privacy Policy Statement](#)

- [ASTM Store](#)
- [Technical Committees/ Membership](#)
- [Training Courses](#)
- [Quality Assurance Programs](#)
- [News & Information](#)

[SITE MAP](#) | [CONTACT](#) | [FAQs](#)

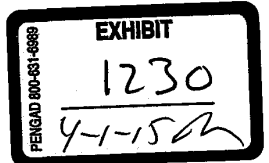
Copyright 1996-1999
 American Society For Testing and Materials
 All rights reserved
 ASTM, 100 Barr Harbor Drive
 West Conshohocken,
 Pennsylvania, USA 19428-2959

EXHIBIT 153

(FILED UNDER SEAL)

Case 1:13-cv-01215-TSC Document 122-9 Filed 12/22/15 Page 71 of 134

EXHIBIT 154



NFPA STANDARDS DEVELOPMENT SITE PUBLIC COMMENT STAGE
Public Comment Submission Closing Date: **June 30, 2013**

NFPA 709, Standard for Electrical Safety in the Workplace, 2012 Edition

Table of Contents

- Chapter 1: Safety-related Work Practices
- Chapter 2: Safety-related Maintenance Requirements
- Chapter 3: Safety Requirements for Special Environments
- Informative Annex A: Recommended Publications
- Informative Annex B: Informational References
- Informative Annex C: Links of Interest
- Informative Annex D: Incident, Event, and Acc. Event Research, Calculation Methods
- Informative Annex E: Electrical Safety Division
- Informative Annex F: Hazard Analysis, Risk Estimation, and Response

Important Note: Changes to browser software sometimes result in unformatted behavior. This site has known issues with specific releases of Google Chrome (ver. 24) and Internet Explorer 8 (ver. 8.0.6001.17310). If you received XSTU Frame Exception error when using Chrome, or if you are having difficulty submitting Public Comments using Internet Explorer 8, please try using Firefox or a different version of your chosen browser.

What's Next?
Once the Public Comment closing date has passed, your submitted Public Comment will be forwarded to the responsible Technical Committee to be addressed at a Second Draft meeting where the committee reviews all Public Comments and develops the Second Draft of the new or revised standard. All technical committee meetings are open to the public. For more information on committee activities and other information related to the standard of interest to you, please visit the "Doc Help" pages at www.nfpa.org/standards, and select the appropriate standard from the List of NFPA Codes & Standards. After the completion of the Second Draft meeting and the holding of the meeting Second Draft by the Technical Committee (and, where applicable, the Consensus Committee), a report on the committee work is published (the Second Draft Report), and you will receive notice and be given the opportunity, using this site, to submit a COMMENT on the Second Draft. For more information on the NFPA standards development process and to read the rules that govern that process - the Regulations - you may also select to leave a publicly completed Public Comment in the system until you are ready to complete and submit it to NFPA. However, any un-submitted Public Comment will be automatically deleted from the system on the Public Comment closing date.

Internet Explorer - Bookmarks - Yahoo! Search - http://www.nfpa.org/standards-development-site

Search

YAHOO! Search

NFPA STANDARDS DEVELOPMENT SITE
PUBLIC COMMENT STAGE
Public Comment Submission Closing Date: June 29, 2013

NFPA 70E, Standard for Electrical Safety in the Workplace, 2012 Edition

Informational Annex B: International References

- Informational Annex C: Limits of Approach
- Informational Annex D: Lockout, Energy, and Arc Flash Hazard Calculation Methods
- Informational Annex E: Electrical Safety Program Procedures
- Informational Annex F: Hazard Analysis, Risk Estimation, and Risk Evaluation
- Informational Annex G: Sample Lockout/Tagout Procedures
- Informational Annex H: Guidance on Selection of Protective Clothing and Other Personal Protective Equipment
- Informational Annex I: Job Briefing and Planning Checklist
- Informational Annex J: Energized Electrical Work Safety
- Informational Annex K: General Categories of Electrical Hazards
- Informational Annex L: Typical Application of Subsystems in the Cell Line
- Informational Annex M: Typical Application of Protection Clothing and Local Shielding Arc Rating
- Informational Annex N: Example Incident Procedures and Checklist
- Informational Annex O: Revised Electrical Lines and Equipment

NOTE: All Public Comment must be received by 5:00 pm EST/EDT on the published Closing Date.

WISCONSIN DEBRA BAIRD

Informational Annex K: General Categories of Electrical Hazards

This informative annex is not a part of the requirements of this NFPA document but is included for informational purposes only.

K.1 General Categories.

There are three general categories of electrical hazard: electrical shock, arc flash, and arc blast.

K.2 Electric Shock.

Approximately 30,000 nonfatal electrical shock accidents occur each year. The National Safety Council estimates that about 1920 fatalities each year are due to electrocution, more than half of them while working energized systems of less than 600 volts.

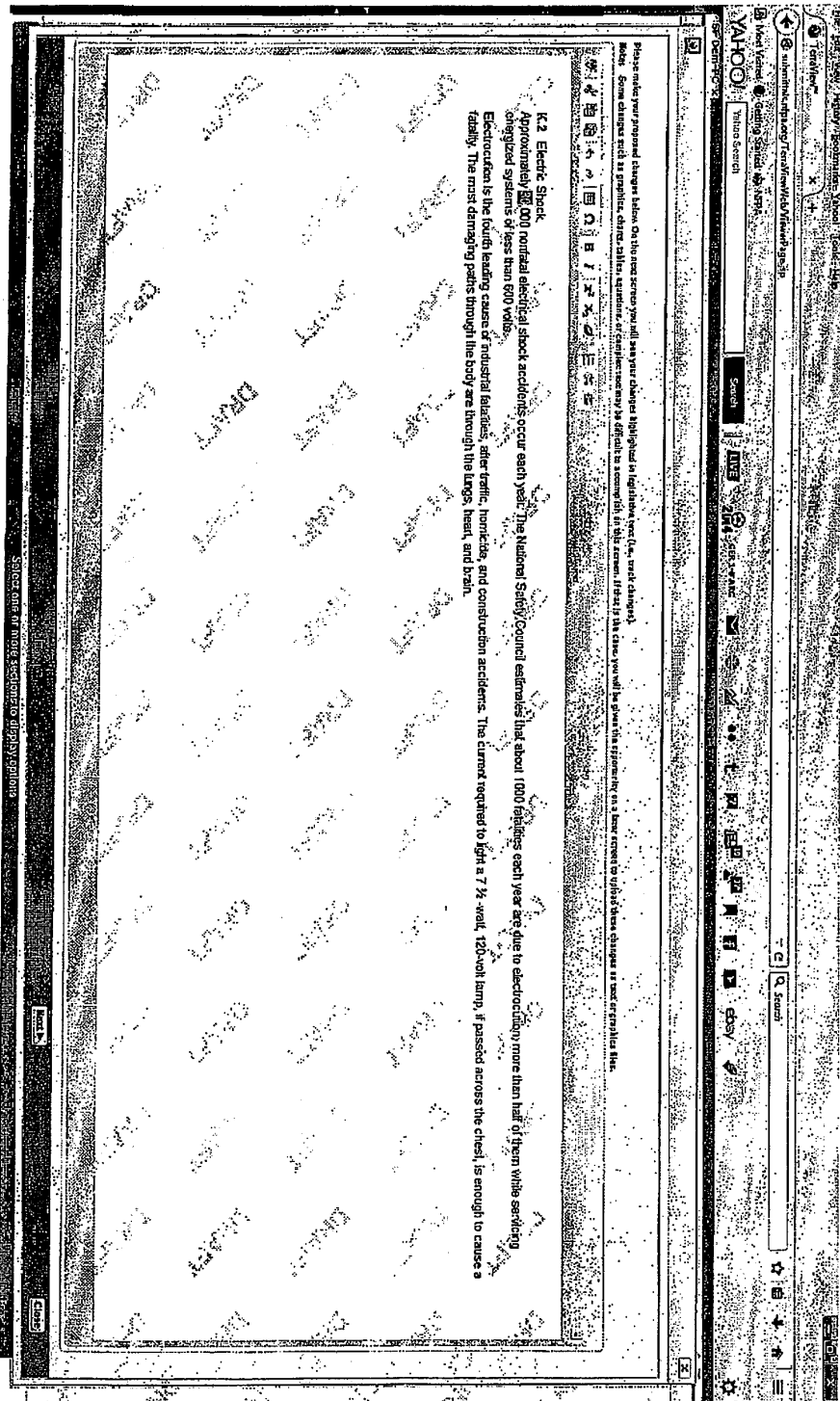
Electrocution is the fourth leading cause of industrial fatalities, after traffic, homicide, and construction accidents. The current required to lift a 75-watt, 120-volt lamp, if present across the chest, is enough to cause a fatality. The most damaging pain through the body are through the lungs, heart, and brain.

K.3 Arc Flash.

When an electric current passes through air between ungrounded conductors and grounded conductors, the temperatures can reach 35,000°F. Exposure to these extreme temperatures both burns the skin directly and causes ignition of clothing, which adds to the burn injury. The majority of hospital admissions due to electrical accidents are from arc flash burns, not from shocks. Each year more than 2300 people are admitted to burn centers with severe arc flash burns. Arc flashes can start at as distances as 5 m (10 ft).

K.4 Arc Blast.

The tremendous temperatures of the arc cause the explosive expansion of both the surrounding air and the metal in the arc path. For example, copper expands by a factor of 67,000 times when it turns from a solid to a vapor. The danger associated with this expansion is one of high pressure, sound, and shrapnel. The high pressures can easily exceed hundreds or even thousands of pounds per square foot, knocking workers off ladders, rupturing eardrums, and collapsing lungs. The sound associated with these pressures can exceed 180 dB. Finally, molten and incandescent metal is expelled away from the arc at speeds exceeding 1800 km/hr (700 mph), fast enough for shrapnel to completely penetrate the human body.



Public Comment No. 15-SF-Dam-PC-2015

K22 Electric Shock.
 Approximately 34,000 nonfatal electrical shock incidents occur each year. The National Safety Council estimates that about 1000 fatalities each year are due to electrocution, more than half of them while servicing energized systems of less than 600 volts.
 Electrocution is the harmful heating cause of industrial fatalities, after traffic, homicide, and construction accidents. The current required to light a 7 1/2 watt, 120-volt lamp, if passed across the chest, is enough to cause a fatality. The most damaging paths through the body are through the lungs, heart, and brain.

Selected one or more sections to display options

Submit comments on this document to the court. Print Help
 Comment Reply Like Dislike

Most Recent Pending Archived All Comments

Add Comment

Add Comment

Upload Additional Proposed Changes (Optional)
 If some or all of your changes were not easily accomplished on the earlier Insert Proposed Changes screen (e.g., graphics, charts, tables, equations, or complex text), you can upload them here as text or graphics files.

Submittal/Response/Technical Review/Forwarding Page

Public Comment No. 15-SF-Dam-PC-2015

State the problem that would be resolved by your proposed change and provide substantiation for the Technical Committee.

Substantiation wording here

Statement of Problem and Substantiation for Public Comment (Required)

Public Comment No. 15-SF-Dam-PC-2015

State the problem that would be resolved by your proposed change and provide substantiation for the Technical Committee.

Substantiation wording here

When additional supplementary material such as tests, research papers, and/or reports, need to be submitted, please provide a brief description of the items being sent to NFPA in the box below and mail or ship the material to NFPA.

Note: Due to copyright considerations, NFPA is unable to accept these submissions electronically at this time.

When sending supplementary material, please include the relevant public report or public comment number and send hard copies to:

7400 Standard Administration
 1 University Park
 Quincy, MA 02266

Please note that if supporting material is not received by the closing date, it will not be accepted for review by the Technical Committee.

Supporting material being sent to NFPA (Optional):

Select one or more sections to display options

Add Related Item
 Add Related Item
 Add Related Item

Related Public Comments and Related Items from the Public Input Stage for This Document (Required)

Add Related Comment - This action allows the submitter of the public comment to provide a link between related public comments that they wish to submit. This link will bring to the attention of the Technical Committee that the recommendation(s) provided in the related public comments should be considered as a single concept.

Add Related Item - To ensure that the public comment is related to an issue or concept raised during the public input stage, the commenter should utilize this action to indicate which FY, PR, CR, CI, or CII that the public comment relates to. This action will help the Technical Committee to determine which issue from the public input stage is related to the public comment.

At least one related item is required.
 No public comments are available.

submit@fdpr.org | Feedback | Help | Log Out

Most Visited | **Getting Started** | **NFPA**

Submitter Name:

User ID (usually email address):

So that the Committee that considers your Public Comment can understand your interest and affiliation, please provide the following information, note that the Company field may be prepopulated with information, if any, from your NFPA user profile. Fill in, or, if pre-populated, edit or revise the Company field as necessary.

Company:

Company (Name of your Employer or Affiliation, if any):

Affiliation:

If you need to make a permanent change to your information, please update your user profile at www.nfpa.org.

Submitter Information Verification (Required)

Please review the following information and make any changes necessary to be associated with this specific proposed change.

Submitter Name: DEBRA BAIO

User ID (usually email address): dbaio@fdpr.org

So that the Committee that considers your Public Comment can understand your interest and affiliation, please provide the following information, note that the Company field may be prepopulated with information, if any, from your NFPA user profile. Fill in, or, if pre-populated, edit or revise the Company field as necessary.

Company: NFPA

Company (Name of your Employer or Affiliation, if any):

Affiliation: Affiliation (Name of Client or Organization, Not Air Responsibility, if any)

If you need to make a permanent change to your information, please update your user profile at www.nfpa.org.

Submit your comment or move sections to: [View Profile](#)

Print | Cancel

Related Public Comments and Related Items from the Public Input Stage for This Document (Required)

Add Related Comment - This action allows the author of the Public Comment to provide a link between related Public Comments that they wish to submit. This link will bring to the attention of the Technical Committee that the recommendation(s) provided in the related public comments should be considered as a single concept.

Add Related Item - To ensure that the Public Comments related to an issue or concept related during the Public Input Stage, the commenter should utilize this action to indicate which FY, FY, CR, CS, or CI that the public comment relates to. This action will help the Technical Committee to determine which issue item the public input stage is related to the public comment.

At least one Related Item is required.

No Public Comments are available

Related Items

List of Related Items from the Public Input Stage

First Revision No. 1 SF Dam-PC-2013 Section No. 200-1

Subject one of more actions to display options

File Edit View History Bookmarks Yahoo! Tools Help

submit/submitForm/submitForm/submitForm

Yahoo! Voice Search

Copyright Assignment and Signature (Required)

Copyright Assignment:

I, **Debra Bato**, hereby irrevocably grant and assign to the National Fire Protection Association (NFPA) all and full rights in copyright in this Public Comment (including both the proposed change and the statement of problem and substantiation), I understand and intend that I acquire no rights, including rights as a joint author, in any publication of the NFPA in which this Public Comment in this or another similar or derivative form is used. I hereby warrant that I am the author of this Public Comment and that I have full power and authority to enter into this copyright assignment.

Signature:

By checking this box I affirm that I am **Debra Bato**, and I agree to be legally bound by the above Copyright Assignment and the terms and conditions contained therein. I understand and intend that, by checking this box, I am creating an electronic signature that will, upon my submission of this form, have the same legal force and effect as a handwritten signature.

Special Note: If you are not the author of some or all the content contained in your Public Comment, click here and you will be taken to an alternative copyright assignment and signature screen to complete your submission.

To complete the submission of your Public Comment, click the Submit button

Submit your Public Comment to NFPA

Submit

What is the alternative copyright assignment?

Submit your Public Comment to NFPA

Submit

File Edit View Settings Window Help

Address: http://www.uscourts.gov/FormsAndResources/Forms/122-9

Search

Print

Zoom

100%

122-9

Alternative Copyright Assignment and Signature (Required)

Copyright Assignment

Your Public Comment should generally be expressed in your own words and should constitute your original expression as an author for copyright purposes. If so, go back to the previous screen to complete your submission. If, however, you are not the author of some or all of the content contained in the Public Comment that you are about to submit, please check the box immediately below and provide the requested information, then proceed to sign the copyright assignment below and submit your Public Comment.

Some or all of the content contained in this Public Comment was not authored by me. Its source is as follows: (Please identify which material and provide complete information on its source.)

I, DEBRA BAO, hereby irrevocably grant and assign to the National Fire Protection Association (NFPA) all and full rights in copyright in this Public Comment (including both the proposed Change and the Statement of Problem and Substantive), I understand and intend that I acquire no rights, including rights as a joint author, in any publication of the NFPA in which this Public Comment in this or another similar or derivative form is used. I hereby warrant that I am the author of this Public Comment and that I have full power and authority to enter into this copyright assignment.

Signature:

By checking this box I affirm that I am DEBRA BAO, and I agree to be legally bound by the above Copyright Assignment and the terms and conditions contained therein. I understand and intend that, by checking this box, I am creating an electronic signature that will, upon my submission of this form, have the same legal force and effect as a handwritten signature.

To complete the submission of your Public Comment, click the submit button.

122-9

Case 1:13-cv-01215-TSC Document 122-9 Filed 12/22/15 Page 84 of 134

EXHIBIT 155


[Blogs](#) | [Bookmark/Share](#) | [Contact Us](#)

[Research Our Records](#)
[Veterans Service Records](#)
[Teachers' Resources](#)
[Our Locations](#)
[Shop Online](#)

Federal Register

[Home](#) > [Federal Register](#) > [Code of Federal Regulations](#) > [Code of Federal Regulations Incorporation by Reference](#)

Government Rules & Regulations

[Daily Updates](#)
[Print Versions](#)
[Updates to Print Versions](#)
[Participate in Rulemaking](#)

How to Read the CFR

[By Subject](#)
[By Indexing Term](#)

Learn More

[What is the CFR?](#)
[CFR Availability](#)
[Incorporation by Reference](#)

Public Workshops

If you work with the *Federal Register* (FR) or the *Code of Federal Regulations* (CFR), you may find these [free workshops](#) especially valuable.

You can also take the:


[On-line Tutorial](#)

Learn why Democracy Starts Here



Incorporation by Reference

This site does not link to or contain standards incorporated by reference into the CFR.

If you are interested in obtaining a copy of a standard that has been incorporated by reference, contact the standards organization that developed the material.

Who to Contact

For more information about a standard:

1. Use the contact information contained in the regulation to:

- Contact the agency that issued the regulation containing the IBR standard.
- Contact the standards organization that developed and published the material.

Some standards organizations have online reading rooms that are free to the public, to registered users, or to organization members. Some of the standards incorporated by reference may be accessible at these standards organization web sites:

- [ASTM International free online reading room](#)
- [ASHRAE free resources](#)
- [NFPA free access to codes and standards](#)
- [ANSI incorporated by reference \(IBR\) portal](#)
- [Underwriters Laboratories standards incorporated by reference](#)
- [International Code Council \(ICC\) free resources](#)
- [Manufacturers Standardization Society \(MSS\) reading room](#)

- [contact aircraft and aircraft parts manufacturers directly.](#)

Some service information incorporated by reference in airworthiness directives may be available online.

2. You can also find agency phone numbers and other contact information at:

- [USA.gov](#)
- [United States Government Manual](#)
- [Federal Citizen Information Center, National Contact Center](#)

3. You may also use the NIST database, [Regulatory Standards Incorporated by Reference](#), for information on the availability of IBR standards.

About IBR

Incorporation by reference (IBR) allows Federal agencies to comply with the requirement to publish rules in the *Federal Register* and the Code of Federal Regulations (CFR) by referring to materials already published elsewhere.

[Learn More](#) ➔

Generally, members of the public must pay a fee to receive a copy of the incorporated material. If you have difficulty locating the material, contact the regulatory agency that issued the regulation.

Why is Incorporation by Reference Used?

Incorporation by reference is used primarily to make privately developed technical standards Federally enforceable. Agency generated documents are presumptively ineligible for incorporation by reference because that material can and should be published in full text in the *Federal Register* and CFR. Agencies are not authorized to incorporate by reference material on their web sites as a substitute for *Federal Register* publication.

The legal effect of incorporation by reference is that the material is treated as if it were published in the *Federal Register* and CFR. This material, like any other properly issued rule, has the force and effect of law. Congress authorized incorporation by reference in the Freedom of Information Act to reduce the volume of material published in the *Federal Register* and CFR. (See 5 U.S.C. 552(a) and 1 CFR part 51). Congress gave complete authority to the Director of the Federal Register to determine whether a proposed incorporation by reference serves the public interest.

[^ Top of Page](#)

Where to Find Materials Incorporated by Reference at NARA Facilities

In most cases, materials incorporated by reference are made available through the standards organization that developed the standard. Contact the standards organization or other designated sources through the address listed in the *Federal Register* or CFR.

However, legal record copies of material incorporated by reference are also filed at the Office of the Federal Register (OFR) and other NARA facilities. **OFR does not distribute IBR materials.**

Legal record copies are available for public inspection and limited photo-copying. If you would like to inspect material incorporated by reference at OFR's downtown Washington, DC location, you must submit a written request and make an appointment for a specific day and time.

1. Submit your written request at least a day in advance.
2. Your request must include:
 - Your name and daytime contact information—so we can confirm your appointment and the availability of the material you are seeking or in case we have questions,
 - A detailed description of the material you wish to examine, and
 - The date and time you wish to examine the materials.

3. Submit your request by:

 **E-mail** fedreg.legal@nara.gov

 **U.S. Mail** addressed to:

Office of the Federal Register (NF)
The National Archives and Records Administration
8601 Adelphi Road
College Park, MD 20740-6001

** Note that our mailing address differs from our physical location.
If submitting your request by mail, we must receive your request at least a day in advance of your requested inspection date.*

The collection of materials incorporated by reference in Titles 1 through 50 of the CFR has grown to

the point that they are transferred from OFR to other NARA sites on a regular basis. See the [Disposition Schedule](#) below for more information on where materials are housed and use the links for these facilities to learn about researcher and information access policies at those locations.

[^ Top of Page](#)

Disposition Schedule and Location

The following table is a listing of the disposition schedule and location of the materials incorporated by reference:

- The dates and timeframes are approximate
- [Addresses for each location](#) are listed below the table

Category of Records	Location of Records - Retention Period		
	OFR	WNRC	NARA
Aircraft Service Bulletins for FAA Airworthiness Directives (14 CFR 39)	From Year 0-3	From Year 3-10	From Year 10 Forward (permanent storage)
State Implementation Plans and Amendments submitted to EPA (40 CFR part 52)	From Year 0-5	From Year 5-15	From Year 15 Forward (permanent storage)
All other materials incorporated by reference in the CFR	From Year 0-5	From Year 5-15	From Year 15 Forward (permanent storage)

[^ Top of Page](#)

Addresses

These are the addresses of the locations listed in the table above. Please call 202-741-6030 for help in determining where the materials are housed:

Office of the Federal Register (OFR)

800 North Capitol Street NW, Suite 700
Washington, DC 20001

Washington National Records Center (WNRC)

4205 Suitland Road
Suitland, MD 20746-8001

National Archives at College Park (NARA)

8601 Adelphi Road
College Park, MD 20740-6001

If you are interested in obtaining a copy of a standard that has been incorporated by reference, contact the standards organization that developed the material or the agency that incorporated it.

If you are interested in examining material that has been incorporated by reference, submit a written request to the Office of the Federal Register.

For more information about Incorporation by Reference, please contact our Legal Affairs and Policy Staff:

[Contact the Standards Organization or Agency](#)



[Make an Appointment to](#)

Inspect IBR Materials at OFR



Telephone (202) 741-6030

Fax (202) 741-6012

E-mail fedreg.legal@nara.gov

U.S. Mail addressed to:

Office of the Federal Register (NF)
The National Archives and Records Administration
8601 Adelphi Road
College Park, MD 20740-6001

Federal Register >

Information For...

- Citizen Archivists
- Federal Employees
- Genealogists
- Members of Congress
- Preservation
- Records Managers
- The Press

Publications

- Federal Register
- Free Publications
- Prologue Magazine
- Purchase Publications
- More...

Orgs & Offices

- Center for Legislative Archives
- Federal Records Center
- Office of the Inspector General
- Presidential Libraries
- More...

About Us

- What is the National Archives?
- Doing Business with Us
- Plans and Reports
- Open Government
- Our Plain Language Activities

I Want To...

- Get My Military Record
- Plan a Research Visit
- Visit the Museum
- View Online Exhibits
- Apply for a Grant

Participate

- Attend an Event
- Donate to the Archives
- Work at the Archives
- Volunteer at the Archives

Resources

- A-Z Index
- America's Founding Docs
- Contact Us
- En Español
- FAQs
- Forms

Connect With Us

- Blogs
- Facebook
- Flickr
- RSS Feeds
- Twitter
- YouTube
- More...

[Contact Us](#) | [Accessibility](#) | [Privacy Policy](#) | [Freedom of Information Act](#) | [No FEAR Act](#) | [USA.gov](#)

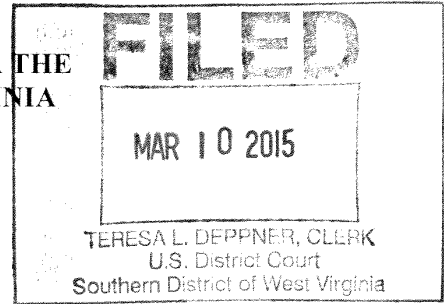
The U.S. National Archives and Records Administration

1-86-NARA-NARA or 1-866-272-6272

Case 1:13-cv-01215-TSC Document 122-9 Filed 12/22/15 Page 89 of 134

EXHIBIT 156

UNITED STATES DISTRICT COURT FOR THE
SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON GRAND JURY 2014
MARCH 10, 2015 SESSION



UNITED STATES OF AMERICA

v.

CRIMINAL NO. 5:14-cr-00244

30 U.S.C. § 820(d)
18 U.S.C. § 371
18 U.S.C. § 1001
18 U.S.C. § 2
15 U.S.C. § 78ff
17 C.F.R. § 240.10b-5

DONALD L. BLANKENSHIP

SUPERSEDING
INDICTMENT

Summary

1. Beginning no later than January 1, 2008 and continuing through April 9, 2010 (the “Indictment Period”), defendant DONALD L. BLANKENSHIP (“BLANKENSHIP”), the Chief Executive Officer (“CEO”) and Chairman of the Board of Directors of coal producer Massey Energy Company (“Massey”), conspired to commit and cause routine violations of mandatory federal mine safety standards at Massey’s Upper Big Branch-South mine (“UBB”).* Throughout the Indictment Period, BLANKENSHIP himself closely managed UBB, the coal from which was critical to Massey’s financial performance. BLANKENSHIP knew that UBB was committing hundreds of safety-law violations every year and that he had the ability to prevent most of the violations that UBB was committing. Yet he fostered and participated in an understanding that

* Allegations herein are made with reference to the Indictment Period unless otherwise noted.

perpetuated UBB's practice of routine safety violations, in order to produce more coal, avoid the costs of following safety laws, and make more money.

2. Throughout the Indictment Period, BLANKENSHIP also conspired to defraud the United States by impeding the federal Mine Safety and Health Administration ("MSHA") in carrying out its duties at UBB.

3. Following a major, fatal explosion at UBB on April 5, 2010, BLANKENSHIP made, and caused to be made, materially false and misleading statements and representations, and omitted and caused to be omitted statements of material facts, regarding his and Massey's practice of willful violations of safety laws at that mine. These included materially false statements and representations made to the United States Securities and Exchange Commission ("SEC") and materially false statements and representations, and materially misleading omissions, made in connection with the purchase and sale of Massey stock.

Background

4. At all relevant times, Massey was a corporation engaged in the business of mining and selling coal, including at numerous mines in the Southern District of West Virginia, where Massey maintained a regional headquarters. UBB was a coal mine that Massey, through various subsidiaries, wholly owned and controlled, and was located in and around Montcoal, Raleigh County, West Virginia, within the Southern District of West Virginia. UBB and all Massey's other mines and mining-related facilities produced products that entered commerce and had operations and products that affected commerce, rendering them subject to Title 30, United States Code, Chapter 22, concerning mine safety and health, and to rules and regulations promulgated thereunder, including mandatory federal mine safety and health standards codified in Title 30, Code of Federal Regulations, Chapter I. UBB was subject to regular federal mine

safety inspections conducted by MSHA, an agency of the United States Department of Labor (DOL), which was part of the executive branch of the government of the United States. UBB was also subject to monetary penalties imposed by MSHA for violations of mandatory federal mine safety and health standards that federal mine safety inspectors discovered during inspections of UBB.

5. At all relevant times, Massey's Class A Common Stock was registered with the SEC and was publicly traded on the New York Stock Exchange. At all relevant times, in order to sell securities to members of the public and maintain public trading of its securities in the United States, Massey was required to comply with provisions of the federal securities laws, including the Securities Exchange Act of 1934, and rules and regulations promulgated thereunder.

6. At all relevant times, the SEC was an agency of the executive branch of the government of the United States.

7. At all relevant times, BLANKENSHIP, as CEO of Massey and Chairman of Massey's Board of Directors, was principally and ultimately responsible for the management of Massey's business. At all relevant times, the Restated Bylaws of Massey Energy Company provided that BLANKENSHIP, as CEO, had general supervision, direction, and control of the officers, employees, business, and affairs of Massey, including the UBB mine.

8. During the Indictment Period, UBB was cited approximately 835 times for violations of mandatory federal mine safety and health standards. This was one of the highest levels of safety-law violations of any Massey mine. Approximately 319 of these violations were in an especially serious category of violations: those that could significantly and substantially contribute to the cause and effect of a safety or health hazard. Approximately 283 of UBB's safety-law violations during the Indictment Period were violations of the laws on mine ventilation, which operate to

prevent explosions and fires in coal mines and to minimize deaths and serious injuries in the event an explosion or fire does occur. Approximately 59 of UBB's safety-law violations during the Indictment Period resulted in shutdown orders closing all or part of the mine until the violation was abated, pursuant to Title 30, United States Code, Section 814(d). Violations resulting in such shutdown orders were among the most serious category of violations that can occur in a coal mine. UBB ranked among the worst mines in the United States in such shutdown orders during the Indictment Period.

9. During the Indictment Period, UBB was important to Massey's financial performance. UBB produced a type of coal called metallurgical coal, which was used for manufacturing steel. During the Indictment Period, metallurgical coal sold for substantially more per ton than Massey's other major product, which was steam coal used to generate electricity. Metallurgical coal from UBB was particularly important to Massey's sales of metallurgical coal, because it was an essential ingredient in a blend of metallurgical coal that also included coal from a group of other Massey mines near UBB. In 2009, this UBB-centered group of mines generated revenues of approximately \$331 million, which represented approximately 14% of Massey's approximately \$2.3 billion in revenue—more than any of Massey's numerous other mining groups. For 2010, Massey projected UBB-group revenue of approximately \$432 million, approximately 16% of Massey's projected revenue of approximately \$2.7 billion and more than the projected revenue for any other Massey mining group.

10. Beginning in 2009 and continuing through the rest of the Indictment Period, one operating section of UBB employed a mining technique known as longwall mining. (A coal mining "section" was an area of a mine where coal was being produced. A single mine may have had multiple mining sections. While the longwall section was operating at UBB, UBB had, at

various times, four or five total active mining sections, with the other sections using a mining technique different from the longwall method.) Longwall mining was the most productive method of underground coal mining; it uses equipment and a mining configuration that permit the extraction of large swaths of coal in a short period of time. When operating at full productivity, the UBB longwall mining section could produce more than \$600,000 worth of coal every day, more than any of Massey's dozens of other underground mining sections. The equipment needed to run a longwall mining section was expensive, typically costing many tens of millions of dollars.

Upper Big Branch Safety-Law Violations

Mine Ventilation Laws

11. Routine violations of mine-safety laws at UBB included violations of the laws on mine ventilation. Proper ventilation in a coal mine was essential to preventing explosions. The coal mining process inherently generates airborne coal dust, which was highly explosive. And in many coal mines, including UBB, the mining process also inherently releases methane gas into the mine air. Methane gas was explosive if it reaches certain atmospheric concentrations. A constant supply of clean air was necessary to dilute those airborne explosive substances and carry them away, preventing them from reaching dangerous concentrations.

12. *Minimum airflow requirements and mine ventilation plans.* At all relevant times, airflow in certain key areas of a coal mine was required, by mandatory federal mine safety standards, to be adequate to dilute, render harmless, and carry away explosive substances. At all relevant times, the operator of any coal mine was required to develop and follow a ventilation plan approved by federal mine-safety officials, also pursuant to a mandatory federal mine safety standard. This ventilation plan was required to be designed to control methane and coal dust, and

to mandate, in certain key locations, specific quantities of airflow that were adequate to dilute, render harmless, and carry away explosive substances. A violation of a mine's approved ventilation plan was a violation of a mandatory federal mine safety standard.

13. *Construction required for proper mine ventilation.* At all relevant times, coal mines were required to construct structures called ventilation controls and devices to manage the flow of air in a mine, pursuant to mandatory mine safety standards. These ventilation structures included permanent block walls and temporary walls made of heavy cloth or plastic to route mine air to locations where it was needed to carry away explosive substances. Maintaining this mandatory system of ventilation structures required continual construction, because as the mine's workings advanced deeper and deeper, new ventilation structures had to be built to route air through the most recently opened parts of the mine.

14. *Mine safety examinations.* At all relevant times, coal mines were required to conduct regular safety examinations to check for ventilation-related hazards, including the presence of potentially explosive methane gas in the mine air, illegally low levels of airflow, and air flowing in the wrong direction. In these safety examinations, mines were also required to check for the existence of any other hazardous conditions, including accumulations of explosive coal dust. Safety examinations in certain areas of a mine were required to be conducted within three hours before any working shift and at least once during each working shift. Wider ranging safety examinations were required to be conducted weekly. These requirements were established in mandatory mine safety and health standards.

15. The above-described mandatory federal mine safety standards concerning ventilation were basic, well-known principles of coal mining.

UBB's Routine Violations of Mine-Ventilation Laws

16. During the Indictment Period, BLANKENSHIP and Massey routinely violated the above-described and other mandatory safety standards on ventilation at UBB.

17. *Violations of airflow requirements and mine ventilation plan.* Examples of these violations included the following: On or around June 4, 2009, a federal mine safety inspector discovered airflow of 147 cubic feet per minute in an area of the mine where 9,000 cubic feet per minute was required. This legal minimum air quantity of 9,000 cubic feet per minute was established to ensure that airflow was sufficient to dilute and carry away explosive substances in the mine atmosphere. The inadequate air quantity violated a mandatory mine safety standard requiring the mine to follow its approved ventilation plan.

18. On or around June 3, 2009, a federal mine safety inspector discovered that UBB's section #1 was operating with less than half the minimum legal air quantity, which again violated the mandatory mine safety standard requiring the mine to follow its approved ventilation plan.

19. On or around October 21, 2009, a federal mine safety inspector discovered that UBB's section #2 was operating with less than the minimum legal air quantity. As a result of the illegally low air quantity, the federal mine-safety inspector observed visible airborne coal dust surrounding miners who were working on section #2. This illegally low air quantity again violated the mandatory federal mine safety standard requiring the mine to follow its approved ventilation plan.

20. On or around March 2, 2010, a federal mine safety inspector discovered that UBB's #1 section was operating with less than half the legal minimum air quantity, again violating the mandatory federal mine safety standard requiring the mine to follow its approved ventilation plan.

21. *Ventilation-plan violations regarding water sprays.* UBB also was cited repeatedly for violating another important component of its ventilation plan: its requirements for water sprays on equipment that cut coal from the coal seam. These water sprays suppressed coal dust and cooled the area where cutting occurred, the latter to diminish the possibility that frictional heat from cutting would ignite explosive substances in the mine air. On or around July 15, 2009, federal mine safety inspectors discovered that a continuous mining machine in UBB's section #2 was missing water sprays required by the mine's ventilation plan. On or around October 27, 2009, federal mine safety inspectors discovered that a continuous mining machine at UBB was running with less than the minimum level of water pressure for its sprays as required by the mine's ventilation plan. On or around March 23, 2010, federal mine safety inspectors discovered that a continuous mining machine at UBB was running with nearly half its required number of sprays in inoperable condition and with a water fitting for its spray system broken. Each of these discoveries represented a violation of the mandatory mine safety standard requiring compliance with the mine's approved ventilation plan, and each resulted in the issuance of a federal citation.

22. After the April 5, 2010 explosion at UBB, a federal investigation determined that at the time of the explosion, the longwall shearer in the mine's longwall section was operating with approximately seven of its required water sprays missing and with other sprays clogged. The missing sprays reduced the water pressure at the remaining sprays significantly below the minimum level required by the mine's approved ventilation plan and prevented the remaining sprays from counteracting frictional heat in the area where coal was being cut. Operating the longwall shearer with missing and clogged sprays and insufficient water pressure violated the mandatory federal mine safety standard requiring compliance with the mine's approved ventilation plan.

23. In total, UBB was cited approximately 61 times for violations of its approved ventilation plan during the Indictment Period. The cited violations occurred throughout the Indictment Period and ranged from in or around March 2008 through on or around April 5, 2010.

24. UBB's routine violation of its ventilation plan was the result of several causes, including the following: providing the mine with an inadequate number of coal miners focused on jobs important to safety-law compliance, including the maintenance of ventilation structures in airways away from the mine's active operating sections; BLANKENSHIP's imposition and aggressive enforcement of coal-production quotas that deprived UBB's coal miners of the time they needed to construct and maintain ventilation control structures, and that forced them to operate even where air quantities were below legal minimums; BLANKENSHIP's direction, addressed below, not to construct certain ventilation controls that would produce more reliable airflow because constructing them diverted time from coal production; and BLANKENSHIP's denial, also addressed below, of a request to construct an airshaft at UBB that would have increased airflow to areas of the mine where it was often below the legal minimum.

25. *Violations: Constructing and maintaining ventilation structures.* UBB also was routinely cited during the Indictment Period for violating mandatory federal mine safety standards on ventilation control structures and devices. For example, on or about November 19, 2009, and on or about December 1, 2009, federal mine safety inspectors discovered that legally mandated ventilation controls were missing in airways that were essential to airflow in at least two of the mine's operating sections, including the longwall mining section. Because of poor engineering, the roof and walls of the area of the mine in which these structures were located were collapsing, causing the structures to be crushed almost as quickly as they could be built. The president of UBB's mining group, whose identity is known to the Grand Jury (the "Known UBB Executive"),

along with other UBB officials known and unknown to the grand jury, knew that the ventilation control structures in this area of the mine were routinely being destroyed by the collapse of the area's roof and walls. They nonetheless caused the affected passageways to remain in use as part of the mine's ventilation system, thus willfully violating mandatory federal mine safety standards.

26. In total, UBB was cited for approximately 59 violations during the Indictment Period of mandatory federal mine safety standards regarding ventilation control structures and devices. The cited violations occurred throughout the Indictment Period and ranged from in or around January 2008 through in or around March 2010. Among the causes of these violations were an insufficient number of coal miners in jobs focused on the construction and maintenance of ventilation control structures and devices, and the imposition and aggressive enforcement of coal-production quotas that did not allow time to properly maintain ventilation control structures and devices.

27. *Violations: Mine-safety examinations.* UBB also was routinely cited during the Indictment Period for violating mandatory federal mine safety standards requiring regular safety examinations. For example, on or around March 9, 2009, federal mine safety inspectors discovered that, according to UBB's own records, one of the mine's aircourses that was required to be examined weekly had not been examined for more than a year. In total, UBB was cited for approximately 62 violations during the Indictment Period of mandatory federal mine safety standards requiring regular safety examinations, which were among the standards for ensuring proper mine ventilation. The cited violations occurred throughout the Indictment Period and ranged from in or around January 2008 through on or around April 5, 2010. Among the causes of these violations were the employment of an inadequate number of coal miners, and the

imposition and enforcement of coal-production quotas that did not allow time, to conduct required safety examinations in a mine the size of UBB.

28. *Violations: Support of the mine roof and walls.* During the Indictment Period, UBB also routinely violated mandatory federal mine safety standards concerning support of the mine's roof and ribs (walls). Because underground coal mining extracts a layer of coal that previously supported layers of earth and rock overhead, substitute support must be constructed to prevent the mine's roof and walls from collapsing into the resulting void. These supports included long bolts (as long as sixteen feet) that were installed in the mine roof and affixed to large plates that hold the stratum of rock above the mine in place, as well as timbers that helped bear the weight of overlying rock and earth. Just as with the mine's ventilation system, this construction process was a continual one: as mining advanced deeper and deeper, supports were required to be constructed in the mine's newly opened areas. The requirement to provide sufficient support to protect persons from falls of the mine's roof and walls was a basic, well-known principle of coal mining.

29. On or around September 23, 2009, for example, a federal mine safety examiner at UBB discovered that most of the mine roof had fallen out in an area of the mine more than 100 feet long and approximately twenty feet wide, leaving the remaining roof unstable in an area where miners were required to work and travel on a regular basis. UBB's own records of past safety examinations showed that mine officials had been aware of this danger for almost a month but failed to correct it. This knowing failure violated a mandatory federal mine safety standard that required the roof and walls of areas where persons work or travel to be supported or otherwise controlled to protect persons from hazards related to falls of the roof and walls.

30. In total, UBB was cited approximately 91 times for violations during the Indictment Period of mandatory federal mine safety standards regarding support of the mine's roof and walls. The cited violations occurred throughout the Indictment Period, ranging from in or around January 2008 through on or around April 5, 2010. Among the causes of these violations were the employment of an inadequate number of coal miners to perform work necessary to comply with the safety laws on support for the mine's roof and walls, as well as the imposition and aggressive enforcement of coal-production quotas that did not allow enough time to perform such work.

31. *Violations: Explosive coal dust and combustible loose coal and other materials.* During the Indictment Period, UBB also routinely violated mandatory mine safety standards concerning accumulations of coal dust, loose coal, and other combustible materials. As explained above, coal mining inherently produced large quantities of airborne coal dust. This coal dust eventually settled out of the mine air and collected on surfaces throughout the mine. After settling, however, coal dust still posed a risk of explosion. If an explosion ignited in one part of a mine, the blast of air from that explosion could force settled float coal dust back into the mine air. Once the previously settled dust became airborne again, heat and flame from the initial ignition could cause it to explode. In this way, previously settled coal dust could enlarge a relatively small initial explosion and cause it to propagate throughout a mine. Consequently, a mandatory federal mine safety standard required that float coal dust be cleaned up and not permitted to accumulate. Mandatory federal mine safety standards also required that loose coal, which was flammable, and other combustible materials be cleaned up and not permitted to accumulate; fires were a serious danger in underground coal mines in part because such mines featured tight spaces and limited air supply, and because miners in such mines often worked far away from the safety of the surface. The mandatory federal mine safety standard requiring that explosive coal dust,

combustible loose coal, and other combustible materials be cleaned up and not permitted to accumulate was a basic, well-known principle of coal mining.

32. Examples of UBB's violations of these standards include the following: On or around January 28, 2010, a federal mine safety inspector discovered float coal dust accumulated along the entire length of the conveyor belt that carried coal from UBB's section #1. This accumulation violated the mandatory federal mine safety standard requiring that explosive float cost dust be cleaned up and not permitted to accumulate.

33. On or around March 15, 2010, a federal mine safety inspector discovered fine, black coal dust deposited along substantially the entire length of the conveyor belt that carried coal from UBB's longwall section. This accumulation violated the mandatory federal mine safety standard requiring that coal dust be cleaned up and not permitted to accumulate.

34. In total, UBB was cited approximately 81 times for violations during the Indictment Period of the mandatory federal mine safety standard requiring that coal dust, loose coal, and combustible materials be cleaned up and not permitted to accumulate. These violations occurred throughout Indictment Period, from in or around January 2008 through on or around April 5, 2010.

35. UBB's own records of mine safety examinations also revealed near-constant violations of mandatory federal mine safety standards concerning accumulations of coal dust and other combustible materials, as well as the application of rock dust, an incombustible substance that was required, pursuant to mandatory federal mine safety standard that were a basic, well-known principle of coal mining, to be spread throughout a coal mine to stop the spread of any explosion or fire that might occur in the mine. In a span of little more than a month, from March 1, 2010, through April 5, 2010, UBB's records of on-shift examinations reflected approximately 937

hazardous conditions arising from accumulations of coal dust and coal and from inadequate application of rock dust. The same records reflected that the majority of these hazardous conditions were not properly corrected. These records were reviewed daily by UBB officials.

36. Among the causes of UBB's routine violations of the laws on explosive and combustible materials and rock dusting were the employment of an inadequate number of coal miners to perform work necessary to comply with these laws, as well as the imposition and aggressive enforcement of coal-production quotas that did not allow sufficient time to perform such work.

Advance Warning of Federal Mine Inspection Activities

37. During the Indictment Period, a scheme existed at UBB to routinely warn underground workers when federal mine safety inspectors were on their way to inspect underground areas of the mine. At the entrance to the UBB mine property was a guardhouse. When federal mine safety inspectors passed this guardhouse on their way to the mine, it was standard practice for a guard to radio the UBB mine office, which sat just outside the entrance to the mine's underground areas, to warn employees in the mine office that the inspectors were on their way. It was standard practice for an employee in the mine office then to call underground (a telephone system connected the mine office to various areas of the mine's underground workings) to pass along this warning to underground personnel. Underground supervisors then would direct miners to quickly cover up violations of mandatory federal mine safety standards that the mine routinely committed, including missing ventilation control structures and devices, accumulations of float coal dust and loose coal, missing roof support, and failures to properly rock dust the mine. The purpose of this advance-warning scheme was to prevent federal mine safety inspectors from discovering and citing many of the violations of mandatory federal mine safety and health standards that were routinely committed at UBB. Because of the distance from the UBB

guardhouse to the mine office and the size of the mine's underground workings, the sections of the mine farthest from the mine entrance could be given as much as two hours' advance warning before federal mine safety inspectors arrived.

38. In order to avoid alerting federal mine safety inspectors that these warnings were being given, UBB employees frequently used code words and phrases when discussing imminent safety inspections on the mine telephone system.

39. UBB officials, including the Known UBB Executive and others known and unknown to the Grand Jury, frequently instructed and encouraged mine employees to provide advance warning whenever federal mine safety inspectors were on their way to inspect the mine's underground areas.

BLANKENSHIP was fully aware of UBB's practice of routinely violating mandatory federal mine safety standards.

40. BLANKENSHIP was fully aware of UBB's practice of routinely violating mandatory federal mine safety standards. As early as in or around January 2008, BLANKENSHIP learned that federal mine safety regulators had designated UBB as a mine with a potential pattern of violations, a status that applied only to the worst mines in the country as measured by serious safety-law violations and other indicators of safety. In or around early 2009, BLANKENSHIP began to request and receive reports detailing the cost of fines that Massey was being assessed for federal safety-law violations. And in or around April 2009, BLANKENSHIP requested and began to receive a report every workday detailing Massey's violations of mandatory federal mine safety standards, including an estimate of the fines that Massey would owe for these violations.

41. Each of these daily safety-violation reports showed BLANKENSHIP a count of Massey's safety-law violations for the year to date, along with year-to-date violation totals for each of Massey's mining groups. Each daily safety-violation report also showed BLANKENSHIP more

detailed information on the company's violations of the mine safety laws: how often each of the company's mining groups had violated those laws year-to-date, the specific mandatory federal mine safety standard that each group of mines violated most often, and the areas of mandatory federal mine safety standards that the company's mines violated most as a whole.

42. For example, on or around July 1, 2009, BLANKENSHIP received a safety-violation report for the year through on or around June 30, 2009. This report showed BLANKENSHIP that in the first six months of 2009, the UBB group of mines was cited for approximately 596 violations of mandatory federal mine safety and health standards resulting in an estimated \$918,401 in fines—more than any other Massey mining group. The report also showed BLANKENSHIP that the mandatory federal mine safety standard violated most often at the UBB group of mines was the standard requiring that accumulations of explosive float coal dust, combustible loose coal, and other combustible materials be cleaned up and not permitted to accumulate. The report further showed BLANKENSHIP that the area of mandatory federal mine safety standards violated most often at Massey's mines as a whole were the standards concerning mine ventilation, which were intended, among other things, to prevent mine explosions and fires and to minimize the risk to miners of death or serious injury if an explosion or fire occurs. The report showed BLANKENSHIP that Massey's mines violated mandatory federal mine safety standards on ventilation approximately 1002 times in the first half of 2009.

43. On or around August 6, 2009, the daily safety-law violation reports sent to BLANKENSHIP began to include a page showing BLANKENSHIP the number of safety-law violations at individual Massey mines, as distinct from mining groups. On or around August 6, 2009, BLANKENSHIP received a daily safety-violation report that showed him that in the year to date, UBB had been cited for approximately 292 violations of federal mine safety laws, fourth

most of any Massey mine in the year to date. That report also showed BLANKENSHIP that the mandatory federal mine safety standard violated most often by mines in the UBB group continued to be the standard requiring that accumulations of explosive coal dust, combustible loose coal, and other combustible materials be cleaned up and not permitted to accumulate in the mine. The same report showed BLANKENSHIP that the area of mandatory federal mine safety standards violated most often at Massey's mines continued to be the standards on mine ventilation.

44. From approximately April 3, 2009, through April 5, 2010, BLANKENSHIP received approximately 249 of these daily safety-violation reports. It was BLANKENSHIP's practice to review each of these reports when he received it. Substantially every one of these 249 reports showed BLANKENSHIP that the UBB mining group was committing hundreds of safety-law violations every year.

45. Beginning on or around June 2, 2009, the daily safety-law violation reports that BLANKENSHIP received showed him which of Massey's mining groups were committing the most safety-law violations, which mandatory federal mine safety standard each mining group was violating most often, and which area of the mine safety laws Massey as a whole was violating most. From on or around June 2, 2009, through on or around April 5, 2010, BLANKENSHIP received approximately 210 of these daily reports of safety-law violations. Nearly all of those reports showed him that UBB's mining group was one of Massey's worst mining groups for safety-law violations and that the worst area of safety-law violations for Massey mines as a whole was mine ventilation. Approximately 193 of these reports showed BLANKENSHIP that the mandatory federal mine safety standard that the UBB group violated

most often was the standard requiring explosive coal dust, combustible loose coal accumulations, and other combustible materials to be cleaned up and not permitted to accumulate.

46. From approximately August 6, 2009, through April 5, 2010, BLANKENSHIP received approximately 163 daily safety-violation reports that showed him year-to-date safety-violation totals for the UBB mine itself, as distinct from its associated group of mines. Nearly all of these reports showed BLANKENSHIP that UBB was committing hundreds of safety-law violations each year and was among Massey's worst mines for safety-law violations.

47. On or around October 7, 2009, BLANKENSHIP received a Massey-internal "Report Card" detailing mine safety violations for each of Massey's mines in the third quarter (July through September) of 2009. This internal Report Card showed BLANKENSHIP that UBB violated mandatory federal mine safety standards 168 times in that three-month period, compared to a target of fifty-nine safety-law violations that Massey had set for UBB in the third quarter of 2009. The Report Card, which was created internally by Massey personnel who tracked safety-law violations at the company's mines, showed BLANKENSHIP that Massey itself had assigned UBB a grade of "Failed" for its number of safety-law violations in the third quarter of 2009.

48. During the Indictment Period, BLANKENSHIP personally monitored the details of UBB's operations closely. After the longwall section began operation at UBB, BLANKENSHIP insisted on personally receiving a report every thirty minutes detailing the longwall section's coal production and the reasons for any production delays. BLANKENSHIP insisted on receiving this report via fax at his home on evenings and weekends. For the other mining sections at UBB, BLANKENSHIP insisted on personally receiving a report every two hours detailing each section's coal production and the reasons for any production delays.

BLANKENSHIP's practice was to regularly review these production reports from UBB's longwall and other sections. Throughout the Indictment Period, BLANKENSHIP insisted on personally reviewing and approving or denying every proposed hire at UBB, every proposal to give a UBB employee a raise, every capital expenditure at UBB, and every hiring of a contractor to perform work at UBB. Throughout much of the Indictment Period, BLANKENSHIP demanded daily phone calls with UBB management, in addition to the dozens of written production reports he received every day, so that he could further supervise activity at UBB. During the Indictment Period, BLANKENSHIP—the CEO and Chairman of a publicly traded corporation with more than \$2 billion in annual revenue—routinely, personally reviewed details such as one of UBB's operating sections starting three hours late because of necessary maintenance, a request to give a small number of truck drivers working for the UBB mining group a raise from approximately \$11.59 an hour to approximately \$13.50 an hour, and a request to spend \$750 to hire a contractor to check the freeze-proofing systems at a UBB-group mine before cold weather arrived.

BLANKENSHIP could have drastically reduced violations of mandatory federal mine safety standards at UBB by taking reasonable steps to follow the law.

49. Blankenship could have drastically reduced violations of mandatory federal mine safety standards at UBB by taking reasonable steps to follow the law. A large majority of UBB's safety-law violations were preventable. For example, daily safety-law violation reports routinely showed BLANKENSHIP that the mandatory federal mine safety standard that the UBB mining group violated most often was the standard requiring that explosive coal dust, combustible loose coal, and other combustible materials be cleaned up and not permitted to accumulate in the mine. Following this safety law was a matter of basic housekeeping. BLANKENSHIP could have prevented the majority of these safety-law violations by hiring enough miners at UBB, and

giving them enough non-coal-production time, to clean up the explosive and combustible substances that collected in the mine. Similarly, most mine-ventilation violations—which BLANKENSHIP knew were the most common category of safety-law violations at Massey’s mines—and roof-control violations at UBB could have been prevented by providing the mine with enough miners, and giving them enough non-coal-production time, to follow the safety laws. Yet throughout the Indictment Period, UBB regularly was staffed with too few miners and had too little non-coal-production time to reasonably be able to comply with mandatory federal mine safety and health standards on ventilation, combustible materials and rock dusting, and roof support, among other areas.

50. Throughout the Indictment Period, BLANKENSHIP possessed the authority to provide UBB with the resources necessary to prevent the majority of UBB’s violations of mandatory federal mine safety standards. BLANKENSHIP was the highest-ranking official in the group of officials who approved each Massey mine’s annual budget and production plan, which detailed how many miners each mine could hire in specific areas, including areas focused on safety-law compliance, and also set the amount of coal and profit that each mine was required to generate. BLANKENSHIP also exercised personal decision-making authority over every decision at UBB regarding hiring and the use of non-employee contractors, as well as capital expenditures for safety-compliance purposes. BLANKENSHIP possessed full authority to respond to UBB’s hundreds of annual, preventable safety-law violations by providing the mine with more miners, particularly in areas focused on safety-law compliance, and to reduce the mine’s requirements for coal production and profit so that miners would have more time to work on following the safety laws. Throughout the Indictment Period, BLANKENSHIP also possessed full authority to

discipline UBB executives for the mine's routine violations of mandatory mine safety and health standards, and to determine those managers' compensation.

51. Throughout the Indictment Period, Massey possessed, and BLANKENSHIP controlled, ample financial resources to provide UBB with the resources and reasonable production requirements that it needed to comply with mandatory federal mine safety standards. During the Indictment Period, Massey possessed cash and cash equivalents ranging from approximately \$391 million to approximately \$1.1 billion.

52. Throughout the Indictment Period, BLANKENSHIP closely managed the UBB mine and group of mines, routinely directing and making decisions on detailed matters of the mines' everyday operations. This elaborate level of involvement further enabled him to take action to reduce safety-law violations at UBB had he chosen to do so. During much of the Indictment Period, BLANKENSHIP received dozens of UBB coal-production reports every day, and had telephone conversations daily or even more frequently with the Known UBB Executive, in which BLANKENSHIP gave direction on UBB's operation. BLANKENSHIP also regularly managed UBB through handwritten messages to the Known UBB Executive, often written on reports regarding UBB's coal production or cost management with which BLANKENSHIP was dissatisfied. Examples of this practice include the following: on or around April 11, 2008, BLANKENSHIP sent the Known UBB Executive a handwritten note, written on a coal-production report from one shift in one operating section of the UBB mine, pressuring the Known UBB Executive to change the section's engineering plan to leave in place smaller coal pillars. Coal pillars were large blocks of coal left in place as a mine advances in order to help support the mine roof; smaller pillars generally provide less support but produce more coal and

thus more profit. The Known UBB Executive responded that the operating section that was the subject of the report would soon begin using smaller coal pillars.

53. Also on or around April 11, 2008, BLANKENSHIP sent the Known UBB Executive a handwritten note, written on a coal-production report from one shift in one operating section of one of the UBB-group mines, criticizing the placement of a specific piece of equipment in that section as it was depicted in a routine diagram on that report, demanding to know the details of the section's airflow configuration and the specific sequence in which the section cut coal from each of its passageways, and concluding, "It's easy to see why your mines don't run."

54. On or around May 15, 2008, the Known UBB Executive sent BLANKENSHIP a memo requesting to raise hourly pay for truckers at the UBB mining group from approximately \$11.59 an hour to approximately \$13.50 because the group could not find truckers willing to work for the rate of approximately \$11.59 an hour. On or around that same day, BLANKENSHIP responded with a series of detailed, handwritten questions about the proposed raise to which he required answers before approving or denying the proposed raise.

55. On or around January 6, 2009, BLANKENSHIP received a regular report called a Lost Footage Report from one of UBB's operating sections. On or around that date, BLANKENSHIP, dissatisfied with the information shown on the report, sent the Known UBB Executive a handwritten note on a copy of the report itself. The note read, "Is this the Head or TailGate? Describe Roof Conditions? Why a late Belt move? I didn't see a report. Why? Did you call me yet [illegible]. TODAY? What do coreholes in mains say rider will do ahead of you?"

56. On or around March 19, 2009, BLANKENSHIP sent the Known UBB Executive a memorandum chastising him for not producing coal as quickly as BLANKENSHIP demanded at UBB. In this memorandum, BLANKENSHIP said that BLANKENSHIP would need to call

directly a subordinate of the Known UBB Executive so that BLANKENSHIP himself could figure out what to do to increase coal production at UBB.

57. On or around October 7, 2009, BLANKENSHIP sent the Known UBB Executive several handwritten notes written on a request from the Known UBB Executive to spend approximately \$750 to have a contractor check and test the freeze-proofing systems at one of the UBB-group mines. Two of these handwritten notes read, “Nonsense Giving Money Away,” and “What does this mean? It’s yet another example of something I never recall having done by a contractor when I was a Group Pres.”

Blankenship chose to routinely violate and cause routine violations of mandatory federal mine safety standards at UBB.

58. Despite having the ready ability to drastically reduce violations of mandatory federal mine safety standards at UBB, and even though he knew that UBB’s practice of routinely violating such standards was unlawful, BLANKENSHIP purposely elected to continue that practice throughout the Indictment Period. Specifically, he chose to maximize profits by depriving UBB of the coal miners and non-coal-production time that it needed to comply with mandatory federal mine safety standards, concluding that it was less expensive to routinely pay fines for violating such standards than to allocate the necessary funds to following them.

59. During the Indictment Period, BLANKENSHIP instructed and encouraged UBB managers to violate mandatory mine safety standards. For example, on or around February 11, 2008, BLANKENSHIP sent the Known UBB Executive a memorandum that addressed work being done to permit UBB to follow mandatory federal mine safety standards on ventilation. This memorandum gave the following instructions: “You need to get low on UBB [sections] #1 and #2 and run some coal. We’ll worry about ventilation or other issues at an appropriate time. Now is not the time.” Throughout the Indictment Period, however, UBB was required to comply

with mandatory federal mine safety standards regarding ventilation, which were intended primarily to prevent mine explosions and fires and to prevent death and serious injury to miners if an explosion or fire occurs. Throughout the Indictment Period, UBB routinely violated those standards.

60. On or around April 29, 2008, BLANKENSHIP sent the Known UBB Executive a handwritten message chastising him because certain sections at UBB-group mines, including UBB itself, were not producing coal as quickly as BLANKENSHIP wanted. In this message, BLANKENSHIP instructed the Known UBB Executive to tell coal miners under his supervision to “run this sections [sic] like coal mines not like construction jobs.” Continual construction, including construction of ventilation control structures and supports for a mine’s roof and walls, was required to comply with mandatory federal mine safety standards.

61. On or around February 8, 2008, BLANKENSHIP sent the Known UBB Executive a handwritten message chastising him because certain sections at UBB-group mines, including UBB itself, were not producing coal as quickly as BLANKENSHIP wanted. In this message, BLANKENSHIP told the Known UBB Executive, referring to two mining sections at UBB, “Acting like construction sections. Get as low as possible and run coal.”

62. On or around April 29, 2008, BLANKENSHIP sent the Known UBB Executive another handwritten message chastising him for not producing coal as quickly as BLANKENSHIP wanted at one of the mines in the UBB mining group. This message instructed the Known UBB Executive, “Run coal. Don’t bolt for the year 2525.” This message was an instruction to increase coal production by devoting less time to the installation of roof bolts, which were a form of roof support. At all relevant times, mandatory federal mine safety standards and approved roof-support plans at all the UBB-group mines determined the number of roof bolts that each of those

mines were required to install, as well as the manner in which they did so, in order to help prevent falls of the mine roof and walls. At all relevant times, any violation of a mine's approved roof support plan was a violation of a mandatory mine safety standard.

63. On or around March 7, 2008, BLANKENSHIP sent the Known UBB Executive a handwritten message pressuring the Known UBB Executive to produce coal more quickly. The message contained the following instruction: "Do not cut any overcasts." An overcast was a ventilation control structure that helps ensure the reliable flow of air through a coal mine such as UBB. As a result of BLANKENSHIP's instruction in this handwritten message and similar instructions that BLANKENSHIP gave to UBB management at other times during the Indictment Period, overcasts were not constructed during the Indictment Period in numerous locations at UBB where they were needed to ensure reliable airflow. This practice contributed to numerous violations of mandatory mine safety and health standards concerning ventilation during the Indictment Period.

64. In or around August 2009, coal miners at UBB were performing work in preparation for the startup of the mine's longwall section, which was projected to be highly profitable. One of the last tasks remaining before the longwall section could begin producing coal was to cut a drainage path in certain passageways around the longwall section. Massey officials expected that water would enter the area near UBB's longwall mining section after it began producing coal, and the purpose of the planned drainage path was to drain this water from the mine in order to prevent flooding. With the drainage project approximately one to two weeks from completion, a Massey Energy Company executive known to the Grand Jury (the "Known Massey Executive") ordered that it be abandoned so that the longwall section could start producing coal sooner. This decision was made in substantial part as a result of pressure from BLANKENSHIP to begin

operating the longwall section as soon as possible. In or around November 2009, when the expected inflow of water entered the area of the longwall section, there was no system in place to drain it, and airways that were necessary to ventilate the mine flooded, at least two of filling with water from floor to roof. On or around December 14, 2009, a federal mine safety inspector issued a shutdown order upon discovering that coal miners at UBB were being required to work and travel in dark and murky water measuring up to four feet in depth with invisible slipping and tripping hazards on the floor of the flooded area—conditions that the inspector found could result in drowning. This condition, which made it impossible to examine several of UBB's aircourses in their entirety, violated a mandatory federal mine safety standard requiring that all aircourses be examined in their entirety at least weekly. It was caused by the decision to abandon the project to drain the area around the longwall section.

65. In or around December 2009, UBB's section #1 was still idled because one of its return aircourses (an aircourse that carries away air potentially contaminated by explosive substances and removes it from the mine) was flooded and could not safely be traveled to conduct required safety examinations, and had not been examined in several weeks. While this return aircourse was still flooded and not capable of being examined for safety, BLANKENSHIP directed the Known UBB Executive to start producing coal again in UBB's section #1, in violation of the mandatory mine safety standard requiring that all aircourses be examined at least weekly. When the Known UBB Executive resisted, BLANKENSHIP chastised him for "letting MSHA run his mines."

66. In or around the summer of 2009, during a period when certain sections at UBB routinely were operating with inadequate airflow, BLANKENSHIP counseled the Known UBB Executive

to ensure that UBB's underground operations were warned ahead of time when federal mine safety inspectors were coming to inspect those operations.

67. During the Indictment Period, UBB management repeatedly requested, in the course of the annual mine budgeting process that BLANKENSHIP oversaw, to hire more coal miners to work in jobs critical to safety-law compliance. BLANKENSHIP and other Massey officials carrying out BLANKENSHIP's instructions and policies, whose identities are known and unknown to the Grand Jury, denied these requests, knowing that these denials would cause routine, preventable violations of mandatory federal mine safety standards to continue at UBB.

68. During the Indictment Period, BLANKENSHIP, together with other Massey officials carrying out BLANKENSHIP's instructions and policies, whose identities are known and unknown to the Grand Jury, imposed coal-production requirements on UBB that they knew would, in combination with the inadequate staffing and other resources provided to UBB, cause routine, preventable violations of mandatory federal mine safety and health standards to continue at UBB.

69. During the Indictment Period, BLANKENSHIP consistently pressured UBB management to cut the number of coal miners in jobs critical to safety-law compliance, including conducting safety examinations and cleaning and rock dusting the mine's conveyor belts. (In part, because UBB's conveyor belts carried large quantities of coal at high speeds, they inevitably developed accumulations of explosive float coal dust and combustible loose coal that had to be promptly cleaned up to comply with mandatory federal mine safety standards.) For example, on or around March 10, 2008, BLANKENSHIP sent the Known UBB Executive a handwritten note chastising him for employing too many coal miners in jobs that focused on safety examinations, cleanup of

explosive and combustible substances on conveyor belts, and other safety-compliance work, calling the UBB group's employment of such miners "ridiculous" and "[l]iterally crazy."

70. On or around April 18, 2008, BLANKENSHIP sent the Known UBB Executive another handwritten note chastising him for employing too many coal miners in jobs involving safety examinations and cleanup of explosive and combustible substances along conveyor belts. In this handwritten note, BLANKENSHIP demanded to be sent the name and job description of every coal miner assigned to clean and maintain conveyor belts at the UBB group so that he could personally review them.

71. On or around February 25, 2009, BLANKENSHIP directed UBB and all other Massey mines to reduce their labor cost from \$18 per ton of coal mined to \$14 per ton of coal mined. BLANKENSHIP knew that the only way to carry out this directive at UBB was to further cut the number of coal miners employed in jobs that focused on safety-law compliance rather than the direct production of coal, including coal miners who conducted safety examinations, cleaned up and maintained conveyor belts, and maintained compliance with safety laws in the mine's aircourses. BLANKENSHIP further knew that this reduction in the number of UBB coal miners who were focused on these and other safety-law compliance tasks, as distinct from direct production of coal, would cause continued routine violations of mandatory federal mine safety standards at UBB.

72. Throughout the Indictment Period, BLANKENSHIP aggressively pressured UBB management to produce more coal and reduce costs while rarely if ever mentioning the mine's routine safety-law violations unless they threatened to affect coal production. UBB managers knew that BLANKENSHIP was aware of the mine's routine safety-law violations, so his near-exclusive emphasis on coal production and cost-cutting, compared with his near silence on

UBB's hundreds of safety-law violations, further clarified to them that he expected and accepted routine safety-law violations as long as they did not compromise coal production.

73. For example, on or around March 19, 2009, BLANKENSHIP sent the Known UBB Executive a memorandum chastising him for not producing as much coal at UBB as BLANKENSHIP wanted. The memorandum said, "UBB's miner sections are a mitigated [sic] disaster," and threatened to shut down UBB if it did not begin producing more coal. In this memorandum, BLANKENSHIP stated that BLANKENSHIP himself would need to personally intervene with the Known UBB Executive's subordinates at UBB to determine, in detail, how to increase coal production at the mine.

74. On or around March 10, 2009, BLANKENSHIP sent the Known UBB Executive a handwritten note chastising him for using two different forms for reports to BLANKENSHIP on an area of cost-cutting at UBB. In this note, BLANKENSHIP threatened the Known UBB Executive's job for what BLANKENSHIP regarded as insufficient attention to cost-cutting, writing, "You have a kid to feed. Do your job."

75. On or around March 13, 2009, BLANKENSHIP sent the Known UBB Executive a handwritten note chastising the Known UBB Executive for not producing as much coal as BLANKENSHIP wanted at a UBB-group mine. This note said, "Pitiful. You need to get focused. As I said at UBB, Marsh F [Marsh Fork, another UBB-group mine], etc I could Krushchev [sic] you. Do you understand?"

76. On or around August 5, 2008, BLANKENSHIP sent a memorandum to several Massey mining-group presidents, including the Known UBB Executive, with the subject "HIGH COSTS." The memorandum said, in part, "It seems to me that none of you are too concerned about your costs. Please let me know whether you are concerned. If you are and you happen to

be responsible for mines like . . . UBB . . ., please advise how you can run the kind of cost that you run.” The memorandum went on to say, “In my opinion, children could run these mines better than you all do. Look at your cost and figure out what you are going to do to get it down because if we don’t have a better August and September than we had July, you can be assured that the stock options are not going to look very attractive.” This memorandum made no reference to compliance with federal mine safety laws.

77. On or around February 9, 2009, BLANKENSHIP sent a memorandum to Massey mining-group presidents, including the Known UBB Executive, which said, “Please be reminded that your core job is to make money. To do this, you have to run coal at a low cost, ship your orders and control your quality.” The memorandum went on to say, “My suggestion is that you begin looking at your daily P&L’s [profit and loss statements] everyday because I’m looking to make an example out of somebody and I don’t mean embarrassment.” This memorandum made no reference to compliance with federal mine safety laws.

78. Meanwhile, during the Indictment Period, in hundreds of calls with the Known UBB Executive in which BLANKENSHIP managed and supervised operations at UBB, BLANKENSHIP rarely if ever mentioned UBB’s practice of routine safety-law violations, of which practice BLANKENSHIP was well aware.

79. During the Indictment Period, BLANKENSHIP and others known and unknown to the Grand Jury used compensation decisions to communicate an expectation and acceptance that UBB would routinely violate mandatory federal mine safety and health standards. During the Indictment Period, BLANKENSHIP personally made decisions on compensation for the presidents of Massey’s mining groups. In 2009, for example, UBB was cited for approximately 517 violations of mandatory federal mine safety standards. For 2009, however, BLANKENSHIP

made the Known UBB Executive, the president of UBB's mining group, among the highest-paid mining group presidents at Massey, with total compensation of approximately \$450,000. Also for 2009, a year in which Massey mines were cited, according to Massey's own count in the daily safety-law violation reports that BLANKENSHIP received, for approximately 8,900 violations of mandatory mine safety and health standards, persons known and unknown to the Grand Jury voted to award BLANKENSHIP bonuses and other compensation that brought his total compensation for the year to approximately \$17.8 million.

False and Misleading Statements and Omissions Following an Explosion at UBB

80. On April 5, 2010, an explosion occurred at UBB. The explosion resulted in a substantial number of fatalities and, as a result, attracted national and international media attention. Some media outlets reported that Massey had engaged in a practice of routinely violating mandatory safety standards. By April 7, 2010, Massey's Class A Common Stock price dropped approximately \$9.15 per share, or 16.8%, from its closing pricing on April 5, 2010. This decrease reduced BLANKENSHIP's net worth by approximately \$3 million.

81. On or around April 7, 2010, BLANKENSHIP directed Massey officials known to the Grand Jury to draft a statement to Massey shareholders (the "UBB Shareholder Statement"). On or around April 7, 2010, Massey officials known to the Grand Jury prepared a draft of the UBB Shareholder Statement and provided it to BLANKENSHIP for his review and approval. Among other things, the draft UBB Shareholder Statement specifically responded to public reports that Massey had engaged in a practice of routinely violating mandatory mine safety and health standards.

82. On or around April 8, 2010, BLANKENSHIP reviewed and approved the UBB Shareholder Statement, and approved its release to the public and its filing with the SEC.

BLANKENSHIP did these acts in or around Julian, Boone County, West Virginia, within the Southern District of West Virginia. The UBB Shareholder Statement that BLANKENSHIP approved included the following statements: “Media reports suggesting that the UBB tragedy was the result of a willful disregard for safety regulations are completely unfounded,” and, “We do not condone any violation of MSHA regulations, and we strive to be in compliance with all regulations at all times.” On or around April 8, 2010, as a result of BLANKENSHIP’s approval, Massey released the UBB Shareholder Statement to the public and filed it with the SEC, using means and instrumentalities of interstate commerce.

83. On or around April 9, 2010, a public relations consultant retained by Massey and known to the Grand Jury sent BLANKENSHIP a draft press release with a message asking him to review the draft release and advising that the consultant wanted to issue the release that day. The release consisted primarily of a list of five claims marked with bullet points. The second of these items was this claim: “We do not condone any violation of Mine Safety and Health Administration (MSHA) regulations, and we strive to be in compliance with all regulations at all times.” On or around April 9, 2010, in or around Julian, Boone County, West Virginia, in the Southern District of West Virginia, BLANKENSHIP responded in writing, approving the issuance of the release. On or around April 9, 2010, the public relations consultant issued the release on Massey’s behalf through means and instrumentalities of interstate commerce, including commercial services intended to disseminate press releases to the financial and investing communities.

84. At the time BLANKENSHIP approved the release and filing of the UBB Shareholder Statement, he knew that the statements that “[w]e [Massey] do not condone any violation of MSHA regulations” and “we [Massey] strive to be in compliance with all regulations at all

times” were materially false, fraudulent, fictitious, and misleading; that the UBB Shareholder Statement contained untrue statements of material fact and omitted to state material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading; that it employed devices, schemes, and artifices to defraud; and that it would operate as a fraud and deceit upon purchasers and sellers of Massey Class A Common Stock.

85. At the time the BLANKENSHIP approved the issuance of the press release described in Paragraph 83, he knew that the statements that “[w]e [Massey] do not condone any violation of Mine Safety and Health Administration (MSHA) regulations” and “we strive to be in compliance with all regulations at all times” were materially false, fraudulent, fictitious, and misleading; that the press release contained untrue statements of material fact and omitted to state material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading; that it employed devices, schemes, and artifices to defraud; and that it would operate as a fraud and deceit upon purchasers and sellers of Massey Class A Common Stock.

**Count One
(Conspiracy)**

86. The Grand Jury re-alleges Paragraphs 1 through 85 as if fully incorporated herein.

87. Throughout the Indictment Period, BLANKENSHIP, together with others known and unknown to the Grand Jury, unlawfully, willfully, and knowingly combined, conspired, confederated, and agreed together with each other:

a. for BLANKENSHIP and Massey, as operators of UBB, to willfully violate mandatory federal mine safety and health standards at UBB, in violation of Title 30, United States Code, Section 820(d), and Title 18, United States Code, Section 371; and

b. to defraud the United States and an agency thereof, to wit, 1) to hamper, hinder, impair, impede, and obstruct, by trickery, deceit, and dishonest means, the lawful and legitimate functions of DOL and its agency, MSHA, in the administration and enforcement of mine safety and health laws at UBB, and 2) to defraud and deprive, by trickery, deceit, and dishonest means, the United States of money that it otherwise would have received.

88. The purposes of this conspiracy included, among other purposes, unlawfully increasing Massey's profits and unlawfully enriching BLANKENSHIP.

Objects of the Conspiracy

89. Among the objects of the conspiracy were to:

- a. routinely violate mandatory federal mine safety and health standards;
- b. hamper, hinder, impair, impede, and obstruct, by trickery, deceit, and dishonest means, the lawful and legitimate functions of DOL and its agency, MSHA, in the administration and enforcement of mine safety and health laws at UBB; and
- c. defraud and deprive, by trickery, deceit, and dishonest means, the United States of money that it otherwise would have received.

Manner and Means

90. The manner and means of the conspiracy included, but were not limited to, the following:

91. It was a part of the conspiracy that BLANKENSHIP, together with others known and unknown to the Grand Jury, would and did instruct and counsel their subordinates to commit violations of mandatory federal mine safety and health standards, and to take actions that they knew would and did cause violations of those standards, and to engage in omissions to act that they knew would and did cause violations of those standards.

92. It was further a part of the conspiracy that BLANKENSHIP, together with others known and unknown to the Grand Jury, would and did refuse to provide UBB with enough coal miners, time to devote to safety-law compliance, and other resources to be reasonably able to comply with mandatory federal mine safety and health standards, knowing that this refusal would and did cause routine violations of federal mine safety and health standards at UBB.

93. It was further a part of the conspiracy that BLANKENSHIP, together with others known and unknown to the Grand Jury, would and did routinely pressure UBB management to increase coal production and cut costs, and specifically to cut the number of coal miners that UBB employed in jobs focused on safety-law compliance, knowing that these steps would cause UBB to continue routinely violating mandatory federal mine safety standards.

94. It was further a part of the conspiracy that BLANKENSHIP, together with others known and unknown to the Grand Jury, would and did routinely disregard UBB's practice of safety-law violations in communicating with UBB management, which served to inform UBB management that BLANKENSHIP and Massey expected and accepted routine violations of mandatory federal mine safety standards at UBB.

95. It was further a part of the conspiracy that BLANKENSHIP, together with others known and unknown to the Grand Jury, would and did reward with high levels of compensation, and declined to punish or discipline, officials who committed and caused routine violations of mandatory federal mine safety and health standards at UBB. These officials included BLANKENSHIP and the Known UBB Executive.

96. It was further a part of the conspiracy that persons known and unknown to the Grand Jury would and did routinely commit willful, readily preventable violations of mandatory federal mine safety and health standards at UBB.

97. It was a part of the conspiracy that BLANKENSHIP, together with others known and unknown, would and did cause and counsel to be given to persons at UBB advance warning of federal mine safety inspection activities, knowing and intending that the persons receiving this advance warning would conceal and cover up and cause to be concealed and covered up violations of mandatory federal mine safety and health standards that otherwise would result in citations and shutdown orders issued by federal mine safety inspectors, and in monetary penalties due to the United States.

98. It was further a part of the conspiracy that members of the conspiracy known and unknown, upon receiving advance warning of federal mine safety inspection activities at UBB, would and did conceal and cover up and cause to be concealed and covered up violations of mandatory federal mine safety standards that would otherwise result in citations and shutdown orders issued by federal mine safety inspectors, and in monetary penalties due to the United States.

99. It was further a part of the conspiracy that members of the conspiracy known and unknown falsified and caused to be falsified samples of respirable dust that were collected at

UBB pursuant to mandatory federal mine health standards, by falsely representing, and causing to be falsely represented, the locations at which dust sampling devices were placed for the collection of such samples.

Overt Acts

100. Overt acts committed in furtherance of the conspiracy and to effect the illegal objects thereof included, but were not limited to, the following:

- a. The imposition of staffing levels and production requirements, by BLANKENSHIP and others known and unknown to the Grand Jury, that BLANKENSHIP and these others known and unknown to the Grand Jury knew would result in continued routine violations of mandatory federal mine safety and health standards at UBB, as alleged in Paragraphs 67 and 68;
- b. the instructions and counsel to perform acts, and to commit omissions, that would violate and cause violations of mandatory federal mine safety and health standards, alleged in Paragraphs 59 through 65;
- c. the counsel to provide advance warning of federal mine safety inspection activities in UBB's underground works, alleged in Paragraph 66;
- d. providing and causing to be provided advance warning of federal mine safety inspection activities in UBB's underground works, as alleged in Paragraphs 37 through 39;
- e. concealing and covering up, and causing to be concealed and covered up, routine violations of mandatory federal mine safety and health standards at UBB in response to warnings of federal mine safety inspection activities in UBB's underground works, as alleged in Paragraph 37;

f. falsifying and causing to be falsified, during the Indictment Period, samples of respirable dust collected at UBB pursuant to mandatory federal mine health standards, by falsely representing and causing to be falsely represented the locations at which dust sampling devices were placed for the collection of such samples;

g. regularly pressuring UBB management to increase coal production and reduce production costs while knowing that UBB was routinely failing to meet mandatory federal mine safety and health standards and that those steps would cause continued and increased violations of those standards at UBB, as alleged in Paragraphs 69 through 77;

h. awarding high levels of compensation to, and declining to discipline or punish, officials who committed and caused routine and ongoing violations of mandatory federal mine safety and health standards at UBB, as alleged in Paragraph 79;

i. making and causing to be made false and misleading statements and omissions intended to conceal the existence of, and thereby perpetuate, the conspiracy, as alleged in Paragraphs 80 through 85; and

j. committing routine violations of mandatory federal mine safety and health standards at UBB, as alleged in Paragraphs 16 through 36.

In violation of Title 30, United States Code, Section 820(d), and Title 18, United States Code, Section 371.

Count Two

101. The Grand Jury re-alleges Paragraphs 1 through 100 as if fully incorporated herein.

102. On or around April 8, 2010, in the Southern District of West Virginia, BLANKENSHIP, aided and abetted by others known and unknown, knowingly and willfully made and caused to be made materially false, fictitious, and fraudulent statements and representations; and knowingly and willfully made and used, and caused to be made and used, a false writing and document knowing the same to contain materially false, fictitious, and fraudulent statements and entries, in a matter within the jurisdiction of the executive branch of the Government of the United States, to wit, by filing and causing to be filed with the SEC a document containing statements, entries, and representations including the following: “[w]e [Massey] do not condone any violation of MSHA regulations” and “we [Massey] strive to be in compliance with all regulations at all times,” which statements BLANKENSHIP then and there well knew were false, fictitious and fraudulent.

In violation of Title 18, United States Code, Section 1001(a)(2) and (3), and Section 2.

Count Three

103. The Grand Jury re-alleges Paragraphs 1 through 102 as if fully incorporated herein.

104. From on or around April 7, 2010, through on or around April 9, 2010, BLANKENSHIP, aided and abetted by others known and unknown to the Grand Jury, did directly and indirectly, by means and instrumentalities of interstate commerce, and by means of the mails and of the facilities of national securities exchanges, did make and cause to be made untrue statements of material fact, and did omit to state, and cause to be omitted to state, material facts necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading, did engage in acts and practices and courses of business which operated and would operate as frauds and deceits upon persons, all in connection with the sale and purchase of securities, to wit, Massey Class A Common Stock, in that BLANKENSHIP, aided and abetted by others known and unknown to the Grand Jury, did directly and indirectly, make and cause to be made the statements, “[w]e [Massey] do not condone any violation of MSHA regulations,” and “[w]e [Massey] do not condone any violation of Mine Safety and Health Administration (MSHA) regulations,” and “we [Massey] strive to be in compliance with all regulations at all times,” in a filing made with the SEC by means of interstate wire transmission, and in a press release distributed by means of interstate wire transmissions and companies engaged in the business of distributing press releases by means of interstate wire transmissions.

In violation of Title 15, United States Code, Section 78ff; Title 17, Code of Federal

Regulations, Section 240.10b-5; and Title 18 United States Code, Section 2.



STEVEN R. RUBY
Assistant United States Attorney

Case 1:13-cv-01215-TSC Document 122-9 Filed 12/22/15 Page 131 of 134

EXHIBIT 157

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA**

BECKLEY DIVISION

UNITED STATES OF AMERICA,

Plaintiff,

v.

CRIMINAL ACTION NO. 5:14-cr-00244

DONALD L. BLANKENSHIP,

Defendant.

ORDER

On October 1, 2015, came the United States by R. Booth Goodwin, United States Attorney for the Southern District of West Virginia, together with Assistant United States Attorneys Steven R. Ruby, R. Gregory McVey and Gabriele Wohl, and also came the Defendant, Donald L. Blankenship, in person and by his counsel, William W. Taylor, Blair Gerard Brown, James A. Walls and Eric R. Delinsky, for trial in the above-styled matter.

Jury selection concluded on October 7, 2015, and the parties presented opening statements and the United States presented evidence. The United States rested its case on November 16, 2015, at which time the Defendant submitted written and oral motion for judgment of acquittal pursuant to Rule 29 of the Federal Rules of Criminal Procedure. The Court held the Defendant's motion in abeyance. The Defendant rested his case on the same day. On November 17, 2015, the Court instructed the jury, and the parties presented their closing arguments. The jury began its deliberations on the same day and subsequently returned a verdict of guilty on December 3, 2015, as to Count One of the Superseding Indictment. The jury found the Defendant not guilty

as to Counts Two and Three of the Superseding Indictment. The verdict was filed on that date. By order entered on the 9th day of December, 2015, the Court denied the Defendant's *Rule 29 Motion for Judgment of Acquittal on all Counts*.

Based on the jury's verdict, the Court **ADJUDGES** the Defendant, Donald L. Blankenship, **GUILTY**, and he now stands convicted of the misdemeanor offense of *Conspiracy*, in violation of 30 U.S.C. § 820(d) and 18 U.S.C. § 371, as charged in **Count One** of the Superseding Indictment. Further, the Court **ADJUDGES** the Defendant, Donald L. Blankenship, **NOT GUILTY** of the charges contained in **Count Two** and **Count Three** of the Superseding Indictment.

Pursuant to U.S.S.G. § 6A1 et seq., and subject to any post-trial motions, it is hereby **ORDERED** as follows:

1) That the Probation Office prepare and forward a draft presentence report to the United States and counsel for the Defendant no later than **February 22, 2016**; that the United States Attorney and counsel for the Defendant file objections to the draft presentence report no later than **March 7, 2016**; that the Probation Office submit a final presentence report to the Court no later than **March 21, 2016**; and that the United States and counsel for the Defendant file a sentencing memorandum no later than **March 28, 2016**. **THE AFORESAID PRESENTENCE REPORT DEADLINES HAVE BEEN ESTABLISHED BY THE COURT AND MAY BE ALTERED ONLY BY THE COURT. REQUESTS TO EXTEND ANY DEADLINE SHALL BE SUBMITTED TO THE COURT IN WRITING IN ADVANCE OF THE ESTABLISHED DEADLINE. SUCH DEADLINES WILL BE EXTENDED ONLY UPON GOOD CAUSE SHOWN.**


2) Pursuant to United States v. Booker, 543 U.S. 220 (2005) and United States v. Hughes, 401 F.3d 540 (4th Cir. 2005), the United States and the Defendant shall file a Sentencing Memorandum addressing the sentencing factors set forth in 18 U.S.C. § 3553(a) as may pertain to this case. The Sentencing Memorandum may also address such other matters not previously addressed in the form of motions or objections to the Presentence Report and may include argument as to the appropriate sentence to be imposed. Sentencing Memoranda shall be no more than ten (10) pages in length.

3) That final disposition of this matter be scheduled for **April 6, 2016, at 10:00 a.m., in CHARLESTON, West Virginia**¹.

4) That the Defendant be released upon the previously executed bond, subject to the conditions set forth in the Order Setting Conditions of Release previously filed herein and with the additional condition that the Defendant shall appear for sentencing on **April 6, 2016, at 10:00 a.m.**

The Court **DIRECTS** the Clerk to send a copy of this Order to the Defendant and counsel, to the United States Attorney, to the United States Probation Office, and to the Office of the United States Marshal.

ENTER: December 10, 2015


IRENE C. BERGER
UNITED STATES DISTRICT JUDGE
SOUTHERN DISTRICT OF WEST VIRGINIA

¹The previously scheduled sentencing date of March 23, 2016, has been modified based on defense counsel's scheduling conflict for that date.

Case 1:13-cv-01215-TSC Document 124-5 Filed 12/22/15 Page 1 of 3

EXHIBIT 3

6/16/2015

Case 1:13-cv-01215-TSC Document 124-5 Filed 12/22/15 Page 2 of 3



Be confident your electrical work complies with California law.

1 message

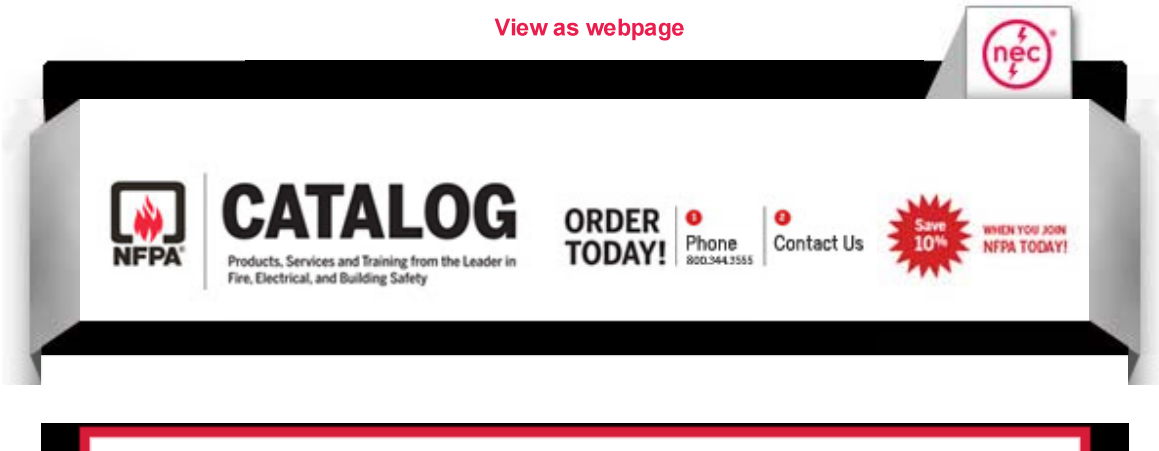
NFPA - Your NEC Source <nfpa@e.nfpa.org>
Reply-To:

Tue, Jun 16, 2015 at 12:46 PM

California has adopted the 2011 NEC®. Order the 2011 NEC Handbook today and receive FREE Tabs!

To ensure proper delivery, add nfpa@e.nfpa.org to your e-mail address book

[View as webpage](#)



California has adopted the 2011 NEC.

Order the 2011 NEC Handbook today and receive a FREE set of 2011 NEC Self-Adhesive Index Tabs.

Act quickly — supplies are limited! (Set of 96 for a \$17.50 Value)



ORDER NOW

Increase efficiency and productivity while you apply the 2011 NEC with confidence! Order the 2011 NFPA 70® National Electrical Code Handbook today and boost your referencing power with **FREE** NEC Tabs for quick access to vital information.

- The 2011 NEC Handbook helps you meet Code, answer questions, and avoid

6/16/2015

Case 1:13-cv-01215-TSC Document 124-5 Filed 12/22/15 Page 3 of 3

errors. NFPA's 2011 NEC Handbook explains NEC reasoning, provides examples based on real-world scenarios, and gives you the background behind Code revisions, so you can work with authority. Expert commentary clarifies concepts and the entire 2011 NEC text is included for reference. The Handbook is also loaded with full-color photos and visuals including schematics, floor plans, flow charts, and cross-sectional graphics.

- FREE 2011 NEC Tabs put Code information at your fingertips. Affix your **FREE** NEC Tabs to the pages of your 2011 NEC Handbook to highlight electrical topics by Code article and name.

Order while supplies last!



The mission of the international nonprofit NFPA, established in 1896, is to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating consensus codes and standards, research, training, and education.

HAVE QUESTIONS?

1 Contact Us	2 Call Now 1.800.344.3555	3 Visit our Catalog
---------------------	----------------------------------	----------------------------

Please do not reply to this email.

NFPA® (National Fire Protection Association)
1 Batterymarch Park, Quincy, MA 02169-7471 USA
Telephone: +1 617 770-3000 Fax: +1 617 770-0700

NFPA® is a registered trademark of the National Fire Protection Association, Quincy, MA

This e-mail was sent to

[Privacy](#) | [Change Your Email Preferences](#) | [Unsubscribe](#)

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

AMERICAN SOCIETY FOR TESTING AND
MATERIALS d/b/a/ ASTM INTERNATIONAL;

NATIONAL FIRE PROTECTION
ASSOCIATION, INC.; and

AMERICAN SOCIETY OF HEATING,
REFRIGERATING, AND AIR-CONDITIONING
ENGINEERS, INC.

Plaintiffs,

v.

PUBLIC.RESOURCE.ORG, INC.,

Defendant.

Case No. 1:13-cv-01215-TSC-DAR

PUBLIC.RESOURCE.ORG, INC.,

Counterclaimant,

v.

AMERICAN SOCIETY FOR TESTING AND
MATERIALS d/b/a/ ASTM INTERNATIONAL;

NATIONAL FIRE PROTECTION
ASSOCIATION, INC.; and

AMERICAN SOCIETY OF HEATING,
REFRIGERATING, AND AIR-CONDITIONING
ENGINEERS, INC.

Counterdefendants.

DECLARATION OF STEVE COMSTOCK

I, Steve Comstock, declare as follows:

1. I am currently employed by the American Society of Heating, Refrigerating, and Air Conditioning Engineers (“ASHRAE”) as its Director of Publications and Education. I have been employed by ASHRAE since 1974. Based on the information known to me as a result of the duties and responsibilities of my position, I have personal knowledge of the facts set forth herein and could and would testify competently thereto if called as a witness.

2. As part of my job responsibilities, questions regarding access to ASHRAE standards are ultimately directed to me, including questions regarding access to ASHRAE standards by individuals with disabilities.

3. ASHRAE is a non-profit organization that operates with the mission of advancing the arts and sciences of heating, ventilating, air conditioning and refrigerating to serve humanity and promote a sustainable world. With that in mind, I have made every effort to make accommodations for anyone with a disability who wishes to access ASHRAE standards. These situations have not arisen often.

4. In my 31 years serving as the Director of Publications for ASHRAE, I recall only two specific examples where individuals requested that ASHRAE make alternate forms of access to ASHRAE publications available due to a disability, and in both instances ASHRAE made the appropriate accommodation. In 2013, ASHRAE sent a digital copy of an ASHRAE published textbook on HVAC systems to a visually impaired student from the Northern Alberta Institute of Technology so that the student could employ screen reader software to access the material audibly. Similarly, a hearing impaired individual alerted ASHRAE that he wished to attend a training class related to HVAC design, and ASHRAE provided sign-language interpretation.

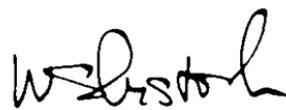
5. ASHRAE has also undertaken additional efforts to ensure that disabilities do not unnecessarily limit access to our standards or other services that ASHRAE provides. Last year, ASHRAE removed encryption from the digital copies of standards sold on the ASHRAE bookstore so that the standards would be more compatible with reading software used by visually impaired individuals. ASHRAE's partner in running the ASHRAE bookstore, a company called Techstreet, has made assurances to ASHRAE that it would also help accommodate individuals with disabilities. And, ASHRAE has formally adopted a policy allowing for alternate testing accommodations related to certification programs run by ASHRAE; a request form for test takers which to receive such accommodations can be found on the ASHRAE website at <https://www.ashrae.org/education--certification/certification/faqs#3>.

6. ASHRAE has consistently provided accommodation to individuals with disabilities in the past and intends to continue to do so in the future.

7. I am attaching to this declaration as Exhibit 1 a true and correct copy of ASHRAE Standard 90.1-2004, which I understand to be one of the ASHRAE standards at issue in this case. In my role as Director of Publications, I am familiar with ASHRAE's standards, including 90.1. I have reviewed this document and it is an accurate copy of Standard 90.1-2004.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Executed this 21st day of January, 2016 at Orlando, Florida.



Steve Comstock

Case 1:13-cv-01215-TSC Document 155-5 Filed 01/21/16 Page 4 of 5

EXHIBIT 1

Case 1:13-cv-01215-TSC Document 155-5 Filed 01/21/16 Page 5 of 5

Filed Under Seal

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

<p>AMERICAN SOCIETY FOR TESTING AND MATERIALS d/b/a/ ASTM INTERNATIONAL;</p> <p>NATIONAL FIRE PROTECTION ASSOCIATION, INC.; and</p> <p>AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND AIR CONDITIONING ENGINEERS,</p> <p style="text-align: center;">Plaintiffs/ Counter-Defendants,</p> <p>v.</p> <p>PUBLIC.RESOURCE.ORG, INC.,</p> <p style="text-align: center;">Defendant/ Counter-Plaintiff.</p>	<p style="text-align: center;">Case No. 1:13-cv-01215-TSC</p>
--	---

**DECLARATION OF CHRISTIAN DUBAY
IN SUPPORT OF PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT**

I, Christian Dubay, declare as follows:

1. I am Vice President, Codes and Standards, and Chief Engineer for the National Fire Protection Association ("NFPA"). My duties include managing and administering the NFPA Codes and Standards process. I have held this position since 2007. The following facts are based upon my own personal knowledge, and if called upon to do so, I could and would testify competently hereto.

2. A central component of NFPA's mission is to eliminate the risk of death, injury, property and economic loss due to fire, electrical and related hazards, for all people. As part of that mission, NFPA has long been involved with developing strategies and fire safety educational materials for people with disabilities.

3. Since at least 2007, NFPA has had a Disability Access Review and Advisory Committee. This committee is appointed by NFPA's president and advises NFPA's president and its Technical Committees.

4. The Disability Access Review and Advisory Committee works to identify existing needs and emerging issues within the disability community, and to ensure that the NFPA Codes and Standards process includes current subject matter that addresses disability issues, access provisions, and other matters that impact the disability community.

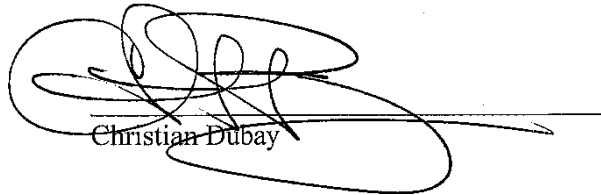
5. NFPA has taken a leading role in promoting building safety for the disabled by, among other things, developing an Emergency Evacuation Planning Guide for People with Disabilities, which is available for free download on NFPA's website. This Guide provides information on the five general categories of disabilities (mobility, visual, hearing, speech, and cognitive) and the four elements of evacuation information that occupants need: notification, way finding, use of the way, and assistance.

6. NFPA is also committed to providing access to its standards to all persons who have an interest in reading them. As part of that commitment, NFPA makes accommodations for disabled persons who request assistance in accessing any of NFPA's standards. NFPA is not aware of any persons who have requested assistance in accessing NFPA materials and have been unable to do so.

7. I am aware of one instance in which NFPA received a request for accommodation in accessing an NFPA standard from a person who had low vision. NFPA responded by providing that individual with a PDF copy of the requested standard, free of charge, and the individual was able to use that PDF copy to read the standard.

8. Attached hereto as Exhibit A is a true and correct copy of the 2011 edition of NFPA 70, the National Electrical Code.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct and that this declaration was executed this 21st day of January 2016 at Quincy, Massachusetts.



Christian Dubay

Case 1:13-cv-01215-TSC Document 155-6 Filed 01/21/16 Page 4 of 5

EXHIBIT A

Case 1:13-cv-01215-TSC Document 155-6 Filed 01/21/16 Page 5 of 5

FILED UNDER SEAL

MATERIAL UNDER SEAL DELETED

JA02965-JA03848

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

<p>AMERICAN SOCIETY FOR TESTING AND MATERIALS d/b/a/ ASTM INTERNATIONAL;</p> <p>NATIONAL FIRE PROTECTION ASSOCIATION, INC.; and</p> <p>AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND AIR CONDITIONING ENGINEERS,</p> <p style="text-align: center;">Plaintiffs/ Counter-Defendants,</p> <p>v.</p> <p>PUBLIC.RESOURCE.ORG, INC.,</p> <p style="text-align: center;">Defendant/ Counter-Plaintiff.</p>	<p style="text-align: center;">Case No. 1:13-cv-01215-TSC</p>
--	---

SUPPLEMENTAL DECLARATION OF THOMAS B. O'BRIEN, JR.

Pursuant to 28 U.S.C. § 1746, I, Thomas B. O'Brien, Jr., declare the following statements to be true under the penalties of perjury:

1. I am over the age of 18 years and am fully competent to testify to the matters stated in this Declaration.
2. This declaration is based on my personal knowledge. If called to do so, I would and could testify to the matters stated herein.
3. I am Vice President and General Counsel at ASTM International ("ASTM"). I have worked at ASTM since 2003.
4. Prior to joining ASTM in 2003, I worked as outside counsel for ASTM between 1997 and 2003.

5. Attached as Exhibit 1 hereto is a true and correct copy of ASTM's online new membership form, which has been in place since 2005.

6. As shown in Exhibit 1, since 2005, new members to ASTM who completed their membership application online had to affirmatively click on a check box next to the following statement: "I agree, by my participation in ASTM and enjoyments of the benefits of my annual membership, to have transferred and assigned any and all interest I possess or may possess, including copyright, in the development or creation of ASTM standards or ASTM IP to ASTM."

7. Attached as Exhibit 2 hereto is a true and correct copy of ASTM's online membership renewal form, which has been in place since 2005.

8. Attached as Exhibit 3 hereto is a true and correct copy of instructions for registering a work item through ASTM's online system, which provides screen shots of each of the different screens a member will see when registering a work item.

9. ASTM has had a version of its "Form and Style for ASTM Standards" ("ASTM Form and Style Guide") since at least as early as 1957.

10. Attached as Exhibit 4 hereto is a true and correct copy of the version of the ASTM Form and Style Guide titled "Recommendations on Form of ASTM Standards," which was published in 1961 and references issuance in 1957.

11. Each version of the ASTM Form and Style Guide described certain components and provided the text for certain language that was required to be included in every ASTM standard during the relevant time period.

12. As part of the process of developing a draft standard, ASTM staff members added language and components that were required by the relevant ASTM Form and Style Guide to the draft prepared by the task group.

13. I have given training to ASTM employees and committee officers on use of the ASTM Form and Style Guide in connection with standards, in conjunction with Regulations Governing ASTM Technical Committees.

14. I have attended ASTM committee meetings in which the requirement to use certain language and information from the ASTM Form and Style Guide was discussed.

15. I supervise the ASTM employees who respond to requests to grant permissions to use ASTM's copyrighted materials, and I have personal knowledge of the circumstances and frequency with which these requests are granted and denied.

16. ASTM denies requests for permission to use its standards at no cost when the requester seeks to post the standard on a public website with no reasonable time limit and/or with no limitation on the number of people who can access it

17. I am not aware of any visually-impaired person who has informed ASTM that he/she was having difficulty accessing an ASTM standard due to a print disability. If a visually-impaired person requested access to an ASTM standard that was necessary due to a print disability, I would instruct the staff member who received the request to provide a copy of the ASTM standard in a format that accommodated the person's disability at no additional cost to the requester.

18. ASTM's practice was to obtain a copyright registration for every annual Book of Standards from 1980-2011. I am not aware of any circumstance in which ASTM deviated from this practice.

19. ASTM maintains records related to each ASTM standard that is proposed. Those records include information about the standard number, the committee that has jurisdiction over the standard, ballot items related to the standard, and the name of the technical contact for the

standard. These records are kept in the ordinary course of ASTM's regularly conducted activity at or near the time at which any activities related to the standard took place by a person with knowledge of the activities related to the standard. I am familiar with these computer-stored records because I use these records to prove legal advice to ASTM. I recognize the documents referenced in paragraphs 20-23 below to be printouts from these computer-stored records and the printouts accurately reflect the computer-stored records.

20. Attached as Exhibit 5 is a true and correct printout from the computer-stored records described in paragraph 19 above with information regarding ASTM D86-07.

21. Attached as Exhibit 6 is a true and correct printout from the computer-stored records described in paragraph 19 above with information regarding ASTM D975-07.

22. Attached as Exhibit 7 is a true and correct printout from the computer-stored records described in paragraph 19 above with information regarding ASTM D396-98.

23. Attached as Exhibit 8 is a true and correct printout from the computer-stored records described in paragraph 19 above with information regarding ASTM D1217-98.

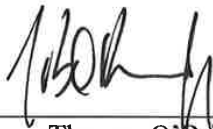
24. ASTM maintains records related to members who complete new membership and membership renewal forms each year. Those records include information such as the name of the member, the date on which the member completed the membership form, and for some of the members, whether the member completed the membership through ASTM's online system, a paper form, or another method. These records are kept in the ordinary course of ASTM's regularly conducted activity at or near the time at which the membership forms were completed by a person with knowledge of the completion of the membership forms. I am familiar with these computer-stored records because I use these records to prove legal advice to ASTM. I

recognize the documents referenced in paragraphs 25-26 below to be printouts from these computer-stored records and the printouts accurately reflect the computer-stored records.

25. Attached as Exhibit 9 is a true and correct printout from the computer-stored records described in paragraph 24 above showing ASTM individual membership forms that were completed in 2007.

26. Attached as Exhibit 10 is a true and correct printout from the computer-stored records described in paragraph 24 above showing ASTM organizational membership forms that were completed in 2007.

Dated: January 21, 2016



Thomas O'Brien

Case 1:13-cv-01215-TSC Document 155-7 Filed 01/21/16 Page 6 of 895

EXHIBIT 1



All Search ASTM GO

LANGUAGES CONTACT CART (0) MYASTM

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

Get Involved / Membership

- Technical Committees
- Membership**
- Students & Professors
- Meetings & Symposia

Membership

Membership with ASTM International offers a wealth of opportunity. Members strengthen their expertise through the development of world class standards; they further their professional growth through public speaking and assuming leadership roles; they build a network of contacts by interacting with the world's top technical experts and business professionals. Please click "Join Now" to read about the benefits of each type of membership.

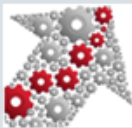
Join Now
Explore the Benefits of Membership.



[Join Additional Committees \(Existing Members\)](#)

[Invite a Colleague to Join](#)

ASTM Leadership



View ASTM's Leadership website for information on mentoring, best practices, professional growth and more.

About ASTM Membership

- [Membership Types & Benefits](#)
- [Membership FAQs](#)
- [Responsibilities of Membership](#)
- [Contact Member Services](#)

Member Resources

- [New Member Orientation](#)
- [Virtual Classroom for Members](#)
- [Technical Committees & Resources](#)
- [Order a Member Plaque](#)
- [Organizational Member Directory](#)

Watch this short video to learn more from members on their ASTM experience!



See all ASTM Intl. videos at [YouTube](#)



[Home](#) [About ASTM](#) [Site Map](#) [Support](#) [Contact](#) [Policies](#) [Copyright/Permissions](#)

Copyright © 2006 - 2015 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19380-2099 USA



[▼ PRODUCTS AND SERVICES](#)
[▼ GET INVOLVED](#)
[▼ ABOUT](#)
[▼ NEWS](#)

Get Involved / Membership / Membership Types

- Technical Committees
- Membership
- Students & Professors
- Meetings & Symposia

Membership

Participating Members

Cost: \$75

JOIN PARTICIPATING

Benefits

- Direct Committee Participation
- Free Volume
- Publication Discounts
- Standardization News

Participating Members are individuals who choose to join ASTM International technical committees. [More>>](#)

Organizational Members

Cost: \$400

JOIN ORGANIZATIONAL

Benefits

- Customized ASTM Organizational Member Wall Plaque
- Free Listing in ASTM Membership Directory
- Transferable Membership
- Direct Committee Participation
- Free Volume
- Publication Discounts
- Standardization News

Organizational Members are organizations that support the ASTM International voluntary consensus process through the designation of one representative that may or may not choose to join ASTM International technical committees. [More>>](#)

Informational Members

Cost: \$75

JOIN INFORMATIONAL

Benefits

- Discounted Standards
- Standardization News

Informational Members have an interest in ASTM International standards and related technical information, but choose not to participate on technical committees. [More>>](#)

Student Members

Cost: Free

JOIN STUDENT

Benefits

- Scholarship Opportunities
- Standardization News

Student Members are full-time undergraduate or graduate students who receive information from ASTM International. [More>>](#)

Recommended



ASTM Training:
Apply standards more effectively

Train at our location or yours, and get instruction on the most important standards you use

- Technical Committees
- Membership
- Students & Professors
- Meetings & Symposia

Participating Membership Application

Join Main Committee

Select the main committee of interest to you from the drop down menu below.

(Note: While you will have the opportunity to join additional committees later in the application process, it is recommended that new members start with one or two committees.)

▾ A01 Steel, Stainless Steel and Related Alloys

Join Subcommittees

Select subcommittees for the committee you chose. Use your control key to select more than one; for Mac use the command key. To identify the relevant subcommittees of interest, [View the list of Standards, Subcommittees and Work Items.](#)

A01.01 Steel Rails and Accessories

A01.02 Structural Steel for Bridges, Buildings, Rolling Stock and Ships

A01.03 Steel Rod and Wire

A01.05 Steel Reinforcement

Please check your organization's primary activity as it relates to the scope of the committee's standards activities.

- Manufacturer of product/service
- Sales/distributor of material/product service
- Supplier of Service
- User/purchaser of product/service
- Testing of product/service
- Consulting Firm / Independent Consultant / Retired but actively consulting
- Research and development
- Government Agency
- Academic
- Consumer
- Retired, unaffiliated
- Other, please explain:

CONTINUE

- Choose committee
- Describe yourself
- Select Volume
- Confirmation

Recommended



ASTM Portals

Access your tailored content and services from a platform where your employees can share and annotate standards, get training and more.

Case 1:13-cv-01215-TSC Document 155-7 Filed 01/21/16 Page 10 of 895



Search ASTM [GO]

LANGUAGES CONTACT CART (1) USER LOGIN

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

Get Involved / Membership / Participating Member Application

- Technical Committees
- Membership
- Students & Professors
- Meetings & Symposia

Tell the Committee About Yourself

To ensure a balanced process, committees classify members as producers, users, consumers, or general interest relative to the committee scope. Please complete this section so that your proper classification and voting status can be assigned.

Name of Company/Organization

[none]



Check here if there is no company affiliation for this membership Name of Your Division in the Company (type "none" if not applicable)

[none]

Name of Parent Organization, which includes any external ownership or control (if independent or none exists, type "none" in the box)

[none]

Please provide information about the products or services provided by you or your company, and/or a brief description of your, or your organization's, activities and interests as it relates to the scope of standards work for the committee you selected.

[none]

Please provide the website address of your organization. If none, type "none" in the box.

[none]

CONTINUE JOIN ADDITIONAL COMMITTEES GO BACK



Recommended

ASTM Proficiency Testing: Improve your lab's performance

Meet accreditation requirements, compare your performance with other labs, document your expertise.

Case 1:13-cv-01215-TSC Document 155-7 Filed 01/21/16 Page 11 of 895



Search bar with 'All' dropdown, 'Search ASTM' text, and 'GO' button

LANGUAGES CONTACT CART (1) USER LOGIN

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

Get Involved / Membership / Participating Member Application

- Technical Committees
- Membership**
- Students & Professors
- Meetings & Symposia

Select Member Benefit

One Free Volume

The collection of ASTM standards is maintained in a series of volumes that collectively comprise *The ASTM Book of Standards*.

The volume(s) for the committee(s) you selected is in the pull-down below. Or, you may select a different volume.

Volumes for the committee(s) you chose:

Dropdown menu: Please select a volume

OR, select another volume:

Dropdown menu: Please select a volume

Note: Volume titles have been truncated for display purposes. [Click here](#) for a list of full volume titles and publication dates for print/CD-ROM versions.

Select volume format

Dropdown menu: Select Format

[Learn more](#) about free volume format options.

No, I do not want a member volume. Click Continue to place your membership in the ASTM shopping cart.

I agree, by my participation in ASTM and enjoyment of the benefits of my annual membership, to have transferred and assigned any and all interest I possess or may possess, including copyright, in the development or creation of ASTM standards or ASTM IP to ASTM. For additional information, please see the [ASTM IP Policy](#).

CONTINUE

Recommended

ASTM Portals

Access your tailored content and services from a platform where your employees can share and annotate standards, get training and more.





Search ASTM

LANGUAGES CONTACT CART (3) USER LOGIN

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

Get Involved / Membership / Participating Member Application

- Technical Committees
- Membership
- Students & Professors
- Meetings & Symposia

Member Online Volume 02.02 Basic has been added to your shopping cart.

For \$30 you can upgrade your Member Online Basic Volume to the online premium volume called Online Plus. This Online Plus Volume includes not only active standards, but also relined, historical and withdrawn standards. Click [here](#) for more information on Online Plus.

Would you like to upgrade your Online Basic Volume to the Plus Volume?

- Yes, upgrade my Basic Volume to the Plus Volume.
- No, I prefer the Basic Volume.

CONTINUE



Recommended



ASTM Training:
Apply standards more effectively

Train at our location or yours, and get instruction on the most important standards you use

1. Confirmation



Search ASTM

LANGUAGES CONTACT CART (3) USER LOGIN

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

Get Involved / Membership / Participating Member Application

- Technical Committees
- Membership
- Students & Professors
- Meetings & Symposia

Volume Confirmation

Volume 02.02 Basic (Click [here](#) to change your selection) has been added to your shopping cart.

Would you like to purchase any other volumes or products and add them to your cart?

- Yes, continue shopping.
- No, take me to my shopping cart.

CONTINUE



Recommended



ASTM Proficiency Testing:
Improve your lab's performance

Meet accreditation requirements, compare your performance with other labs, document your expertise.



Case 1:13-cv-01215-TSC Document 155-7 Filed 01/21/16 Page 13 of 895



Dropdown menu with 'All' and search bar 'Search ASTM' with a 'GO' button.

LANGUAGES CONTACT CART (2) USER LOGIN

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

You might also consider:



Standards Tracker

Free

ADD TO CART

Your Shopping Cart:

Description	Qty.	Price	Total	
Participating Membership (MEM)	1	\$75.00	\$75.00	delete
Member Volume NONFERROUS METALS PRODUCTS 02.02 Aluminum and Magnesium Alloys-Online Basic	1	\$0.00	\$0.00	delete

UPDATE QTY.

Subtotal: \$75.00

CONTINUE SHOPPING

CHECKOUT



Home About ASTM Site Map Support Contact Policies Copyright/Permissions

Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA

- Technical Committees
- Membership
- Students & Professors
- Meetings & Symposia

Organizational Membership Application

Join Main Committee

Select the main committee of interest to you from the drop down menu below.

(Note: While you will have the opportunity to join additional committees later in the application process, it is recommended that new members start with one or two committees.)

I choose not to participate on ASTM Committees

Join Subcommittees

Select subcommittees for the committee you chose. Use your control key to select more than one; for Mac use the command key.

I choose not to participate on ASTM Committees

Please check your organization's primary activity as it relates to the scope of the committee's standards activities.

- Manufacturer of product/service
- Sales/distributor of material/product service
- Supplier of Service
- User/purchaser of product/service
- Testing of product/service
- Consulting Firm / Independent Consultant / Retired but actively consulting
- Research and development
- Government Agency
- Academia
- Consumer
- Retired, unaffiliated
- Other, please explain:

CONTINUE



Recommended



ASTM Portals

Access your tailored content and services from a platform where your employees can share and annotate standards, get training and more.



Search ASTM

GO

LANGUAGES CONTACT CART (0) MYASTM

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

Get Involved / Membership / Organizational Membership Application

- Technical Committees
- Membership
- Students & Professors
- Meetings & Symposia

Non - Consultant Application

Tell the Committee About Yourself

To ensure a balanced process, committees classify members as producers, users, consumers, or general interest relative to the committee scope. Please complete this section so that your proper classification and voting status can be assigned.

Name of Company /Organization

[Text input box]

Check here if there is no company affiliation for this membership

Name of Your Division in the Company (type "none" if not applicable)

[Text input box]

Name of Parent Organization, which includes any external ownership or control (if independent or none exists, type "none" in the box)

[Text input box]

Please provide information about the products or services provided by you or your company, and/or a brief description of your, or your organization's, activities and interests as it relates to the scope of standards work for the committee you selected.

[Text input box]

Please provide the website address of your organization. If none, type "none" in the box.

[Text input box]

CONTINUE JOIN ADDITIONAL COMMITTEES GO BACK



Recommended



ASTM Portals

Access your tailored content and services from a platform where your employees can share and annotate standards, get training and more.



Home About ASTM Site Map Support Contact Policies Copyright/Permissions

Copyright © 2006 - 2016 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



⌵ All | Search ASTM

GO

⌵ LANGUAGES CONTACT 🛒 CART (0) MYASTM

⌵ PRODUCTS AND SERVICES ⌵ GET INVOLVED ⌵ ABOUT ⌵ NEWS

Get Involved / Membership / Organizational Membership Application

- Technical Committees
- Membership
- Students & Professors
- Meetings & Symposia

Organizational Representative Application

Please nominate your organization's representative. Your representative will be the contact for your Membership and can join committees, participate, and vote.

Please provide the information below and click **Continue**.

First Name: MI:

Last Name:

Organization:

Address:

City:

Country:

State/Province:

Zip:

Phone:

Please do not include country code, extensions, or "T"

E-Mail:

Required for Order Confirmation and Support

Continue



Recommended



ASTM Training:
Apply standards more effectively

Train at our location or yours, and get instruction on the most important standards you use



Search ASTM GO

LANGUAGES CONTACT CART (0) MYASTM

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

Get Involved / Membership / Participating Member Application

- Technical Committees
- Membership
- Students & Professors
- Meetings & Symposia

Select Member Benefit

One Free Volume

The collection of ASTM standards is maintained in a series of volumes that collectively comprise *The ASTM Book of Standards*.

The volume(s) for the committee(s) you selected is in the pull-down below. Or, you may select a different volume.

Volumes for the committee(s) you chose:

Please select a volume

OR, select another volume:

01.07 Ships and Marine Technology

Note: Volume titles have been truncated for display purposes. [Click here](#) for a list of full volume titles and publication dates for print/CD-ROM versions.

Select volume format

Online Basic (Immediate Availability)

[Learn more](#) about free volume format options.

No, I do not want a member volume. Click Continue to place your membership in the ASTM shopping cart.

I agree, by my participation in ASTM and enjoyment of the benefits of my annual membership, to have transferred and assigned any and all interest I possess or may possess, including copyright, in the development or creation of ASTM standards or ASTM IP to ASTM. For additional information, please see the [ASTM IP Policy](#).

CONTINUE



Recommended



ASTM Training:
Apply standards more effectively

Train at our location or yours, and get instruction on the most important standards you use

1. Confirmation



Search ASTM GO

LANGUAGES CONTACT CART (2) MYASTM

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

Get Involved / Membership / Participating Member Application

- Technical Committees
- Membership
- Students & Professors
- Meetings & Symposia

Member Online Volume 01.07 Basic has been added to your shopping cart.

For \$46 you can upgrade your Member Online Basic Volume to the online premium volume called Online Plus. This Online Plus Volume includes not only active standards, but also relined, historical and withdrawn standards. [Click here](#) for more information on Online Plus.

Would you like to upgrade your Online Basic Volume to the Plus Volume?

- Yes, upgrade my Basic Volume to the Plus Volume.
- No, I prefer the Basic Volume.

CONTINUE



Recommended



ASTM Training:
Apply standards more effectively

Train at our location or yours, and get instruction on the most important standards you use



Search bar with 'All' dropdown, 'Search ASTM' text, 'GO' button, and navigation links for LANGUAGES, CONTACT, CART (1), and MYASTM.

- Navigation menu: PRODUCTS AND SERVICES, GET INVOLVED, ABOUT, NEWS

You might also consider:



Standards Tracker

Free

ADD TO CART

Your Shopping Cart:

Shopping cart table with columns: Description, Qty., Price, Total. Item: Informational Membership (MEM) with Qty. 1, Price \$75.00, Total \$75.00, and a delete link.

UPDATE QTY.

Subtotal: \$75.00

CONTINUE SHOPPING

CHECKOUT



Home About ASTM Site Map Support Contact Policies Copyright/Permissions

Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



Search bar with 'All' dropdown, 'Search ASTM' text, 'GO' button, and navigation links for LANGUAGES, CONTACT, CART (0), and MYASTM.

- Navigation menu: PRODUCTS AND SERVICES, GET INVOLVED, ABOUT, NEWS

- Left sidebar menu: Technical Committees, Membership, Students & Professors, For Students, For Professors, Academic Products, Standards 101, Meetings & Symposia

Get Involved / Students & Professors / For Students / Become a Student Member

Become a Member Student Awards Learning Modules Project Grants Student Podcasts

My Student Membership

Become a Student Member

Join Your Future Peers - Today, Become an ASTM Student Member!

As a Student Member of ASTM International, you'll be part of a prestigious worldwide network of technical experts and business leaders who develop standards for quality and testing. An ASTM membership is more than an instant plus for your resume. It's a front row seat to the standardization process, enhancing your knowledge in the subject of standards before you start using them in the workplace.

Exciting Benefits for Student Members

- Receive Electronic editions of ASTM Magazines and Newsletters
- Free Attendance at ASTM Symposia
- Participation in Student Competition and Opportunities to Publish
- Reduced Memberships Fees Upon Graduation

Apply Online

To become an ASTM Student Member, just fill out our easy [online application](#).

For additional information, download a copy of our [Student Membership Brochure](#), [Brochure in Spanish](#)

Recommended

ASTM Training: Apply standards more effectively. Train at our location or yours, and get instruction on the most important standards you use.



Home About ASTM Site Map Support Contact Policies Copyright/Permissions

Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



Search ASTM GO LANGUAGES CONTACT CART (0) MYASTM

- PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

Get Involved / Membership

- Technical Committees Membership Students & Professors Meetings & Symposia

Student Membership Application

Please complete this application for your free student membership in ASTM International.

Member Information

Last Name: [REQUIRED]
First Name: [REQUIRED]
Middle Initial:
College / University: [REQUIRED]
Facility / Building:
Street: [REQUIRED]
City: [REQUIRED]
Country: [Please Select a Country]
State or Province:
Zip Code: [REQUIRED]
Phone: [REQUIRED]
E-Mail: [REQUIRED]
Anticipated Graduation Date: (for current program enrollment)
Degree Sought: [Certificate Program]
Reasons for your interest in Student Membership in ASTM International:

Recommended
ASTM Portals
Access your tailored content and services from a platform where your employees can share and annotate standards, get training and more.

Mailing Lists: ASTM International occasionally provides printed mailing lists of its members to other organizations for the promotion of technical literature, products, and services that may be of professional interest (e-mail addresses are not included.) IF YOU DO NOT WISH YOUR NAME TO BE INCLUDED ON SUCH LISTS, PLEASE CHECK THIS BOX. []

SUBMIT APPLICATION

Case 1:13-cv-01215-TSC Document 155-7 Filed 01/21/16 Page 20 of 895

EXHIBIT 2



[LANGUAGES](#)
[CONTACT](#)
[CART \(0\)](#)
[LOGOUT](#)

[PRODUCTS AND SERVICES](#)
[GET INVOLVED](#)
[ABOUT](#)
[NEWS](#)

MyASTM

MyASTM

Welcome, Kara Laufer

It's time to renew your 2014 membership. [RENEW MEMBERSHIP](#)

Please Select:

- SEDL - Digital Library
- MyCommittees
- MyCollaboration Areas
- MyStandards Tracker
- ASTM Admin
- Training

- MyChoices
- MyCommittees
- Digital Library Home
- MyAccount
- Invite A Colleague
- Join Additional Committees
- Drop Subcommittees
- Help

Account#: 1637053
 Kara Laufer
 klaufer@astm.org
 ASTM International



[Home](#)
[About ASTM](#)
[Site Map](#)
[Support](#)
[Contact](#)
[Policies](#)
[Copyright/Permissions](#)
 Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



[LANGUAGES](#)
[CONTACT](#)
[CART \(0\)](#)
[LOGOUT](#)

[PRODUCTS AND SERVICES](#)
[GET INVOLVED](#)
[ABOUT](#)
[NEWS](#)

MyASTM / MyCommittees

MyCommittees

Committee D20 on Plastics

[Ballots](#)
[Minutes](#)
[Rosters](#)
[Meetings & Symposia](#)
[Agendas](#)
[Committee Documents](#)
[Standards Tracking](#)

Committee F17 on Plastic Piping Systems

[Ballots](#)
[Minutes](#)
[Rosters](#)
[Meetings & Symposia](#)
[Agendas](#)
[Committee Documents](#)
[Standards Tracking](#)

- MyChoices
- MyCommittees
- Digital Library Home
- MyAccount
- Invite A Colleague
- Join Additional Committees
- Drop Subcommittees
- Help

[Renew Membership](#)

Account#: 1337023
 Adam Miloser
 AMILOSER@CHARLOTTEPIPE.COM
 Charlotte Pipe And Foundry

My Tools

Negatives & Comments

- [+ My Next Meetings 2](#)
- [+ My Work Items](#)
- [+ My Collaboration Areas](#)
- [+ Ballots & Workitems](#)
- [+ Meetings, Minutes Agendas](#)
- [+ Additional Resources](#)



[Home](#)
[About ASTM](#)
[Site Map](#)
[Support](#)
[Contact](#)
[Policies](#)
[Copyright/Permissions](#)
 Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



▾ All Search ASTM GO ▾ LANGUAGES CONTACT CART (0) LOGOUT

- ▾ PRODUCTS AND SERVICES
- ▾ GET INVOLVED
- ▾ ABOUT
- ▾ NEWS

Get Involved / Membership / Membership Renewal

Digital Library Home

MyAccount

Help

Membership Renewal

Welcome, Kara Laufer

Thank you for renewing your Participating membership. Your 2014 Membership renewal fee is \$75 U.S.

You agree, by your participation in ASTM and enjoyment of the benefits of your annual membership, to have transferred and assigned any and all interest you possess or may possess, including copyright, in the development or creation of ASTM standards or ASTM IP to ASTM. For additional information, please see the [ASTM IP Policy](#).

Click "Continue" to place your membership renewal in the ASTM shopping cart.

CONTINUE



Home About ASTM Site Map Support Contact Policies Copyright/Permissions
Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



▾ All Search ASTM GO ▾ LANGUAGES CONTACT CART (0) LOGOUT

- ▾ PRODUCTS AND SERVICES
- ▾ GET INVOLVED
- ▾ ABOUT
- ▾ NEWS

Get Involved / Membership / Membership Renewal

Digital Library Home

MyAccount

Help

Membership Renewal

Kara Laufer,

Your membership entitles you to a free basic Volume from the Annual Book of ASTM Standards.

1. Select Section of Interest:

▾

2. Select Volume:

▾

Note: Volume titles have been truncated for display purposes. [Click here](#) for a list of full volume titles and publication dates for Print/CD-ROM versions.

3. Select Format:

▾

Click [here](#) to learn more about your Volume format options.

No, I do not want a member volume

Click "Continue" to place your free Volume in your ASTM shopping cart.

CONTINUE



Home About ASTM Site Map Support Contact Policies Copyright/Permissions
Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



⌵ All Search ASTM GO LANGUAGES CONTACT CART (2) LOGOUT

- PRODUCTS AND SERVICES
- GET INVOLVED
- ABOUT
- NEWS

Get Involved / Membership / Membership Renewal

- Digital Library Home
- MyAccount
- Help

Membership Renewal

Kara Laufer,

Member Volume 01.01 Online Basic (Click [here](#) to change your selection) has been added to your shopping cart.

For \$33 you can change your Member Online Basic Volume to the online premium Volume called Online Plus This Online Plus Volume includes not only active standards, but also redlined, historical and withdrawn standards. Click [here](#) for more information on Online Plus.

Would you like to change your Online Basic Volume to the Online Plus Volume?

[Yes](#), change my Basic Volume to the Plus Volume.

[No](#), I prefer the Basic Volume.



Home About ASTM Site Map Support Contact Policies Copyright/Permissions
Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



⌵ All Search ASTM GO LANGUAGES CONTACT CART (2) LOGOUT

- PRODUCTS AND SERVICES
- GET INVOLVED
- ABOUT
- NEWS

Get Involved / Membership / Membership Renewal

- Digital Library Home
- MyAccount
- Help

Membership Renewal

Kara Laufer,

Volume 01.01 (Click [here](#) to change your selection) has been added to your shopping cart.

Would you like to purchase any other Volumes from the Annual Book of ASTM Standards and add them to your cart?

[Yes](#), please show me a list of available Volumes.

[No](#), take me to my shopping cart.



Home About ASTM Site Map Support Contact Policies Copyright/Permissions
Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



[LANGUAGES](#)
[CONTACT](#)
[CART \(2\)](#)
[MYASTM](#)

[PRODUCTS AND SERVICES](#)
[GET INVOLVED](#)
[ABOUT](#)
[NEWS](#)

You might also consider:



Standards Tracker

Free

Your Shopping Cart:

Description	Qty.	Price	Total	
Participating Membership	<input type="text" value="1"/>	\$75.00	\$75.00	delete
Member Volume IRON AND STEEL PRODUCTS 01.01 Steel-Piping, Tubing, Fittings-Online Basic	<input type="text" value="1"/>	\$0.00	\$0.00	delete

Subtotal: \$75.00



[LANGUAGES](#)
[CONTACT](#)
[CART \(0\)](#)
[LOGOUT](#)

[PRODUCTS AND SERVICES](#)
[GET INVOLVED](#)
[ABOUT](#)
[NEWS](#)

Get Involved / Membership / Membership Renewal

[Digital Library Home](#)

[MyAccount](#)

[Help](#)

Membership Renewal

Welcome, William Stuckey

Thank you for renewing your Organizational membership. Your 2014 Membership renewal fee is \$400 U.S.

You agree, by your participation in ASTM and enjoyment of the benefits of your annual membership, to have transferred and assigned any and all interest you possess or may possess, including copyright, in the development or creation of ASTM standards or ASTM IP to ASTM. For additional information, please see the [ASTM IP Policy](#).

Note: Your renewal will be submitted under your Representative Account 000125837.

Click "Continue" to place your membership renewal in the ASTM shopping cart.



[Home](#)
[About ASTM](#)
[Site Map](#)
[Support](#)
[Contact](#)
[Policies](#)
[Copyright/Permissions](#)

Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



LANGUAGES
CONTACT
CART (1)

- [PRODUCTS AND SERVICES](#)
- [GET INVOLVED](#)
- [ABOUT](#)
- [NEWS](#)

You might also consider:



Standards Tracker

Free

Your Shopping Cart:

Description	Qty.	Price	Total	
Organizational Membership	1	\$400.00	\$400.00	delete

Subtotal: \$400.00



[Home](#)
[About ASTM](#)
[Site Map](#)
[Support](#)
[Contact](#)
[Policies](#)
[Copyright/Permissions](#)
 Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



LANGUAGES
CONTACT
CART (0)

- [PRODUCTS AND SERVICES](#)
- [GET INVOLVED](#)
- [ABOUT](#)
- [NEWS](#)

Get Involved / Membership / Membership Renewal

[Digital Library Home](#)

[MyAccount](#)

[Help](#)

Membership Renewal

Welcome Giancarlo Mazzoleni

ISO members do not need to go through the membership renewal process. For questions regarding your membership, please contact your staff manager.



[Home](#)
[About ASTM](#)
[Site Map](#)
[Support](#)
[Contact](#)
[Policies](#)
[Copyright/Permissions](#)
 Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



☰ All Search ASTM

GO

▾ LANGUAGES CONTACT 🛒 CART (0)

👤 LOGOUT

- ▾ PRODUCTS AND SERVICES
- ▾ GET INVOLVED
- ▾ ABOUT
- ▾ NEWS

Get Involved / Membership / Membership Renewal

Digital Library Home

MyAccount

Help

Membership Renewal

Welcome Les Jaworski

Special members do not need to go through the membership renewal process; your membership type does not require a fee for renewal.



Home About ASTM Site Map Support Contact Policies Copyright/Permissions
Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



☰ All Search ASTM

GO

▾ LANGUAGES CONTACT 🛒 CART (0)

👤 LOGOUT

- ▾ PRODUCTS AND SERVICES
- ▾ GET INVOLVED
- ▾ ABOUT
- ▾ NEWS

Get Involved / Membership / Membership Renewal

MyChoices

Digital Library Home

MyAccount

Help

Membership Renewal

Welcome, Richard Peppin

Thank you for renewing your Lifetime membership. Your 2014 Membership renewal fee is \$0 U.S.

You agree, by your participation in ASTM and enjoyment of the benefits of your annual membership, to have transferred and assigned any and all interest you possess or may possess, including copyright, in the development or creation of ASTM standards or ASTM IP to ASTM. For additional information, please see the [ASTM IP Policy](#).

Click "Continue" to place your membership renewal in the ASTM shopping cart.

CONTINUE



Home About ASTM Site Map Support Contact Policies Copyright/Permissions
Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



▾ All Search ASTM GO

▾ LANGUAGES CONTACT CART (0) LOGOUT

▾ PRODUCTS AND SERVICES ▾ GET INVOLVED ▾ ABOUT ▾ NEWS

Get Involved / Membership / Membership Renewal

- MyChoices
- Digital Library Home
- MyAccount
- Help

Membership Renewal

Richard Peppin,

Your membership entitles you to a free basic Volume from the Annual Book of ASTM Standards.

Currently your Member Online Volume in your MyStandards collection gives you access to the following:

- Member Online Volume:
 - 04.06 Basic (expiration March 30, 2014)

Would you like to renew for the same Member Online Volume?

Yes, please renew the above Online Volume

No, I would like to renew for a different Member Volume
(If you select a different online volume, it will replace your current online volume)

No, I'm not ready to pick my free Volume at this time



Home About ASTM Site Map Support Contact Policies Copyright/Permissions

Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



▾ All Search ASTM GO

▾ LANGUAGES CONTACT CART (2) LOGOUT

▾ PRODUCTS AND SERVICES ▾ GET INVOLVED ▾ ABOUT ▾ NEWS

Get Involved / Membership / Membership Renewal

- MyChoices
- Digital Library Home
- MyAccount
- Help

Membership Renewal

Richard Peppin,

Member Volume 04.06 Online Basic (Click [here](#) to change your selection) has been added to your shopping cart.

For \$43 you can change your Member Online Basic Volume to the online premium Volume called Online Plus This Online Plus Volume includes not only active standards, but also redlined, historical and withdrawn standards. Click [here](#) for more information on Online Plus.

Would you like to change your Online Basic Volume to the Online Plus Volume?

Yes, change my Basic Volume to the Plus Volume.

No, I prefer the Basic Volume.



Home About ASTM Site Map Support Contact Policies Copyright/Permissions

Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



All Search ASTM GO

LANGUAGES CONTACT CART (1) MYASTM

PRODUCTS AND SERVICES GET INVOLVED ABOUT NEWS

You might also consider:



Standards Tracker

Free

ADD TO CART

Your Shopping Cart:

Description	Qty.	Price	Total	
Lifetime Membership	1	\$0.00	\$0.00	delete

UPDATE QTY.

Subtotal: \$0.00

CONTINUE SHOPPING

CHECKOUT



Home About ASTM Site Map Support Contact Policies Copyright/Permissions
Copyright © 2006 - 2013 ASTM. All Rights Reserved. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA

Case 1:13-cv-01215-TSC Document 155-7 Filed 01/21/16 Page 29 of 895

EXHIBIT 3

How to register a work item

Please follow this step by step guide to register a work item.

**A work item is a tracking number that ASTM
uses to follow each standard through the process.**



Login to your ASTM account



◆ All Search term GO

▽ LANGUAGES CONTACT CART (2) MYASTM

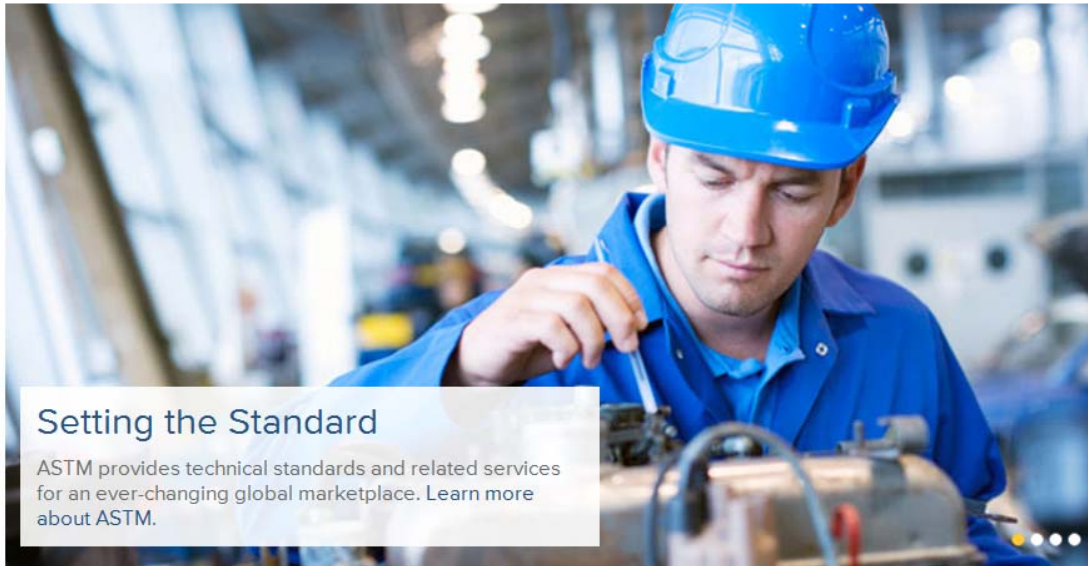


▽ PRODUCTS AND SERVICES

▽ GET INVOLVED

▽ ABOUT

▽ NEWS



Setting the Standard

ASTM provides technical standards and related services for an ever-changing global marketplace. Learn more about ASTM.

Buy Standards

You can download or order any of ASTM's standards directly from the website.



Quick Links

- Standards & Publications
- Membership
- MyASTM Login
- Technical Committees
- Meetings

Featured Products



SEDL - Digital Library - Discover a vast

Latest News From ASTM

Automated Guided Vehicles

Headlines



Select "My Committees"



▾ All Search term GO

▾ LANGUAGES CONTACT CART (2) LOGOUT

▾ PRODUCTS AND SERVICES ▾ GET INVOLVED ▾ ABOUT ▾ NEWS

MyASTM

MyASTM

Welcome, Katerina Koperna

Please Select:

- Standards and Engineering Digital Library
- MyCommittees ←
- MyCollaboration Areas
- MyPTP Portal

- MyChoices
- MyCommittees
- Digital Library Home
- MyAccount
- Invite A Colleague
- Join Additional Committees
- Drop Subcommittees
- Help

Account#: 1538452
Katerina Koperna
kkoperna@astm.org
ASTM International



From the right side toolbar, select Ballots & Work Items and then click Submit/Edit.

ASTM INTERNATIONAL

▼ PRODUCTS AND SERVICES ▼ GET INVOLVED ▼ ABOUT ▼ NEWS

MyASTM / MyCommittees

MyCommittees

MyChoices
MyCommittees
Digital Library Home
MyAccount
Invite A Colleague
Join Additional Committees
Drop Subcommittees
Help

Account#: 1538452
Katerina Koperna
kkoperna@astm.org
ASTM International

Committee B09 on Metal Powders and Metal Powder Products

Ballots Minutes Rosters Meetings & Symposia Agendas Committee Documents Standards Tracking

Committee D09 on Electrical and Electronic Insulating Materials

Ballots Minutes Rosters Meetings & Symposia Agendas Committee Documents Standards Tracking

Committee D21 on Polishes

Ballots Minutes Rosters Meetings & Symposia Agendas Committee Documents Standards Tracking

My Tools

- Roster Maintenance 44
- Negatives & Comments 24
- + My Outstanding Ballots 5
- + My Next Meetings 5
- + My Work Items
- + My Collaboration Areas
- Ballots & Workitems
- Submit/Edit
- Inactivity Reports
- Launch Collaboration Area
- + Meetings, Minutes Agendas
- + Additional Resources

ASTM INTERNATIONAL
Standards Worldwide

Select the first option “I need to register a Work Item for a Revision or New Standard”.



ASTM Work Item Registration and Ballot Item Submittal

[Guide For Writing Standards](#) | [MyASTM](#) | [Tech Support](#) | [Log Out](#)

Choose from the following options:

- I need to register a Work Item for a Revision or New Standard.**
For Reapproval, Withdrawal or Reinstatement ballot actions; go to Option 2 - [Ballot Item Submittal](#) (Work Item registration not required)
- I need to Submit an Item to Ballot.**
For Revisions and New Standards, please have a Work Item number. Go To Option 1 - [Work Item Registration](#) if WK registration is needed.
- I need to Edit an existing Work Item or Update the Target Date.**

Continue

Copyright © 1996-2012 ASTM. All Rights Reserved.
ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



Select the Main Committee and Sub-Committee that have jurisdiction over the standard you're revising or developing.



ASTM Work Item Registration Area

[Guide For Writing Standards](#) | [MyASTM](#) | [Tech Support](#) | [Log Out](#)

Type



Work Item registration is required for New Standards and Revisions to Existing Standards.

What type of Work Item are you submitting?

- Proposed New ASTM Standard Revision(s) to an Existing ASTM Standard.

Note: to submit a ballot item for reapprovals, withdrawals, or reinstatements go to "[Submission of Ballot Items](#)". Work Item Registration not required

Select the Main Committee and Subcommittee sponsoring the Work Item:

D09-Electrical and Electronic Insulating Material

D09.19 - Dielectric Sheet and Roll Products

Continue

Copyright © 1996-2012 ASTM. All Rights Reserved.
ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA



Review the ASTM Intellectual Property Policy and select the first option if you are submitting original material. If you select either of the other two options, you will not be able to move forward.



ASTM Work Item Registration Area

Tech Support

Copyright

Type	Copyright	Target	Data	Summary	Confirm
1	2	3	4	5	6

Work Item Registration

Please select one of the following choices regarding this workitem.

Note that the following choices refer to new additional material in your proposed revision and the choices do not apply to currently published ASTM standards.

- I am submitting original material (i.e. it is not copyrighted, patented, or published elsewhere).
- I am not submitting original material (i.e. it is copyrighted, patented, or published elsewhere), but I am authorized to and agree to release copyright.
- The material I am submitting is not original and I am not authorized to release copyright.

I have read and will comply with [ASTM International's Intellectual Property Policy](#). I hereby grant and assign to ASTM International all and full intellectual property rights, including copyright, in the proposed draft standard/text and any contributions I make to ASTM International in connection with this proposal. I understand that I will have no rights in any publication of ASTM International in which the proposed draft standard in this or similar form is used. To the best of my knowledge the proposed draft standard/text is not subject to copyright of any other person or entity. I agree not to reproduce or circulate or quote, in whole or in part, this document outside of ASTM Committee/Society activities or submit it to any other organization or standards bodies (whether national, international, or other) except with the approval of the Chairman of the Committee having jurisdiction and the written authorization of the President of the Society.



**This is where you will enter most of the details regarding your work item.
Select your target date for ballot, authorization date and expected approval date.**

Target

Type	Copyright	Target	Data	Summary	Confirm
1	2	3	4	5	6

Work Item Registration - D09.19

What is the target date for Subcommittee or Concurrent Ballot? 12 2012

Was this Work Item authorized at a Subcommittee meeting, or by the Subcommittee Chairman?

Yes No

Select authorization date: 06 2012

Does This Work Item respond to an emergency situation, regulatory requirement or other special circumstance?

Yes No

What is the expected target date for approval of the item? 3 - 6 months


Who will be the Technical Contact for this Work Item?

I will.

A Member of Committee D09 will. Zatursky, Edward



Select the standard that you are revising and give a detailed rationale for your activity. If it is a new standard, give as much detail in the rationale as possible.

 **ASTM Work Item Registration Area** Tech S

target Type Copyright Target Data Summary Co

1 2 3 **4** 5

Work Item Registration - Revision - D09.19

The contents of these fields will serve as the posted Work Item on the web. For a sample of how it will look [click here](#). The Technical Contact for this Work Item will receive a Word version of the existing standard from ASTM International for preparation of the ballot.

Which D09.19 Standard are you revising?*

D351-97(2008)e1 Standard Classification for Natural Muscovite Block Mica and



Note: All revisions for this standard being considered by this Task Group shall be included under this Work Item. Do not register separate Work Items for revisions to different sections of the standard. If appropriate you can split this Work Item into separate ballot items when you Submit Item to Ballot.



Rationale for Revision*

The description of parameters is missing from the table on page 4.

Spell Check

Note: Fields marked with an asterisk are required.


List other ASTM Committees or key outside organizations that you feel should be informed of this activity:


[Empty text area for listing other ASTM Committees or key outside organizations]

Back Continue




This is the final screen where you want to review the information you entered and submit it for official registration.

 **ASTM Work Item Registration Area** [Tech Supp](#)

Data Summary [Print](#) 

Type	Copyright	Target	Data	Summary	Confirm
1	2	3	4	5	6

 **Work Item Registration - Revision - D09.19**
 Do you want to open an online collaboration area for this work item so members may collaborate online? [\(What is a Collaboration Area?\)](#)
 Yes No

Work Item Type: Revision
 Copyright: Yes
 Revised Standard: D351-97(2008)e1 - Standard Classification for Natural Muscovite Block Mica and Thins Based on Visual Quality
 Sponsoring Subcommittee: D09.19
 Technical Contact: Zatursky Edward - ed.zatursky@vonroll.com
 Target Ballot Date: 12/2012
 Authorization Date: 6/2012
 Emergency Response: No
 Target Completion Date: 9/2012 to 12/2012
 Rationale: The description of parameters is missing from the table on page 4.
 Notify Other:

By submitting this form, I acknowledge that all copyrights to this document, as a draft and an approved ASTM standard, are the sole and exclusive property of ASTM, in accordance with the Intellectual Property policies of the Society.

Please review the Data Summary and print or save this screen for your personal records. Click Submit to register the new Work Item for D09.19. The Work Item will be posted on the ASTM web site within five business days.



After you click submit, the next screen that appears, will include your work item number. Please take a moment to make a note of this number for future reference.

Thank You!

For additional questions, please contact your Staff Manager.



Case 1:13-cv-01215-TSC Document 155-7 Filed 01/21/16 Page 41 of 895

EXHIBIT 4

ROBERT P. LUMENS

RECOMMENDATIONS ON FORM
of
ASTM STANDARDS



SPECIFICATIONS
METHODS OF TESTS
Notes, References, Illustrations
Units of Measurement

April, 1961

AMERICAN SOCIETY FOR TESTING MATERIALS
1916 Race St., Philadelphia 3, Pa.

RECOMMENDATIONS ON FORM
of
ASTM STANDARDS



SPECIFICATIONS
METHODS OF TESTS
Notes, References, Illustrations
Units of Measurement

April, 1961

AMERICAN SOCIETY FOR TESTING MATERIALS
1916 Race St., Philadelphia 3, Pa.

~~ESTABLISHED~~ RECOMMENDATIONS ON FORM OF ASTM SPECIFICATIONS

APRIL, 1957



PHILOSOPHY OF SPECIFICATIONS

A specification may be defined as a concise description, preferably in measurable terms, of the significant characteristics of a material. The determination of such needs in terms of characteristics that can be set up easily in a specification requires logical thought based on sound chemical and engineering principles.

Requirements should be set forth in a clear, detailed but concise manner and should be quantitative rather than qualitative to reduce to a minimum decisions based on personal opinion.

There are five important requisites of a specification:

1. Accuracy and precision
2. Workability
3. Suitability
4. Flexibility
5. Acceptability

A specification should never be considered as final or complete. Frequently an outmoded specification will prove a greater deterrent to progress than no specification at all. Any specification should be examined periodically, in view of technological advances in manufacture, testing, and use requirements.

Subject Headings of Text

The following list shows in sequence the subjects usually covered in a specification; all subjects may not be required for all materials, and in some instances there may be need for inclusion of sections on other subjects:

- Title
- Scope
- Definitions or Descriptions of Terms
- Optional Requirements (Basis of Purchase)
- Materials and Manufacture
- Chemical Requirements
- Physical Requirements
- Dimensions, Weights, and Permissible Variations
- Workmanship and Finish
- Sampling
- Methods of Test
- Number of Tests and Retests

- Packing, Marking, Shipping, and Preservation
- Inspection
- Certification
- Rejection and Rereading
- Supplementary Requirements
- Explanatory Notes
- Appendixes

Subject headings in boldface type should precede each section to orient the reader. Sections should be numbered consecutively with Arabic numbers. Subdivisions of a section, designated "Paragraphs," should have italic letters running consecutively throughout a section only. Subdivisions of a paragraph should be numbered with italic numbers in parentheses, the numbers running consecutively through each paragraph only.

Title

The title should be as concise as possible but complete enough to identify clearly the materials covered by the specification. Titles are used frequently in Lists, Tables of Contents, Indexes, etc., and it is accordingly most important that they be brief but inclusive.

NOTE 1.—The plural form "specifications" has been used for many years; however, the singular form "specification" is now preferred on the basis that the series of requirements constitute a single document.

Scope

1. The materials covered by the specification, the general uses or fields of application for which they are intended, and limitations of the specification should be stated. When the specification covers several types, classes, and grades, they should be described briefly in a separate paragraph under the section on Scope.

It is appropriate also in the scope section to state what materials are excluded or not intended to be covered by the specification. Attention should be called to any other special features of the specification.

In the general or "umbrella type" specification it is customary to point out that when there is conflict with a detailed purchase specification, the latter shall take precedence.

Definitions or Descriptions of Terms

2. Definitions or descriptions of terms used should be included, when necessary for proper interpretation of the specification. Unnecessary repetition should be avoided by making reference to existing standards covering applicable definitions.

Optional Requirements (Basis of Purchase)

3. When the specification covers op-

tional requirements, such as various types, grades, alloys, sizes, and weights, etc., it is desirable that the purchase order or inquiry state which particular types, alloys, sizes, etc., are desired. Usually this is done in a separate section on Basis of Purchase.

A listing of each such optional feature, together with a reference to the applicable paragraph in the specification will be of assistance in the wording of orders. After the attention of the purchaser is directed to all of the options in the specification, his attention might be directed to what would be furnished by the supplier if the purchaser fails to specify one or more of the options.

Materials and Manufacture

4. General requirements regarding the materials and methods of manufacture to be used are frequently included, particularly when these may include reference to any particular processes of manufacture, such as the open-hearth, electric-furnace, or acid-bessemer processes generally specified for steel products. When the material or product specified is made from two or more materials, this section should state briefly the general requirements of the materials to be used and the process to be followed in manufacture, including items such as the nature and character of any alloys, fillers, saturants, anti-oxidants, coatings, and plasticizers.

Chemical Requirements

5. When necessary, detailed requirements should be given as to chemical composition and other chemical characteristics to which the material must conform. Frequently these are presented in a tabular form. It is most important that the following information be clearly indicated: (a) name of each constituent specified, (b) maximum, minimum, or range, (c) the units applicable, and (d) reference

RECOMMENDATIONS ON FORM OF ASTM SPECIFICATIONS

3

to explanatory notes when necessary for further clarification.

The sequence of items specified should be consistent within a related group of specifications.

The preferred introduction for this section is: "The material shall conform to the requirements as to chemical composition specified in Table I."

Physical Requirements

6. The requirements for mechanical, electrical, thermal, optical, and similar properties are presented in this section, usually in tabular form. The table should be introduced as follows: "The material shall conform to the (insert name of property group) properties prescribed in Table II." The table must clearly indicate the name of each property specified, whether maximum, minimum, or range and state the units for each. The sequence of items specified should be consistent when in a related group of specifications.

NOTE 2.—In preparing a specification it is of course essential to make sure that there is a test procedure for determining conformance in each instance.

When it is not feasible to tabulate the requirements, separate paragraphs may be used to specify the various requirements. These should be given appropriate headings consistent with the subject matter included.

Dimensions, Weights, and Permissible Variations

7. Details as to the standard shapes, weights, and size ranges usually are presented best in tabular form with brief reference in the text. Separate sections may be necessary with individual tables. The tables should clearly indicate where the various size ranges are divided, for example, ranges of 0 to 10 in., 10 to 20 in., 20 to 30 in. should

be more properly stated as 10 in. and under, over 10 to 20 in., inclusive, over 20 to 30 in., inclusive, etc.

The permissible variations in dimensions, weights, etc., frequently can be included in the same tables with the nominal sizes. It should be made clear whether the tolerances specified are both plus and minus or only apply in one direction.

Workmanship and Finish

8. Requirements covering the workmanship and finish include such general requirements as the type of finish and general appearance, or color, whether of uniform quality and temper (for metals), clean, sound, free from scale and injurious defects. To avoid misunderstanding, these should be spelled out clearly. Provisions for removal or repair of minor surface imperfections which are not considered cause for rejection should be stated.

For pipe and tile it is usually customary to specify absence of defects such as fractures, large or deep cracks, checks, blisters, laminations and surface roughness. The finish and shape of the ends also should be specified.

Sampling

9. The Section on Sampling may describe in detail the procedure for obtaining the sample for testing, also the size of the sample, or preferably, when there are detailed sampling procedures in separate ASTM Methods, reference should be made to such methods. If any special type of container is necessary to protect the sample during transit to the laboratory, this should be specified. Other details such as the preparation of the sample for testing, the size of test specimens, and any preparation necessary are usually included only in the methods of testing.

RECOMMENDATIONS ON FORM OF ASTM SPECIFICATIONS

NOTE 3.—Attention is called to the Tentative Recommended Practices for Probability Sampling (ASTM Designation: E 105)¹ and for Choice of Sample Size to Estimate the Average Quality of a Lot or Process (ASTM Designation: E 122)¹ prepared by ASTM Committee E-11 on Quality Control of Materials. One of the main functions of this committee is to serve in an advisory capacity and to assist other technical committees of the Society in this area.

Other publications of interest are:

Specification for Hard-Drawn Copper Wire (ASTM Designation: B 1)² which contains sampling provisions based on statistical quality control.

Method of Sampling Preformed Thermal Insulation (ASTM Designation: C 390).³

Symposium on Usefulness and Limitations of Samples (Dec., 1948).³

Symposium on Bulk Sampling (Jan., 1952), STP 114.³

Symposium on Application of Statistics (July, 1950), STP 103.³

Symposium on Statistical Quality Control, STP 66.³

Methods of Test

10. Reference should be made to the ASTM Methods to be used in testing the material to determine compliance with the specification. This includes sampling, chemical analysis, mechanical, electrical, thermal, optical, and other testing procedures. When alternate procedures are given in the test methods, it is important to state which particular procedure shall be used as the basis for the specification requirement.

When there is no ASTM Method specified for a particular property, the test procedure to be followed should be described in detail in the specification, including definition and significance information. Test procedures should be described in the imperative.

Where a method of some other organization is being used and the committee has not approved the test as an ASTM Method then it is desirable to describe

¹ 1956 Supplement to Book of ASTM Standards, Parts 1 to 7.

² 1956 Supplement to Book of ASTM Standards, Part 2.

³ Issued as separate publication.

the test in detail in the specification and to include a footnote reference to the original source. References to test methods of other organizations by title only are not desirable and should be eliminated as just described. Such method should be subsequently reviewed and established as an ASTM Method, being published separately from the specification, if necessary.

Number of Tests and Retests

11. The number of tests that are required to determine conformance of the material to the specification should be stated. This usually includes the number of test specimens required to be selected and tested. Provisions for retest should be included, such as when a specimen shows defective marking, reveals casting defects, or other imperfections.

Packing, Marking, Shipping, and Preservation

12. Where it is customary to package, box, crate, wrap, or otherwise protect the material or product for shipment, the general requirements for such action shall be stated. If it is necessary to protect the material from damage in ordinary handling or from moisture or heat, etc., the general nature of the wrapping or packing should be stated. If the material is to be shipped in packages of definite sizes these should be specified. It is customary to state the nature of the information to be marked or included on the package or on a label or tag attached thereto. This usually includes such details as the name and brand or trade mark of the manufacturer, type of material, size, date of manufacture, and ASTM designation of the specification to which the material conforms. It is sometimes necessary to state the location of the marking on the article, such as of pipe, tubes, sheet, plate and shapes.

Requirements regarding the shipping

RECOMMENDATIONS ON FORM OF ASTM SPECIFICATIONS

5

of the material should be specified when necessary. If it is customary to keep the material in storage prior to shipment, any requirements regarding the conditions for such storage, such as protection from moisture, or other environmental conditions should be stated.

Inspection

13. The general provisions for inspection of the material, including the facilities to be afforded the inspector by the manufacturer, and who pays the costs of inspection should be stated. Whether the tests and inspection are to be made at the place of manufacture prior to shipment or at the point of delivery should be specified.

Certification

14. For a product manufactured in advance and accepted on the basis of certification by the manufacturer that the material conforms to the specification, it should be definitely stated what conditions apply to such acceptance. It is usually customary to require records of test results to be systematically made and maintained by the manufacturer as the basis for certification. In lieu of the manufacturer's certification and upon written request by the purchaser these records are usually required for examination by the purchaser or his accredited representative upon the manufacturer's premises. Certification usually consists of a copy of the manufacturer's test report, or when agreed upon by the purchaser, consists of a statement by the supplier that the material has been sampled, tested, and inspected in accordance with the provisions of the specification.

Rejection and Rehearing

15. Provisions under which the material will be rejected should be stated definitely. If there is any time limit within

which the purchaser must notify the manufacturer this should be stated, also the length of time which the tested samples must be preserved from the date of the test report. Provisions for rehearings or retests should also be stated and also whether the material may be reexamined or treated and resubmitted for test.

SUPPLEMENTARY REQUIREMENTS

For some materials supplementary requirements may be specified. Usually these apply only when specified by the purchaser in the inquiry, contract, or order. These supplementary requirements should appear in separate sections numbered S 1, S 2, S 3, etc.

EXPLANATORY NOTES

Statements or information of an explanatory nature should be set apart from the text of the specification in the form of Explanatory Notes. These text notes should preferably appear at the end of the section or paragraph to which they apply. Reference to such notes is desirable in the text, such as "(Note 3)" immediately following a specific word or phrase to which the note refers. Notes which apply to several sections of a specification may be grouped together at the end under the heading "Explanatory Notes." Notes should be numbered consecutively throughout a specification.

APPENDIXES

There are times when it is desirable to include in a specification additional information for general use and guidance, but which does not constitute a mandatory part of the specification. It is appropriate to include such informational material in Appendixes. Examples of material that have been included in such appendixes cover tables showing approximate relationship between tensile

RECOMMENDATIONS ON FORM OF ASTM SPECIFICATIONS

strength and hardness, list of preferred thicknesses of plate, sheet, and strip reproduced from an American Standard, tables of standard weights and standard sizes, information on typical applications of the material covered, and information on typical physical properties whose definite values are not prescribed in the specification.

for which lower case letters are employed.

The publication information referred to should be arranged in the sequence needed for locating the report or paper. For example, the author's initials and name, followed by the title of the paper in quotation marks; title of the publication in italics; publisher; volume; number; date, where date is a subdivision of a volume or number; and page number.

Footnotes and Literature References¹

Footnotes are intended only for references and should never carry any information or instructions necessary for the proper application of the specification or method. They should be used for the following:

When volume numbers are given, the year of publication should appear in parentheses at the end of the footnote. Otherwise, the date of publication should appear immediately after the name of the publication. Names of societies should be abbreviated.

(1) Statements of committee jurisdiction and method history.

(2) Literature References. Only references to publications supporting or providing needed supplementary information should be included. Historical and acknowledgment references are not desirable.

Standard Abbreviations and Editorial Details

An extensive list of official abbreviations, spelling, terms, and expressions which should be used in a specification appears in the Appendix.¹

Consecutive superior figures should be used for reference to footnotes except in connection with numerals and tables,

¹ See p. 18.

RECOMMENDATIONS ON FORM OF ASTM METHODS OF TEST

ISSUED APRIL, 1961

INTRODUCTION

An ASTM method of test is a concise description of an orderly procedure for determining a property or constituent of a material or an assembly of materials. The directions for performing the test should include all of the essential details as to apparatus, test specimen, procedure, and calculations needed to achieve satisfactory precision by either the same operator or operators in different laboratories.

A standard method should represent a consensus as to the best currently available test procedure for the use intended. It should be supported by experience and adequate data obtained from cooperative tests.

ASTM methods are frequently intended for use in the buying and selling of materials according to specifications and therefore should provide such precision that when the test is properly performed by a competent operator the results will be found satisfactory for judging the compliance of the material with the specification. Some methods may be suitable for determining fundamental properties of materials such as density and absolute viscosity, and others for empirical properties such as softening point, flash point, distillation, etc. They may include a variety of different laboratory procedures such as chemical and spectrochemical analysis, mechanical and electrical tests, weathering tests, visual examination, fire tests, performance characteristics, nondestructive tests, radiation exposure tests, etc. In some standards, optional methods are included.

Methods are sometimes prepared for use in research rather than in the buying and selling of materials. Other methods cover process control, screening, and field tests. While these methods may not always be as precise as referee test methods, they are sufficiently precise for the intended use and usually require less time. Field tests have the added virtue of allowing testing at the site, thus eliminating transportation of specimens to and from the laboratory.

Methods should be kept up to date and accordingly need to be examined periodically to determine whether revisions are desirable as the result of technological advances in manufacturing, testing, and use requirements.

Subject Heading of Text

The following is the preferred sequence for the text of ASTM methods of test:

	DISCUSSED ON PAGE
Title.....	9
Introduction (only if necessary).....	9
Scope.....	9
Summary of Method.....	10
Significance.....	10
Definitions or Descriptions of Terms.....	10
Interferences.....	11
Apparatus.....	11
Reagents and Materials.....	12
Safety Precautions.....	13
Sampling.....	13
Test Specimen or Sample.....	14
Preparation of Apparatus.....	14
Calibration and Standardization.....	14
Conditioning.....	14
Procedure.....	14
Calculation or Interpretation of Results.....	15
Report.....	15
Precision and Accuracy.....	16
Explanatory Notes.....	17
References.....	17
Appendixes.....	17

The above section headings are those most generally used. Not all of these headings may be required for a particular method. Also, it may be necessary to use other appropriate headings in methods covering a specialized subject. These should appear in the most appropriate place, depending on their relation to the sections listed above. When a standard includes several methods, repetition of appropriate headings may be desirable.

Subject headings in bold-face type should precede each section to orient the reader. Sections should be numbered consecutively with arabic numbers.¹ Subdivisions of a section, designated "Paragraphs," should have italic letters in parentheses running consecutively throughout a section only. Subdivisions of a paragraph should be numbered with italic numbers in parentheses, the numbers running consecutively through each paragraph only. Number figures or illustrations consecutively with arabic numbers, and tables with roman numerals.

¹ Consideration is being given to other schemes for numbering sections of standards.

Number footnotes continuously with arabic numbers and corresponding superior reference numbers in the text.

Explanatory notes preferably should be under the section or paragraphs to which they apply and shall be numbered consecutively with arabic numbers. References, when few in number, should appear as footnotes under the appropriate section of the text. In special cases, explanatory notes and references may be grouped at the end of the method.

See the Appendix for additional suggestions regarding notes, footnotes, references, illustrations, units of measurements, abbreviations, etc.

For convenience in application and when economy in printing may result, methods may include a series of procedures for determining different properties of a given material. In such methods, at the beginning of the standard include individual sections describing those features that are common to all of the separate test procedures.

Examples of methods for single determination:
 Method of Test for Compressibility of Metal Powders (B 331),
 Method of Test for Softening Point of Glass (C 338), and
 Method of Test for Flash Point by Tag Closed Tester (D 56).

Examples of methods covering a series of test procedures:
 Methods of Sampling and Testing Untreated Paper Used for Electrical Insulation (D 202),
 Methods of Sampling and Chemical Analysis of Soaps and Soap Products (D 460),
 Methods of Test for Fluoride Ion in Industrial Water and Industrial Waste Water (D 1179), and
 Methods for Chemical Analysis of Magnesium and Magnesium-Base Alloys (E 35).

In deciding whether to describe similar methods as portions of a single standard or as separate methods, the following criterion may be found useful: When the description of the apparatus and procedure are similar and a significant economy in printing can be accomplished

RECOMMENDATIONS ON FORM OF ASTM METHODS

9

by combining, and if, because of clearly understood distinctions in applicability, no confusion can arise as to which method should be used, then it is desirable to treat the methods as separate parts of a single standard. If confusion could arise, the methods should be published separately. If one method is preferred as a referee method it should be so designated, in which case the other methods should be designated as optional or nonreferee. Methods for various determinations on a given material may be grouped in a single standard for convenience in reference and use. When methods are published separately, a worthwhile saving can be accomplished by making cross references from one method to another for the apparatus and detailed description of the procedure.

Title

The title should be concise but complete enough to identify the nature of the test and the material to which it is applicable. Titles are used frequently in lists, tables of contents, indexes, tabulating card systems, etc., and therefore must be brief but inclusive. Select words that easily lend themselves to indexing. The essential features of a title are the particular property or constituent being determined, the material to which the method is applicable, and, when pertinent, the technique or instrumentation. If the method is designed to determine a number of constituents or properties, use a general title, omitting the names of specific constituents or properties. When a standard includes a number of individual methods for different constituents or properties, the title need indicate only the general nature of the tests and the material to which it is applicable.

Examples of some concise titles are as follows:

Methods and Definitions for Mechanical Testing of Steel Products (ASTM Designation: A 370),

Methods for Chemical Analysis of Portland Cement (ASTM Designation: C 114),
Method of Test for Conradson Carbon Residue of Petroleum Products (ASTM Designation: D 189),
Methods of Test for Sulfated Residue, Lead, Iron, and Copper in Lubricating Oils (ASTM Designation: D 810), and
Methods for Inspection, Test, and Standardization of Hydrometers (ASTM Designation: E 126).

Introduction

A separate section covering general introductory or informational material is not generally used in ASTM methods. Occasionally, there is a method of such a nature that it requires an explanatory statement for proper understanding by the user. In such instances, an introduction may be included immediately after the title of the method but without a section number.

Examples of methods that include Introductions are as follows:

Methods of Testing Small Clear Specimens of Timber (D 143),
Methods of Test for Strength of Adhesives (D 906 and D 905),
Methods of Test for International Standard Hardness of Vulcanized Rubber (D 1415), and
Method of Test for Twist in Yarns (Direct-Counting Method) (D 1423).

Scope

1. (a) Include here information relating to the purpose, application, etc., of the method. State the range of application of the method as completely as possible; do not sacrifice clearness for sake of brevity. Avoid repetition of information included in the section on Significance (Section 3). If the method covers several tests, each with its own scope, include a statement regarding the scope of each such test in this general section on scope. Use appropriate subtitles for each test covered.

(b) Include in a separate paragraph any appropriate comments on limitations of the test. Indicate any means of recognizing cases where the method may

not be applicable to the material under test.

(c) In standards that cover a number of methods, include in a separate paragraph an alphabetic list of the methods, together with the corresponding section numbers.

NOTE 1.—Reference to alternate or companion methods should be included in a note under Scope. The title and designation of the other methods should be a part of such reference.

Summary of Method

2. Include here a brief outline of the method, describing in the passive voice its essential features without the details that are a necessary part of the complete statement of procedure. If desired, a brief statement of the principle of the method may be given; this is particularly desirable in the case of chemical methods and should appear as the first paragraph. In chemical methods state the type of procedure, such as colorimetric, electrometric, volumetric, etc., and describe the source of color, major chemical reaction, etc.

Significance

3. This section should include information on the usefulness of each test procedure described, stating first the most significant features. State any significant limitations of the method. Such statements should be concise without sacrificing important ideas or completeness and should provide the user of the method with an understanding of the following:

- (1) The meaning of the test as related to the manufacture and end use of the material,
- (2) The suitability of the test for specification acceptance, service evaluation, regulatory statutes, manufacturing control, development, and research, and
- (3) The fundamental assumptions in-

herent in the method that may affect the usefulness of the results.

Examples of methods that include sections on significance are:
Methods of Test for A-C Capacitance, Dielectric Constant, and Loss Characteristics of Electrical Insulating Materials (D 150),
Methods of Testing Laminated Tubes Used for Electrical Insulation (D 348),
Method of Test for Water Absorption of Plastics (D 570),
Recommended Practice for Operating of Light- and Water-Exposure Apparatus (Carbon-Arc Type) for Exposure of Plastics (D 1499), and
Method of Test for Dilute Solution Viscosity of Ethylene Polymers (D 1601).

Definitions or Descriptions of Terms

4. Make reference to existing ASTM definitions where applicable. Include here only definitions or descriptions of terms that are required for the correct interpretation of the method or in the expression of test results. Do not include terms that are satisfactorily defined in Webster's International or other equivalent dictionary. If the terms are described in dictionary-definition form, use the heading "Definitions." When the information is explanatory in nature and contains general descriptions of the terms used, the section should be headed "Description of Terms" or "Terminology." Descriptions of terms relating to apparatus or reagents should be incorporated in the sections dealing with these subjects.

Examples of ASTM definitions having general application are:
Definitions of Terms Relating to Methods of Mechanical Testing (E 6),
Definitions of Terms Relating to Metallography (E 7),
Definitions of Terms Relating to Rheological Properties of Matter (E 24),
Definitions of Terms Relating to Conditioning (E 41),
Definitions of Terms and Symbols Relating to Absorption Spectroscopy (E 131),
Definitions of Terms and Symbols Relating to Emission Spectroscopy (E 135), and
Definitions of Terms Relating to Textile Materials (D 123).

RECOMMENDATIONS ON FORM OF ASTM METHODS

11

Examples of ASTM methods incorporating definitions are:

Method of Reporting Results of Analysis of Industrial Water and Industrial Waste Water (D 596),

Method of Test for Unevenness of Textile Strands (D 1425), and

Method of Test for Neutralization Value (Acid and Base Numbers) by Color-Indicator Titration (D 974).

Examples of ASTM methods incorporating descriptions of terms are:

Method of Test for Tear Resistance of Woven Fabrics by Falling-Pendulum (Elmendorf) Apparatus (D 1424),

Method of Core Sampling of Raw Wool in Packages for Determination of Percentage of Clean Wool Fiber Present (D 1060),

Method of Sampling Preformed Thermal Insulation (C 390), and

Methods of Testing Structural Insulating Board Made from Vegetable Fibers (C 209).

Interferences

5. If it is necessary for the successful application of the method to include explanatory statements on interference effects, include such information here; otherwise omit this section. List briefly the constituents or properties that are likely to cause interference and the amounts that are known to interfere. In some cases this information can be obtained only by observation during the performance of the test. In such cases appropriate reference should be made under the sections on "Procedure" or "Calculation."

NOTE 2.—Supplementary information on possible interferences not normally encountered, and on means for removing or compensating for them, may be included in a text note in this section when desirable.

Apparatus

6. (a) In this section, include a brief description of the essential features of the apparatus and equipment required for the test, and where they will clarify or supplement the text, schematic drawings or photographs. Cover in separate paragraphs the important features and requirements for the apparatus. Do not

list common laboratory apparatus, such as flasks, beakers, etc., but include any especially modified forms or unusual sizes of common apparatus that are required or that may require special preparation, such as a Gooch crucible.

(b) Avoid the use of trade names, unless a specific manufacturer's product is required for a well-defined reason. In such cases an explanatory footnote may be included giving supplementary information regarding such apparatus or material. The footnote should state that this apparatus or material or its equivalent "has been found satisfactory for this purpose." When special types of glassware are required, such as heat-resistant, chemical-resistant, etc., the significant characteristic desired should be stated rather than a trade name. For example, "borosilicate glass" may be used in place of Pyrex or Kimax. Filter paper should be specified by description of the significant characteristic such as porosity, rate of filtering, ash content, etc. (see Appendix).

NOTE 3.—Attention is called to the policies adopted by the Board of Directors that are applicable to standards involving patented apparatus, materials, and processes. These policies are described in detail in Section 21 of the Regulations Governing ASTM Technical Committees.² In such cases, committees are required to furnish to the Board of Directors information regarding the patents. The Board of Directors considers such matters upon their respective merits. The owner and manufacturer must give assurance satisfactory to the Society that a patent monopoly will not result in an exorbitant price to the consuming public. ASTM does not undertake to insure anyone utilizing such materials, apparatus, appliance or machine for testing, against liability of infringement or assume any such liability.

(c) Detailed manufacturing requirements for apparatus, unless quite brief, should preferably be placed in an Appen-

² See 1954 ASTM Year Book; also published in reprint form and available from Society Headquarters.

dix to the method, retaining in the text only a brief outline with schematic drawings or illustrations where necessary. The purpose of this outline is to provide the user with information regarding the essential features of the apparatus, to enable him to assemble and understand the use of the equipment in the method.

(d) When essentially the same apparatus is used for more than one method and the description of the apparatus requirements is lengthy, it is recommended that the complete specifications for the apparatus be included in an Appendix to one method and merely a reference be made to them in the other method, mentioning under "Apparatus" only such modifications as may apply in each particular case.

(e) When the same apparatus is used in several methods, the detailed specifications may be covered by a separate ASTM standard.

Examples of such standards are:
Specifications for Flow Table for Use in Tests of Hydraulic Cement (C 230),
Specifications for ASTM Thermometers (E 1),
Specifications for ASTM Hydrometers (E 100),
Specifications for Apparatus for Water Determination (E 123),
Specifications for Distillation Equipment (E 133),
Specifications for Apparatus for Microchemical Analysis (E 124, E 148, E 149), and
Recommended Practices for Apparatus and Reagents for Chemical Analysis of Metals (E 50).

NOTE 4.—Information on the manner of expressing the requirements for dimensions of apparatus both in the text and on schematic drawings is included in the Appendix to these recommendations.

Reagents and Materials

7. (a) When there is more than one procedure, list the reagents and materials required for that procedure as a separate section under each subdivision. When only chemical reagents are required, omit the word "materials" from the heading.

(b) It is recommended that, where applicable, the following be included as Paragraphs (a) and (b) of this section:

(a) *Purity of Reagents.*—Reagent grade chemicals shall be used in all tests. Unless otherwise indicated, it is intended that all reagents shall conform to the specifications of the Committee on Analytical Reagents of the American Chemical Society, where such specifications are available.³ Other grades may be used, provided it is first ascertained that the reagent is of sufficiently high purity to permit its use without lessening the accuracy of the determination.

(b) *Purity of Water.*—Unless otherwise indicated, references to water shall be understood to mean distilled water or water of equal purity.

If satisfactory, reference may be made to the Specifications for Reagent Water (ASTM Designation: D 1193).⁴ If a purer grade of water is required, add a second sentence as follows: Water conforming to the following specifications is required (list the specific properties, kinds of ion freedom, etc.).

In standards covering two or more chemical methods these paragraphs on purity should be made a separate section entitled Purity of Reagents and Materials.

(c) List the reagents and materials alphabetically in separate lettered paragraphs. Give the name of the reagent first, followed by any descriptive terms (see *Example*). State the desired concentration if significant; then follow with instructions for preparation and standardization (if required), using the imperative mood and concise descriptions. Spell out the full name of the reagent, and immediately after the first mention of the name include within parentheses

³ "Reagent Chemicals, American Chemical Society Specifications," Am. Chemical Soc., Washington, D. C. For suggestions on the testing of reagents not listed by the American Chemical Society, see "Reagent Chemicals and Standards," by Joseph Rosin, D. Van Nostrand Co., Inc., New York, N. Y., and the "United States Pharmacopeia."

⁴ See latest edition of Book of ASTM Standards and its Supplements.

RECOMMENDATIONS ON FORM OF ASTM METHODS

the exact chemical formula of the reagent showing its water of crystallization, etc. Exception to this may be made in the case of organic, metallo-organic, or complex inorganic compounds by omitting the chemical formula. Subsequent references to compounds shall be by formula only where they can be clearly specified by this means, as in the case of most inorganic compounds. As exceptions, always spell out the word "water" and the names of substances in their elementary state, for example, use lead, not Pb; oxygen, not O₂. If the reagent is to be used as purchased, and not diluted, dissolved, or purified, state the chemical formula as given by the manufacturer.

(d) Avoid the use of trade names and names of patented products, using chemical names only, unless a specific product is required for a well-defined reason. In this case, use a superior reference number to refer to a footnote giving the required information, incorporating the phrase "has been found satisfactory for this purpose." Where particular reagents are required only for standardization or calibration, identify them by reference to an appropriate footnote such as "This reagent used for standardization purposes only."

(e) Specify the reagent concentration in applicable terms, as follows:

Concentrated acids and bases.....	specific gravity, unless per cent by weight is more generally used or required
Dilute acids and bases.....	volume ratio, x:y (x volumes of reagent added to y volumes of water)
Nonstandardized solutions.....	grams of reagent as weighed out per liter of solution
Standardized solutions.....	normality, expressed decimally; or the equivalent of 1 ml of solution in terms of grams of a given element expressed as "1 ml = x.xx g of ..."

(f) Wherever possible, use the same

concentrations of reagents and methods of standardization as used in other similar ASTM methods.

Examples of reagent descriptions are as follows:

- (a) *Ammonium Carbonate* ((NH₄)₂CO₃).
- (b) *Barium Chloride Solution (100 g per liter)*.—Dissolve 100 g of barium chloride (BaCl₂·2H₂O) in water and dilute to 1 liter.
- (c) *Potassium Hydroxide, Methanol Solution (33 g per liter)*.—Dissolve 33 g of potassium hydroxide (KOH) in methanol and dilute to 1 liter with methanol.
- (d) *Sodium Thiosulfate, Standard Solution (0.1 N)*.—Dissolve 24.82 g of sodium thiosulfate (Na₂S₂O₃·5H₂O) in water and dilute to 1 liter in a volumetric flask. Preserve the thiosulfate solution by adding 5 ml of chloroform or 1 g of sodium hydroxide (NaOH) per liter. Determine the exact normality by titration against a standard solution of equivalent strength of potassium acid iodate (KH(IO₃)₂) or potassium dichromate (K₂Cr₂O₇).

Safety Precautions

8. When there are hazards to personnel in performing the test, such as explosions, fire, toxicity, a warning to this effect should be included here. Indicate at which steps in the procedure these hazards exist. At the point in the text where a precaution is important include the word **Caution**, followed by the details of the protective or precautionary measures to be taken.

Examples of methods that include safety precautions are:⁵

- Method of Test for Sulfur in Petroleum Products by the Bomb Method (D 129),
- Methods of Test for Total Chromium in Industrial Water and Industrial Waste Water (D 1687), and
- Methods for Chemical Analysis of Magnesium and Magnesium-Base Alloys (E 35).

Sampling

9. (a) When required, give under this heading necessary special directions for taking samples from bulk, for storage of

⁵ The safety precaution statements in these particular methods do not conform exactly with the form proposed in Section 8 but illustrate the type of hazards to which attention should be directed.

samples, for preservation of samples, or for special preparation of the sample for the test.

(b) If the method of sampling is described in an existing ASTM method, refer to that method by title and designation. Instructions for sampling may appear in the materials specifications, in which case those provisions are applicable.

(c) If the method of sampling is detailed in a readily available publication other than an existing ASTM Standard, refer to the publication in a footnote (Note 5), arranging the information in accordance with the suggestions presented in the Appendix to these recommendations.

NOTE 5.—References to publications other than those of ASTM for methods of sampling should be used only for supplementary information, or only until a suitable ASTM method is prepared. Essential requirements for sampling should always be covered in the method or in another ASTM publication. In a few cases problems have resulted from references only to publications of other organizations.

Test Specimen or Sample

10. (a) The size of sample used for a chemical analysis usually is given in the section on Procedure but, if significant in connection with pretreatment or preparation, it may be included here. When the test sample is specified by weight, indicate the degree of precision desired.

(b) Include detailed requirements as to the size and number of test specimens to be used for other than chemical tests. Where a test specimen of a particular shape is required, the essential dimensions shall be specified, including tolerances. A drawing showing the details of the specimen may be included.

Preparation of Apparatus

11. Use this section only when detailed instructions are required for the initial assembly, conditioning, or preparation of the apparatus.

Calibration and Standardization

12. (a) Where applicable, place this section immediately after "Sampling," unless two or more methods are published in one standard, in which case place this section immediately after "Reagents and Materials" in each method in which it applies.

(b) *Apparatus*.—Give such detailed instructions for calibration and adjustment of the apparatus as may be necessary to the use of the method.

(c) *Reference Standards and Blanks*.—Give detailed instructions for the standardization and use of reference standards and blanks used in the method. Describe any standard samples used to assure uniformity of the test technique, and standard specimens or photographic standards.

(d) *Calibration Curves and Tables*.—Give detailed instructions for the preparation and use of calibration curves or tables, according to the suggestions presented in the Appendix. Include in the instructions for curve or table preparation items such as calibration solutions, reference standards, blanks, color development, photometry, construction, etc.

Conditioning

13. The atmosphere to be used and the time of exposure to the atmosphere, as well as the atmosphere required during the test, shall be specified, where necessary. State whether the conditioning requirements apply to laboratory samples as well as individual specimens. Indicate any requirements for preconditioning.

Procedure

14. (a) Include in proper sequence detailed directions for performing the test. Describe the procedure in the imperative mood, present tense, for example: "Heat the test specimen . . ."

RECOMMENDATIONS ON FORM OF ASTM METHODS

15

rather than "The test specimen shall be heated . . .". State the number of samples or specimens to be tested. Describe in detail the successive steps of the procedure, grouping related operations into logical, lettered paragraphs. Subheadings may be used if they will help the organization of the material. Make the text of the procedure concise, to the point, and easily understandable. When alternative procedures are given, state their relative status, that is, which is the preferred or referee procedure.

(b) In chemical methods, specify the size of test sample and indicate the degree of precision desired in the weighing. The sample size and its accuracy of weighing shall be considered in connection with the ultimate use of the method. If the formula for a reagent has been given previously in accordance with the instructions given in Section 7(c), refer to the reagent by chemical formula only. Otherwise, spell out the name of the reagent. The procedure should provide for any operations necessary to obtain any correction data that may be needed.

NOTE 6.—Supplementary information regarding the procedure, such as technical details or discussion to amplify the test procedure, or alternate directions, may be included in a note. Instructions or details essential to the procedure should not appear in notes.

Calculation or Interpretation of Results

15. (a) *Calculation*.—Give here directions for calculating the results of the test, including any equations. Spell out names in the text but use letter symbols in the equations to designate individual values. Use numerical values for any constants. Describe the letter symbols immediately under the equation. Avoid the use of combined factors in chemical methods. Indicate the reference point on which the calculations are based, such as on the sample as received, dry basis, etc., and the units in which the results are reported. If necessary for clarity, a

typical calculation may be included in an explanatory note.

Example of typical equation is:

Aluminum, per cent

$$= \frac{(A - B) \times 0.0587}{C} \times 100$$

where:

A = grams of aluminum oxyquinolate found in the aliquot used,

B = grams of aluminum oxyquinolate found in the blank, and

C = grams of sample represented in the aliquot used.

(b) *Interpretation of Results*.—Use this section in place of the section on "Calculation" when the results of the test must be expressed in descriptive form, relative terms, or abstract values. List and define the descriptive terms or classifications used. The results of a test may be interpreted or expressed in terms of a rating scale. There is fairly wide agreement on five-step scales for many values or rankings of merit, with 5-good, 3-middle, 1-bad. In general, a higher score for more of a desirable property is the more satisfactory arrangement. This eliminates confusion arising from number 1 in rank for the most of a quantity, without regard.

Examples of methods that include rating systems are:

Methods of Polariscopic Examination of Glass Containers (C 148),

Method of Test for Copper Strip Corrosion by Petroleum Products (D 130),

Methods of Test for Pilling Resistance of Textile Fabrics (D 1375), and

Method of Test for Estimation of Deleterious Particles in Lubricating Grease (D 1404).

Report

16. State in this section the detailed information required in reporting the results of the test. When two or more procedures are described in a method, the report should indicate which procedure was used. When the method

permits variations in operating or other conditions, a statement as to the particular conditions used in the test should be incorporated in the report. As an aid in the calculation and uniform recording of test results a standard report form or work sheet may be used, and if desirable a facsimile of the form may be included in the method.

Precision and Accuracy

17. (a) *Precision*.—State the precision expected when the method is used by competent operators in a number of laboratories. "Precision" refers to the degree of agreement of repeated measurements of the same property of a given material, expressed in terms of dispersion of test results around the arithmetic mean. Additional information on precision may be supplied based on test results obtained by repetitive testing of a homogeneous sample by a single operator, by different operators in the same laboratory, etc. The terms in which precision is expressed shall be clearly defined.

Examples of methods that include sections on precision are:

Method of Test for Water and Sediment in Fuel Oils by Centrifuge (D 1796),
 Methods of Test for Phenolic Compounds in Industrial Water and Industrial Waste Water (D 1783),
 Method of Test for Aniline Point and Mixed Aniline Point of Hydrocarbon Solvents (D 1012),
 Method of Test for Tensile Breaking Strength of Paper and Paperboard (D 828),
 Methods of Testing Urethane Foam Raw Materials (D 1638),
 Method of Test for Specific Gravity of Askarels (D 1810),
 Method of Test for Strength and Elongation of Cotton Fibers (Flat Bundle Method) (D 1445), and
 Method for Spectrochemical Analysis of Pig Lead by the Point-to-Plane Spark Technique (E 117).

(b) *Accuracy*.—When the information is available, state the accuracy of the

method, that is, the degree of agreement between results of measurement and the true value for the property being measured.

(c) For suggestions on reporting test data, see the "ASTM Manual on Quality Control of Materials," 1951 Edition, *STP No. 15-C*. The Manual gives, in addition to a brief discussion of the theoretical aspects of the measurement of precision, useful examples and convenient short-cut methods of calculation. See also the Recommended Practices for Designating Significant Places in Specified Limiting Values (ASTM Designation: E 29).⁴

Other ASTM Publications that offer useful guides for interlaboratory testing and statistical analysis of test data are:

Proposed Recommended Practices for Applying Precision Data Given in ASTM Methods of Test for Petroleum Products and Lubricants,⁶
 Tentative Recommended Practice for Interlaboratory Evaluation of Test Methods Used with Paper and Paper Products (D 1749),⁴
 Tentative Recommended Practice for Interlaboratory Testing of Rubber and Rubber-Like Materials (D 1421),⁴
 Recommended Practice for Interlaboratory Testing of Textile Materials (D 990),⁴
 Proposed Recommendations for Interlaboratory Testing of Industrial Aromatic Hydrocarbons and Related Materials,⁷
 Proposed Procedure for Determination of Precision of Committee D-19 Methods,⁸
 Suggested Practices for Use of Statistical Methods in Spectrochemical Analysis,⁹
 Tentative Recommended Practices for Conducting Interlaboratory Studies of Methods for Chemical Analysis of Metals (E 173),¹⁰
 Proposed Recommended Practice for Developing Precision Data on ASTM Methods for the Analysis and Testing of Industrial Chemicals.⁷

⁶ Directory of ASTM Committee D-2 on Petroleum Products and Lubricants, January, 1960.

⁷ *Proceedings*, Am. Soc. Testing Mats., Vol. 60 (1960).

⁸ Manual on Industrial Water and Industrial Waste Water—Second Edition (1959); also Second Printing of Second Edition (1960).

⁹ Methods for Emission Spectrochemical Analysis (1960).

¹⁰ 1960 Book of ASTM Methods for Chemical Analysis of Metals.

RECOMMENDATIONS ON FORM OF ASTM METHODS

17

EXPLANATORY NOTES

In some methods it may be desirable to group all of the explanatory notes at the end rather than to place them under individual sections. This is permissible especially when the information in the individual notes applies to two or more sections of the method. List the notes in sequence in the same order in which they would appear if placed in the text of the method. Appropriate references to the notes should appear in the main body of the method.

Examples of standards having Explanatory Notes at the end are:

Specifications for Soft Rectangular and Square Bare Copper Wire for Electrical Conductors (B 48),
Specifications for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Members, for Electrical Conductors (B 172),
Method of Test for Water Resistance of Paper, Paperboard, and Other Sheet Materials by the Dry-Indicator Method (D 779), and
Classification of Austenite Grain Size in Steels (E 19).

REFERENCES

A list of literature references to reports, papers, or other publications that contain background information or supporting data may be included. Only pertinent references should be cited, not a bibliography. Do not cite references of historical or acknowledgment value only. This list should preferably appear at the end of the method, unless there are only a few references in which case they may appear as footnotes. In either case, appropriate notations to the references should appear in the text. The form to be used for such references is discussed in the Appendix.

Examples of methods that contain References are:

Methods of Test for A-C Capacitance, Dielectric Constant, and Loss Characteristics of Electrical Insulating Materials (D 150),
Methods of Preparation of Metallographic Specimens (E 3), and
Recommended Practice for Thermal Analysis of Metals and Alloys (E 14).

APPENDIXES

Supplementary information may be included in one or more Appendixes to the method. Information on the following general subjects has been included in such Appendixes:

(1) Notes on significance and interpretation of the method, usually to amplify the statement in the text,

(2) Glossary of terms used in the method,

(3) List of symbols,

(4) Detailed description of apparatus,

(5) Instructions for calibrating and standardizing apparatus,

(6) Directions for cleaning apparatus,

(7) Operating instructions and adjustments of specific makes of apparatus,

(8) Development of equations used in the calculations,

(9) Charts or supplementary information for computations, and

(10) Suggested data forms for recording test results.

Sections of the first Appendix should be designated A1, A2, A3, etc. Paragraphs should be lettered consecutively in each section as (a), (b), (c), etc., and subparagraphs numbered with arabic numerals in parentheses (1), (2), (3). Sections of the second Appendix should be designated B1, B2, B3, etc. and so on alphabetically for succeeding appendixes. The paragraphs and subparagraphs are lettered and numbered the same as in the first Appendix.

APPENDIX

NOTES, REFERENCES, ILLUSTRATIONS, AND UNITS OF MEASUREMENT IN ASTM STANDARDS¹¹*Manuscript*

A1. (a) Manuscript for an ASTM standard should be typewritten on one side of reasonably heavy paper of ordinary thickness (not onion skin), *double spaced*, with a margin of at least 1 in. on each side. Pages should be numbered consecutively.

(b) Two copies of the manuscript should be furnished for final editing. Also send glossy prints of photographs and the original copy or tracings of line drawings. Use only *essential illustrations*. Provide good sharp prints of photographs on glossy paper. Mail photographs flat, not rolled, using sufficient cardboard to prevent creasing. Do not use clips as they mar the print. Photomicrographs should be *unmounted*. See Section A5 for further information regarding illustrations.

Notes

A2. (a) Notes in the text are intended to set explanatory material apart from the text itself, either for emphasis or for offering informative suggestions not properly part of the method. Clarification of the description of required apparatus or procedure and modifications required or permitted in certain cases belong in the text itself. However, text notes may be preferable for detailed description of auxiliary procedures (for

example, correction of barometric pressure in a method not primarily concerned with pressure).

(b) Notes appearing in a given method should be numbered in sequence, regardless of the number of sections, subdivisions, or appendixes. These notes should preferably appear at the end of the paragraph to which they pertain. In special cases, notes may be grouped at the end of the method under the heading "Explanatory Notes." If it is desired to refer to a text note in connection with a specific word or phrase in the text, that word or phrase should be followed by a reference to the note, "(Note 1)," etc.

(c) Notes in the text are preferred for the following:

(1) To refer to editorial changes made in the text.

(2) To refer to similar or companion ASTM methods.

(3) Under "Definitions," to amplify the description of the term or to refer to similar terms which may be confused with those used in the method.

(4) Safety precautions concerning explosion, fire, toxicity, or other hazards to personnel. See Section 8 of these recommendations.

(5) Special precautions to prevent damage to equipment.

(6) Limitations of the application of the test when not covered in the text.

(7) Description, if included under "Scope," of experimental means for recognizing cases where the method is not applicable to the material under test.

¹¹ These recommendations are in general agreement with the "Manual for Authors of ASTM Papers," copies of which are available from the Headquarters of the American Society for Testing Materials on request.

RECOMMENDATIONS ON FORM OF ASTM METHODS

19

(8) Description of additional (not alternative) apparatus, materials, procedure, or calculations that are not actually required; or description of merely recommended forms of construction of required apparatus.

(9) Explanation, if desired, of the reasons for a certain requirement or direction. If brief, include in the text rather than as a note.

Footnotes and Literature References

A3. (a) Footnotes to the text are intended for explanation or references and should never carry any information or instructions necessary for the proper application of the method or specification. They should be used for the following:

(1) Statement of committee jurisdiction and subcommittee responsibility.

(2) Historical information as to date of first publication and subsequent revision or change in status.

(3) To indicate the nature of the latest revisions and which sections were affected.

(4) References to essentially identical methods published by other organizations.

(5) Literature references. Include only references to publications supporting or providing needed supplementary information; references that are merely historical or for acknowledgment are not desirable. When there are a number of references, group them at the end of the method under the heading "References."

(6) References to the Book of ASTM Standards or other publications for internal cross references to other standards.

(7) Brand names or trade designations of apparatus or supplies, but only when such references point out materials for which availability or adaptability is not generally known.

(8) Names and addresses of suppliers of apparatus and materials for

which there is only one or a limited number of sources.

(b) Footnotes to tables are used for a variety of purposes, such as references to other ASTM standards, explanation of symbols, clarification of requirements, etc.

(c) Use consecutive superior figures for references to footnotes to the text, regardless of the number of sections, subdivisions, or appendixes in the method. For footnotes to tables, use lower-case superior letters.

(d) In literature references, arrange the information in the sequence needed for locating the report or paper. For example, the author's initials and name and title of paper should be followed by the name of the publication, publisher, volume, number, date, and page number. When the year is parenthetical to the volume, it should be placed in parentheses at the end. Otherwise, the date of publication should appear immediately after the name of the publication. Abbreviate the names of societies, but spell out the distinguishing word, such as: Am. Soc. Testing Mats., Am. Chemical Soc. Enclose the titles of papers in quotation marks and underline the names of Journals, Proceedings, Bulletins, etc.

Examples of such References are:

- (1) K. C. Li and C. Y. Wang, "Tungsten," 3rd Ed., Reinhold Publishing Co., New York, N. Y. (1955).
- (2) R. Dyck and T. J. Veleker, "Spectrographic Analysis of Tungsten Metal Powder," *Analytical Chemistry*, Vol. 31, p. 390 (1959).
- (3) H. Yagoda and H. A. Fales, "The Separation and Determination of Tungsten and Molybdenum," *Journal*, Am. Chemical Soc., Vol. 58, p. 1494 (1936).
- (4) P. G. McVetty, "The Interpretation of Creep Tests," *Proceedings*, Am. Soc. Testing Mats., Vol. 34, Part II, p. 105 (1934).
- (5) J. T. Ransom and R. F. Mahl, "The Statistical Nature of the Fatigue Properties of SAE 4340 Steel Forgings," Symposium on Fatigue with Emphasis on Statistical Approach-II, *ASTM STP No. 137*, Am. Soc. Testing Mats., p. 3 (1952).

RECOMMENDATIONS ON FORM OF ASTM METHODS

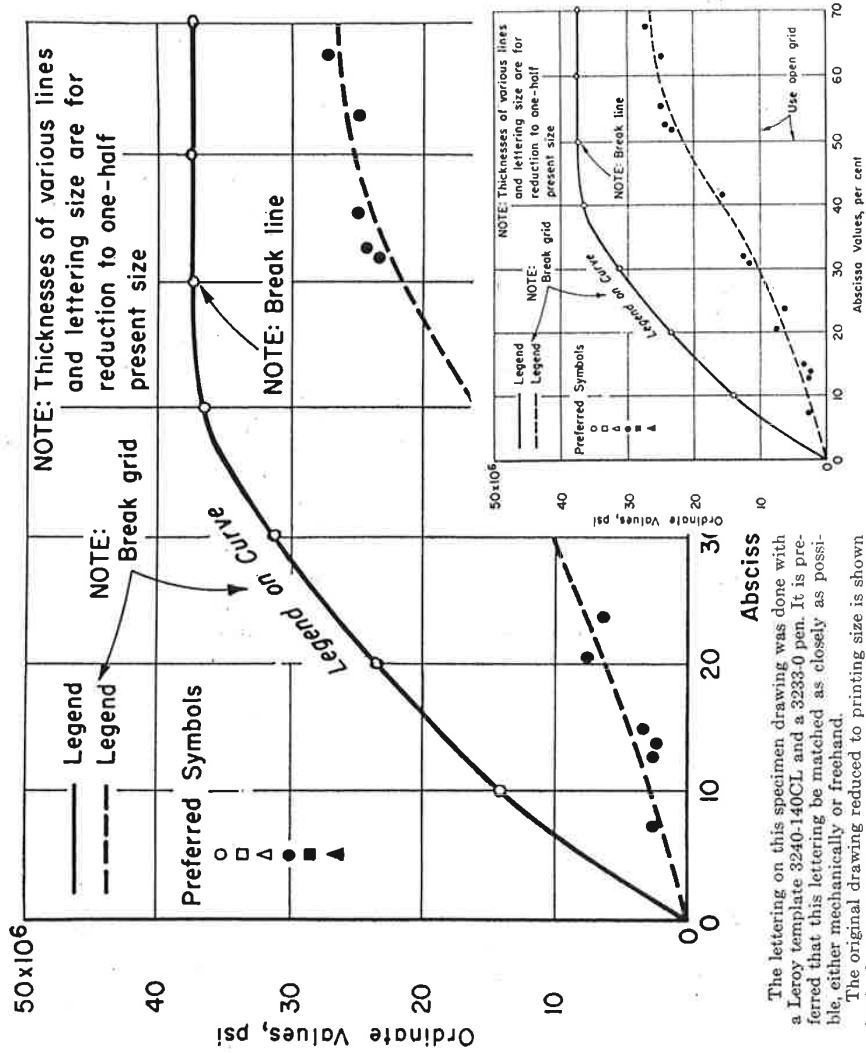


FIG. 1.—Specimen Drawing.

The lettering on this specimen drawing was done with a Leroy template 3240-140CL and a 3233-0 pen. It is preferred that this lettering be matched as closely as possible, either mechanically or freehand. The original drawing reduced to printing size is shown in the lower right hand corner.

RECOMMENDATIONS ON FORM OF ASTM METHODS

21

References to ASTM Thermometers

A4. (a) Whenever possible, refer to thermometers described in the Specifications for ASTM Thermometers (ASTM Designation: E 1).⁴ Reference to an ASTM thermometer of the desired range should be as follows:

Thermometer.—ASTM (name) Thermometer having a range of — to — (C or F, whichever applies) and conforming to the requirements for thermometer (give thermometer number; for example, 16F) as prescribed in ASTM Specifications E 1.

(b) Do not specify both temperature scales unless there is a definite need for them.

Illustrations

A5. (a) Illustrations of the apparatus should be designated as figures with arabic numbers. Line drawings are preferable to photographs. Furnish short titles or captions for each illustration.

(b) In preparing the drawings, due consideration should be given to the arrangement of the figure and the character and width of lines for reduction in reproduction. Original tracings or drawings should be made twice the size of the figure or illustration to appear in the standard as it is economically desirable to reduce all drawings to one-half size in reproduction. The lettering should be of adequate size so that it will be legible after the one-half reduction. For figures or illustrations that will fit across a single column of type ($2\frac{1}{4}$ in.) the drawing should be $4\frac{1}{2}$ in. wide, maximum, and those to appear across the full page ($4\frac{3}{4}$ in.) should be 9 in. wide, maximum. When the height of the drawing is the governing dimension it should preferably be not more than twice the height of the type page ($7\frac{1}{4}$ in.) or $14\frac{1}{2}$ in. When extra space is required for the figure caption, allow for this by reducing the height of the drawing. The maximum drawing size should, therefore, be kept within $9\frac{1}{2}$ by

$14\frac{1}{2}$ in. The specimen drawing in Fig. 1 may be used as a guide. It also contains suggestions on size of lettering. For additional information on preparation of drawings for publication, see American Standard ASA Y15.1—1959—Illustrations for Publication and Projection.

(c) Where a graph with one or more curves is considered essential, the instructions given in Paragraphs (a) and (b) apply. In plotting curves it may be possible to make the drawing so that it can be used directly, with some retouching, thus obviating the necessity of having new drawings made for reproduction which involves delay and additional expense. See the specimen drawing in Fig. 1.

(d) When it is necessary to use photomicrographs, refer to the Methods of Preparation of Micrographs of Metals and Alloys (ASTM Designation: E 2).⁴ The following information may be obtained from this reference: standard magnifications; the use of rectangular rather than circular micrographs; and explanatory title giving magnification, etching medium (if one was used), treatment, etc.

Tables

A6. Tables of considerable length should be on separate sheets of paper and placed in their proper position in the manuscript. Copy for tables should not be crowded.

Equations

A7. When equations will not fit on one line across the single column of type ($2\frac{1}{4}$ in.) use letter symbols to represent the items in the equation. Give a legend under the equation. Verify carefully all equations before submitting the manuscript. Be sure that distinction between capital and small letters is clear, and designate Greek letters as such. There is often confusion between the small letter

l (el) and the figure one, between ω (omega) and w; also between 0 and the letter O. Be sure that the distinction is clear in the manuscript, and also that all subscript letters and figures are plainly marked.

Units of Measurement

A8. (a) In apparatus specifications it is common manufacturing practice to use inches and decimals or fractions of inches for metal parts, and centimeters or millimeters for glass parts. Many of these, when converted from the original system to show figures in both systems, give decimals in the converted values that are of no practical utility. Hence, as a general practice, show only inches, etc., for metal parts and metric units for glass parts. For liquid measure and for volumetric glassware, use the term "milliliter" in preference to "cubic centimeter."

(b) Temperatures should not be expressed in both Centigrade and Fahrenheit, when one of the two scales is used to the virtual exclusion of the other. Both scales should be included only if there is good reason to do so, and the scale less frequently used should appear parenthetically. All chemical methods should be written using the Centigrade scale only. The Fahrenheit scale should be used only where such usage is firmly established as common practice such as in physical test methods. When Fahrenheit temperatures are specified, the Centigrade equivalents should appear in parentheses.

(c) Dimensions or temperatures, if converted from one system of units into another, should be rounded off in a practical manner, so that the values are significant. Thus, if a distance is quoted as approximately 1 to $1\frac{1}{4}$ in. and a metric equivalent is desired, this should be 25 to 32 mm, not 25.4 to 31.8 mm; or if

a temperature is quoted as not lower than 300 nor greater than 350 F, and a Centigrade equivalent is desired, this should be either 150 to 175 C or 149 to 177 C, depending on the precision implied in the given case; 148.9 to 176.7 C would not be realistic.

Numbering

A9. (a) Use arabic numbers for numbering sections of a standard, letters in parentheses for paragraphs, and arabic numbers in parentheses for subparagraphs. Refer to the numbered sections of a standard as "Section 6"; the lettered subdivisions of a section either as "Paragraph (a)" or "Section 6(a)." The former may be used only when the reference occurs in the section containing the paragraph referred to; in all other cases the latter form should be used.

(b) Use roman numerals in designating tables and insert plates: thus, "Table VI"; not "Table 6." Use arabic numerals in designating figures; thus, "Fig. 3"; not "Fig. III."

(c) Use superior figures for footnotes to the text. Use superior lower-case letters for footnotes to tables.

(d) Spell out all numbers from one to twelve, with the following exceptions:

(1) Use numerals when the quantity is partly fractional: as, 1.15, $5\frac{1}{2}$.

(2) Use numerals when followed by an expression having a standard abbreviation: as, 1 in., 6 lbs, etc.; and for expressions or units that do not admit of abbreviation such as 5 ohms, 7 tons, etc.

(3) In contrasting statements, if some numbers must be numerals, use numerals for all: as, "make 2 tests after 17 days."

(4) In a series of connected numerical statements implying precision, use numerals: as, "5 months, 3 days." The use of numerals is not recommended for numbers occurring in precise statements similar to the following: "Recording the data from the *ten* test locations."

RECOMMENDATIONS ON FORM OF ASTM METHODS

(5) Use numerals after abbreviations: as, Vol. 26, Fig. 2, No. 5, etc.

(6) Use numerals in stating any exact quantity, such as "1 liter" or the number of drops of a solution, as in "add 2 or 3 drops of $KMnO_4$ solution." Also, say, "mix 2 volumes of HCl (sp gr 1.19) with 3 volumes of water."

(e) Use numerals for all numbers exceeding twelve, with the following exceptions:

(1) Do not begin a sentence with a numeral.

(2) Round numbers used in an indefinite sense shall be spelled out: as, "A *hundred* feet or so," etc.

(3) Spell out numbers when used in the following manner: "*fifteen* 2-in. rods," etc.

(f) In expressing percentages, precise figures, etc., use decimals: as, "4.5 per cent"; not "4½ per cent."

(g) In decimal numbers, place a zero before the decimal point: as, "0.65 in.;" not ".65 in."

(h) In pointing off numbers of more than four figures, use commas in the text (1,234,567) and spaces in tabular matter (1 234 567). Do not point off numbers of four figures in either text or tabular matter (1234), except when they occur in a column containing numbers of more than four figures.

Spelling and Punctuation

A10. (a) In general, use the preferred spelling given in *Webster's International Dictionary*. In view of the variants now in use, use the following recommended spellings:

aging	kerosine
benzene	mold
briquet	nondestructive
buret	nonferrous
carburation	pipet
cross-section	pozzolan
disk	siliceous
embed	skillful
endorse	sulfur
gage (measurement)	ultraviolet
gage (tempering plaster)	viscometer

glycerin
infrared
iodine

wavelength
X-ray

(b) Hyphenate compound adjectives: as, "2-in. gage," "cold-drawn wire." Write such expressions as the following with the hyphen only after the second numeral: "2 and 6-in. specimens." For sake of appearance, omit hyphens in such expressions as: "3 per cent nickel alloy," "3 per cent solution," etc.

(c) Do not hyphenate such expressions as: "newly puddled iron," where the adverb is a regular modifier of the adjective.

(d) Do not use a period within or after an abbreviation except where indicated in Section A14.

Capitals

A11. (a) Use capitals sparingly.

(b) Capitalize the principal words in headings, titles of standards, books, papers, etc. (nouns, pronouns, verbs, adjectives, adverbs, and prepositions with over four letters).

(c) Use capital initial "C" for "committee" when used as a title: thus, "Committee D-19," "Committee on Papers." In all other cases use lower-case "c": thus, "The committee recommends . . ."

(d) Use lower-case initial letters for the following: admiralty, babbitt, bessemer, bunsen, duralumin, monel, nylon, portland cement.

(e) Use initial capitals in referring to tables, figures, insert plates, volumes, etc.: as, Table III, Fig. 2, Plate VI, Vol. 26.

(f) Use the form "test No. 1," "specimen A," etc.

Preferred Terms and Expressions in All Methods

A12. (a) Use the imperative mood, present tense for all instructions and directions in test procedures. Use the mandatory verb "shall" only in stating

definite requirements. In specifications, the verb "shall" implies a requirement that is binding on parties of the first or second part, the verb "will" implies a declaration of purpose only and the verb "may" implies an act that is permissive.

(b) Use "full-size tests"; not "full-sized tests," etc.

(c) Use "test specimen"; not "test piece." In case the term "test specimen" is repeated several times in the same section, the word "specimen" may be used after the first use of "test specimen."

(d) Use " $\frac{3}{4}$ in. or over in thickness"; not " $\frac{3}{4}$ in. and over."

(e) In referring to dimensions, use "2 in."; not "two inches (2 in.)" or "two (2) inches."

(f) Use "reduction of area"; not "reduction in area" nor "contraction in area."

(g) Use "flexure" test; not "transverse" test.

(h) Use "Rockwell hardness C scale" or when accompanied by a value, "Rockwell hardness C 59."

(i) In references to concrete say it "shrinks" and "swells" when exposed to moisture, but it "contracts" and "expands" when exposed to temperature changes.

(j) In reference to reagent solutions, in all sections other than the section on "Reagents and Materials" use the form, "add 10 ml of KMnO_4 solution," omitting any statement of concentration except where two or more concentrations are referred to in the same method. In the latter case, state the concentration intended with *each* reference. When referring to standard solutions, use the form "titrate with 0.1 N KMnO_4 solution."

Refer to concentrated acids and ammonium hydroxide, except in the section on "Reagents and Materials" by chemical formula only, as in "add 10 ml of HCl to the solution," except where one or more

dilutions of the acid or ammonium hydroxide are referred to in the same method, in which case state the concentration intended.

(k) Spell out the names of elements, except when used in chemical formulas, in expressing concentrations of reagents, as in "1 ml = 0.04 g Zn," or in calculations. For example, say "Calculate the percentage of iron as follows:

$$\text{Iron as Fe, per cent} = \frac{A - B}{C} \times 100$$

Except in the detailed instructions for preparation of reagents, spell out the names of those inorganic compounds which are so unusually complex or uncommon that (a) confusion or inconvenience might result from the use of chemical formulas, or (b) the use of chemical formulas would result in waste of space or poorer readability.

Preferred Terms and Expressions in Methods for Chemical Analysis

A13. In general, new or revised methods should read as nearly as possible like similar ASTM methods for chemical analysis that have recently been issued or that have been editorially revised in accordance with these recommendations on form, except as required by actual differences in details of the methods. Wherever definite improvements in wording are possible, these should be made, but similar wording should be used wherever possible in order to make significant differences in substance of the methods more readily evident and to show the similarity of like portions of the methods. Examples of preferred wordings are as follows:

(1) Say "dropwise" instead of "drop by drop."

(2) Use "persistent" rather than "permanent" in referring to the color of a solution, as in the case of a "persistent blue color" where starch is used as an indicator.

(3) Use the terms "fine," "me-

RECOMMENDATIONS ON FORM OF ASTM METHODS

dium," and "coarse" to describe the porosity of filter paper. Describe size, quality, and porosity in that order, as in the case of a "9-cm, low-ash, medium paper." Avoid the use of trade names, using catalog descriptions only, unless a specific manufacturer's product is required for a well-defined reason. In this case, use a superior number to refer to a footnote giving the required information, incorporating the phrase, "has been found satisfactory for this purpose." Where appropriate, reference may be made to the Specifications for Filter Paper for Use in Chemical Analysis (ASTM Designation: D 1100).⁴

(4) Say "filter through a fine paper" when only the filtrate is to be used, but "filter using a fine paper" when the precipitate is to be used.

(5) In general, do not use "approximately" in stating the concentrations of reagents. State the nominal concentration, as in "standard KMnO₄ solution (0.005 N)." The precision of the statement will depend on the manner in which the solution is prepared and where necessary, standardized.

(6) Avoid use of the abbreviation "l" for liter.

Abbreviations

A14. (a) Terms that are *infrequently used* will, in general, not be abbreviated. The official abbreviations of many terms that frequently appear in the text of Society publications follow. See also Sections A3 and A9.

Absolute	abs
Alternating current	ac
(as adjective)	a-c
American wire gage	Awg
Ampere	amp
Ampere-hour	amp-hr
Ångström unit	Å
Ante meridiem	am
Atmospheres	atmos
Average	avg
Barrel	bbl
Barometric pressure in millimeters of mercury	mm Hg
Birmingham wire gage	Bwg

Brake horsepower	bhp
British thermal unit	Btu
Brown and Sharpe (gage)	B & S
Calorie	cal
Centigrade ¹² (Celsius)	C and Cent
Centigram	cg
Centiliter	cl
Centimeter	cm
Centipoise	cp
Centistoke	cs
Chemically pure (use discouraged)	CP
Circular mils	cir mils
Cubic	cu
Cubic centimeter ¹³ (volume)	cu cm
Curie	c
Cycles per minute	cpm
Cycles per second	cps
Day	spell out
Decigram	dg
Deciliter	dl
Decimeter	dm
Degree ¹²	deg
Diameter	diam
Direct current	dc
(as adjective)	d-c
Effective horsepower	ehp
Electromotive force	emf
Electron volt	ev
Equation	Eq
Fahrenheit ¹²	F and Fahr
Figure	Fig.
Foot	ft
Foot-pound	ft-lb
Gallon	gal
Grain	spell out
Gram	g
Gravity	g
Henry	h
Horsepower	hp
Horsepower-hour	hp-hr
Hour	hr
Hydrogen ion concentration	pH
Inch	in.
Inch-pound	in-lb
Indicated horsepower	ihp
Inside diameter	ID
K-alpha radiation	K α
Kelvin ¹² (deg Cent absolute)	K and Kelvin
Kilocycle	kc
Kilogram	kg
Kilogram-calorie	kg-cal
Kilogram-meter	kg-m
Kiloliter	kl

¹² In the interest of simplicity and clarity the abbreviation for the temperature scale F, C, or K shall always be included in expressions for numerical temperatures but the abbreviation or symbol for "degree" shall be omitted: as 69 F. In a table heading, use "Temperature, deg Fahr" or "deg Cent," or "deg Kelvin."

Use the degree sign for °API, and °Baumé gravity, and for indicating angles on drawings.

¹³ Use the abbreviation cu cm rather than cc as the unit of capacity. Use ml for milliliter as the unit of volume.

Case 1:13-cv-01215-TSC Document 155-7 Filed 01/21/16 Page 69 of 895

EXHIBIT 5

Case 1:13-cv-01215-TSC Document 155-7 Filed 01/21/16 Page 70 of 895

ASTM Staff

President's Office
HR/Benefits
Editorial
TCO
IT Services
Site Map

Search
Reports
Requests
Logout

Draft Document Data

DTN: 02D081143-01 **Jurisdiction:** D020800 **Status:** APPROVED **Work Item:** WK12518
Entered Date: 01/15/2007 **Initial Date:** 09/14/2006
Comment:

Technical Contact Information:
Account: 000109656 **Full Name:** Collier, Michael A **Phone:** 8154580216
Email: michael.collier@paclp.com

Action: 2 REVISION **Dependency:** **Dependency Status:**
Designation Nr: D0086-2015 **Category:** STANDARD **Draft Title Change:** No
Title: 02 Test Method For Distillation of Petroleum Products and Liquid Fuels at Atmospheric Pressure
Des Replacement:

Reference Item	Ballot(SN Review)	Item	CCParagraph	Status	Neg	Resolved	Approved
006	D0208000206	006	REVISION OF 12.3.2 REPORT TO NEAREST ONE TENTH	PASSED		10/19/2006	
	D020806(SN1206)		REVISION OF 12.3.2 REPORT TO NEAREST ONE TENTH	PASSED	Y	03/12/2007	
	COS0307	007		APPROVED		04/02/2007	04/01/2007

Case 1:13-cv-01215-TSC Document 155-7 Filed 01/21/16 Page 71 of 895

EXHIBIT 6

Case 1:13-cv-01215-TSC Document 155-7 Filed 01/21/16 Page 72 of 895

Draft Document Data

DTN: 02DE00944-10	Jurisdiction: D02E000	Status: APPROVED	Work Item: WK7467
Entered Date: 05/01/2007	Initial Date: 05/02/2007		
Comment:			

Technical Contact Information:		
Account: 000109531	Full Name: Chandler, John E	Phone: 7323434609
Email: waxcrystal@gmail.com		

Action: 2 REVISION	Dependency:	Dependency Status:
Designation Nr: D0975-2015C	Category: STANDARD	Draft Title Change: No
Title: 01 Specification For Diesel Fuel Oils		
Des Replacement:		

Reference Item	Ballot(SN Review)	Item	CCParagraph	Status	Neg	Resolved	Approved
010	D020207	010	C	PASSED		07/06/2007	
	D020207(SN0607)		TO INCLUDE SIMULTED DISTILLATION FOR S15	APPROVED		07/06/2007	07/15/2007

Case 1:13-cv-01215-TSC Document 155-7 Filed 01/21/16 Page 73 of 895

EXHIBIT 7

Case 1:13-cv-01215-TSC Document 155-7 Filed 01/21/16 Page 74 of 895



ASTM Staff

President's Office | HR/Benefits | Editorial | TCO | IT Services | Site Map

Search | Reports | Requests | Logout

Draft Document Data

DTN: 02DE00846-00 **Jurisdiction:** D02E000 **Status:** APPROVED **Work Item:**

Entered Date: 01/26/1998 **Initial Date:** 02/03/1998

Comment:

Technical Contact Information:

Account: 000109531 **Full Name:** Chandler, John E **Phone:** 7323434609

Email: waxcrystal@gmail.com

Action: 2 REVISION **Dependency:** **Dependency Status:**

Designation Nr: D0396-2015C **Category:** STANDARD **Draft Title Change:** No

Title: 01 Specification For Fuel Oils

Des Replacement:

Reference Item	Ballot(SN Review)	Item	CCParagraph	Status	Neg	Resolved	Approved
014	D020198(SN0398)	014	ADD ENTRIES TO SECTION 2	APPROVED			04/10/1998
015	D020198(SN0398)	015	ADD SECTION 2.2	APPROVED			04/10/1998

Case 1:13-cv-01215-TSC Document 155-7 Filed 01/21/16 Page 75 of 895

EXHIBIT 8

Case 1:13-cv-01215-TSC Document 155-7 Filed 01/21/16 Page 76 of 895

Draft Document Data

DTN: 02D041004-00	Jurisdiction: D02040D	Status: APPROVED	Work Item:
Entered Date: 01/26/1998	Initial Date: 02/03/1998		
Comment:			

Technical Contact Information:		
Account: 000107860	Full Name: King, Jimmy L	Phone: 5046563431
Email: jlking@conocophillips.com		

Action: 5 REAPPROVAL	Dependency:	Dependency Status:
Designation Nr: D1217-2015	Category: STANDARD	Draft Title Change: No
Title: 00 Test Method for Density and Relative Density (Specific Gravity) of Liquids by Bingham Pycnometer		
Des Replacement:		

Reference Item	Ballot(SN Review)	Item	CCParagraph	Status	Neg	Resolved	Approved
039	D020198(SN0398)	039		APPROVED			04/10/1998

MATERIAL UNDER SEAL DELETED

JA03925-JA03929

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

AMERICAN SOCIETY FOR TESTING AND
MATERIALS d/b/a ASTM INTERNATIONAL;

NATIONAL FIRE PROTECTION
ASSOCIATION, INC.; and

AMERICAN SOCIETY OF HEATING,
REFRIGERATING, AND AIR CONDITIONING
ENGINEERS,

Plaintiffs-Counterdefendants,

v.

PUBLIC.RESOURCE.ORG, INC.,

Defendant-Counterclaimant.

Case No. 1:13-cv-01215-TSC-DAR

**DECLARATION OF MATTHEW
BECKER IN SUPPORT OF
DEFENDANT-COUNTERCLAIMANT
PUBLIC.RESOURCE.ORG, INC.'S
REPLY MEMORANDUM IN SUPPORT
OF ITS MOTION FOR SUMMARY
JUDGMENT**

Action Filed: August 6, 2013

REDACTED VERSION SOUGHT TO BE FILED UNDER SEAL

I, Matthew Becker, declare pursuant to 28 U.S.C. § 1746 as follows:

1. I am an attorney admitted to practice in the District of Columbia and am an associate with the law firm of Fenwick & West LLP, counsel of record for Defendant/Counterclaimant Plaintiff Public.Resource.Org, Inc. Except where otherwise indicated, I have personal knowledge of the facts herein and could and would testify competently hereto.

2. Attached to Public Resource's Index of Consolidated Exhibits as **Exhibit 1** is a true and correct copy of excerpts of John Jarosz's deposition, Plaintiffs' designated expert witness, dated August 27, 2015.

3. Attached to Public Resource's Index of Consolidated Exhibits as **Exhibit 2** is a

true and correct copy of excerpts of Steven Comstock's deposition, as the corporate designee for ASHRAE, dated March 5, 2015.

4. Attached to Public Resource's Index of Consolidated Exhibits as **Exhibit 3** is a true and correct copy of excerpts of Donald Bliss's deposition, as the corporate designee for NFPA, dated March 3, 2015.

5. Attached to Public Resource's Index of Consolidated Exhibits as **Exhibit 4** is a true and correct copy of excerpts of **Daniel Smith's deposition**, as the corporate designee of ASTM, dated July 24, 2015.

6. I requested that the Clerk of the Court of Appeals for the Fifth Circuit send me copies of the *amicus curiae* briefs filed in the case of *Veeck v. Southern Building Code Congress International, Inc.*, No. 99-40632. Attached to Public Resource's Index of Consolidated Exhibits as **Exhibit 5** is a true and correct copy of the Brief of Amicus Curiae States of Ohio and Ten Other States and Territories Supporting Appellant Veeck Upon Rehearing En Banc, which I received in response to that request.

7. I requested that the Clerk of the Court of Appeals for the Fifth Circuit send me copies of the *amicus curiae* briefs filed in the case of *Veeck v. Southern Building Code Congress International, Inc.*, No. 99-40632. Attached to Public Resource's Index of Consolidated Exhibits as **Exhibit 6** is a true and correct copy of the Brief of Amicus Curiae ASTM International in Support of Petition for a Writ of Certiorari, which I received in response to that request.

8. [REDACTED]

9. Attached to Public Resource's Index of Consolidated Exhibits as **Exhibit 8** is a true and correct copy of a printout of the webpage *Membership Types and Benefits*, ASTM.org (accessed Feb. 4, 2016), <http://www.astm.org/MEMBERSHIP/MemTypes.htm>.

10. Attached to Public Resource's Index of Consolidated Exhibits as **Exhibit 9** is a true and correct copy of a printout of the webpage *FAQs*, NFPA.org (accessed Feb. 4, 2016), <http://www.nfpa.org/about-nfpa/international/faqs>.

11. [REDACTED]

12. [REDACTED]

13. I requested that the Clerk of the Court of Appeals for the Fifth Circuit send me copies of the *amicus curiae* briefs filed in the case of *Veeck v. Southern Building Code Congress International, Inc.*, No. 99-40632. Attached to Public Resource's Index of Consolidated Exhibits as **Exhibit 17** is a true and correct copy of the Brief of Amicus Curiae Texas Municipal League, American National Standards Institute, National Fire Protection Association, American Society of Heating, Refrigerating, and Air-Conditioning Engineers, et al. in Support of Petition for a Writ of Certiorari, which I received in response to that request.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 4th day of February, 2016 at San Francisco, CA.

/s/ Matthew Becker
Matthew Becker

Case 1:13-cv-01215-TSC Document 164-3 Filed 02/05/16 Page 1 of 7

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

AMERICAN SOCIETY FOR TESTING AND
MATERIALS d/b/a ASTM INTERNATIONAL;

NATIONAL FIRE PROTECTION
ASSOCIATION, INC.; and

AMERICAN SOCIETY OF HEATING,
REFRIGERATING, AND AIR CONDITIONING
ENGINEERS,

Plaintiffs/Counter-defendants,

v.

PUBLIC.RESOURCE.ORG, INC.,

Defendant/Counterclaimant.

Case No. 1:13-cv-01215-TSC-DAR

**SUPPLEMENTAL STATEMENT OF
UNDISPUTED MATERIAL FACTS
IN SUPPORT OF DEFENDANT-
COUNTERCLAIMANT PUBLIC.
RESOURCE.ORG, INC.'S MOTION
FOR SUMMARY JUDGMENT**

Action Filed: August 6, 2013

REDACTED VERSION SOUGHT TO BE FILED UNDER SEAL

GLOSSARY OF CITATIONS

Short Form Citation	Document Title
M. Becker Supp. Decl.	Supplemental Declaration of Matthew Becker in support of Defendant-Counterclaimant’s Reply to Motion for Summary Judgment
Supp. Decl. of Carl Malamud	Supplemental Declaration of Carl Malamud in support of Defendant-Counterclaimant’s Motion for Summary Judgment
Opp.	Plaintiffs Opposition to Defendant’s Motion for Summary Judgment and Reply Memorandum of Law in support of Their Motion for Summary Judgment and for a Permanent Injunction, ECF No. 155
SRJN	Supplemental Request for Judicial Notice in further support of Defendant-Counterclaimant Public.Resource.Org, Inc.’s Motion for Summary Judgment
Bliss Dep.	Videotaped 30(b)(6) deposition of National Fire Protection Association, Inc. through Donald P. Bliss, March 3, 2015
Comstock Dep.	Videotaped 30(b)(6) deposition of American Society of Heating, Refrigerating, and Air Conditioning Engineers through Steven Comstock, March 5, 2015
Smith Dep.	Videotaped 30(b)(6) deposition of American Society for Testing & Materials, through Daniel Smith, July 24, 2015

Pursuant to Local Rule 7(h), Defendant Public.Resource.Org (“Public Resource”) contends that there are no genuine disputes as to the following facts. Each of the following facts supports Public Resource’s Motion for Summary Judgment:

1. Eleven states and United States territories jointly filed an amicus brief in support of Peter Veeck in the case *Veeck v. S. Bldg. Code Cong. Int’l, Inc.*, 293 F.3d 791, 801 (5th Cir. 2002), in which they asserted that “[c]opyright, while permitted by the Constitution, is at base only a statutory right On the other hand, due process is a constitutional right of the first order.” M. Becker Supp. Decl. ¶ 6, Ex. 5 at 4.
2. ASHRAE standards take the form of specific requirements that “provide methods of testing equipment so that equipment can be measured [and] compared with similar levels of performance.” M. Becker Supp. Decl. ¶ 3, Ex. 2 (Comstock Dep. 96:01–22).
3. ASTM standards are “[s]pecifications, test methods, practices, guides, classifications and terminology.” ECF No. 122-2 (Smith Dep. 14:22–15:18).
4. An NFPA standard provides a consistent process for fire investigation. M. Becker Supp. Decl. ¶ 4, Ex. 3 (Bliss Dep. 106:09–24).
5. After the *Veeck* decision, ASTM International and many other SDOs filed briefs seeking Supreme Court review. In those briefs, they insisted, at length, that if that decision stood it would destroy the standards development process. (M. Becker Supp. Decl. ¶¶ 7, 13, Exs. 6, 17).
6. The Internet is fast becoming the primary means of obtaining information about government operations and policies. *See* U.S. Department of Justice, Civil Rights Division, “Accessibility of State and Local Government Websites to People with Disabilities,” <http://www.ada.gov/websites2.htm>. Accessibility best practices follow the principle of universal

design, which states that the best accommodations for people with disabilities are those that benefit everyone:

When accessible features are built into web pages, websites are more convenient and more available to everyone—including users with disabilities. Web designers can follow techniques developed by private and government organizations to make even complex web pages usable by everyone including people with disabilities.

Id.

7. A special commission of the Department of Education concluded in the field of accessibility for higher education that requiring people with disabilities to use special accommodations from the providers of instructional material is disfavored. “Rather, the ideal is for . . . instructional materials to be available in accessible forms in the same manner that and at the same time as traditional materials.” Advisory Commission on Accessible Instructional Materials, Report of the Advisory Commission on Accessible Instructional Materials in Postsecondary Education for Students with Disabilities at 49 (December 6, 2011), <http://www2.ed.gov/about/bdscomm/list/aim/meeting/aim-report.pdf>. The Chafee Amendment, codified at 17 U.S.C. § 121, has never been the Copyright Act’s sole means of promoting accessibility, and federal officials now consider it outdated and in need of reform. *See id.* at 43-44.

8. Public Resource first posted the 2008 National Electric Code on its website in 2008. Supp. Decl. of Carl Malamud ¶¶ 5–7.

9. Courts regularly purchase bound volumes and electronic access to statutes and case law. SRJN ¶ 5.

10. ASTM now admits that it only started asking for copyright assignments in 2005, Opp. at 32, which is years after 226 of the 229 ASTM standards at issue had been developed. *See*

ECF No. 1-1 (Complaint Exhibit A, listing ASTM standards at issue and their date of publication).

11. ASTM's Rule 30(b)(6) representative on the subject of copyright ownership and assignment claimed that he was told that an unidentified ASTM employee consulted with an unnamed individual at the Copyright Office at some unknown date before 1980, and that unidentified ASTM employee was told by the individual at the Copyright Office to list ASTM as the sole author on its copyright registration applications. The Rule 30(b)(6) representative stated that there was no record of this alleged communication with an individual from the Copyright Office, nor does ASTM have any documentation memorializing or evidencing that this communication occurred. M. Becker Supp. Decl. ¶ 5, Ex. 4 (Smith Dep. 125:06–135:14).

12. A “reapproval” of an ASTM standard means that an older standard is re-evaluated and republished without any changes to its content. M. Becker Supp. Decl. ¶ 5, Ex. 4 (Smith Dep. 151:01–152:02).

13. Michael Collier was not an individual member of ASTM; he represented his employer Petroleum Analyzer Co. LP, which had an organizational membership. *See* M. Becker Supp. Decl. ¶ 8, Ex. 7 [REDACTED]

[REDACTED] Exhibit 5 to the O'Brien Supplemental Declaration (ECF No. 155-7) (listing a work email address for Michael Collier at Petroleum Analyzer Co. LP); Exhibit 10 to the O'Brien Supplemental Declaration, p. 4 (ECF No. 155-7) (listing Michael Collier as having registered with ASTM through an organizational membership, as opposed to an individual membership); *see also Membership Types and Benefits*, ASTM.org (accessed Feb. 4, 2016), <http://www.astm.org/MEMBERSHIP/MemTypes.htm> (describing that ASTM organizational memberships cost \$400 and are intended for

organizations, allowing transferable membership between individuals within that organization, in contrast to individual membership which is intended for individuals, costs \$75, and is not transferable) M. Becker Supp. Decl. ¶ 9, Ex. 8.

14. NFPA states that “[m]embership is issued to individuals on behalf of their company or organization.” *FAQs*, NFPA.org (accessed Feb. 4, 2016), <http://www.nfpa.org/about-nfpa/international/faqs>. M. Becker Supp. Decl. ¶ 10, Ex. 9.

15. The annual revenue from all editions of ASHRAE 90.1 combined account for only a minority of ASHRAE’s annual revenue from the sale of standards. M. Becker Supp. Decl. ¶ 11, Ex. 10.

16. ASHRAE’s revenue from the combined sale of all ASHRAE standards accounts for only a minority of ASHRAE’s annual revenue. This is evident because “ASHRAE’s revenue stream is well diversified with standards accounting for about 8%.” M. Becker Supp. Decl. ¶ 12, Ex. 11.

Dated: February 4, 2016

Respectfully submitted,

/s/ Andrew P. Bridges

Andrew P. Bridges (admitted)

abridges@fenwick.com

Sebastian E. Kaplan (*pro hac vice* pending)

skaplan@fenwick.com

Matthew Becker (admitted)

mbecker@fenwick.com

FENWICK & WEST LLP

555 California Street, 12th Floor

San Francisco, CA 94104

Telephone: (415) 875-2300

Facsimile: (415) 281-1350

Corynne McSherry (admitted *pro hac vice*)

corynne@eff.org

Mitchell L. Stoltz (D.C. Bar No. 978149)

mitch@eff.org

ELECTRONIC FRONTIER FOUNDATION

815 Eddy Street

San Francisco, CA 94109

Telephone: (415) 436-9333

Facsimile: (415) 436-9993

David Halperin (D.C. Bar No. 426078)

davidhalperindc@gmail.com

1530 P Street NW

Washington, DC 20005

Telephone: (202) 905-3434

Attorneys for Defendant-Counterclaimant

Public.Resource.Org, Inc.

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

AMERICAN SOCIETY FOR TESTING AND
MATERIALS d/b/a ASTM INTERNATIONAL;

NATIONAL FIRE PROTECTION
ASSOCIATION, INC.; and

AMERICAN SOCIETY OF HEATING,
REFRIGERATING, AND AIR
CONDITIONING ENGINEERS,

Plaintiffs-Counterdefendants,

v.

PUBLIC.RESOURCE.ORG, INC.,

Defendant-Counterclaimant.

Case No. 1:13-cv-01215-TSC-DAR

Action Filed: August 6, 2013

**SUPPLEMENTAL DECLARATION OF CARL MALAMUD IN FURTHER SUPPORT
OF DEFENDANT’S MOTION FOR SUMMARY JUDGMENT**

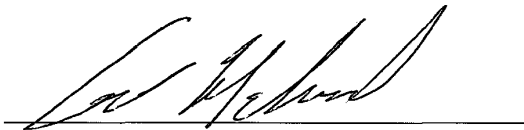
I, Carl Malamud, declare as follows:

1. I am over the age of 18 years and am fully competent to testify to the matters stated in this declaration.
2. This declaration is based on my personal knowledge. If called to do so, I would and could testify to the matters stated herein.
3. I am the President and sole employee of Public.Resource.Org, Inc. (“Public Resource”), which is a 501(c)(3) non-profit corporation headquartered in Sebastopol, California. I have worked at Public Resource since I founded the organization in 2007. It is my only source of employment.

4. Public Resource does not charge for access to the archive of laws and other government authored materials on the domains under the public.resource.org website.
5. In August of 2008, I posted the Alabama Electrical Code, Arkansas Electrical Code, Idaho Electrical Code, Minnesota Electrical Code, North Carolina Electrical Code, North Dakota Electrical Code, New Hampshire Electrical Code, Rhode Island Electrical Code, South Dakota Electrical Code, Utah Electrical Code, and Wyoming Electrical Code to the website law.resource.org.
6. Each of these codes contains the unmodified text of the 2008 National Electrical Code.
7. For instance, the Alabama Electrical Code, Alabama Building Commission Administrative Code chapter 170-X-2, consists of the complete, unmodified 2008 National Electrical Code with five pages of Alabama-specific material placed at the front of the document. Attached to Public Resource's Index of Consolidated Exhibits as **Exhibit 16** is a true and correct copy of the first 34 pages of the Alabama Electrical Code that I posted on the Public Resource website in August of 2008. Because the entire document is over 800 pages I have not included it in its entirety, and Public Resource will have the entire document available at the hearing on Public Resource's Motion for Summary Judgment and requests permission to lodge it or file it formally at the hearing, instead of putting such a large document on PACER. The full document will be made available for Plaintiffs to inspect at their request.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Executed this 4th day of February, 2016 at Sebastopol, California.



Carl Malamud

Case 1:13-cv-01215-TSC Document 164-13 Filed 02/05/16 Page 1 of 45

EXHIBIT 5

Case 1:13-cv-01215-TSC Document 164-13 Filed 02/05/16 Page 2 of 45

Do Not Remove
From Record Room

EN BANC
No. 99-40632

99-40632

PERMANENT IN THE
UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT

PETER VEECK, doing business as RegionalWeb,
Appellant,

v.

SOUTHERN BUILDING CODE CONGRESS INTERNATIONAL INC.,
Appellee.

Appeal from the United States District Court
For the Eastern District of Texas
Honorable David Folsom

**BRIEF OF AMICUS CURIAE STATES OF OHIO AND
TEN OTHER STATES AND TERRITORIES SUPPORTING
APPELLANT VEECK UPON REHEARING EN BANC**

U.S. COURT OF APPEALS
FILED
NOV 13 2001
CHARLES R. FULBRUGE III
CLERK

BETTY D. MONTGOMERY
Attorney General of Ohio

ELISE W. PORTER
MARTIN D. SUSEC
Assistant Attorneys General
Chief Counsel's Staff
30 East Broad Street, 17th Fl.
Columbus, OH 43215-3428
(614) 466-2872
(614) 728-7592 FAX
Attorneys for *Amici* States

LIST OF ATTORNEYS GENERAL SIGNING ON TO THIS BRIEF

BRUCE M. BOTELHO
Attorney General
State of Alaska

ANABELLE RODRIGUEZ
Attorney General
Commonwealth of Puerto Rico

ROBERT A. BUTTERWORTH
Attorney General
State of Florida

PAUL SUMMERS
Attorney General
State of Tennessee

CARLA J. STOVALL
Attorney General
State of Kansas

JOHN CORNYN
Attorney General
State of Texas

MIKE HATCH
Attorney General
State of Minnesota

MARK SHURTLEFF
Attorney General
State of Utah

MIKE MCGRATH
Attorney General
State of Montana

DARRELL V. MCGRAW, JR.
Attorney General
State of West Virginia

STATEMENT REGARDING ORAL ARGUMENT

Amici State of Ohio and ten other States and territories have moved the Court for 10 additional minutes of argument time. In the alternative, the States have requested to share 10 minutes of the time already reserved for the parties. The *amici* States have not received any opposition to this request.

TABLE OF CONTENTS

	Page
STATEMENT REGARDING ORAL ARGUMENT.....	i
TABLE OF AUTHORITIES.....	iv
INTEREST OF THE AMICI	1
INTRODUCTION AND SUMMARY OF ARGUMENT.....	2
STATEMENT OF THE FACTS AND OF THE CASE	7
LAW AND ARGUMENT	10
A. The Dictates of Due Process Are Inconsistent With a Private Party Holding a Copyright in the Text of a Law.	10
1. Due Process Requires That the Text of the Law be Freely Available to All Citizens.	10
2. The Complete Monopoly of Access Makes a Copyright in the Text of a Law Incompatible with Due Process.	14
3. The Primary Purpose of Copyright Law is not to Provide a Benefit to Authors, But to Provide the Public With Access to Authors' Works.	16
4. The Constitutional Due Process Rights of Citizens Far Outweigh any Public Interests in Copyright.....	18
B. A Long-Standing Body of Case Law Supports the Incompatibility of Copyright In, and Access To, the Text of the Law.	20
1. The Supreme Court and Other Courts Have Consistently Held that There Can Be No Copyright in the Text of Judicial and Statutory Law.	20

	Page
2. The Text of the Law is Public Because of its Nature as the Law, Not Because of the Nature or Employment of the Author.....	24
3. Cases Cited by SBCCI Are Easily Distinguishable and To the Extent They Are Not, Should Be Disregarded.....	27
C. SBCCI and Similar Organizations Have Waived any Copyright by Actively Lobbying Government to Adopt Their Codes.....	31
CONCLUSION	32
CERTIFICATE OF SERVICE.....	33
CERTIFICATE OF COMPLIANCE	35

TABLE OF AUTHORITIES

	Pages
Cases	
<i>Anderson National Bank v. Lockett</i> , 321 U.S. 233 (1944).....	12
<i>Banks v. Manchester</i> , 128 U.S. 244 (1888).....	4, 21, 24
<i>Building Officials Code Adm. v. Code Technology, Inc.</i> , 628 F.2d 730 (1 st Cir. 1980).....	passim
<i>Callaghan v. Myers</i> , 128 U.S. 547 (1888).....	4, 5, 21, 24
<i>CCC Information Services, Inc. v. Maclean Hunter Market Reports</i> , 44 F.3d 61 (2 nd Cir. 1994).....	passim
<i>Chicago v. Morales</i> , 527 U.S. 41 (1999).....	11
<i>Chrysler Corp. v. Brown</i> , 441 U.S. 281 (1979).....	12
<i>Connecticut v. Gould</i> , 34 F. 319 (N.D. N.Y. 1888).....	22, 24
<i>County of Suffolk New York v. First American Real Estate Solutions</i> , 261 F. 179, 2001 U.S. App. LEXIS 16706 (2 nd Cir. 2001) 5, 25, 29	
<i>Davidson v. Wheelock</i> , 27 F. 61 (D. Minn. 1866)	21
<i>Du Puy v. Post Telegram Co.</i> , 210 F. 883 (3 rd Cir. 1914)	25

	Pages
<i>Feist Publications, Inc. v. Rural Telephone Service, Co.</i> , 499 U.S. 340 (1991).....	26
<i>Fox Film Corp. v. Doyal</i> , 286 U.S. 123 (1932).....	2, 14, 17
<i>Gen. Elec. v. EPA</i> , 53 F.3d 1324 (D.C. Cir 1995).....	11
<i>Giaccio v. Pennsylvania</i> , 382 U.S. 399 (1966).....	10, 11
<i>Gould v. Banks</i> , 53 Conn. 415 (1886).....	22
<i>Hildreth v. Iowa Dep't of Human Servs.</i> , 550 N.W.2d 157 (Iowa 1996).....	12
<i>Howell v. Miller</i> , 91 F. 129 (6 th Cir. 1898)	22
<i>Lambert v. California</i> , 355 U.S. 225 (1957).....	13
<i>McBoyle v. United States</i> , 283 U.S. 25 (1931).....	11
<i>Nash v. Lathrop</i> , 142 Mass. 29 (1886)	22
<i>North Laramie Land Co. v. Hoffman</i> , 268 U.S. 276 (1925).....	12
<i>Practice Management Information Corporation v.</i> <i>American Medical Association</i> , 121 F.3d 516 (9 th Cir. 1997)	6, 28, 30, 31

	Pages
<i>Schnapper Public Affairs Press v. Foley</i> , 667 F.2d 102 (D.C. Cir. 1981).....	25
<i>Sims v. Heckler</i> , 725 F.2d 1143 (7th Cir.1984)	12
<i>Sony Corp. of America v. Universal City Studios, Inc.</i> , 464 U.S. 417 (1984).....	16, 17
<i>Texaco, Inc. v. Short</i> , 454 U.S. 516 (1982).....	12
<i>Twentieth Century Music Corp. v. Aiken</i> , 422 U.S. 151 (1975).....	17
<i>United States v. Jefferson County Board of Education</i> , 380 F.2d 385 (5 th Cir. 1967)	3, 15
<i>United States v. One 1973 Rolls Royce</i> , 43 F.3d 794 (3d Cir. 1994).....	11
<i>United States v. Paramount Pictures, Inc.</i> , 334 U.S. 131 (1948).....	4, 17
<i>Wheaton v. Peters</i> , 33 U.S. (8 Peters) 591 (1834)	4, 20
 Other Authorities	
1 <i>Nimmer on Copyright</i> , Mathew Bender & Company, Inc., § 5.06[C].....	18, 19, 28
Anna, Tex., Ordinance No. 95-15 (Oct. 10, 1995)	7
§ 206.1 Compendium of Copyright Office Practices, Copyright Office (1984).....	16

	Pages
H.R. Rep. No 2222, 60 th Cong. 2d Sess., 7 (1909)	17
Perritt, Sources and Rights to Access Public Information, 4 <i>Wm & Mary Bill of Rts. J.</i> 179 (1995)	26
Suetonius, <i>The Lives of the Twelve Caesars</i> , 192 Random House, 1959.	3, 16
U.S. Const. Art. I, § 8	16

INTEREST OF THE AMICI

Amici State of Ohio and ten other States and Territories have a vital interest in the principles at stake in this case. Governments have an imperative obligation to make laws openly available to the public. Governments regulate their citizens through administrative and municipal law in a myriad of areas. Such laws can include both civil and criminal penalties. The *amici* States, through their legislative and administrative systems, have incorporated into law model codes such as the one at issue here. Because administrative regulations have “the force and effect of law,” States and local governments have a duty under the Due Process Clause of the United States Constitution—as well as under provisions in their own public records laws and state constitutions—to provide the public unimpeded access to the text of those regulations.

In addition, the States’ unique perspective is particularly important in this case, as the parties to this case are both private entities. The outcome of this case will substantially affect the ability of the States to provide unfettered access to their laws. The *amici* States therefore submit this brief to help the Court in understanding the viewpoint of State and local governments, and to

urge the Court to reverse the district court's judgment and hold that no entity, public or private, can hold a copyright in the text of the law.

INTRODUCTION AND SUMMARY OF ARGUMENT

One of the cornerstones of due process is notice—a citizen must be aware of what the law is before he can be deprived of life, liberty or property for failing to follow it. A statute, administrative rule or municipal ordinance—like any other law—has the potential to deprive a citizen of a liberty or property right, so the law must be sufficiently clear to give the citizen reasonable notice of what is required or prohibited.

In contrast, one of the cornerstones of the copyright law is that the holder of a copyright “has the right to refuse to publish the copyrighted material at all and may prevent anyone else from doing so, thereby preventing any public access to the material.” *Fox Film Corp. v. Doyal*, 286 U.S. 123 (1932).

The complete monopoly in the author of copyright works is incompatible with the due process requirements inherent in the text of a law. If the right to withhold access to a law is exercised, citizens risk being punished for failure to follow an unavailable law

and the government is unable to discharge its duty towards those citizens to make the law available.

In this case, the Appellee, is a not-for-profit service organization, Southern Building Code Congress International, Inc. (“SBCCI”), whose voting members are local governments. SBCCI successfully lobbied the towns of Savoy and Anna, Texas, to use its model building codes as the building codes for those municipalities. Appellant Peter Veeck wants to post local laws, including the building codes of Anna and Savoy, on his website but SBCCI has insisted that it has a copyright and thus a strict monopoly on copies of the text of the building codes.

Thus, like Caligula’s tax laws, Anna and Savoy’s building codes are, at best, “posted up, but in a very narrow place and in excessively small letters, to prevent the making of a copy.” *United States v. Jefferson County Board of Education*, 380 F.2d 385, 410-11 (5th Cir. 1967), citing Suetonius, *The Lives of the Twelve Caesars*, 192 Random House, 1959.

But the scope of a copyright owner’s right is not unlimited. Indeed, the private reward to the owner of a copyright is “a secondary consideration” to the ultimate aim of the copyright law—

the public benefit. *United States v. Paramount Pictures, Inc.*, 334 U.S. 131, 158 (1948).

The panel majority incorrectly found that due process rights of citizens in the text of the law are outweighed by SBCCI's copyright interest. Notwithstanding the opinion of the panel majority, the *amici* States contend that the rights of a copyright owner can never outweigh the due process rights of the citizens to freely read and copy the text of a law. Copyright, while authorized by the Constitution, is essentially a statutory right. On the other hand, due process is a constitutional right of the first order.

The incompatibility of copyright and due process in this context, and the idea that the law is in the public domain, is well-established in case law. *See, e.g., Wheaton v. Peters*, 33 U.S. (8 Peters) 591 (1834); *Banks v. Manchester*, 128 U.S. 244 (1888); *Callaghan v. Myers*, 128 U.S. 547, 645 (1888).

In modern times, this reasoning has been followed by the First Circuit in *Building Officials Code Adm. v. Code Technology, Inc.*, 628 F.2d 730, 734-35 (1st Cir. 1980) ("*BOCA*"). The plaintiff in that case, another code-writing organization, claimed copyright protection in its model building code, which, like SBCCI, it encouraged

governments to adopt through a licensing program. The First Circuit was not persuaded by BOCA's reasoning that the law is public only when a public officer is its author.

The text of the law is public not because the public pays the salaries of the authors, but because of its nature as the law. See *Callaghan* (reporter may hold copyright in the title page, table of cases, headnotes, arguments of counsel and index, even though he was a public official, paid from the public treasury), 128 U.S. at 645-50.

The recent case *County of Suffolk New York v. First American Real Estate Solutions*, 261 F. 179, 2001 U.S. App. LEXIS 16706 (2nd Cir. 2001) supports this contention. The *Suffolk* court set forth a test for when a work may be deemed to be in the public domain:

- (1) whether the entity or individual who created the work needs an economic incentive to create or has a proprietary interest in creating the work and (2) whether the public needs notice of this particular work to have notice of the law.

Under the second prong of the *Suffolk* test, due process dictates that SBCCI cannot maintain its copyright. But even under the first prong, there is no need for an economic incentive. SBCCI's primary purpose is to create model codes and have them adopted by

government bodies, not to make money by selling books. Even more important, state and local governments have a duty to create building codes, regardless of the existence of SBCCI and its model code.

The cases cited by SBCCI are easily distinguishable, and to the extent that they are not, *amici* States submit that they are wrongly decided and should not be followed. Both *CCC Information Services, Inc v. Maclean Hunter Market Reports*, 44 F.3d 61 (2nd Cir. 1994); and *Practice Management Information Corporation v. American Medical Association*, 121 F.3d 516 (9th Cir. 1997), can be distinguished from this case and *BOCA* because in both cases, the work was produced by a private entity for a reason other than incorporation into the law. Economic incentives were needed to create the works in those cases, quite apart from their use as standards by the government.

Finally, SBCCI, BOCA and similar not-for-profit organizations have waived their copyright in the text of the law by actively lobbying State and local governments to adopt their model codes. SBCCI cannot have its cake and eat it too—if it lobbies a

government to adopt its codes as the text of the law, it has waived its copyright.

STATEMENT OF THE FACTS AND OF THE CASE

Peter Veeck owns and operates a service, known as “RegionalWeb” which is physically located and operated in Denison, Grayson County, Texas. R. 92, Plaintiff’s Motion for Summary Judgment, p. 4. Veeck’s website provides free access to information by or about the area of Texas north of Dallas, including the area’s codes and ordinances. R. 92, Plaintiff’s Motion for Summary Judgment, p. 4. Two of the local codes published by Veeck on RegionalWeb included the Building Codes of Anna and Savoy, Texas. R. 516, Plaintiff’s First Amended Complaint ¶ III.

The Building Codes of Savoy and Anna, Texas include by reference the 1994 model building code promulgated by Southern Building Code Congress International, Inc. (“SBCCI”). Anna, Tex., Ordinance No. 95-15 (Oct. 10, 1995). Deposition of SBCCI general counsel Brad Ware, p. 31, lines 18-24. SBCCI is not-for-profit organization incorporated under the laws of the State of Alabama. R. 388, Affidavit of Brad Ware. Although SBCCI is a private entity,

SBCCI is itself made up of governmental units or agencies. Voting power for each “active member” is determined by the population the governmental unit or agency serves. See www.SBCCI.org/membershipservices/mbvinfo.htm. SBCCI's purpose is to promote and promulgate standards which safeguard life, health and public welfare for all types of buildings and constructions. R. 388, Affidavit of Brad Ware. In carrying out its purpose, SBCCI develops and maintains a set of model building codes known as the Standard Building Codes (“Codes”). R. 17, Answer ¶ 4. These Codes include a Standard Building Code, a Standard Plumbing Code, a Standard Gas Code, and a Standard Fire Prevention Code. R. 20, Answer ¶ 23. With SBCCI’s express permission, these Codes have been incorporated by reference within the building codes of many municipalities and States across the country. R. 17, Answer ¶ 4.

SBCCI claims a copyright to these Codes, notwithstanding their incorporation into the building codes of many municipalities and States. R. 17, Answer ¶ 4. SBCCI claims that it has the *exclusive right to publish or license the reproduction and publication* of these Codes. R. 17, Answer ¶ 4.

The 1994 model code, incorporated by reference into the municipal codes, was and is only available directly or indirectly through SBCCI in bookstores, through direct sales via telephone, over the Internet, or through SBCCI members. R. 17, Answer ¶ 25. Even copies of the 1994 model act maintained by the local government officials in Savoy, Texas are subject to SBCCI's copyright claims. R. 389, Affidavit of Brad Ware (stating that, "the codes are available for inspection and copying as needed. . . . SBCCI has routinely granted permission for copying of provisions of its code under the fair use doctrine and for non-republishing uses or non-general public distribution uses.").

SBCCI's exclusive control over its Codes generates millions of dollars in revenue from the public, who must obey the laws of the municipalities and States that have incorporated them. The Codes derive their value from their incorporation into the law, not from any other educational or entertainment value. People read them to know the laws they must follow. SBCCI seeks to protect the value that it derives from its exclusive control to the public's access these laws. R. 389, Affidavit of Brad Ware, p. 2.

Veeck filed the underlying declaratory judgment action to clarify the public's right to access municipal building codes that incorporate by reference SBCCI's Codes. SBCCI counterclaimed for copyright infringement.

Veeck argues that SBCCI, by allowing the use of its model codes by municipalities, allowed the codes to become part of the public domain and therefore not subject to copyright protection. Veeck expressed four grounds for finding lack of copyright protection: (1) due process and access to the law, (2) the fact/idea-expression merger, (3) misuse, and (4) waiver. SBCCI argues, in turn, that Veeck has violated the copyrights in its codes.

LAW AND ARGUMENT

A. The Dictates of Due Process Are Inconsistent With a Private Party Holding a Copyright in the Text of a Law.

1. Due Process Requires That the Text of the Law be Freely Available to All Citizens.

One of the cornerstones of due process is notice—a citizen must be aware of what the law is before he can be deprived of life, liberty or property for failing to follow it. *Giaccio v. Pennsylvania*, 382 U.S. 399 (1966). Notice must be given before a criminal or

significant civil or administrative penalty is imposed. *See, e.g.,* *McBoyle v. United States*, 283 U.S. 25 (1931) (criminal sanction); *United States v. One 1973 Rolls Royce*, 43 F.3d 794 (3rd Cir. 1994) (civil forfeiture); *Gen. Elec. v. EPA*, 53 F.3d 1324 (D.C. Cir 1995) (administratively assessed fine).

One of the basic purposes of due process is to protect the citizen against having burdens imposed on him by the government “except in accordance with the valid laws of the land.” *Giaccio*, 382 U.S. at 403. “Implicit in this constitutional safeguard is the premise that the law must be one that carries an understandable meaning” *Id.*

In modern jurisprudence, if a law as written or construed does not give reasonable notice to individuals that their conduct is illegal, such a law may be considered “void for vagueness.” *Id.*, *Chicago v. Morales*, 527 U.S. 41, 56 (1999). The “void for vagueness” doctrine, while normally reserved for criminal statutes, is not constrained by “the simple label a State chooses to fasten” on the law. *Giaccio*, 382 U.S. at 402. “Both liberty and property are specifically protected” by due process. *Id.*

Due process protections are not limited to statutes and judicial opinions, as administrative rules and municipal ordinances have “the force and effect of law.” *Chrysler Corp. v. Brown*, 441 U.S. 281, 295 (1979),¹ *Hildreth v. Iowa Dep’t of Human Servs.*, 550 N.W.2d 157, 160 (Iowa 1996).

Therefore, a statute, administrative rule or municipal ordinance—like any other law—may deprive a citizen of a liberty or property right, and must be sufficiently clear to give the citizen reasonable notice of what is required or prohibited.

Normally, to afford citizens adequate notice of its terms, the government need merely “enact and publish the law.” *Texaco, Inc. v. Short*, 454 U.S. 516, 531-538 (1982). The citizen is “charged with knowledge of relevant statutory provisions affecting the control or disposition” of the citizen’s property. *Texaco*, 454 U.S. at 532. See, also, *North Laramie Land Co. v. Hoffman*, 268 U.S. 276, 283 (1925); *Anderson National Bank v. Lockett*, 321 U.S. 233, 243 (1944).

¹ However, to have such effect the rule must: “(1) affect individual rights and obligations, (2) have been promulgated in compliance with statutory procedures under a delegation of legislative authority, (3) not be arbitrary and capricious, and (4) be reasonably related to the purposes of the enabling legislation.” *Sims v. Heckler*, 725 F.2d 1143 (7th Cir.1984).

However, if the text of the law is unavailable to the citizen, no notice at all has been given—it is the vaguest of vague laws, because the citizen cannot know its content, and may not even know of its existence. See *Lambert v. California*, 355 U.S. 225 (1957) (conviction for failure to exercise a duty is inconsistent with due process where person does not know of the duty). The citizen has no opportunity to determine what behavior is required or expected to comply with such a law.

In short, the government has a positive duty to provide all citizens with unrestricted access to the text of the law, because if “the law is generally available for the public to examine,” the citizens “may be considered to have constructive notice of it,” and any failure to follow it “results from simple lack of diligence.” *Building Officials Code Adm. v. Code Technology, Inc.*, 628 F.2d 730, 734-35 (1980) (“BOCA”). But “due process requires people to have notice of what the law requires of them so that they may obey it and avoid its sanctions.” *Id.*

2. The Complete Monopoly of Access Makes a Copyright in the Text of a Law Incompatible with Due Process.

One of the cornerstones of the copyright law is that the holder of a copyright “has the right to refuse to publish the copyrighted material at all and may prevent anyone else from doing so, thereby preventing any public access to the material.” *Id.* at 735, citing *Fox Film Corp. v. Doyal*, 286 U.S. 123 (1932) (copyright owner “may . . . simply exclude others from using his property”).

The complete monopoly in the author of copyright works is incompatible with the due process requirements inherent in the text of a law. If a copyright owner can “simply exclude others from using his property” in the text of a law, he can, by definition, withdraw or withhold permission for the government to use the text, and for the citizens to obtain access to it.

The danger of a copyrighter’s veto is no less real simply because the law may be available at a particular time. The power of the copyright owner to withhold consent jeopardizes future access to the text of the law. This is no idle speculation—indeed, SBCCI does not even have a licensing agreement with the municipalities in this case. The municipalities must incorporate the code in their

ordinances by reference only—even the actual ordinance voted on by the municipal body does not contain the text of the law. No contract or licensing agreement precludes SBCCI from refusing to provide access to Anna and Savoy of their own municipal ordinances at any time.

If the right to withhold access to a law is exercised, citizens, who presumably will be expected to continue following the law, will be unable to determine what that law is. A citizen is thus at risk of being punished for failure to follow an unavailable law. In addition, the government will be unable to discharge its duty towards citizens to make the law available.

In short, a copyright in the text of the law puts citizens in the position of the Romans of Caligula's time, when certain taxes "had been proclaimed but not published in writing," so that "many offenses were committed through ignorance of the letter of the law." Even when Caligula was persuaded to "publish" it, he "had the law posted up, but in a very narrow place and in excessively small letters, to prevent the making of a copy." *United States v. Jefferson County Board of Education*, 380 F.2d 385, 410-11 (5th Cir. 1967),

citing Suetonius, *The Lives of the Twelve Caesars*, 192 Random House, 1959.

The severe restrictions placed on municipal codes by SBCCI make them a modern equivalent of Caligula's tax laws. "[T]his aspect of copyright protection can[not] be squared with the right of the public to know the law to which it is subject." *BOCA*, 628 F.2d at 735. Indeed, the United States Copyright Office itself recognizes that there can be no copyright in the law. § 206.1 Compendium of Copyright Office Practices, Copyright Office (1984).

3. The Primary Purpose of Copyright Law is not to Provide a Benefit to Authors, But to Provide the Public With Access to Authors' Works.

Further, the scope of a copyright owner's right is not unlimited. The primary purpose of copyright law is "To Promote the Progress of Science and the useful Arts" U.S. Const. Art. I, § 8. The copyright privileges accorded an owner "are neither unlimited nor primarily designed to provide a special private benefit," but rather to motivate artists and inventors "and to allow the public access to the products of their genius after the limited period of exclusive control has expired." *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984).

Indeed, the private reward to the owner of a copyright is “a secondary consideration” to the ultimate aim of the copyright law—the public benefit. *United States v. Paramount Pictures, Inc.*, 334 U.S. 131, 158 (1948). “The sole interest of the United States and the primary object in conferring the monopoly lie in the general benefits derived by the public from the labors of authors.” *Fox Film*, 256 U.S. at 127; *see, also, Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1975). Indeed, Congress recognized this interest in the public welfare when enacting the comprehensive revision of the Copyright Act in 1909: “The granting of such exclusive rights, under the proper terms and conditions, confers a benefit upon the public that outweighs the evils of the temporary monopoly.” H.R. Rep. No 2222, 60th Cong. 2d Sess., 7 (1909) (Judiciary Committee of the House of Representatives).

Even where material is subject to copyright protection, “[a]ll reproductions of the work . . . are not within the exclusive domain of the copyright owner; some are in the public domain.” *Sony*, 464 U.S. at 432. The constraints of due process require that public enactments, such as the laws at issue here, be in the public domain, and not subject to the control of a private copyright owner.

4. The Constitutional Due Process Rights of Citizens Far Outweigh any Public Interests in Copyright.

The District Court and the panel majority incorrectly found that due process rights of citizens in the text of the law are outweighed by SBCCI's copyright interest. "[A] policy judgment is indispensable to our balancing of the public interests in, on the one hand, encouraging innovation through copyright and, on the other hand, ensuring free access to the law."

The panel came down on the side of copyright, quoting a well-known treatise as its only basis. See 1 *Nimmer on Copyright*, Mathew Bender & Company, Inc., § 5.06[C]. *Nimmer* recognizes the due process implications of holding a copyright in the text of a law, but states that "it is questionable whether that rationale justifies the denial of copyright to a private person or group who produces such a model code." *Id.*

Notwithstanding the opinions of the panel majority and *Nimmer* on this issue, the *amici* States contend that the rights of a copyright owner can never outweigh the due process rights of the citizens in the text of a law. Copyright, while permitted by the Constitution, is at base only a statutory right. As discussed above,

the rights of copyright owners are not absolute, and primarily created for the ultimate benefit of the public, rather than authors.

On the other hand, due process is a constitutional right of the first order—it was considered so important it was included both in the Bill of Rights and in the Fourteenth Amendment. And the due process right at issue here is of fundamental importance to the operation of a free government. In our society, the people are assumed to know the law, and are expected to follow it. Without guaranteed access to the text of the law at all times, this right is not just in jeopardy—it has been abridged.

Nimmer admits that allowing a copyright in the text of a law would result in a due process violation, but his solution is to allow the citizen to use the due process and the fair use doctrine as a defense. “Failure to observe such due process notice requirements would certainly constitute a defense for one charged with violation of the nonpublicized law.”

Amici States assert that *Nimmer’s* solution is unsatisfactory for several reasons. It is simply bad government and a violation of due process to restrict a citizen’s access to the law hoping that he will have defenses to an infringement suit. A government should strive

to provide the public with the tools to be good citizens, not merely hope that a citizen will be able to defend an infringement suit when he attempts to learn the law.

Perhaps most important, the chilling effect of a potential copyright suit will prevent many citizens from copying the law, thus presenting them with the classic Hobson's choice—copy the law and risk a copyright suit, or remain ignorant of the law and risk a sanction for breaking it.

In short, regardless of the facts of an individual case, the due process rights of the public in the text of a law far outweigh any possible public benefit from copyright in that same text.

B. A Long-Standing Body of Case Law Supports the Incompatibility of Copyright In, and Access To, the Text of the Law.

1. The Supreme Court and Other Courts Have Consistently Held that There Can Be No Copyright in the Text of Judicial and Statutory Law.

Cases going back at least to 1834 hold that judicial opinions and statutes are in the public domain and not subject to copyright protection. The first such case was *Wheaton v. Peters*, 33 U.S. (8 Peters) 591 (1834). In that case, Wheaton, the early reporter for the Supreme Court, claimed a copyright in his reports. While the main

issue was whether Wheaton had complied with a statutory requirement, the Court also remarked “that the Court are unanimously of the opinion that no reporter has or can have any copyright in the written opinions delivered by this court,” and that “the judges thereof cannot confer on any reporter any such right.” 33 U.S. at 668.

The Court definitively held that the text of judicial opinions is in the public domain in *Banks v. Manchester*, 128 U.S. 244 (1888). “The whole work done by the judges constitutes the authentic exposition and interpretation of the law, which, *binding on every citizen, is free for publication to all*, whether it is a declaration of unwritten law, or an interpretation of a constitution or a statute.” 128 U.S. at 253 (emphasis added). And in *Callaghan v. Myers*, 128 U.S. 547, 645 (1888), the Supreme Court reiterated that a reporter of opinions may hold a copyright in “all but the opinions of the court.”

Courts have recognized that statutes as well as judicial opinions are in the public domain, and cannot be copyrighted. For instance, in *Davidson v. Wheelock*, 27 F. 61 (D. Minn. 1866), a federal court in Minnesota held that the publisher “obtained no

exclusive right to print and publish and sell the laws of the state of Minnesota,” and went on to hold that “such publications are open to the world. They are public records, subject to inspection by every one” 27 F. at 62.

Several other courts have followed suit. *Nash v. Lathrop*, 142 Mass. 29, 35 (1886) (“Every citizen is presumed to know the law . . . and it needs no argument to show that justice requires that all should have free access to the opinions”); *Connecticut v. Gould*, 34 F. 319 (N.D. N.Y. 1888) (“in a country where every person is presumed and required to know the law . . . the fullest and earliest opportunity of access to [judicial opinions] should be afforded.”); *Howell v. Miller*, 91 F. 129 (6th Cir. 1898) (the reporter “has no exclusive right in the judicial opinions published,” but the reporter’s copyright consisted of his index, marginal references, notes, memoranda, table of contents and digests); cf. *Gould v. Banks*, 53 Conn. 415 (1886).

In modern times, this reasoning has been followed by the First Circuit in *BOCA v. CT*. The plaintiff in that case, another code-writing organization, claimed copyright protection in its model building code, which, like SBCCI, it encouraged governments to

adopt through a licensing program. Massachusetts adopted a code substantially similar to the BOCA model, and the defendant, Code Technology, Inc. (“CT”) published and distributed its own edition of the Massachusetts Building Code. CT argued, as does Veeck here, that the text of the Building Code had entered the public domain and could not be copyrighted. The district court disagreed and granted a preliminary injunction.

The First Circuit declined to rule on the ultimate merit of the case, but vacated the preliminary injunction, and pointed out that it was not persuaded by BOCA’s reasoning, as “the public owns the law.” “The citizens are the authors of the law, and therefore its owners, regardless of who actually drafts the provisions, because the law derives its authority from the consent of the public, expressed through the democratic process.” 628 F.2d at 734.

These cases demonstrate a long-standing principle that the text of a law is, by its very nature, in the public domain and not copyrightable. In addition, they illustrate that there is no principled reason to differentiate between judicial opinions, statutes and administrative or municipal enactments.

2. The Text of the Law is Public Because of its Nature as the Law, Not Because of the Nature or Employment of the Author.

The case law demonstrates an important principle that counters one of SBCCI's primary arguments: the text of the law is public not because the public pays the salaries of the authors, but because of its nature as the law. Although the Supreme Court in *Banks* mentioned that the judges were paid by the public, in its next case on the subject, the Court contradicted such a justification. In *Callaghan v. Myers*, the Supreme Court held that the reporter may hold a copyright in the title page, table of cases, headnotes, arguments of counsel and index, even though he was a public official, paid from the public treasury. 128 U.S. at 645-50. In *Connecticut v. Gould*, the State also paid the reporter of opinions, yet a lower federal court held that he was allowed to keep a copyright in his index and syllabi (though not in the text of the opinions). 34 F. 319.

Thus, merely because it is authored by a public official whose salary is paid by the public, a document is not exempt from copyright. It follows that the fact that judges or legislators are paid by the public is irrelevant to the copyrightability of the law—the text

of the law is in the public domain because of its nature as the law, not because of its author. *See, also, Schnapper Public Affairs Press v. Foley*, 667 F.2d 102, 110 (D.C. Cir. 1981), quoting *Du Puy v. Post Telegram Co.*, 210 F. 883 (3rd Cir. 1914).

The recent case *County of Suffolk New York v. First American Real Estate Solutions*, 261 F. 179, 2001 U.S. App. LEXIS 16706 (2nd Cir. 2001), supports this contention. In *Suffolk*, the county had produced tax maps to help it in assessing property tax. The question was whether the county's tax maps were amenable to copyright, or whether they had passed into the public domain. The *Suffolk* court set forth a test for whether a work may be deemed to be in the public domain:

(1) whether the entity or individual who created the work needs an economic incentive to create or has a proprietary interest in creating the work and (2) whether the public needs notice of this particular work to have notice of the law.

261 F.3d at ___, LEXIS 16706, at *34-35.

Under the second prong of the *Suffolk* test, SBCCI cannot maintain its copyright. As discussed above, due process requires that the public have complete and free access to the text of the law.

The public must have “notice of [the text of the municipal codes at issue here] to have notice of the law.”

But even under the first prong—the need for an economic incentive—SBCCI cannot maintain a copyright. The first prong at the *Suffolk* test, like the second, is constitutionally based. The only purpose for copyright is to “promote the progress of science and useful arts.” When economic incentive is not needed, the Patents and Copyrights Clause does not authorize a copyright. See, Perritt, Sources and Rights to Access Public Information, 4 *Wm & Mary Bill of Rts. J.* 179 (1995); *Feist Publications, Inc. v. Rural Telephone Service, Co.*, 499 U.S. 340, 347-48 (1991).

As stated by SBCCI’s own general counsel, SBCCI’s primary purpose is to create model codes and have them adopted by government bodies, not to make money by selling books. SBCCI is a not-for-profit organization whose members consist of government units and agencies. SBCCI may have an economic incentive to maintain a copyright in the model codes, but there is no *need* for such an incentive to create the codes. SBCCI and similar organizations would create such codes with or without the copyright incentive.

Even more important, state and local governments have a duty to create building codes, regardless of the existence of SBCCI and its model code. Thus, copyright law does not need to create any economic incentive in writing codes—they will be written whether governments create them or acquire them from an entity like SBCCI.

3. Cases Cited by SBCCI Are Easily Distinguishable and To the Extent They Are Not, Should Be Disregarded.

The cases cited by SBCCI are easily distinguishable, and to the extent that they are not, *amici* States submit that they are wrongly decided and should not be followed.

The first, *CCC Information Services, Inc v. Maclean Hunter Market Reports*, 44 F.3d 61 (2nd Cr. 1994), involved two private, for-profit organizations. The Appellee, CCC Information Services, had been systematically loading major portions of the Appellant's book of used car valuations commonly known as the Red Book onto its database and republishing the information to its customers. The Second Circuit held that the Red Book had not fallen into the public domain even though it had been adopted in state statutes regulating insurance payments.

CCC is distinguishable. The Red Book itself was not the text of the law, but only one of several alternate standards by which insurers could determine the value of a used car. The Red Book is not, in and of itself, a regulation—it gives the public no directives to follow or duties to fulfill. Thus, under the second prong of the *Suffolk* test, the public does not “need notice of this particular work to have notice of the law.” 261 F.3d at ___, LEXIS 16706, at *34-35.

In addition, “the adoption of a private work into law might well justify a fair use defense for personal use, but it should not immunize a competitive commercial publisher from liability.” CCC, 44 F.3d at 74, footnote 30. In other words, the private citizen who obtains a copy to ensure that he is following the law is not an infringer, but a commercial entity attempting to profit from the work of another is an infringer.²

Similarly, in *Practice Management Information Corporation v. American Medical Association*, 121 F.3d 516 (9th Cir. 1997), the AMA had a copyright on their medical coding system, which had been licensed to the federal Health Care Financing Administration

² It applied to the text of a law, this is essentially the same flawed rationale used by *Nimmer*, as discussed above.

("HCFA"). However, the license was "non-exclusive, royalty free and irrevocable." HCFA was free to "use, publish and distribute" the code and had the right to cancel the agreement and use a competing system at any time. 121 F.3d at 517.

As with CCC, the Ninth Circuit distinguished a user denied access to a standard under the law, and a rival for AMA's business in copying and publishing the code. The Court also pointed out that any attempt by the AMA to restrict access to the text of the code would likely result in termination of its agreement with HCFA.

Both cases can also be distinguished because in both the work was produced by a private entity for a reason other than incorporation into the law. The government would be highly unlikely, on its own, to create a valuation system for used cars or a medical coding system. This is precisely the distinction made in the first prong of the *Suffolk* test.

In contrast, SBCCI, BOCA, and similar organizations create model codes for the express and primary purpose of persuading States and municipalities to incorporate them as the text of a law. And SBCCI and similar organizations have insisted on very restrictive copyrights, which virtually preclude governments from

providing citizens with the text of the law. (See copyright statement, R. 17, Answer ¶ 17.) No one but SBCCI is allowed to copy or distribute the law without SBCCI's permission, not even the governmental entities responsible for enforcing it. Indeed, SBCCI insists that its code be adopted by reference only, so that the text of the law does not even appear in the ordinance or regulation adopting it, or in codified versions of the ordinances or regulations of a government entity. *Id.*

Under these circumstances, nothing in the copyright law prevents SBCCI from simply refusing to make copies of the text available to the public, or even to the governmental entities responsible for enforcing it. This is no less dangerous merely because it is now in SBCCI's commercial interest to allow access. SBCCI, or a successor in interest, could cut off access at any time, for any reason, including bankruptcy, development of new codes not yet adopted by the State or municipality, or even retaliation against a government entity for refusal to adopt other SBCCI codes.

In contrast, the AMA's agreement in *Practice Management* irrevocably allowed the United States the unlimited ability to copy and distribute copies of the code, and allowed the U.S. to revoke the

license at any time and use an alternate coding system. In *CCC*, the Red Book was only one of several possible methods of valuation that the insurer could use. Neither case involved a risk that the relevant government or its citizens would lack the necessary tools to know the requirements of the law.

Thus, both *CCC* and *Practice Management* are distinguishable, and alternately, to the extent that those cases stand for the proposition that the text of a law can be copyrighted, they are against the weight of precedent, as well as against sound constitutional principles, and should be ignored.

C. SBCCI and Similar Organizations Have Waived any Copyright by Actively Lobbying Government to Adopt Their Codes.

SBCCI, BOCA and similar not-for-profit organizations actively lobby State and local governments to adopt their model codes, and yet insist that the text of the codes remain a closely-guarded monopoly. SBCCI has undoubtedly been aware of the long line of case law precluding a copyright in the text of the law, and yet has continued to conduct its business as if this body of law did not exist. SBCCI cannot have its cake and eat it too—if it lobbies a government to adopt its codes as the text of the law, it must accept

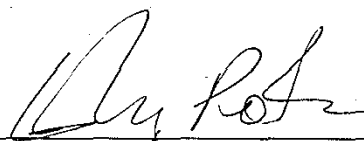
that the text will pass into the public domain. SBCCI has waived its copyright.

CONCLUSION

For the foregoing reasons, *amici* States urge the Court to overrule the decision of the panel and hold that there can be no copyright in the text of a law.

Respectfully submitted,

BETTY D. MONTGOMERY
Attorney General of Ohio



ELISE W. PORTER
MARTIN D. SUSEC
Assistant Attorneys General
Chief Counsel's Staff
30 East Broad Street, 17th Floor
Columbus, OH 43215-3428
(614) 466-2872
(614) 728-7592 FAX
Attorneys for *Amici* States

CERTIFICATE OF SERVICE

I hereby certify that two true copies of the foregoing Brief of *Amicus Curiae* States of Ohio and Ten Other States and Territories Supporting Appellant Veeck Upon Rehearing En Banc was served, by ordinary U.S. mail (on paper and computer disk), to counsel of record listed below, pursuant to Fed. R. App. P. 25(b), and that the same document was filed, by delivering an original and twenty copies (on paper and computer disk) to the United States Post Office for first-class U.S. mail delivery to the Clerk of the Court, pursuant to Fed. R. App. P. 25(a)(2)(B)(i), on this 6th day of November, 2001, at the following addresses:

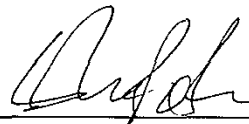
Eric Weisberg
200 West Main Street
Denison, TX 75020-3025
Counsel for Plaintiff-Appellant

Robert J. Veal
Burr & Forman
South Trust Tower
420 North 20th Street, Suite 3100
Birmingham, AL 35203
Counsel for Defendant-Appellee

Michael Lowenberg
Akin, Gump, Strauss, Hauer & Feld, L.L.P.
1700 Pacific Avenue, Suite 4100
Dallas, TX 75201-4618
Counsel for Amicus AMA

Karen B. Tripp
1100 Louisiana Street, Suite 2690
Houston, TX 77002
*Counsel for Amici Association of
American Physicians & Surgeons, Inc.
Eagle Forum Education and Legal Defense Fund*

Mr. Charles R. Fulbruge, III
Clerk of the Court
United States Court of Appeals
for the Fifth Circuit
600 Camp Street
New Orleans, LA 70130



ELISE W. PORTER
Assistant Attorney General
Chief Counsel's Staff

CERTIFICATE OF COMPLIANCE

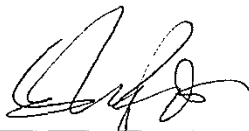
Pursuant to 5th Cir. R. 32.2. and 32.3 and Fed. R. App. P. 32(a)(7)(C), the undersigned certifies this brief complies with the type-volume limitations of 5th Cir. R. 32.2.7(b) and Fed. R. App. P. 29(d).

1. Exclusive of the exempted portions in 5th Cir. R. 32.2 and Fed. R. App. P. 32.2.7(b)(3), the brief contains 6,728 words.

2. The brief has been prepared in proportionally spaced typeface using Bookman Old Style 14 point font for text and 12 point font for footnotes produced by Microsoft Word 2000.

3. An electronic version of the brief has been provided and if the Court so requests, the undersigned will provide a copy of the word or line printout.

4. The undersigned understands a material misrepresentation in completing this certificate, or circumvention of the type-volume limits in 5th Cir. R. 32.2, may result in the Court's striking the brief and imposing sanctions against the person signing the brief.



ELISE W. PORTER
Assistant Attorney General

Case 1:13-cv-01215-TSC Document 164-14 Filed 02/05/16 Page 1 of 15

EXHIBIT 6

FILE COPY

No. 02-355

STATEMENTS DURING TRIAL
FILED
OCT 21 2002

IN THE
Supreme Court of the United States

CLERK

SOUTHERN BUILDING CODE CONGRESS
INTERNATIONAL, INC.,

Petitioner,

v.

PETER VEECK D/B/A REGIONAL WEB,

Respondent.

**On Petition for a Writ of Certiorari to the
United States Court of Appeals for the
Fifth Circuit**

**BRIEF OF AMICUS CURIAE
ASTM INTERNATIONAL
IN SUPPORT OF PETITION
FOR A WRIT OF CERTIORARI**

THOMAS B. O'BRIEN, JR.*
JOSEPH B. SILVERSTEIN
Klett Rooney Lieber & Schorling
12th Floor, Two Logan Square
Philadelphia, PA 19103
(215) 567-7500 (Phone)
(215) 567-2737 (Fax)

**Counsel of Record
Counsel for Amicus Curiae*

TABLE OF CONTENTS

	Page
TABLE OF AUTHORITIES	ii
CONSENT TO FILING OF <i>AMICUS</i> BRIEF	1
STATEMENT OF INTEREST	1
A. ASTM International	1
B. Use of ASTM Standards	2
C. ASTM’s Revenue Sources	6
D. Access to ASTM Standards	7
SUMMARY OF ARGUMENT	7
REASONS FOR GRANTING THE WRIT	7
A. The Fifth Circuit’s Decision Creates a Conflict Among the Circuit Courts of Appeal and Misinterprets Prior Precedent of This Court. . .	8
B. Congress Did Not Intend Government Reference to Private Codes to Somehow Transfer or Void the Copyright of Such Codes.	11
C. SBCCI Was the Author and Copyright Owner of the Code and the Fifth Circuit’s Decision Deprived It of This Valuable Right	14
CONCLUSION	19

TABLE OF AUTHORITIES

Cases	Page
<i>American Society for Testing & Materials v. Board of Revision of Taxes, Philadelphia County</i> , 423 Pa. 530, 225 A.2d 557 (1967)	1
<i>Banks v. Manchester</i> , 128 U.S. 244 (1888)	9, 10, 11
<i>Building Officials and Code Admin. v. Code Technology, Inc.</i> , 628 F.2d 730 (1st Cir. 1980)	8, 10
<i>CCC Information Services, Inc. v. Maclean Hunter Market Reports</i> , 44 F.3d 61 (2nd Cir. 1994), <i>cert. denied</i> , 516 U.S. 817 (1995)	8, 9, 10, 17
<i>Callaghan v. Myers</i> , 128 U.S. 617 (1888)	10, 11
<i>Community for Creative Non-Violence v. Reid</i> , 490 U.S. 730 (1989)	11
<i>County of Suffolk, NY v. First Amer. Real Estate Solutions</i> , 261 F.3d 179 (2nd Cir. 2001)	8, 9, 10
<i>Davidson v. Wheelock</i> , 27 F. 61 (D. Minn. 1866)	9
<i>Howell v. Miller</i> , 91 F. 129 (6th Cir. 1898)	9
<i>James v. Campbell</i> , 104 U.S. 356 (1882)	17
<i>Lane v. First National Bank</i> , 871 F.2d 166 (1st Cir. 1989)	17
<i>Nash v. Lathrop</i> , 142 Mass. 29, 6 N.E. 559 (1886)	9
<i>Practice Management Information Corp. v. The American Medical Association</i> , 121 F.3d 516 (9th Cir. 1997), <i>amended</i> , 133 F.3d 1140 (9th Cir. 1998), <i>cert. denied</i> , 522 U.S. 933 (1997)	8, 9, 10
<i>Roth v. Pritikin</i> , 710 F.2d 934 (2nd Cir. 1983), <i>cert. denied</i> , 464 U.S. 961 (1983)	17
<i>Ruckelshaus v. Monsanto Co.</i> , 467 U.S. 986 (1984)	17

TABLE OF AUTHORITIES — (Continued)

Cases	Page
<i>Peter Veech d/b/a Regional Web v. Southern Building Code Congress International, Inc.</i> , 293 F.3d 791 (5th Cir. 2002) (<i>en banc</i>)	1, 8-11, 14-18
<i>Veech v. Southern Building Code Congress International, Inc.</i> , 49 F. Supp. 2d 885 (E.D. Tex. 1999), <i>aff'd</i> , 241 F.3d 398 (5th Cir. 2001), <i>rev'd and remanded</i> , 293 F.3d 721 (5th Cir. 2002) (<i>en banc</i>)	14, 15, 16
<i>Wheaton v. Peters</i> , 33 U.S. (8 Pet.) 591 (1834)	9, 10, 11
U.S. Constitution, Statutes and Regulations	
U.S. Const. Amend V	17
1995 P.L. 104-113, 15 U.S.C. § 272	5, 13
15 U.S.C. § 2051	3
17 U.S.C. § 201(e)	15
17 U.S.C. § 204(a)	16
42 U.S.C. § 9601 (35)(B)(iv)(II)(2002)	6
63 Fed. Reg. 85,445 (1998)	12
67 Fed. Reg. 49,569 (2002)	4
67 Fed. Reg. 52,780 (2002)	4
67 Fed. Reg. 56,182 (2002)	4
67 Fed. Reg. 42,892 (2002)	4
67 Fed. Reg. 46,852 (2002)	4
State Statutes	
35 P.S. § 6024.103	5
3 P.S. § 132-3	5
4 P.S. § 402	5, 6

TABLE OF AUTHORITIES — (Continued)

	<i>Page</i>
75 Pa. C.S § 9002	5
Cal. Bus. & Prof. Code § 13710 (2002)	5
Cal. Health & Safety Code § 108510 (2001).	6
D.C. Code Ann. § 50-1609 (2001).	5
Ind. Code § 22-15-7-4 (2001)	6
La. Rev. Stat. Ann. § 40:1484.4 (2002)	6
Md. Code Ann., Environ § 7-506 (a)(1)(v) (2001)	6
Mich. Comp. Laws § 408.684 (2002)	6
Mo. R.S. § 316.205 (2001)	6
Mo. R.S. § 160.675 (2001)	6
N.J. Stat. Ann. § 39:4-10.5 (2002)	5
N.Y. Veh. & Tran. Law § 1238 (2002)	5
Ohio Rev. Code Ann. § 1711.53 (2002)	6
Or. Rev. Stat. § 453.235 (2001)	6
R.I. Gen. Laws § 23-34.1-5 (2001)	6
R.I. Gen. Laws § 31-19-2.1 (2001)	5
Tenn. Code Ann. § 68-131-305 (2001)	6
Texas Occ. Code § 2151.106 (2002)	6
W. Va. Code § 17C-11A-3 (2001)	5
Miscellaneous	
Fourth Annual Report on Federal Use of Voluntary Consensus Standards (2000).	5
NASA's 2001 Annual Report on OMB A-119.	13

TABLE OF AUTHORITIES — (Continued)

	<i>Page</i>
OMB Circular A-119 (63 Fed. Reg. 8545 (rev. 1998))	4, 5, 7, 11, 12, 13
Statement of Gregory E. Saunders, Director, Defense Standardization Program Office, Defense Logistics Agency, Before the Subcommittee on Technology, House Committee on Science, March 15, 2000	14
U.S. Dept. of Interior, Bureau of Land Management, H 2000-1 Land Exchange Handbook (1997)	6

CONSENT TO FILING OF AMICUS BRIEF

The Southern Building Code Congress International, Inc. (“SBCCI”) has filed a Petition for a Writ of Certiorari, requesting that this Court review the decision of the United States Court of Appeals for the Fifth Circuit (*en banc*) in *Peter Veeck d/b/a Regional Web v. Southern Bldg. Code Congress Int’l, Inc.*, 293 F.3d 791 (5th Cir. 2002).

ASTM International files this brief in support of the request for review. In accordance with Supreme Court Rule 37.3(a), ASTM International has obtained written consent to the filing of this brief from counsel of record for both parties. These consents have been previously filed with the Court.

STATEMENT OF INTEREST¹

A. ASTM International

ASTM International *f/k/a* The American Society for Testing & Materials (“ASTM”) is a not-for-profit charitable institution organized under the laws of the Commonwealth of Pennsylvania.² Founded in 1898, ASTM provides a global forum for the development and publication of voluntary consensus standards for

1. In accordance with Supreme Court Rule 37.6, *amicus curiae* states that this brief was not authored, in whole or in part, by counsel to a party, and that no monetary contribution to the preparation or submission of this brief was made by any person or entity other than the *amicus curiae* or its counsel.

2. See *American Society for Testing & Materials v. Board of Revision of Taxes, Philadelphia County*, 423 Pa. 530, 225 A.2d 557 (1967), wherein the Pennsylvania Supreme Court held that the American Society for Testing and Materials (“ASTM”) was a “purely public charity” under the Pennsylvania Constitution and discusses ASTM’s membership, mission and works.

materials, products, systems and services. Over 32,000 individuals from 100 nations are members of ASTM, including manufacturers, retailers, consumers, as well as representatives from government and academia. ASTM develops standards in over 130 areas covering subjects including consumer products, medical services and devices, electronics, metals, paints, plastics, textiles, petroleum, construction, energy and the environment.

ASTM standards are written by its more than 32,000 volunteer members who serve on ASTM's 132 technical committees devoted to specific areas of interest and which pursue standardization issues considered necessary by their members. Committees are divided into smaller entities of sub-committees and task groups that focus more closely on particular areas of a committee's scope.

ASTM memberships are inexpensive, costing \$75.00 per year for an individual member and \$400.00 per year for an organizational member. Each member yearly receives one free volume of his/her choice of the "Annual Book of ASTM Standards," as well as other membership benefits.

B. Use of ASTM Standards

More than 11,000 ASTM voluntary consensus standards are published each year in the 73 volumes of the "Annual Book of ASTM Standards." Each standard is copyrighted by ASTM. These standards: (1) promote public health and safety, and the overall quality of life; (2) contribute to the reliability of materials, products, systems and services; and (3) facilitate national, regional and international commerce. ASTM standards are widely used by business, consumers and government.

ASTM standards are incorporated into business contracts, used by scientists and engineers in their laboratories, used by architects and designers in their plans and, of course, governments and their agencies use and reference them for a variety of reasons. ASTM does not lobby or urge federal, state or local governments to reference, incorporate or adopt its standards. If a standard does not exist, it is relatively simple to start the ASTM process in motion. Anyone (including a government agency) can submit a written request to ASTM, describing a need for proposed standard activity and listing individuals, companies and organizations that might have an interest. ASTM contacts interested parties to assess that interest and need; if it exists and is within the subject area of an ASTM committee, activity begins. Membership in ASTM is not a pre-requisite to participation in the process (membership, however, is required to vote on acceptance of draft standards by ASTM).

ASTM standards are utilized by all federal government departments and agencies.³ Federal agencies as varied as the Bureau of Alcohol, Tobacco and Firearms ("ATF"), the Consumer Product Safety Commission ("CPSC"),⁴ the Environmental Protection Agency ("EPA"), Food and Drug Administration ("FDA"), the Nuclear Regulatory Commission ("NRC"), and the National Aeronautics and Space Administration ("NASA") reference ASTM standards

3. A LEXIS search shows that in the last six months, ASTM standards were referenced in 117 proposed federal agency decisions and/or rules.

4. The Consumer Product Safety Act, 15 U.S.C. § 2051, *et seq.*, requires that the Consumer Product Safety Commission defer to and utilize private voluntary standards rather than produce its own. *Id.* at § 2056.

in their regulations and procurement documents. ASTM standards are widely referenced in government bids and contracts because they ensure commercially available, competitively priced goods and services, and the standards are readily available and accessible. The United States Trade Representative (Executive Office of the President) has recently utilized ASTM standards to reference steel products for tariff purposes under § 203 of the Trade Act of 1974. *See* 67 Fed. Reg. 56,182 (2002). The EPA recently referenced ASTM standards in its National Emission Standards for Hazardous Air Pollutants. *See* 67 Fed. Reg. 52,780 (2002) (to be codified at 40 C.F.R. Part 63). The Department of Transportation referenced ASTM standards in recent regulations concerning traffic control devices. *See* 67 Fed. Reg. 49,569 (2002) (to be codified at 23 C.F.R. Part 655). The FDA referenced ASTM standards in its request for reclassification of a certain type of bone cement. *See* 67 Fed. Reg. 46,852 (2002) (to be codified at 21 C.F.R. Part 888). The Federal Railroad Administration recently referenced ASTM standards in its amendment to passenger equipment safety standards. *See* 67 Fed. Reg. 42,892 (2002) (to be codified at 49 C.F.R. Part 238). These are but a few of the many examples of federal agency use of ASTM standards so far this year.

The United States Congress, at least as far back as 1993, clearly intended that the federal government reference and utilize privately authored voluntary consensus standards. *See* Office of Management and Budget Circular No. A-119 (revised 1993) (“OMB A-119”).⁵ Congress’ intent was reiterated in the

⁵ OMB A-119 (1993) is available at (http://clinton1.nara.gov/White_House/EOP/OMB/html/circulars/a119/a119.html.)

National Technology Transfer and Advancement Act of 1995 P.L. 104-113, 15 U.S.C. § 272 (“NTTAA”). As a result, federal agency use of ASTM standards (and other privately developed codes and standards) has increased each year and is today pervasive.⁶ ASTM standards are currently referenced in 800 federal regulations.

States and their agencies, as well as the federal agencies, utilize and reference many ASTM standards. Just recently, California modified its specification for engine coolants, adopting ASTM standards. *See* Cal. Bus. & Prof. § 13710. Pennsylvania, ASTM’s home state, references ASTM standards in many of its laws and regulations, including its agricultural statutes (3 P.S. § 132-3), liquid fuels regulations (75 Pa. C.S. § 9002), amusement ride inspection regulations (4 P.S. § 402), and Safe Packaging Act (35 P.S. § 6024.103). Many states require children’s bicycle (and other) helmets comply with, among others, ASTM standards, including New Jersey (N.J. Stat. Ann. § 39:4-10.5 (2002)); New York (N.Y. Veh. & Tr. Law § 1238 (2002)); Rhode Island (R.I. Gen. Laws § 31-19-2.1 (2001)); the District of Columbia (D.C. Code Ann. § 50-1609 (2001)); and West Virginia (W. Va. Code § 17C-11A-3) (2001)).

⁶ The National Institute of Standards and Technology (“NIST”), United States Department of Commerce, is required by the Office of Management and Budget revised Circular A-119 (“OMB A-119”) to report annually on the progress made by federal agencies toward using voluntary standards created by the private sector. OMB A-119(9). NIST’s *Fourth Annual Report on Federal Use of Voluntary Consensus Standards* (available at (<http://ts.nist.gov/ts/htdocs/210/toolkit.htm#ann-rpts>)) states that in fiscal year 2000, federal agencies increased their use of voluntary standards to a total of 8,759. *Fourth Annual Report* at p. vi.

Many states and municipalities require that amusement park rides comply with ASTM standards. See Texas Occ. Code § 2151.106 (2002); R.I. Gen. Laws § 23-34.1-5 (2001); 4 P.S. § 402 (Pa. 2002); Ohio Rev. Code Ann. § 1711.53 (2002); Mo. R.S. § 316.205 (2001); La. Rev. Stat. Ann. 40:1484.4 (2002); Ind. Code § 22-15-7-4 (2001). Several states use ASTM standards to ensure the safety of: school art supplies, see Or. Rev. Stat. § 453.235 (2001), Tenn. Code Ann. § 68-131-305 (2001), Cal. Health & Safety Code § 108510 (2001)); playgrounds (see Mich. Comp. Laws § 408.684 (2002)); and the walk to school itself. See Mo. R.S. § 160.675 (2001) (school warning signs). These are but a few examples of how state governments use and rely on ASTM standards; the list may be endless.⁷

C. ASTM's Revenue Sources

ASTM's fiscal year budget totals \$32,346,800. On a yearly basis, ASTM receives between 75% and 80% of its revenue from the sale of its copyrighted standards. These sales are key to the continuation of ASTM and its mission. Membership fees intentionally make up only a small fraction of ASTM's revenue and budget. This is done to ensure and maintain ASTM's independence as an organization from the interests of its members. Without its revenue from the sale of copyrighted standards, ASTM could not survive and

7. As another example, most states, in their "brownsfield" legislation, require potential applicants to state programs perform "Phase I" and "Phase II" environmental site assessments pursuant to ASTM standards (see, e.g., Md. Code Ann., Environ § 7-506 (a)(1)(v)). The Federal Bureau of Land Management has also adopted ASTM's Phase I and II assessments, see U.S. Dept. Interior, Bureau of Land Management, H-2000-1 Land Exchange Handbook 19 (1997), as does the Brownsfields Revitalization Act, 42 U.S.C. § 9601 (35)(B)(iv)(II)(2002).

fulfill its mission — to produce fair and balanced voluntary consensus standards.

D. Access to ASTM Standards

The average cost of an ASTM standard is \$30.00. Standards can be purchased on-line at the ASTM website (<http://www.astm.org>), where standards may be instantly downloaded directly to a user's computer. Standards may also be purchased from ASTM by telephone or mail, or through several distributors. Delivery takes place within days, if not sooner.

Many government agencies have complete sets of ASTM standards, as do most (if not all) technical libraries and many other libraries.

SUMMARY OF ARGUMENT

The *en banc* decision of the Fifth Circuit found that the unilateral action of a government entity — a small municipality — could strip a valuable and protected property right from its owner. This ruling created a conflict in the Circuit Courts of Appeals (and created confusion amongst standard development organizations such as ASTM), conflicts with the clear Congressional intent expressed in OMB A-119 and in the National Technology Transfer and Advancement Act, and fails to adequately address the apparent transformation of private intellectual property into public property. The decision puts at risk the long-term (and successful) co-operative effort between government and private-sector standards development organizations. For these reasons, SBCCI's petition should be granted.

REASONS FOR GRANTING THE WRIT

The *en banc* Fifth Circuit majority decided the issue of "the extent to which a private organization

may assert copyright protection for its model codes, after the models have been adopted by a legislative body and become the law.” *Veeck*, 293 F.3d 791, 793 (5th Cir. 2002). The Fifth Circuit held: “. . . that as law, the model codes enter the public domain and are not subject to the copyright holder’s exclusive prerogatives.” *Id.* The Fifth Circuit found that once adopted, the private author of a model code loses its copyright. *Id.* at 799.

A. The Fifth Circuit’s Decision Creates a Conflict Among the Circuit Courts of Appeal and Misinterprets Prior Precedent of This Court.

The Fifth Circuit’s majority ruling that a municipality’s adoption by reference terminates the valid copyright of a work authored by a private entity conflicts with opinions of other Circuit Courts of Appeal, specifically those of the First Circuit in *Building Officials and Code Admin. v. Code Technology, Inc.*, 628 F.2d 730 (1st Cir. 1980) (“BOCA”), the Second Circuit in *CCC Information Services, Inc. v. Maclean Hunter Market Reports*, 44 F.3d 61 (2nd Cir. 1994) (“CCC Info”) and *County of Suffolk, NY v. First Amer. Real Estate Solutions*, 261 F.3d 179 (2nd Cir. 2001), and the Ninth Circuit in *Practice Management Information Corp. v. The American Medical Ass’n*, 121 F.3d 516 (9th Cir. 1997), *amended*, 133 F.3d 1140 (9th Cir. 1998), *cert. denied*, 522 U.S. 933, (1997) (“PMI”).

The Fifth Circuit majority concluded the copyright of a privately authored code was terminated (or transferred to the public) when the code was adopted by reference as a local building code. *Veeck*, 293 F.3d at 802. In similar circumstances, the First, Second and Ninth Circuits have refused to terminate or strip copyrights from building codes (*BOCA*), car valuations

(*CCC Info*), tax maps (*County of Suffolk*) and a uniform medical code (*PMI*), all of which had been enacted or adopted into regulations or statutes by some level of government. The First, Second and Ninth Circuits relied principally on the same two opinions of this Court in reaching their decisions, *Wheaton v. Peters*, 33 U.S. (8 Pet.) 591 (1834) and *Banks v. Manchester*, 128 U.S. 244 (1888), as did the Fifth Circuit in the matter at hand. *Veeck*, 293 F.3d at 795.

Neither *Wheaton* nor *Banks* addressed any question of the copyright status of privately authored works. Each addressed the copyright status of judicial opinions, which were not copyrightable.⁸ *Banks*, 128 U.S. at 253. Yet from these two opinions flow the Fifth Circuit’s conclusion that the code, once adopted, lost its copyright. The Fifth Circuit read *Wheaton* and *Banks* “to enunciate the principle that ‘the law,’ whether it has its source in judicial opinions or statutes, ordinances or regulations, is not subject to federal copyright law.” *Veeck*, 293 F.3d at 800. This was not the Court’s holding in either *Wheaton* or *Banks*. The Fifth Circuit’s analysis of *Wheaton* and *Banks*, and its conclusion based on this analysis, also conflicts with that of the other Circuit Courts of Appeal which have addressed the issue.

8. The Fifth Circuit also relies on *Nash v. Lathrop*, 142 Mass. 29, 6 N.E. 559 (1886), *Davidson v. Wheelock*, 27 F. 61 (D. Minn. 1866), and *Howell v. Miller*, 91 F. 129 (6th Cir. 1898), for its conclusion that government adoption of a privately authored work terminates or transfers its copyright. *Veeck v. Southern Bldg. Code Congress Int’l, Inc.*, 293 F.3d 791, 796 (5th Cir. 2002) (*en banc*). *Nash*, again, dealt with judicial opinions; *Davidson* and *Howell* involved uncopyrightable and publicly “authored” state statutes. All are inapplicable to the matter at hand.

The Fifth Circuit, in reaching its conclusion, rejected the earlier analysis of *Wheaton* and *Banks* enunciated by the First Circuit in *BOCA* (628 F.2d at 734), and adopted by the Second Circuit in *CCC Info* and *County of Suffolk*, and the Ninth Circuit in *PMI*. This analysis is succinctly stated in *County of Suffolk*:

[T]wo considerations influence whether a particular work may be deemed in the public domain: (1) whether the entity or individual who created the work needs an economic incentive to create or has a proprietary interest in creating the work and (2) whether the public needs notice of this particular work to have notice of the law.

261 F.3d at 194. See also *Veeck*, 293 F.3d at 796-97. The second prong of the *BOCA* analysis is a due process one — so long as the law is generally available, then the public has notice and access.⁹ *BOCA*, 628 F.2d 734, *PMI*, 121 F.3d at 518-19. It is this analysis, not the Fifth Circuit's conclusion (that "the law" is not copyrightable), that should determine the present situation.

Callaghan v. Myers, 128 U.S. 617 (1888), decided by this Court soon after *Banks*, interpreted *Wheaton* and *Banks*, and focused on the issue of authorship. *Callaghan*, 128 U.S. at 649-50 ("it was held, that the opinions of the court, being published under the authority of Congress, were not the proper subject of private copyright"). The public, or government, was the "author" in *Wheaton*, *Banks* and *Callaghan*. There

9. "Access" does not mean *Veeck* is entitled to a free copy of the code. Access requires fair warning of conduct prohibited or regulated by statute or regulation. See *County of Suffolk, N.Y. v. First Amer. Real Estate Solutions*, 261 F.3d 179, 195 (2nd Cir. 2001).

is no question that SBCCI, a private entity, was the author of the subject code and was entitled to its copyright. *Veeck*, 293 F.3d at 794 and 802. See *Community for Creative Non-Violence v. Reid*, 490 U.S. 730 (1989) (the author is the party who actually creates work which is entitled to copyright protection).

The Fifth Circuit's reliance on a single sentence in *Banks* for its termination of SBCCI's private copyright ("The whole work done by the judges constitutes the authentic exposition and interpretation of the law, which, binding every citizen, is free for publication to all, whether it is a declaration of unwritten law, or an interpretation of a constitution or statute." *Banks*, 128 U.S. at 253) is misplaced. *Banks* did not decide that a private property right was somehow terminated or converted to a public one by adoption — it simply found that judicial opinions were not copyrightable. Changing circumstances since *Wheaton*, *Banks* and *Callaghan*, and the conflicting interpretation of this Court's opinions by the Circuit Courts of Appeal, dictate that this Court review these important issues.

B. Congress Did Not Intend Government Reference to Private Codes to Somehow Transfer or Void the Copyright of Such Codes.

Congress has mandated the federal agencies use private standards and codes whenever possible. As recognized by the *Veeck* dissent, this Congressional intent was clearly enunciated in OMB A-119 and the National Technology Transfer and Advancement Act. *Veeck*, 293 F.3d at 814-15.

OMB A-119, revised in 1993, established the policy to be followed by executive agencies in their utilization of standards.¹⁰ That clearly enunciated policy was for the federal government, in procurement and regulatory activities, to rely on privately developed voluntary consensus standards wherever possible. OMB A-119(6)(a). The Circular also states:

Voluntary standards adopted by Federal agencies should be referenced, along with their dates of issuance and sources of availability, in appropriate publications, regulatory orders, and related in-house documents. **Such adoption should take into account the requirements of copyright and other restrictions.**

OMB A-119 (7)(a)(5) (1993) (*emphasis added*). OMB A-119 established federal policy governing the adoption of privately authored standards and clearly provided this adoption would have no impact on existing and applicable copyrights. OMB A-119 was revised in 1998¹¹ to make it consistent with the NTTAA. *See* 63 Fed. Reg. 85,445 (1998). OMB A-119 now mandates use of voluntary consensus standards such as those of ASTM.¹² *See* OMB A-119(6) (1998). The purpose of this mandate is to reduce costs to federal taxpayers of the

10. The 1993 revision of OMB A-119 superseded OMB Circular No. A-119, dated October 26, 1982, which was rescinded.

11. The 1998 revision of OMB A-119 is available at the Defense Standardization Program web site, (http://www.dsp.dla.mil/documents/omb_a119.pdf), and on the White House website, (<http://www.whitehouse.gov/omb/circulars/a119/print/a119.html>).

12. "All federal agencies must use voluntary consensus standards in lieu of government—unique standards in their procurement and regulatory activities, except where inconsistent with law or otherwise impractical." OMB A-119 (6).

government producing its own standards. OMB A-119 (2)(a).

Agencies have taken Congress' dictates to heart. The National Institute of Standards and Technology ("NIST"), a non-regulatory federal agency within the U.S. Commerce Department (15 U.S.C. § 272), is required by OMB A-119 and the NTTAA to compile annual reports to Congress providing information on federal government use of voluntary consensus standards.¹³ These reports document extensive and growing use by federal agencies of copyrighted standards. NASA's 2001 Annual Report on OMB A-119 indicates this single agency alone used 922 voluntary consensus standards in fiscal year 2001.¹⁴ In 1993, pursuant to executive order, a federal government-wide program — Environmentally Preferable Purchasing — was instituted, encouraging agencies to identify and purchase environmentally preferable products and services. EPA administers the program and requested standards development organizations ("SDOs") undertake to develop standards for the program.¹⁵ ASTM, along with other private sector standards organizations, responded — at no cost to the government — to EPA's request. Such participation has now been placed at risk by the Fifth Circuit. The Congressional mandate that federal agencies adopt privately-authored standards and codes — without compromising the authors' copyrights in these stan-

13. NIST's Annual Reports on Implementation of OMB A-119 are available at (<http://ts.nist.gov/ts/htdocs/210/nttaa/toolkit.htm#ann-rpts>).

14. *See* Annual Report for NASA (FY 2001), available at (http://standards.nasa.gov/AnnualReportFinal_FY01.pdf).

15. *See* (http://www.epa.gov/opptintr/epp/guidance/standards_page.htm).

dards and codes — has been carried out by federal agencies with great savings to the taxpayers.¹⁶ The Fifth Circuit's opinion places the future of this cooperative arrangement at risk.

C. SBCCI was the Author and Copyright Owner of the Code and the Fifth Circuit's Decision Deprived It of This Valuable Right.

The Fifth Circuit's opinion terminates or deprives SBCCI of its copyright in the code without any discussion or analysis. The Fifth Circuit initially found: "As the organizational author of original works, SBCCI indisputably holds a copyright in its building codes." *Veeck*, 293 F.3d at 794. The majority continued, however, finding that when two small Texas towns adopted SBCCI's 1984 Standard Building Code,¹⁷ *id.*, SBCCI's copyright somehow terminated, with "the public" then becoming the "final author" and, apparently, its owners. *Id.* at 799.

SBCCI was the author of the code at issue. *Id.* at 794. The copyright in this code, as recognized by the Fifth Circuit, vested in SBCCI at fixation or publica-

16. The Department of Defense reported significant cost avoidance or negotiated savings through use of voluntary consensus standards of \$106 million for a single year. *Statement of Gregory E. Saunders, Director, Defense Standardization Program Office, Defense Logistics Agency, Before the Subcommittee on Technology, House Committee on Science, March 15, 2000, available at* (http://www.house.gov/science/saunders_031500.htm).

17. The trial court opinion indicates that the two Texas municipalities, Anna and Savoy, "under expressed agreements with SBCCI," enacted ordinances adopting SBCCI's codes by reference. *Veeck v. Southern Bldg. Code Congress Int'l, Inc.*, 49 F.Supp. 2d 885, 887 (E.D. Tex. 1999), *aff'd*, 241 F.3d 398 (5th Cir. 2001), *rev'd and remanded*, 293 F.3d 721 (5th Cir. 2002) (*en banc*).

tion. *Id.* at 794. As a result of the Fifth Circuit's holding, ownership of that bundle of rights was subsequently and involuntarily transferred to the public at the time of its adoption by a local municipality. *Id.* at 799. The legal mechanism of the transfer is neither described nor discussed by the majority. This transfer, on the facts recited, appears to have been involuntary, as SBCCI is nowhere alleged to have consented (and its pleadings and briefs make clear that it did not so consent).¹⁸ The Copyright Act specifically addresses involuntary transfer of copyrights:

Involuntary Transfer. — When an individual author's ownership of a copyright, or any of the exclusive rights under a copyright, has not previously been transferred voluntarily by that individual author, no action by any governmental body or other official or organization purporting to seize, expropriate, transfer, or exercise rights of ownership with respect to the copyright, or any of the exclusive rights under a copyright, shall be given effect under this title, except as provided under Title 11.

17 U.S.C. § 201(e). The Historical and Statutory Notes relating to this sub-section clearly and emphatically state:

The purpose of this subsection is to reaffirm the basic principle that the United States copyright of an individual author shall be secured to that author, and cannot be taken away by involuntary

18. The trial court found that SBCCI expressly reserved its copyright in the codes adopted by the municipalities, and that no waiver of that copyright occurred. *Veeck*, 49 F.Supp 2d at 891.

transfer. It is the intent of the subsection that the author be entitled, despite any purported expropriation or involuntary transfer, to continue exercising all rights under the United States statute, and that the governmental body or organization may not enforce or exercise any rights under this title in that situation.

Nothing in the record below demonstrates a voluntary transfer by SBCCI of its copyright in the codes.¹⁹

The Fifth Circuit's entire discussion of this transfer consists of the following:

Section 201(e) of the Act reflects Congress' intention to protect copyright's from involuntary appropriation by government entities. 17 U.S.C. § 201(e). This is not, however, a "takings" case, not the least because SBCCI urged localities to adopt its model codes. The issue in the case is not the voluntariness of the appropriation but the legal consequences flowing from the permission that SBCCI gave.

¹⁹ The Fifth Circuit's own description of the "transactions" between the two municipalities and SBCCI appears to contradict a finding of voluntariness. The Fifth Circuit noted Peter Veech had easily purchased a copy of the code, which contained a copyright notice and license agreement. *Veech*, 293 F.3d at 793. The Fifth Circuit found ". . . SBCCI continues to assert its copyright prerogatives — exclusively to publish the codes and license their reproduction and distribution — even as to codes that have been adopted by local entities. . . ." *Id.* at 794. The "voluntary" transfer could not have been in writing, as the Fifth Circuit pointed out no licensing agreements are executed by SBCCI in connection with legislative adoption. *Id.* The written documentation requirement of 17 U.S.C. § 204(a) (written instrument required to transfer copyright) was therefore not met. In fact, the trial court's opinion indicates that SBCCI reserved all its rights. See *Veech*, 49 F.Supp.2d 885, 887 (E.D. Tex. 1999).

Veech, 293 F.3d at 803.²⁰ The Fifth Circuit apparently considered the transfer outside of the scope of § 201(e), although it does not explicitly state this. There is no legal or factual support demonstrated for this proposition.

Intellectual property, as do other types of property, enjoys constitutional protection afforded by the Fifth Amendment's command that "private property [shall not] be taken for public use, without just compensation." *U.S. Const. Amend V. See James v. Campbell*, 104 U.S. 356, 358 (1882) (patents); *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1003-04 (1984) (trade secrets). Copyrights are property for purposes of a Fifth Amendment Takings Clause analysis. See *Lane v. First Nat. Bank*, 871 F.2d 166, 174 (1st Cir. 1989); *Roth v. Pritikin*, 710 F.2d 934, 939 (2nd Cir. 1983). The casting of private property into the public domain appears on its face to constitute a government taking; an uncompensated one in the instant case. This issue, potentially affecting a number of organizations and the future ability of all levels of government to utilize privately developed codes, deserves greater explication and analysis than that given to it by the Fifth Circuit. The Fifth Circuit's broad and unsupported holding is

²⁰ The Second Circuit Court of Appeals, in *CCC Information Services, Inc. v. Maclean Hunter Market Reports, Inc.*, 44 F.3d 61 (2nd Cir. 1994), *cert. denied*, 516 U.S. 817 (1995), reached the opposite conclusion: "[A] rule that the adoption of such a reference by a state legislature or administrative body deprived the copyright owner of its property would raise very substantial problems under the Taking Clause of the Constitution." *Id.* at 74.

18

extremely troubling. The lack of legal or factual parameters²¹ surrounding this conclusion will inevitably lead to confusion and additional litigation without guidance from this Court.

21. The Fifth Circuit does exempt what it terms as “extrinsic standards” from its holding, *Veck* at 804-05, but otherwise provides no guidance.

19

CONCLUSION

The Petition for Writ of Certiorari should be granted.

Respectfully submitted,

THOMAS B. O'BRIEN, JR.*

JOSEPH B. SILVERSTEIN

Klett Rooney Lieber & Schorling

12th Floor, Two Logan Square

Philadelphia, PA 19103

(215) 567-7500 (Phone)

(215) 567-2737 (Fax)

* *Counsel of Record*

Counsel for Amicus Curiae

October 2002

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

AMERICAN SOCIETY FOR TESTING AND MATERIALS, <i>et al.</i> ,)	
)	
Plaintiffs,)	
)	
v.)	Case No. 13-cv-1215 (TSC)
)	
PUBLIC.RESOURCE.ORG, INC.,)	
)	
Defendant.)	
)	
AMERICAN EDUCATIONAL RESEARCH ASSOCIATION, INC. <i>et al.</i> ,)	
)	
Plaintiffs,)	
)	
v.)	Case No. 14-cv-0857 (TSC)
)	
PUBLIC.RESOURCE.ORG, INC.,)	
)	
Defendant.)	

MEMORANDUM OPINION

Before the court are motions and cross-motions for summary judgment in two related cases. Because there is significant factual and legal overlap between the two cases, the court issues this consolidated opinion to be filed in both cases.

Plaintiffs American Society for Testing and Materials (“ASTM”), National Fire Protection Association, Inc. (“NFPA”), and American Society of Heating, Refrigerating, and Air-Conditioning Engineers (“ASHRAE”) (collectively “ASTM Plaintiffs”) brought suit against Defendant Public.Resource.org, Inc. (“Public Resource”) under the Copyright Act (17 U.S.C. § 101 *et seq.*) and the Lanham Act (15 U.S.C. § 1051 *et seq.*), alleging copyright infringement and trademark infringement. Plaintiffs American Educational Research Association, Inc.

("AERA"), American Psychological Association, Inc. ("APA"), and National Council on Measurement in Education, Inc. ("NCME") (collectively "AERA Plaintiffs") also brought copyright infringement claims against Public Resource under the Copyright Act. Plaintiffs¹ in both cases seek permanent injunctions barring Defendant from continued display of their works.

Plaintiffs moved for summary judgment, and Defendant filed cross-motions for summary judgment in both cases. The court held a combined oral argument on September 12, 2016 to consider the motions. Upon consideration of the parties' filings, the numerous amicus briefs, and the arguments presented at the motions hearing, and for the reasons stated herein, the ASTM Plaintiffs' motion for summary judgment is GRANTED and Defendant's cross-motion is DENIED. The AERA Plaintiffs' motion for summary judgment is GRANTED IN PART AND DENIED IN PART, and Defendant's cross-motion is DENIED.

I. FACTUAL BACKGROUND

A. The Parties

1. ASTM Plaintiffs

ASTM Plaintiffs are not-for-profit organizations that develop private sector codes and standards in order to advance public safety, ensure compatibility across products and services, facilitate training, and spur innovation. (*See* ASTM Pls. Statement of Material Facts ("PSMF") ¶¶ 9, 13, 14, 86, 87, 129, 130 (ASTM ECF No. 118-2)).² These standards include technical works, product specifications, installation methods, methods for manufacturing or testing materials, safety practices, and other best practices or guidelines. (*Id.* ¶ 1). ASTM has

¹ For simplicity, the court's use of "Plaintiffs" refers collectively to the ASTM Plaintiffs and AERA Plaintiffs.

² All initial citations to the record in this Opinion will include the docket number as "ASTM ECF" or "AERA ECF."

developed over 12,000 standards that are used in a wide range of fields, including consumer products, iron and steel products, rubber, paints, plastics, textiles, medical services and devices, electronics, construction, energy, water, and petroleum products, and are the combined efforts of over 23,000 technical members, representing producers, users, consumers, government, and academia. (*Id.* ¶¶ 13, 28, 41). NFPA has developed over 300 standards in the areas of fire, electrical, and building safety, with the goal of reducing the risk of death, injury, and property and economic loss due to fire, electrical, and related hazards. (*Id.* ¶¶ 86, 87, 92). NFPA’s most well-known standard is the National Electrical Code, first published in 1897 and most recently in 2014. (*Id.* ¶¶ 93–94). Finally, ASHRAE has published over 100 standards for a variety of construction-related fields, including energy efficiency, indoor air quality, refrigeration, and sustainability. (*Id.* ¶ 130).

2. AERA Plaintiffs

AERA Plaintiffs are not-for-profit organizations that collaboratively develop the Standards for Educational and Psychological Testing, including the 1999 edition at issue in this case (“the 1999 Standards”). (AERA PSMF ¶¶ 1, 5, 13 (AERA ECF No. 60-2)). AERA is a national scientific society whose mission is “to advance knowledge about education, to encourage scholarly inquiry related to education, and to promote the use of research to improve education.” (*Id.* ¶ 2). APA is the world’s largest association of psychologists, and its mission is “to advance the creation, communication, and application of psychological knowledge.” (*Id.* ¶ 3). Finally, NCME is a professional organization “for individuals involved in assessment, evaluation, testing, and other aspects of educational measurement.” (*Id.* ¶ 4).

3. Public Resource

Defendant Public Resource is a not-for-profit entity devoted to publicly disseminating

legal information. (ASTM DSMF ¶¶ 1–2 (ASTM ECF No. 120-3); AERA DSMF ¶¶ 1–2 (AERA ECF No. 68-3)). Its mission is “make the law and other government materials more widely available so that people, businesses, and organizations can easily read and discuss [the] laws and the operations of government.” (ASTM DSMF ¶ 2; AERA DSMF ¶ 2). Public Resource has posted government-authored materials on its website, including judicial opinions, Internal Revenue Service records, patent filings, and safety regulations. (ASTM DSMF ¶¶ 3–4; AERA DSMF ¶¶ 3–4). It does not charge fees to view or download the materials on its website. (ASTM DSMF ¶ 5; AERA DSMF ¶ 5).

B. Incorporation by Reference of Industry Standards

In the United States, a complex public-private partnership has developed over the last century in which private industry groups or associations, rather than government agencies, typically develop standards, guidelines, and procedures that set the best practices in a particular industry.³ Applicable standards are used by entities and individuals in order to self-regulate and conform to the best practices of that industry. Professor Peter Strauss has noted that “manufacturing and markets are greatly aided, and consumers offered protection, by the application of uniform industrial standards created independent of law, as means of assuring quality, compatibility, and other highly desired market characteristics.” Peter L. Strauss, *Private Standards Organizations and Public Law*, 22 Wm. & Mary Bill Rts. J. 497, 499 (2013).

³ See U.S. Office of Management and Budget, Revised Circular No. A-119, https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/revised_circular_a-119_as_of_1_22.pdf (“OMB Revised Circular”) at 1 (Jan. 27, 2016) (“The vibrancy and effectiveness of the U.S. standards system in enabling innovation depends on continued private sector leadership and engagement. Our approach—reliance on private sector leadership, supplemented by Federal government contributions to discrete standardization processes as outlined in OMB Circular A-119—remains the primary strategy for government engagement in standards development.”).

Standards are typically developed by standards developing organizations (“SDOs”), like Plaintiffs, who work to develop “voluntary consensus standards,” such as those here. Voluntary consensus standards are the ultimate product of many volunteers and association members from numerous sectors bringing together technical expertise. They are “developed using procedures whose breadth of reach and interactive characteristics resemble governmental rulemaking, with adoption requiring an elaborate process of development, reaching a monitored consensus among those responsible within the SDO.” *Id.* at 501. ASTM Plaintiffs develop their standards using technical committees with representatives from industry, government, consumers, and technical experts. (ASTM PSMF ¶¶ 7, 28, 29, 109, 114, 135). These committees conduct open proceedings, consider comments and suggestions, and provide for appeals, and through subcommittees, draft new standards, which the full committees vote on. (*Id.* ¶¶ 31–37, 109, 136, 139). The AERA Plaintiffs developed the 1999 Standards through a Joint Committee which considered input from the public in a notice-and-comment process. (AERA PSMF ¶¶ 13–16).

Pursuant to 5 U.S.C. § 552, federal agencies may incorporate voluntary consensus standards—as well as, for example, state regulations, government-authored documents, and product service manuals—into federal regulations by reference. *See* Emily S. Bremer, *Incorporation by Reference in an Open-Government Age*, 36 Harv. J.L. & Pub. Pol’y 131, 145–47 (2013) (providing a general overview of the federal government’s incorporation of materials by reference). The federal government’s practice of incorporation by reference of voluntary consensus standards is intended to achieve several goals, including eliminating the cost to the federal government of developing its own standards, encouraging long-term growth for U.S. enterprises, promoting efficiency, competition, and trade, and furthering the reliance upon private sector expertise. *See* OMB Revised Circular, *supra*, at 14.

Section 552(a)(1) provides that “a person may not in any manner be required to resort to, or be adversely affected by, a matter required to be published in the Federal Register and not so published[, but] . . . matter *reasonably available to the class of persons affected thereby* is deemed published in the Federal Register when incorporated by reference therein with the approval of the Director of the Federal Register.” 5 U.S.C. § 552(a)(1) (emphasis added). The Office of the Federal Register (“OFR”) adopted regulations pursuant to § 552(a)(1) in 1982 and issued revised regulations in 2014. *See Approval Procedures for Incorporation by Reference*, 47 Fed. Reg. 34,107 (Aug. 6, 1982) (codified at 1 C.F.R. § 51.1 *et seq.*); 79 Fed. Reg. 66,267 (Nov. 7, 2014). These regulations specify that a “publication is eligible for incorporation by reference” if it is “published data, criteria, standards, specifications, techniques, illustrations, or similar material; and [d]oes not detract from the usefulness of the Federal Register publication system.” 1 C.F.R. § 51.7(a)(2). To determine whether the material is “reasonably available” as required by the statute, OFR will consider “[t]he completeness and ease of handling of the publication” and “[w]hether it is bound, numbered, and organized, as applicable.” *Id.* § 51.7(a)(3). All the standards at issue in this case have been incorporated by reference into federal law. (ASTM D5M F ¶ 22; 34 C.F.R. § 668.146 (incorporating AERA Plaintiffs’ 1999 Standards).

Standards that are incorporated by reference are available in person at the OFR in Washington, DC and/or with the incorporating agency. *See* 1 C.F.R. § 51.3(b)(4). Federal regulations that incorporate standards by reference typically direct interested individuals or entities to location(s) where they may view the incorporated documents in person. For example, the Environmental Protection Agency’s (“EPA”) regulation, 40 C.F.R. § 60.17(a), which incorporates numerous standards at issue here, states that:

Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. § 552(a) and 1 CFR part 51. . . .

All approved material is available for inspection at the EPA Docket Center, Public Reading Room, EPA WJC West, Room 3334, 1301 Constitution Ave. NW, Washington, DC, telephone number 202-566-1744, and is available from the sources listed below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030 or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

The EPA regulation further specifies that, for example, the 206 ASTM standards incorporated by reference by the EPA (some of which are involved in this suit) are “available for purchase from ASTM International, 100 Barr Harbor Drive, P.O. Box CB700, West Conshohocken, Pennsylvania 19428-2959, (800) 262-1373, <http://www.astm.org>.” 40 C.F.R. § 60.17(h). The U.S. Department of Education incorporated the AERA Plaintiffs’ 1999 Standards by reference at 34 C.F.R. § 668.146(b)(6), which states that the standards are:

on file at the Department of Education, Federal Student Aid, room 113E2, 830 First Street, NE, Washington, DC 20002, phone (202) 377-4026, and at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 1-866-272-6272, or to go: <http://www.archives.gov/federal-register/code-of-federal-regulations/ibr-locations.html>. The document may also be obtained from the American Educational Research Association.

ASTM Plaintiffs sell PDF and hard copy versions of their standards, including those that have been incorporated by reference into law. (ASTM PSMF ¶¶ 57, 99, 157). The prices for the standards in this case range from \$25 to \$200. (*Id.* ¶¶ 58, 99, 158). The ASTM Plaintiffs also maintain “reading rooms” on their websites that allow interested parties to view Plaintiffs’ standards that have been incorporated by reference. (*Id.* ¶¶ 63–64, 100, 161). The standards in these reading rooms are “read-only,” meaning they appear as images that may not be printed or downloaded. (*Id.*). AERA Plaintiffs sell hardcopy versions of the 1999 Standards, but do not sell digital or PDF versions. (AERA PSMF ¶¶ 30, 33). The prices for the 1999 Standards have ranged from \$25.95 to \$49.95 per copy, and they were sold continuously from 2000 through 2014, except for a nearly two-year period. (*Id.* ¶¶ 34–35).

C. Plaintiffs' Claims in This Action

1. ASTM et al. v. Public Resource

This case involves 257 of ASTM Plaintiffs' standards that have been incorporated by reference into federal law. (*See* ASTM Compl. Ex. A–C; ASTM DSMF ¶ 22). Defendant admits that it purchased hard copies of each of the standards at issue, scanned them into PDF files, added a cover sheet, and posted them online. (ASTM DSMF ¶¶ 173–74, 177–78; ASTM PSMF ¶¶ 182–87). Defendant re-typed some of ASTM Plaintiffs' standards and posted them online, with text in Hypertext Markup Language (HTML) format and graphics and figures in Mathematics Markup Language and Scalable Vector Graphics formats. (ASTM DSMF ¶¶ 83, 175). The copies posted on Defendant's website all bore ASTM Plaintiffs' trademarks. (ASTM PSMF ¶ 210). Defendant also uploaded the ASTM Plaintiffs' standards to the Internet Archive, a separate independent website. (*Id.* ¶ 185).

The ASTM Plaintiffs allege that their standards are original works protected from copyright infringement, and brought claims of copyright infringement, contributory copyright infringement, trademark infringement, unfair competition and false designation, and trademark infringement under common law. (ASTM Compl. ¶¶ 142–95). Defendant counter-sued, seeking a declaratory judgment that its conduct does not violate copyright law or trademark law. (ASTM Ans. ¶¶ 174–205). Both sides have filed motions for summary judgment.

2. AERA et al. v. Public Resource

This case involves the 1999 Standards, which AERA Plaintiffs have sold since 2000. (AERA PSMF ¶¶ 34–35). In May 2012, Public Resource purchased a paper copy of the 1999 Standards, disassembled it, scanned the pages, created a PDF file, attached a cover sheet, and, without authorization from the AERA Plaintiffs, posted the PDF file to Public Resource's

website and the Internet Archive. (AERA DSMF ¶ 28; AERA PSMF ¶¶ 69–80). Public Resource posted a read-only version of the 1999 Standards to its website, unlike many of the ASTM Plaintiffs’ standards, which had undergone optical character recognition (“OCR”) processing to be text-searchable. (*Id.* ¶ 73). OCR processing uses a machine to recognize letters and words in a PDF and translate them into letters or words that can be searched and used by text-to-speech software for individuals who are blind or visually impaired. (*Id.* ¶¶ 73–75).

Plaintiffs allege that the 1999 Standards are protected original works, and they brought suit claiming copyright infringement and contributory copyright infringement. (AERA Compl. ¶¶ 50–63). Defendant counter-sued seeking a declaratory judgment that its conduct does not violate copyright law or trademark law. (AERA Ans. ¶¶ 116–37). Both sides have moved for summary judgment.

II. LEGAL STANDARD

Summary judgment may be granted if “the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a); *see also Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247–48 (1986) (“[T]he mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no genuine issue of material fact.”) (emphasis in original); *Holcomb v. Powell*, 433 F.3d 889, 895 (D.C. Cir. 2006). Summary judgment may be rendered on a “claim or defense . . . or [a] part of each claim or defense.” Fed. R. Civ. P. 56(a).

“A party asserting that a fact cannot be or is genuinely disputed must support the assertion by . . . citing to particular parts of materials in the record.” Fed. R. Civ. P. 56(c)(1)(A). “A fact is ‘material’ if a dispute over it might affect the outcome of a suit under governing law;

factual disputes that are ‘irrelevant or unnecessary’ do not affect the summary judgment determination. An issue is ‘genuine’ if ‘the evidence is such that a reasonable jury could return a verdict for the nonmoving party.’” *Holcomb*, 433 F.3d at 895 (quoting *Liberty Lobby*, 477 U.S. at 248) (citation omitted). The party seeking summary judgment “bears the heavy burden of establishing that the merits of his case are so clear that expedited action is justified.” *Taxpayers Watchdog, Inc. v. Stanley*, 819 F.2d 294, 297 (D.C. Cir. 1987).

In considering a motion for summary judgment, “[t]he evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in his favor.” *Liberty Lobby*, 477 U.S. at 255; *see also Mastro v. Potomac Elec. Power Co.*, 447 F.3d 843, 850 (D.C. Cir. 2006) (“We view the evidence in the light most favorable to the nonmoving party and draw all inferences in its favor.”). The nonmoving party’s opposition, however, must consist of more than mere unsupported allegations or denials, and must be supported by affidavits, declarations, or other competent evidence setting forth specific facts showing that there is a genuine issue for trial. *See Fed. R. Civ. P. 56(c); Celotex Corp. v. Catrett*, 477 U.S. 317, 324 (1986). The non-movant “is required to provide evidence that would permit a reasonable jury to find [in his favor].” *Laningham v. U.S. Navy*, 813 F.2d 1236, 1242 (D.C. Cir. 1987).

III. ANALYSIS

A. Copyright Infringement

Under the Copyright Act, copyright in a work vests initially in the author(s) of that work. 17 U.S.C. § 201(a). Ownership can be transferred in whole or in part, and the exclusive rights of copyright ownership may also be transferred. *Id.* § 201(d). An owner of a valid copyright has the “exclusive right” to reproduce, distribute, or display the copyrighted works as well as prepare derivative works based upon it. *Id.* § 106(1)–(3), (5). Anyone who violates the exclusive rights

of the copyright owner “is an infringer of the copyright or right of the author, as the case may be.” *Id.* § 501(a). The legal or beneficial owner of that exclusive right may then “institute an action for any infringement.” *Id.* § 501(b). In order to succeed on their copyright infringement claims, the Plaintiffs must prove both ““(1) ownership of a valid copyright, and (2) copying of constituent elements of the work that are original.”” *Stenograph, LLC v. Bossard Assoc., Inc.*, 144 F.3d 96, 99 (D.C. Cir. 1998) (quoting *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 361 (1991)).

1. Feist Prong 1: Ownership of a Valid Copyright

a. Ownership

The court must first decide the threshold issue of whether Plaintiffs own the copyrights in part or outright such that they have standing to challenge Defendant’s alleged infringement. The Copyright Act provides that possession of a certificate of registration from the U.S. Copyright Office “made before or within five years after first publication of the work shall constitute prima facie evidence,” creating a rebuttable presumption of ownership of a valid copyright. 17 U.S.C. § 410(c); *see also MOB Music Publ’g. v. Zanzibar on the Waterfront, LLC*, 698 F. Supp. 2d 197, 202 (D.D.C. 2010). If the copyright was registered more than five years after the work was published, then the “evidentiary weight to be accorded . . . shall be within the discretion of the court.” 17 U.S.C. § 410(c).

When a party offers as prima facie evidence a registration certificate for a compilation of individual works that it authored, rather than the registration for a specific individual work, a court may consider this to be similar prima facie evidence of ownership, creating the same rebuttable presumption. *See Xoom, Inc. v. Imageline, Inc.*, 323 F.3d 279, 283-84 (4th Cir. 2003), *abrogated by Reed Elsevier, Inc. v. Muchnick*, 559 U.S. 154 (2010); *Morris v. Business*

Concepts, Inc., 259 F.3d 65, 68 (2d Cir. 2001), *abrogated on other grounds by Muchnick*, 559 U.S. 154 (2010). Moreover, the registration certificate is sufficient prima facie evidence for the individual works within the compilation if the compilation is deemed to be a “single work.” Federal regulations provide that “all copyrightable elements that are otherwise recognizable as self-contained works, that are included in a single unit of publication, and in which the copyright claimant is the same” constitute a “single work,” such that they are validly registered under a single registration certificate 37 C.F.R. § 202.3(b)(4)(A); *Kay Berry, Inc. v. Taylor Gifts, Inc.*, 4221 F.3d 199, 205–06 (3d Cir. 2005); *Yurman Studio, Inc. v. Castaneda*, 591 F. Supp. 2d 471, 483 (S.D.N.Y. 2008).

Once a copyright holder has proffered this prima facie evidence, the alleged infringer “challenging the validity of the copyright has the burden to prove the contrary.” *Hamil Am., Inc. v. GFI, Inc.*, 193 F.3d 92, 98 (2d Cir. 1999); *United Fabrics Int’l, Inc. v. C&J Wear, Inc.*, 630 F.3d 1255, 1257 (9th Cir. 2011) (infringer “has the burden of rebutting the facts set forth in the copyright certificate”). The defendant-infringer might argue that the plaintiff-copyright holder had some defect in the record-keeping submitted to establish ownership. However, this “skips a step,” as the defendant must first “set forth facts that rebut the presumption of validity to which [the plaintiff’s] copyright is entitled” before attacking the sufficiency of a plaintiff’s evidence of ownership. *United Fabrics*, 630 F.3d at 1257. The infringer must use “*other evidence* in the record [to] cast[] doubt on” the validity of the ownership. *Fonar Corp. v. Domenick*, 105 F.3d 99, 104 (2d Cir. 1997) (emphasis in original). The court in *Fonar* noted that defendant-infringers have overcome the presumption of validity with evidence that the work has been copied from the public domain and evidence that the work was non-copyrightable. *Id.* (citing *Folio Impressions, Inc. v. Byer Cal.*, 937 F.2d 759, 763–64 (2d Cir. 1991); *Carol Barnhart, Inc. v. Economy Cover*

Corp., 773 F.2d 411, 414 (2d Cir. 1985)). Parties challenging the validity of copyright registrations must therefore do more than simply point out potential errors in the certificate. *See* 2 Nimmer on Copyright § 7.20(b)(1) (“a misstatement . . . in the registration application, if unaccompanied by fraud, should neither invalidate the copyright nor render the registration certificate incapable of supporting an infringement action”).

The ASTM Plaintiffs produced copyright certificates for each of the nine standards at issue, and each of these certificates list the ASTM Plaintiffs as the authors of the works.⁴ The AERA Plaintiffs also produced the copyright certificates for the 1999 Standards, listing the AERA Plaintiffs as authors.⁵ Two of ASTM’s standards—D86-07 and D975-07—were registered more than five years after they were published. The court accords these the same evidentiary weight as if they had been registered within five years. *See* 17 U.S.C. § 410(c) (court has discretion over evidentiary weight). Moreover, the court finds that the registration certificate for the 1999 Book of Standards sufficiently establishes prima facie evidence of ASTM’s ownership of D396-98 and D1217-93(98). Therefore, the ASTM Plaintiffs and AERA Plaintiffs have established their ownership of the works at issue with prima facie evidence.

⁴ The nine copyright registrations are provided in the record here:

- ASTM: Ex. 1 to O’Brien Decl. (ASTM D86-07) (ASTM ECF No. 118-7, p. 13); Ex. 2 to O’Brien Decl. (ASTM D975-07) (ASTM ECF No. 118-7, p. 16); Ex. 4 to O’Brien Decl. (1999 Annual Book of ASTM Standards) (ASTM ECF No. 118-7, p. 23); Ex. 3 to O’Brien Decl. (listing ASTM D396-98 and ASTM D1217-93(98) as standards included in the 1999 Annual Book of ASTM Standards) (ASTM ECF No. 118-7, pp. 20–21).
- NFPA: Ex. A to Berry Decl. (National Electrical Code, 2011 ed.) (ASTM ECF No. 118-3, p. 6); Ex. B to Berry Decl. (2014 ed.) (ASTM ECF No. 118-3, p. 8).
- ASHRAE: Ex. 3 to Reiniche Decl. (Standard 90.1, 2004 ed.) (ASTM ECF No. 118-10, page 16); Ex. 4 to Reiniche Decl. (2007 ed.) (ASTM ECF No. 118-10, page 19); Ex. 5 to Reiniche Decl. (2010 ed.) (ASTM ECF No. 118-10, page 22).

⁵ Ex. RRR to Levine Decl. (original copyright registration) (AERA ECF No. 60-83); Ex. SSS to Levine Decl. (2014 corrected registration) (AERA ECF No. 60-84).

The burden to offer evidence disproving ownership thus shifts in both cases to Defendant. *See Zanzibar*, 698 F. Supp. 2d at 202; *Roeslin v. District of Columbia*, 921 F. Supp. 793, 797 (D.D.C. 1995) (finding that because the copyright registration listed plaintiff as the author, the “burden is thus on the defendant to establish” that plaintiff was not the author). To rebut the presumption of validity, in both cases Defendant pointed to the fact that the certificates state that the standards were “works for hire”—i.e., that Plaintiffs acquired authorship and ownership rights because their employees or anyone who signed a work-for-hire agreement wrote the standards—and the certificates further state that Plaintiffs are the authors of the “entire text[s],” when Plaintiffs have said that the standards are drafted by hundreds or thousands of volunteer contributors. Defendant contends that the certificates must list all of these hundreds or thousands of authors in order to be accurate, and that the failure to do so is a material error which strips Plaintiffs of the presumption of ownership. However, Defendant offers scant support for this argument.

Moreover, Defendant failed to meet its initial burden, since it did not adduce any additional evidence *disproving* Plaintiffs’ authorship. Instead, Defendant points to weaknesses in the additional evidence that Plaintiffs proffered to establish their ownership, including questioning whether every one of the hundreds of Plaintiffs’ members who contributed to the standards at issue signed an agreement with appropriate language transferring or assigning copyright ownership to Plaintiffs. Because Plaintiffs may have standing to bring this infringement suit even as part owners of the copyrights, it is not clear why Defendant asserts that Plaintiffs must prove outright ownership of their copyrights. Beyond showing that Plaintiffs’ recordkeeping could perhaps be more thorough, Defendant has not identified any evidence that either the ASTM Plaintiffs or AERA Plaintiffs do not own the copyrights of the standards, in

whole or in part. The court therefore concludes that the ASTM Plaintiffs and AERA Plaintiffs are the owners of the copyrights at issue and have standing to bring their claims.⁶

b. Valid Copyrights

Defendant also argues that Plaintiffs do not own “valid” copyrights under *Feist* because the standards either were never copyrightable or lost their copyright protection upon incorporation by reference into federal regulations. Defendant argues that the standards cannot be copyrighted because: (1) they are methods or systems, which are not entitled to protection under 17 U.S.C. § 102(b); (2) the standards are in the public domain as “the law”; and (3) the merger and *scènes à faire* doctrines preclude a finding of infringement.

(i). *Methods or Systems under Copyright Act § 102(b)*

Section 102(b) of the Copyright Act specifies eight types of works that are not protected by copyright: “In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.” 17 U.S.C. § 102(b). Though these eight types of works are not further defined in the statute, the legislative history accompanying the Copyright Act of 1976 offers some starting guidance: “Section 102(b) in no way enlarges or contracts the scope of copyright protection under the present law. Its purpose is to restate, in the context of the new single Federal system of copyright, that the basic dichotomy between expression and idea remains unchanged.” H.R.

⁶ Defendant did not dispute that “ASTM has copyright registrations that cover each of the standards at issue in this litigation” except as to one standard, ASTM D323-58(68). (*See* Def. Statement of Disputed Facts ¶ 70 (ASTM ECF No. 121-3)). Therefore, unless Defendant presents evidence disproving ownership, the court is likely to conclude, based on these copyright registrations, that the ASTM Plaintiffs are the owners of the remaining standards at issue in this litigation, with the exception of D323-58(68). As to this standard, ASTM will need to present additional evidence establishing ownership.

Rep. No. 94-1476, at 57, *reprinted in* 1976 U.S.C.C.A.N. 5659, 5670 (Sept. 3, 1976); S. Rep. No. 94-473 (Nov. 20, 1975); *see also* 1-2A Nimmer on Copyright § 2A.06(a)(1) (summarizing legislative history). The “basic dichotomy” refers to the well-established principle that ideas cannot be copyrighted, but expression of those ideas can be. *See* 1-2A Nimmer on Copyright § 2A.06(a)(2)(b) (a work “is to be denied protection only if that protection would be tantamount to protecting an excluded category (e.g., idea or method of operation) without regard to the fact that the excluded subject matter is expressed or embodied in expression”).

This section of the Copyright Act codifies the Supreme Court’s 1879 decision in *Baker v. Selden*, 101 U.S. 99 (1897), which denied copyright protection for systems, methods, processes, and ideas. *Baker* evaluated a copyright claim by the author of a manual describing “a peculiar system of book-keeping” against a defendant who published a similar guide to book-keeping using “a similar plan so far as results are concerned[,] but mak[ing] a different arrangement of the columns, and us[ing] different headings.” *Id.* at 100. The Court defined the question as “whether the exclusive property in a system of book-keeping can be claimed, under the law or copyright, by means of a book in which that system is explained.” *Id.* at 101. In answering this question, the Court offered as an example that “[t]he copyright of a work on mathematical science cannot give to the author an exclusive right to the methods of operation which he propounds, or to the diagrams which he employs to explain them, so as to prevent an engineer from using them whenever occasion requires.” *Id.* at 103. This distinction between the actual method or system described by a work, which cannot be copyrighted, and the written words describing it, which can, is fundamental to understanding the Copyright Act’s modern limitations to copyright protection in § 102(b).

Defendant primarily argues that the Plaintiffs’ standards are completely devoid of

creative expression and are merely recitations of processes or procedures that a person or entity would follow. Part of this argument appears to rest only on the fact that the names of the ASTM Plaintiffs' standards, and their descriptions or advertisements, include the words "method" and "procedure." *See, e.g.*, ASTM D86-07 Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure, Ex. 6 to Decl. of Thomas O'Brien ("O'Brien Decl.") (ASTM ECF No. 118-7 at 107)); ASTM D1217-93(98) Standard Test Method for Density and Relative Density (Specific Gravity) of Liquids by Bingham Pycnometer, Ex. 9 to O'Brien Decl. (ASTM ECF No. 118-7 at 136). Additionally, the AERA Plaintiffs' Rule 30(b)(6) representative noted that the 1999 Standards "describe procedures, statistical procedures, research procedures . . . how to design a test, how to collect evidence of validity, [and] how to calculate the reliability of tests." (Def. Br. at 32 (citing AERA DSMF ¶ 77)). However, simply calling a work a "procedure" or a "method" does not revoke its copyright protection under the Copyright Act. This argument misunderstands or ignores the expression/idea dichotomy rooted in *Baker* and codified in § 102(b).

Defendant also emphasizes that because the Plaintiffs' standards are highly technical, complex, and precise, and because testimony shows that the ASTM Plaintiffs attempt to create the "best" standards, then the standards are "dictated by utility" or just "discovered facts," and lack any creative expressive content. However, the court rejects the argument that voluntary consensus standards, such as those here, are analogous to a list of ingredients or basic instructions in a recipe, or a series of yoga poses, as in the cases cited by Defendant. Not only is there a vast gulf between the simplicity of an ingredient list and the complexity of the standards,

but, more importantly, the standards plainly contain expressive content.⁷ As one example, ASTM D1217-93 lists under the heading “Significance and Use”: “Although [the standard] is no longer employed extensively for the purpose, this test method is useful whenever accurate densities of pure hydrocarbons or petroleum fractions with boiling points between 90 and 110°C are required.” (ASTM ECF No. 118-7 at 136).

The standards in these cases contain expression that is certainly technical but that still bears markings of creativity. As the Supreme Court instructed in *Feist*, “the requisite level of creativity is extremely low; even a slight amount will suffice. The vast majority of works make the grade quite easily, as they possess some creative spark, ‘no matter how crude, humble or obvious’ it might be.” 499 U.S. at 345 (quoting 1 M. Nimmer & D. Nimmer, Copyright § 1.08(C)(1) (1990)). Moreover, as Defendant conceded, there are many possible forms of expression through which the technical material in the standards could be conveyed, and the volunteer and association members who collectively author the standards “debate wording in the standards.” (Def. Br. at 32 (ASTM ECF No. 121)). Thus, however “humble” or “obvious” Defendant finds the Plaintiffs’ creative choices, the standards still bear at least the “extremely low” amount of creativity required by the Supreme Court. Moreover, the undisputed record evidence also shows that other parties have written different standards on the same exact subject matter as ASTM Plaintiffs’ standards, undermining the argument that the standards are so technical and precise there can be only one possible expression. (ASTM PSMF ¶¶ 38, 133).

Importantly, *Baker* and § 102(b) bar Plaintiffs from attempting to copyright the system or

⁷ Defendant does not request that this court scour the over 1,000 pages of the nine of ASTM Plaintiffs’ standards provided to the court or the over 200 pages of the 1999 Standards, and the court was not provided with copies of the remaining standards. The court declines to engage in such an exercise here.

method *itself*, not the written work explaining or describing that method. Here, the copyright protections held by the Plaintiffs do not prevent any person or entity from using or applying the procedures described in the standards, only from copying their written descriptions of those standards. Defendant presented no evidence that the Plaintiffs have sought to block an entity or person from *using* the procedures described in the standards. In fact, use of the procedures described is the *entire purpose* of such voluntary consensus standards. The court therefore concludes that § 102(b) of the Copyright Act does not preclude these standards from being copyrighted.

(ii). *Loss of Copyright Upon Entering the Public Domain*

A. Federal Law Does Not Bar Copyrightability

At the heart of Defendant's defense is the argument that Plaintiffs' standards lost their copyright protections the instant they were incorporated by reference into federal regulations. There are weighty policy arguments on both sides of this issue, including the need to preserve a vital and complicated public-private partnership between the government and SDOs, and the need for an informed citizenry to have a full understanding of how to comply with the nation's legal requirements. However, this suit is not about access to the law in a broad sense, but instead about the validity of copyrights for these standards under current federal law. Copyright protection is a creature of statute, and as such is the result of careful policy considerations by Congress. In the view of this court, Congress has already passed on the question of revoking copyright protection for standards that have been incorporated by reference into regulations, and any further consideration of the issue must be left to Congress for amendment.

Section 105 of the Copyright Act states that “[c]opyright protection under this title is not available for any work of the United States Government.” 17 U.S.C. § 105. The Act defines a

“work of the United States Government” as “a work prepared by an officer or employee of the United States Government as part of that person’s official duties.” *Id.* § 101. These are the only government-related works that outright lack copyright under the law. For other types of works, such as those commissioned by the government or created under government contract by private parties, Congress chose to make case-by-case decisions and leave the determination of whether private copyright should exist to the federal agency that commissioned or contracted for the work. The House Report accompanying the Copyright Act states:

The bill deliberately avoids making any sort of outright, unqualified prohibition against copyright in works prepared under Government contract or grant. There may well be cases where it would be in the public interest to deny copyright in the writings generated by Government research contracts and the like; it can be assumed that, where a Government agency commissions a work for its own use merely as an alternative to having one of its own employees prepare the work, the right to secure a private copyright would be withheld. However, there are almost certainly many other cases where the denial of copyright protection would be unfair or would hamper the production and publication of important works. Where, under the particular circumstances, Congress or the agency involved finds that the need to have a work freely available outweighs the need of the private author to secure copyright, the problem can be dealt with by specific legislation, agency regulations, or contractual restrictions.

H.R. Rep. No. 94-1476, at 5672 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5672.

Defendant argues that Sections 102(b) (no protection for systems or methods) and 105 (no protection for Government-authored works) should be read together to indicate that Congress intended that there be no copyright protections for incorporated standards because, like judicial opinions—which the Supreme Court nearly two hundred years ago determined could not be copyrighted—the standards, once incorporated, are “legal facts” which cannot be copyrighted. *See Wheaton v. Peters*, 33 U.S. 591, 668 (1834) (writing that the Court was “unanimously of the opinion that no reporter has or can have any copyright in the written opinions delivered by this Court”); *Banks v. Manchester*, 128 U.S. 244, 253 (1888) (“The whole work done by the judges

constitutes the authentic exposition and interpretation of the law, which, binding every citizen, is free for publication to all, whether it is a declaration of unwritten law, or an interpretation of a constitution or a statute.”). While these cases form the bedrock for the long-standing principle that works authored by government officials or employees cannot be copyrighted, the cases involved works by actual government officials—i.e., judges—acting in their official capacity, unlike here. That was the principle codified in § 105 of the Copyright Act and restated in the U.S. Copyright Office’s Compendium of Copyright Office Practices § 313.6(c)(2) (3d ed. 2014), which states: “As a matter of longstanding public policy, the U.S. Copyright Office will not register a government edict that has been issued by any state, local, or territorial government, including legislative enactments, judicial decisions, administrative rulings, public ordinances, or similar types of official legal materials.”

Congress was well aware of the potential copyright issue posed by materials incorporated by reference when it crafted Section 105 in 1976. Ten years earlier, Congress had extended to federal agencies the authority to incorporate private works by reference into federal regulations. *See* Pub. L. No. 90-23, § 552, 81 Stat. 54 (1967) (codified at 5 U.S.C. § 552) (providing that “matter reasonably available to the class of persons affected thereby is deemed published in the Federal Register when incorporated by reference therein with the approval of the Director of the Federal Register”). However, in the Copyright Act of 1976, Congress made no mention of these incorporated works in § 105 (no copyright for “any work of the United States Government”) or any other section. As the House Report quoted above indicates, Congress already carefully weighed the competing policy goals of making incorporated works publicly available while also preserving the incentives and protections granted by copyright, and it weighed in favor of preserving the copyright system. *See* H.R. Rep. No. 94-1476, at 60 (1976) (stating that under

§ 105 “use by the Government of a private work would not affect its copyright protection in any way”); *see also M.B. Schnapper v. Foley*, 667 F.2d 102, 109 (D.C. Cir. 1981) (analyzing Copyright Act and holding that “we are reluctant to cabin the discretion of government agencies to arrange ownership and publication rights with private contractors absent some reasonable showing of a congressional desire to do so”).

However, recognizing the importance of public access to works incorporated by reference into federal regulations, Congress still requires that such works be “reasonably available.” 5 U.S.C. § 552(a)(1). Under current federal regulations issued by the Office of the Federal Register in 1982, a privately authored work may be incorporated by reference into an agency’s regulation if it is “reasonably available,” including availability in hard copy at the OFR and/or the incorporating agency. 1 C.F.R. § 51.7(a)(3). Thirteen years later, Congress passed the National Technology Transfer and Advancement Act of 1995 (“NTTAA”) which directed all federal agencies to use privately developed technical voluntary consensus standards. *See Pub. L. No. 104-113*, 110 Stat. 775 (1996). Thus, Congress initially authorized agencies to incorporate works by reference, then excluded these incorporated works from § 105 of the Copyright Act, and, nearly twenty years later, specifically directed agencies to incorporate private works by reference. From 1966 through the present, Congress has remained silent on the question of whether privately authored standards and other works would lose copyright protection upon incorporation by reference. If Congress intended to revoke the copyrights of such standards when it passed the NTTAA, or any time before or since, it surely would have done so expressly. *See Whitman v. Am. Trucking Ass’ns, Inc.*, 531 U.S. 457, 468 (2001) (“Congress . . . does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions—it does not . . . hide elephants in mouseholes.”); *United States v. Fausto*, 484 U.S. 439, 453 (1988)

("[It] can be strongly presumed that Congress will specifically address language on the statute books that it wishes to change."). Instead, Congress has chosen to maintain the scheme it created in 1966: that such standards must simply be made reasonably available. *See* 5 U.S.C. § 552(a)(1).

Moreover, Congress has similarly determined that online access to the nation's laws and regulations need not be provided for no cost. In establishing "a system of online access to the Congressional Record [and] the Federal Register," Congress authorized the Superintendent of Documents, under the direction of the Director of the Government Publishing Office, to "charge reasonable fees for use of the directory and the system of access." 44 U.S.C. §§ 4101–02. While citing this statute and noting that the Superintendent has chosen not to charge fees for online access, OFR in its 2013 proposed rulemaking stated that Congress had not made a policy determination that online access to the law must be provided free of charge. *See* Incorporation by Reference, 78 Fed. Reg. 60,784, 60,785 (Oct. 2, 2013). Similarly, OFR recently determined that "reasonably available" under § 552(a)(1) did not mean availability for no cost on the Internet. *See id.* (considering proposed amendments to OFR's regulations on incorporation by reference and specifically addressing and rejecting the argument that standards incorporated by reference should be posted online for free in order to be reasonably available).

Importantly, there is no evidence that the ASTM Plaintiffs' standards or the AERA Plaintiffs' standards are unavailable to the public. In fact, the undisputed record evidence shows that the standards are required to be available in physical form from OFR (*see* 1 C.F.R. § 51.3(b)(4)); are available for purchase from the AERA Plaintiffs in hard copy (AERA PSMF ¶ 34) and from the ASTM Plaintiffs in hard copy and PDFs (*see* ASTM PSMF ¶ 57, 99, 157); and are accessible in read-only format for free in ASTM Plaintiffs' online reading rooms (*see*

ASTM PSMF ¶¶ 64, 100, 161). While Defendant argues that the public requires *greater* access to the standards—in particular, free online access in formats other than read-only—that is a policy judgment best left to Congress. The arguments raised by the parties and by amici highlight important considerations regarding unrestricted access to the texts of laws, regulations, and incorporated materials, as well as the strong need to protect the economic incentives for the further creation of new standards through revenues from the sale of existing standards. This is the policy balancing that Congress is presumed to have already engaged in, and any further changes to the law in light of new technological developments and resulting changes in public expectations of access to information are best addressed by Congress, rather than this court.

B. Due Process Concerns Do Not Bar Copyrightability

Defendant further argues that even if the Copyright Act does not bar copyright protection for incorporated standards, individuals have a due process right to access the text of “the law,” including the standards at issue here. Four Circuit Courts have considered similar arguments regarding copyrighted works incorporated by reference into state and federal regulations. *See Bldg. Officials & Code Admins. v. Code Tech., Inc.*, 628 F.2d 730 (1st Cir. 1980) (“BOCA”) (declining to rule on the question); *CCC Info. Servs., Inc. v. McLean Hunter Mkt. Reports, Inc.*, 44 F.3d 61, 74 (2d Cir. 1994) (upholding copyright in work incorporated by reference); *Cnty. of Suffolk, N.Y. v. First Am. Real Estate Solutions*, 261 F.3d 179 (2d Cir. 2001) (same); *Practice Mgmt. Info. Corp. v. Reports, Inc.*, 121 F.3d 516, 518 (9th Cir. 1997) (same); *Veeck v. S. Bldg. Code Cong. Int’l, Inc.*, 293 F.3d 791, 796 (5th Cir. 2002) (en banc) (holding that incorporation by reference revoked the copyright owner’s copyright protection). The court will briefly describe each of these Circuit decisions.

The question of whether a privately-authored, copyrighted work might lose its copyright

protection after being referenced in a law was first discussed by the First Circuit in *BOCA*. That case involved a nonprofit, BOCA, which authored and copyrighted a model code called the “Basic Building Code.” *See* 628 F.3d at 731-32. Massachusetts adopted a building code based in substantial part on the BOCA Basic Building Code, called the Commonwealth of Massachusetts State Building Code. *Id.* at 732. BOCA sold a printed version of the Massachusetts State Building Code for \$22 a copy, and the state referred any persons interested in obtaining a copy of the code for their own use to BOCA. *Id.* The defendant, Code Tech., Inc., published its own copy of the Massachusetts State Building Code and sold it for \$35 per volume. *Id.* In the subsequent copyright infringement suit, the district court granted BOCA’s request for a preliminary injunction, and the First Circuit reversed, though it reserved judgment on the merits of whether the building code was validly copyrighted. Instead, it noted that “[t]he citizens are the authors of the law, and therefore its owners, regardless of who actually drafts the provisions, because the law derives its authority from the consent of the public, expressed through the democratic process.” *Id.* at 734.

The Second Circuit considered similar issues in two cases. First, in *CCC*, the court considered whether copyright protection for a compilation called the Red Book, which listed used car valuations, was revoked after it was referenced by states as one of several references for car valuation. *See* 44 F.3d at 74. The court rejected the argument that referenced works enter the public domain, stating: “We are not prepared to hold that a state’s reference to a copyrighted work as a legal standard for valuation results in loss of the copyright. While there are indeed policy considerations that support [defendant’s public domain] argument, they are opposed by countervailing considerations.” *Id.* The court then analogized to a state education system assigning copyrighted books as a mandatory part of a school curriculum and noted that under the

public domain logic, these books might lose copyright protection. *Id.*

Second, in *County of Suffolk*, the Second Circuit considered the copyrightability of a county's tax maps. The court looked to *Banks*, in which the Supreme Court held that judicial opinions were not copyrightable, and determined that *Banks* established two premises: (1) that judges' opinions cannot be copyrighted because judges receive their salaries from the public treasury and do not have the economic incentives that copyrights are designed to protect; and (2) there are due process considerations because the "whole work done by the judges constitutes the authentic exposition and interpretation of the law, which, binding every citizen, is free for publication to all." 261 F.3d at 193–94 (citing *Banks v. Manchester*, 128 U.S. 244, 253 (1888)). Building on these premises, the Second Circuit articulated two factors that should guide courts' analysis in these situations: first, "whether the entity or individual who created the work needs an economic incentive to create or has a proprietary interest in creating the work"; and second, "whether the public needs notice of this particular work to have notice of the law." *Id.* at 194 (citing *Practice Management*, 121 F.3d at 518–19; *BOCA*, 628 F.2d at 734–35). With regard to this second factor, the court primarily considered the severity of criminal or civil sanctions associated with failure to adhere to the maps at issue. Finding no serious penalties, it focused on the fact that citizens had "fair warning" of the tax maps from their reference in the tax statute, and there was "no allegation that any individual required to pay the applicable property tax ha[d] any difficulty in obtaining access to either the law or the relevant tax map." *Id.* at 195. Therefore, the maps were entitled to copyright protection.

Like the Second Circuit, the Ninth Circuit in *Practice Management* also decided to preserve the copyright protections in the American Medical Association's ("AMA") publication of medical codes and descriptions which had been incorporated by reference by the U.S. Health

Care Financing Administration (“HCFA”). Under the HCFA’s regulation, parties seeking health insurance reimbursement for Medicare were required to use the codes created and copyrighted by the AMA. *See* 121 F.3d at 518. The Ninth Circuit similarly looked to *Banks* and focused on its premise that there is a due process interest in free access to the law. Like the Second Circuit, the court considered this due process interest and ultimately rejected revoking the AMA’s copyright because “[t]here [was] no evidence that anyone wishing to use the [copyrighted codes] ha[d] any difficulty obtaining access to it.” *Id.* at 519.

Finally, counter to the opinions of other circuits, the Fifth Circuit sitting *en banc* in *Veck* focused more heavily on the first *Banks* premise regarding economic incentives and held that copyright protection is revoked when a model code is adopted as law by a municipality, stating that “as law, the model codes enter the public domain and are not subject to the copyright holder’s exclusive prerogatives.” 293 F.3d at 793. However, the court carefully distinguished its decision from the facts in the aforementioned cases. It wrote:

[T]he limits of this holding must be explained. Several national standards-writing organizations joined [defendant] as amici out of fear that their copyrights may be vitiated simply by the common practice of governmental entities’ incorporating their standards in laws and regulations. This case does not involve references to extrinsic standards. Instead, it concerns the wholesale adoption of a model code promoted by its author, [defendant], precisely for use as legislation. Caselaw that derives from official incorporation of extrinsic standards is distinguishable in reasoning and result. . . . If a statute refers to the Red Book or to specific school books, the law requires citizens to consult or use a copyrighted work in the process of fulfilling their obligations. The copyrighted works do not ‘become law’ merely because a statute refers to them. . . . Equally important, the referenced works or standards in *CCC* and *Practice Management* were created by private groups for reasons other than incorporation into law. To the extent incentives are relevant to the existence of copyright protection, the authors in these cases deserve incentives. . . . In the case of a model code, on the other hand, the text of the model serves no other purpose than to become law.

Id. at 803–05. The cases before the court, involving some of the same amici referenced in *Veck*, do not involve model codes adopted verbatim in their entirety into legislation. Instead, the

standards incorporated by reference provide guidelines and procedures that individuals or entities must use or reference in the fulfillment of their legal obligations under federal regulations.

Applying the first premise of *Banks* to the facts here, Defendant argues that Plaintiffs do not require economic incentives to create their standards because they actively lobby and advocate for their standards to be incorporated by reference into regulations, including investing funds on lobbying to that effect. Therefore, Defendant argues, the court should find that Plaintiffs create standards for no purpose other than adoption into law, as the *Veeck* court determined regarding the model code in that case. Here however, the facts indicate that Plaintiffs create standards for a wide range of industries, that the majority of their standards are not incorporated into regulations, and that even those that have been incorporated by reference have undergone updates and revisions to reflect modern use, despite the regulations incorporating past versions. Plaintiffs and supporting amici highlight that without copyright protection for all of their standards, they will face significant difficulty raising the necessary revenue to continue producing high-quality voluntary consensus standards. In its Notice of Proposed Rulemaking, OFR relied on this same argument to ultimately reject a proposal to require free online access to standards in its “reasonably available” determination. 78 Fed. Reg. at 60,785 (“If we required that all materials IBR’d into the CFR be available for free, that requirement would compromise the ability of regulators to rely on voluntary consensus standards, possibly requiring them to create their own standards, which is contrary to the NTTAA and the OMB Circular A-119.”).

As for the second premise of *Banks*, this court finds that, as in the cases before the Second and Ninth Circuits, there is no evidence here that anyone has been denied access to the standards by the ASTM Plaintiffs or AERA Plaintiffs. Instead, Defendant simply argues that the

public should be granted more expansive access.

Therefore, considering the *Banks* holdings and given the existing statutory, regulatory, and judicial framework, this court finds that Plaintiffs' standards have not entered the public domain upon their incorporation by reference into federal regulations and do not lose their copyright protection. This conclusion does not dismiss or diminish the valid public policy concern that citizens benefit from greater access to statutes, regulations, and all materials they must reference in fulfilling their legal obligations. The ability to know, understand, and communicate the law as a broad concept is of paramount importance to the continued success of our democracy. However, changes to the statutory or regulatory framework that reconsider the balancing of interests underlying modern copyright law and incorporation by reference must be made by Congress, not this court.

(iii). *Merger Doctrine*

Defendant asks the court to apply the "merger doctrine" to find that the standards cannot be copyrighted because the expressions in the standards have merged with the law to become facts. Under modern copyright law, there is a well-known dichotomy between "expression," which can generally be copyrighted, and "ideas," which cannot. 4-13 Nimmer on Copyright § 13.03. The merger doctrine has developed to consider those specific situations in which "the idea 'merges' with the expression, such that a given idea is inseparably tied to a particular expression." *Id.* at § 13.03(3). This can occur when there "are so few ways of expressing an idea [that] not even the expression is protected by copyright." *Id.* (quoting *BUC Int'l Corp. v. Int'l Yacht Council Ltd.*, 489 F.3d 1129, 1143 (11th Cir. 2007)).

The parties disagree as to the proper merger doctrine analysis. Defendant argues that upon their incorporation by reference, the standards become "merged" with the "fact" that is the

law. Plaintiffs argue that to determine if an idea and expression have merged, the court should focus on whether there were any other ways of articulating a particular idea when the work was first published, not when it was later incorporated by reference. In essence, the parties disagree as to whether the merger doctrine is a question of copyrightability—meaning the Plaintiffs’ standards might lose copyright protection upon incorporation by reference—or an affirmative defense to copyright infringement—i.e., the allegedly infringing work did not violate copyright because there was no other way to express the content of the work. Plaintiffs argue that the merger doctrine addresses only the question of copyrightability, and so the court’s analysis should focus on whether, at the time the standards were authored, there were no other ways to articulate and arrange such standards. Defendant contends that the standards could not be expressed any other way after incorporation into regulations, and thus its display of the standards was not infringement.

The court declines to resolve this merger doctrine issue, since under either approach, the standards maintain copyright protection. At the time they were authored, there were certainly myriad ways to write and organize the text of the standards, and, for the reasons discussed above, the standards did not lose their copyright protections upon incorporation by reference into federal regulations. Therefore, the merger doctrine neither precludes a finding of copyrightability nor serves as a defense for Defendant.

(iv). *Scènes à Faire Doctrine*

Finally, Defendant points to the *scènes à faire* doctrine, which similarly may be approached as a question of copyrightability or an affirmative defense. The doctrine typically applies to “incidents, characters, or settings which are as a practical matter indispensable, or at least standard, in the treatment of a given topic.” Nimmer § 13.03(4) (quoting *Atari, Inc. v.*

North Am. Philips Consumer Elecs. Corp., 672 F.2d 607, 616 (7th Cir. 1982), *cert. denied*, 459 U.S. 880 (1982)). Nimmer offers examples such as the use of a bar room scene in a film about a broken-hearted lover because, as the name of the doctrine suggests, these are “scenes which must be done.” *Id.* Defendant argues here that Plaintiffs’ standards are entirely “uncopyrightable” because they are “shaped by external factors,” such as the desire to satisfy regulations and laws and to write what Plaintiffs believe to be the most accurate and clear standards. (Tr. of Motions Hearing at 62:15–19 (ASTM ECF No. 173); Def. Br. at 34). However, this doctrine is a poor fit for Defendant’s arguments. In the court’s view, there is a great deal of difference between every detail of the phrasing, explanation, and organization across thousands of pages of standards, which Defendant argues is *entirely* dictated by Plaintiffs’ broad desires for accuracy and clarity, and the inclusion of a generic bar room scene in a romantic drama where the audience expects it. Defendant offers no cases to support its argument that this doctrine bars copyrightability of the standards at issue here, and this court knows of none. The court concludes that the *scènes à faire* doctrine does not act as a bar to the copyrightability of Plaintiffs’ standards and does not serve as a defense for Defendant’s display of the standards

In sum, the court concludes that Plaintiffs own valid copyrights over the standards at issue, and that the copyrights were not stripped upon the incorporation by reference into federal regulations.

2. *Feist* Prong 2: Copying an Original Work

a. Overview

Having established that both the ASTM Plaintiffs and AERA Plaintiffs own valid copyrights in the standards at issue, the second question for the court under *Feist* is whether Public Resource, by scanning and posting online the standards at issue “cop[ied] anything that

was ‘original’ to” the Plaintiffs. *Feist*, 499 U.S. at 361. Copying means exercising any of the exclusive rights that 17 U.S.C. § 106 vests in the owners of a copyright. *See Call of the Wild Movie, LLC v. Does*, 770 F. Supp. 2d 332, 351 (D.D.C. 2011). These rights include the rights of reproduction, distribution, display, and creation of derivative works. *See* 17 U.S.C. § 106(1)–(3), (5). There is no factual dispute that Public Resource reproduced and posted online for display or distribution the standards at issue in this case. Having rejected the application of the merger doctrine or *scènes à faire* doctrine as affirmative defenses, Defendant’s only argument on this second prong is therefore that its copying and posting of the standards was “fair use.”

b. Affirmative Defense of Fair Use

Under the Copyright Act, fair use of a copyrighted work “is not an infringement of copyright.” 17 U.S.C. § 107. Fair use is a defense to a claim of copyright infringement in order to “fulfill copyright’s very purpose, ‘to promote the Progress of Science and useful Arts.’”

Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 575 (1994) (quoting U.S. Const. art. I, § 8, cl.

8). The Copyright Act provides that:

In determining whether the use made of a work in any particular case is a fair use, the factors to be considered shall include—

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work.

17 U.S.C. § 107. The statute further lists examples of uses that are “fair use,” including “criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research.” *Id.* The fair use doctrine calls for a “case-by-case analysis,” and the four statutory factors are meant to provide “general guidance,” weighed together “in light of the

purposes of copyright.” *Campbell*, 510 U.S. at 578–79.

(i). *Purpose and Character of Defendant’s Use of the Standards*

With regard to the first factor, the statute itself offers guidance on the types of purposes that might be considered fair use: criticism, commentary, news reporting, teaching, or research. *Id.* § 107. Moreover, the Supreme Court has held that courts should focus on whether the new work “supersede[s] the objects of the creation . . . or instead adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message; [the question], in other words, [is] whether and to what extent the new work is transformative.” *Campbell*, 510 U.S. at 578–79 (internal quotations omitted). Given the constitutional goal of copyright—to promote the development of science and the arts—“the more transformative the new work, the less will be the significance of other factors, like commercialism, that may weigh against a finding of fair use.” *Id.* at 579.

It is undisputed that Public Resource scanned the ASTM Plaintiffs’ standards at issue from their physical hardcopies and converted them to searchable PDFs using OCR processing (ASTM Pls. SUMF ¶ 182) and reproduced some of the standards by re-typing them into HTML format. (ASTM PSMF ¶ 182; ASTM DSMF ¶ 83). Public Resource scanned the AERA Plaintiffs’ 1999 Standards from the physical hard copy and converted them to a PDF file, which it then uploaded to its website for display and distribution. (AERA PSMF ¶¶ 69, 71–73; AERA DSMF ¶ 28). Defendant argues this is transformative in three ways: by providing free access to “the law”; by enabling others to use software to analyze the standards; and by enabling those with visual impairments to use text-to-speech software. The evidence does not support any of these arguments.

Defendant first argues that it has transformed Plaintiffs’ standards by making identical

copies of them and distributing them online for no cost. In Defendant’s view, this is transformative because it provides individuals with greater access to “the law.” While Defendant argues that its conduct is analogous to those who make copies of copyrighted works in order to comply with legal requirements, Defendant was not actually acting to comply with a particular law—unlike, for example, an individual who makes a photocopy of the standards located at OFR for use on her building project. Instead, Defendant has placed identical copies of Plaintiffs’ standards into the online marketplace with no intention to use them itself, but instead to simply offer them for free in competition with Plaintiffs’ standards. While Defendant did not earn revenue directly from the display of the standards, its activity still bears “commercial” elements given that it actively engaged in distributing identical standards online in the same consumer market. While this commerciality is not by itself dispositive, it does weigh firmly against fair use. *See Campbell*, 510 U.S. at 594.

Defendant points to *Swatch Group Management Services Ltd. v. Bloomberg L.P.*, 756 F.3d 73, 81 (2d Cir. 2014) in support of its proposition that when a copyrighted document is of great public importance then posting it online may be transformative. However, *Swatch Group* involved the recording of a private conference call about the company’s earnings report involving executives and 132 analysts that Bloomberg then distributed to subscribers of its Bloomberg Professional service. *Id.* at 78–79. Given that Swatch Group instructed call participants not to record or broadcast the call, any direct knowledge of what the executives said would be limited to those analysts who participated. *Id.* The facts of *Swatch Group* do not align with those here, where the evidence demonstrates that Plaintiffs’ standards are available to anyone for viewing online in ASTM Plaintiffs’ reading rooms, at a public library, at the OFR or incorporating agency, or for purchase on Plaintiffs’ websites. This court is unwilling to apply

any principles from *Swatch Group* or similar cases to this case, in which the standards are widely available.

Next, Public Resource argues that distributing the duplicate copies online is transformative because, with regard to the ASTM Plaintiffs' standards, Public Resource first altered their formatting through application of OCR or conversion to HTML, which enables software analysis or the use of text-to-speech software, and for AERA Plaintiffs' standards, it scanned the hard copy and distributed a PDF version. The court has little difficulty concluding that these actions are not transformative. *See* 4-13 Nimmer on Copyright § 13.05(1)(b); *Nihon Keizai Shimbun, Inc. v. Comline Bus. Data, Inc.*, 166 F.3d 65, 72 (2d Cir. 1999) (holding that a translation is not a transformative, expressive work); *Soc'y of the Transfiguration Monastery, Inc. v. Gregory*, 685 F. Supp. 2d 217, 227 (D. Mass. 2010), *affirmed*, 689 F.3d 29, 59-65 (1st Cir. 2012) ("A simple repackaging of a work in a new format, whether on the Internet or on a CD-ROM or on a flash drive, is not transformative when the result is simply a mirror image reflected on a new mirror."); *see also Authors Guild v. Google, Inc.*, 804 F.3d 202, 207, 217 (2d Cir. 2015) (reasoning Google's scanning and posting of snippets of copyrighted books online was fair use because it made "available information *about* Plaintiffs' books without providing the public with a substantial substitute for matter protected by the Plaintiffs' copyright interests in the original works or derivatives of them" and added "important value to the basic transformative search function, which tells only whether and how often the searched term appears in the book") (emphasis added); *Authors Guild, Inc. v. HathiTrust*, 755 F.3d 87, 90 (2d Cir. 2014) (text searching modification was transformative but where full work was not displayed).

Here, Defendant does not actually perform any analysis on the standards, nor does it offer

the service of providing them in an accessible way to those visual impairments. Instead, Defendant has identified a series of events that must occur, involving intervening third parties and the use of one or more additional software programs, in order for there to be a potentially “transformative” use for individuals who are blind or have visual impairments. Defendant in both cases proffered the expert report of James Fruchterman, who opined on accessibility of written materials for those who are blind. In Fruchterman’s AERA report, he wrote that to make a hard copy accessible for those with visual impairments, he would scan the pages, process them with OCR to convert the read-only images to searchable text, create a Microsoft Word file, and then have it proofread because OCR can create numerous errors. (Expert Rep. of James R. Fruchterman at 8 (AERA ECF No. 70-50)). Once such a version is then uploaded online, an individual who is blind or visually impaired would then need to use additional screen reader software, which “is a program that runs on a personal computer or a smartphone that reads the information on the screen aloud (using a computer-synthesized voice) to a blind person.” (*Id.* at 3–4). While “most blind people themselves do not have the ability to convert books[,] [s]ome blind people have their own home scanners, and if they purchased a used copy online, would be able to scan the 1999 Standards page by page on a home scanner, which would take at least two hours of labor, and then perform optical character recognition on the title.” (*Id.* at 8). In his ASTM report, Fruchterman wrote that he was able to use a screen reader program to read the text of the ASTM Plaintiffs’ standards aloud on Defendant’s website, but not in ASTM Plaintiffs’ reading rooms. (Ex. 96 to Becker Decl., Expert Rep. of James R. Fruchterman at 5–7 (ECF No. 122-6)). Fruchterman noted that some of the PDFs on Defendant’s website were read-only images, such as those on ASTM Plaintiffs’ reading rooms, which had to be copied and pasted into a Microsoft Word document in order for a screen reader program to operate. (*Id.* at 16–17).

He also noted that individuals who are blind may “independently perform optical character recognition on image-based PDFs themselves and access the text that way, and many advanced computer users that are blind would be aware that this is possible.” (*Id.* at 17). He did not opine on whether OCR could be performed on the PDFs of standards that ASTM Plaintiffs sell or whether he attempted to investigate that as part of his research.

While it appears Defendant may enable blind individuals, like all other individuals, to access the standards at no cost, they still may have to take additional steps like OCR processing or converting to a different file type, as well as using additional screen reader programs in order to access the standards. There is no evidence that this would not be possible with Plaintiffs’ PDFs or by scanning Plaintiffs’ hard copy standards. In Defendant’s view, taking the first step or two towards making the standards entirely accessible to those with visual impairments is enough to have transformed the standards. This attempts to stretch logic, and certainly the doctrine of fair use, too far. Defendant has not offered a sufficiently new purpose to render the use transformative, and this weighs against a finding of fair use.

(ii). *Nature of the Copyrighted Standards*

The Supreme Court in *Campbell* instructs that courts should analyze the nature of the copyrighted work with “recognition that some works are closer to the core of intended copyright protection than others, with the consequence that fair use is more difficult to establish when the former works are copied.” 510 U.S. at 586. Many cases create a spectrum between creative, fictional expression and factual expression, with the former being “more” protected. *See* 4-13 Nimmer § 13.05(A)(2). Defendant argues that Plaintiffs’ standards are “factual,” both because they are highly technical and because they are “the law.” However, the Constitution explicitly states that copyright exists to “advance the progress of science and the useful arts.” U.S. Const.

art. I, § 8, cl. 8. That Plaintiffs' works involve technical scientific concepts and guidelines does not push it away from the core of intended copyright protection, but actually brings it closer. Plaintiffs' standards are vital to the advancement of scientific progress in the U.S. and exactly the type of expressive work that warrants full protection under the Constitution and the Copyright Act.

(iii). Amount and Substantiality of the Portions Defendant Used

The third factor, "the amount and substantiality of the portion used in relation to the copyrighted work as a whole," 17 U.S.C. § 107(3), weighs overwhelmingly in Plaintiffs' favor and against a finding of fair use. It is undisputed that Defendant copied and distributed identical versions of the Plaintiffs' standards in their entirety. To support its actions as fair use under this third factor, Public Resource argues that it was necessary to do so because the full text of the standards were incorporated into "the law." However true it may be that individuals wishing to read the text of standards incorporated by reference would want to read them in their entirety, this argument is unpersuasive in the fair use analysis. Any market competitor wishing to copy a rival's work and distribute it itself could argue that it "needs" to copy the entire work, otherwise its distribution would be less successful. Unsurprisingly, Defendant cannot point to a single case that supports its view, and the court finds that this factor also weighs strongly against a finding of fair use.

(iv). Effect of Defendant's Use Upon Potential Market or Value

The fourth factor, "the effect of the use upon the potential market for or value of the copyrighted work," 17 U.S.C. § 107(4), "poses the issue of whether unrestricted and widespread conduct of the sort engaged in by the defendant would . . . result in a substantially adverse impact on the potential market for, or value of, the plaintiff's present work," 4-13 Nimmer on

Copyright § 13.05(A)(4); *Campbell*, 510 U.S. at 589 (quoting *Nimmer*). Moreover, the analysis “must take into account not only of harm to the original but also of harm to the market for derivative works.” *Campbell*, 510 U.S. at 589 (quoting *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 568 (1985)). When Defendant engages in “mere duplication for commercial purposes,” as here, a harm to the potential market for the copyrighted works may be inferred. *See id.* at 590–91. Such an inference is intuitive based on the facts here where consumers in the online marketplace are currently presented with the option to purchase a PDF or hard copy version of Plaintiffs’ standards directly from them, or may download a PDF of an identical standard for no cost. The only logical conclusion is that this choice negatively impacts the potential market for Plaintiffs’ standards.

In *Campbell*, the Supreme Court noted that “[s]ince fair use is an affirmative defense, its proponent would have difficulty carrying the burden of demonstrating fair use without favorable evidence about relevant markets.” 510 U.S. at 590. Here, Defendant did not offer expert evidence on the economic impact on the markets, instead pointing to testimony by Plaintiffs’ executives that they did not track or know of negative impacts thus far on their revenue from Defendant’s conduct. This is not enough to overcome the logical presumption that such activity, particularly if it became more widespread by others in the marketplace, would impact Plaintiffs’ revenues. It is not Plaintiffs’ burden to establish that they *have* been harmed in the market, but Defendant’s burden to affirmatively establish that such conduct could not even “potentially” harm the Plaintiffs’ market. Defendant has not done so.

(v). *Overall Assessment*

Whatever merit there may be in Defendant’s goal of furthering access to documents incorporated into regulations, there is nothing in the Copyright Act or in court precedent to

suggest that distribution of identical copies of copyrighted works for the direct purpose of undermining Plaintiffs' ability to raise revenue can ever be a fair use. The court thus concludes that the fair use doctrine does not serve as a valid defense for Defendant's conduct.

Therefore, the court finds that the ASTM Plaintiffs' motion for summary judgment as to their copyright infringement claim is GRANTED, and the AERA Plaintiffs' motion for summary judgment as to their copyright infringement claim is also GRANTED. Defendant's cross-motions on copyright infringement are both DENIED.

B. Contributory Copyright Infringement

AERA Plaintiffs additionally move for summary judgment on their contributory copyright infringement claim.⁸ Establishing proof of contributory infringement requires a party to demonstrate that the actor was "intentionally inducing or encouraging direct infringement." *MGM Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913, 930 (2005). Plaintiffs⁹ must show (1) direct infringement by third parties; (2) that Defendant knew that third parties were directly infringing; and (3) that Defendant substantially participated in that direct infringement. *Rundquist v. Vapiano SE*, 798 F. Supp. 2d 102, 126 (D.D.C. 2011). "Merely supplying the means to accomplish an infringing activity cannot give rise to the imposition of liability for contributory copyright infringement." *Newborn v. Yahoo!, Inc.*, 391 F. Supp. 2d 181, 186 (D.D.C. 2005) (internal quotation omitted).

⁸ The ASTM Plaintiffs initially brought a separate claim for contributory copyright infringement, but did not include that claim in their motion for summary judgment. Counsel for ASTM Plaintiffs stated at oral argument that they believed the remedy for their infringement claim covered any potential remedy for their contributory copyright claim. (Tr. of Motions Hearing at 122:1-7).

⁹ Because ASTM Plaintiffs did not move for summary judgment on their contributory copyright claim, for this section the court will use "Plaintiffs" to refer to AERA Plaintiffs.

To establish direct infringement by third parties, Plaintiffs must demonstrate “(1) which specific original works form the subject of the copyright claim; (2) that the plaintiff owns the copyrights in those works; (3) that the copyrights have been registered in accordance with the statute; and (4) by what acts [and] during what time the defendant infringed the copyright.” *Id.* (quoting *Home & Nature, Inc. v. Sherman Specialty Co.*, 322 F. Supp. 2d 260, 266 (E.D.N.Y. 2004)). As discussed above in section III(A), these first three elements have been satisfied. On the fourth element, Plaintiffs must show that a third party infringed its copyrights by violating their exclusive rights under 17 U.S.C. § 106, including reproduction, preparation of derivative works, distribution, or public display. *See Home & Nature*, 322 F. Supp. 2d at 267. However, Plaintiffs only present evidence that the 1999 Standards were “accessed at least 4,164 times” on Public Resource’s website and that they were “accessed on the Internet Archive . . . website 1,290 times.” (AERA PSMF ¶¶ 85–86). Without more, there is no basis for the court to determine that accessing a website is equivalent to copying or violating any of the exclusive rights under § 106. Plaintiffs also assert that “some” individuals “obtained” the standards, but their only evidence of this is a redacted e-mail in which an individual states “[O]ne of my students showed up for class this semester and told me that he/she didn’t purchase a copy of the Standards (I require them as a text for one of my courses) because ‘they are available for free on line’ and they showed me the following site.” (Exl. LLL to Decl. of Laress Wise (AERA ECF No. 60-75)). Even if such a statement were ultimately determined to be admissible for the truth of the matter that the student did not purchase the Standards, it still does not establish that the student downloaded or otherwise copied the 1999 Standards from Defendant’s website.¹⁰

¹⁰ The court recognizes that acquiring evidence of downloads may be difficult. Carl Malamud, Public Resource’s CEO, testified at deposition that “I don’t know about downloads. It’s technically impossible to determine that.” (Ex. A to Hudis Decl. at 347:6–8 (AERA ECF No.

In their Reply Brief, Plaintiffs also point to the possibility that simply browsing a website causes a copy of the material on the website to be automatically copied to the computer's random access memory or RAM. See *CoStar Realty Info., Inc. v. Field*, 737 F. Supp. 2d 496, 507 (D. Md. 2010) (analyzing copyright claim involving cache copies of websites in computer's RAM); *Ticketmaster, LLC v. RMG Techs., Inc.*, 507 F. Supp. 2d 1096, 1104–05 (C.D. Cal. 2007) (same). While this may be correct, the fact remains that Plaintiffs have put forth no actual evidence that even one of the 4,164 accesses resulted in such a copying to a computer's RAM, and without such evidence, Plaintiffs cannot meet their burden on their contributory copyright claim at the summary judgment stage.

The second two factors require Plaintiffs to establish that Defendant knew that third parties were engaged in direct infringement and that it substantially participated in such infringement. Plaintiffs may demonstrate knowledge by showing that Defendant was notified of the third party direct infringement or that it “willfully blind[ed] itself to such infringing uses.” *Newborn*, 391 F. Supp. 2d at 186. On this factor, Plaintiffs again fall short, relying on the fact that they asked Defendant to remove the 1999 Standards from its website and Defendant refused to do so, as well as evidence that Defendant did not track or prevent downloads of the 1999 Standards from its website. Without more, this is insufficient to establish that Defendant knew that third parties were infringing the Plaintiffs' copyrights.

Similarly, Plaintiffs have not presented sufficient evidence on the substantial participation factor. While it is undisputed that Defendant posted the 1999 Standards on its website to enable greater access for those wishing to read them, because Plaintiffs have not

60-4)). However, this does not relieve Plaintiffs of the burden of establishing some evidence demonstrating direct infringement by third parties.

established any actual third party direct infringement, there is insufficient evidence that Defendant substantially participated in that infringement.

Therefore, the court DENIES Plaintiffs' motion for summary judgment as to its contributory copyright claim, and also DENIES Defendant's motion for summary judgment on this claim, as there exists questions of fact as to any third party infringement, Defendant's knowledge, and Defendant's participation.

C. Trademark Infringement Claims

ASTM Plaintiffs additionally moved for summary judgment on their trademark infringement, unfair competition and false designation of origin, and common law trademark infringement claims, and Defendant cross-moved for summary judgment on these claims as well.¹¹ Trademark law is governed by the Lanham Act, 15 U.S.C. § 1051 *et seq.*, which provides that:

(1) Any person who shall, without the consent of the registrant . . . (a) use in commerce any reproduction, counterfeit, copy, or colorable imitation of a registered mark in connection with the sale, offering for sale, distribution, or advertising of any goods or services on or in connection with which such use is likely to cause confusion, or to cause mistake, or to deceive . . . shall be liable in a civil action by the registrant for the remedies hereinafter provided.

15 U.S.C. § 1114(1). In order to prevail on a trademark infringement claim under the Lanham Act, Plaintiffs¹² “must show (1) that [they] own[] a valid trademark, (2) that [their] trademark is distinctive or has acquired a secondary meaning, and (3) that there is a substantial likelihood of confusion between the plaintiff[s'] mark and the alleged infringer's mark.” *Globalaw Ltd. v. Carmon & Carmon Law Office*, 452 F. Supp. 2d 1, 26 (D.D.C. 2006); *AARP v. Sycle*, 991 F.

¹¹ The AERA Plaintiffs did not bring a trademark claim, and so this section applies only to ASTM Plaintiffs.

¹² As in the preceding section, because only ASTM Plaintiffs moved for summary judgment on this claim, the court will refer to them here as Plaintiffs.

Supp. 2d 224, 229 (D.D.C. 2013) (same). Common law claims are analyzed under the same standard. *See AARP*, 991 F. Supp. 2d at 229 (citing *Breaking the Chain Found., Inc. v. Capitol Educ. Support, Inc.*, 589 F.Supp.2d 25, 29 (D.D.C. 2008)). In order for conduct to be considered infringing, there must be a “use in commerce.” 15 U.S.C. §§ 1114(1), 1125(a)(1).

Defendant cites *Dastar Corp. v. Twentieth Century Fox Film Corp.*, to discourage the court from considering Plaintiffs’ trademark claims on the principle that courts should not “misuse or over-exten[d] [] trademark and related protections into areas traditionally occupied by patent or copyright.” 539 U.S. 23, 34 (2003). *Dastar* held that a plaintiff could not bring a false designation of origin trademark claim against a defendant who was distributing content that had become part of the public domain because the Lanham Act only offers protection “to the producer of the tangible goods that are offered for sale, and not to the author of any idea, concept, or communication embodied in those goods.” *Id.* at 37. Unlike in *Dastar*, Plaintiffs here have an independent basis for claiming that Defendant infringed their trademarks, separate from their copyright infringement claims: Defendant distributed standards online bearing Plaintiffs’ registered trademarks and logos, and Plaintiffs argue that this unauthorized use of their marks will confuse consumers and falsely signal that Plaintiffs are the origin of the standards distributed on Defendant’s website rather than Defendant. While the remedy sought for Plaintiffs’ copyright claim—an injunction barring Defendant from displaying Plaintiffs’ standards online—may be broad enough to subsume a remedy for their trademark claims, the claims are based on independent arguments, and are therefore the type that *Dastar* found to be appropriate for consideration under the Lanham Act.

The court must therefore consider whether Plaintiffs own a valid, protectable trademark, whether Defendant engaged in an unauthorized use in commerce, whether there is a likelihood of

consumer confusion, and whether Defendant's fair use defense permits its use of the trademarks.

1. Valid, Protectable Trademark

Under the Lanham Act, any registration of a trademark "shall be prima facie evidence of the validity of the registered mark and of the registration of the mark, of the owner's ownership of the mark, and of the owner's exclusive right to use the registered mark in commerce." 15 U.S.C. § 1057(b). The record indicates that Plaintiffs own valid trademarks of the trademarks asserted in this case, and they have federal trademark registrations for each of the asserted marks.¹³ Thus, Plaintiffs have established a prima facie showing of ownership. Defendant offers no evidence to demonstrate that Plaintiffs do not own the trademarks, and therefore the court concludes that Plaintiffs are the owners of these marks.

The trademarks must also be "valid." To establish validity, Plaintiffs must prove that the designation is inherently distinctive or that it has become distinctive by acquiring secondary meaning. *See Two Pesos, Inc. v. Taco Cabana, Inc.*, 505 U.S. 763, 769 (1992); *Globalaw*, 452 F. Supp. 2d at 26. However, Plaintiffs' trademark registrations create a rebuttable presumption of "inherent distinctiveness or secondary meaning." Restatement (Third) of Unfair Competition § 13 cmt. a (1995). Additionally, the Lanham Act provides that if the trademark has been "in continuous use for five years subsequent to registration" then the marks become "incontestable," 15 U.S.C. § 1065, meaning the registration "shall be conclusive evidence of the validity of the registered mark," including as to whether it is distinctive or has a secondary meaning, 15 U.S.C. § 1115(b); *see also* Restatement (Third) of Unfair Competition § 13 cmt. a (1995). Plaintiffs

¹³ (PSMF ¶¶ 77 (trademark registration for "ASTM"), 78 (trademark registration for "ASTM International" and logo), 79 (trademark registration for ASTM logo), 123 (trademark registration for "National Fire Protection Association" and "NFPA"), 124 (trademark registration for NFPA logo), 126 (trademark registration for NEC logo), 149 (trademark registration for ASHRAE logo), 151 (trademark registration for additional ASHRAE logo)).

provided evidence that some of their trademarks have become incontestable and that they all are distinctive. (See PSMF ¶¶ 77, 78, 124, 125, 126, 150). Defendant offered no evidence to dispute the validity of the trademarks. Thus, Plaintiffs have sufficiently established their ownership of valid trademarks.

2. Defendant's Unauthorized Use in Commerce

Plaintiffs must also demonstrate that Defendant used their trademarks “in commerce.” 15 U.S.C. §§ 1114(1), 1125(a)(1). Under the Lanham Act, “[c]ommerce’ means all commerce which may be lawfully regulated by Congress.” 15 U.S.C. § 1127. Therefore, to satisfy this requirement, Plaintiffs need not demonstrate actual use or intended use in interstate commerce. See *United We Stand Am., Inc. v. United We Stand, Am. N.Y., Inc.*, 128 F.3d 86, 92 (2d Cir. 1997) (the commerce requirement “reflects Congress’s intent to legislate to the limits of its authority under the Commerce Clause, rather than to limit the Lanham Act to profit-seeking uses of a trademark”). Distribution on the Internet can satisfy the “use in commerce” requirement. See *Intermatic, Inc. v. Toebben*, 947 F. Supp. 1227, 1239 (N.D. Ill. 1996). Thus, Defendant’s online posting of the standards bearing Plaintiffs’ trademarks satisfies this requirement.

This use in commerce must further be “without the consent of the registrant.” 15 U.S.C. § 1114(1). It is undisputed that Plaintiffs did not authorize Defendant’s use of Plaintiffs’ trademarks in commerce. Defendant instead argues that its use was permitted under the “first sale doctrine,” which holds that a trademark owner cannot control what happens to its products after the first sale. However, the court finds this doctrine a poor fit here, where it is undisputed that Defendant did not redistribute the physical copies of Plaintiffs’ standards that it purchased but rather created reproductions through scanning and re-typing, with resultant errors and differences. See *Australian Gold, Inc. v. Hatfield*, 436 F.3d 1228, 1241 (10th Cir. 2006) (noting

that the first sale doctrine is appropriate only when the actor “does no more than stock, display, and resell a producer’s product under the producer’s trademark”); *Capitol Records, LLC v. DeRigi Inc.*, 934 F. Supp. 2d 640, 655 (S.D.N.Y. 2013) (in the copyright context, the first sale doctrine was “impossible” to apply because that defense is limited to when an actor distributes the original material item, not when she distributes reproductions).

Moreover, Defendant’s quality control standards in reproducing Plaintiffs’ standards were outside of Plaintiffs’ control and below that sufficient to deem the standards it distributed “genuine” products, meaning the first sale doctrine cannot protect Defendant’s conduct. *See Polymer Tech. Corp. v. Mimran*, 37 F.3d 74, 78 (2d Cir. 1994); *Shell Oil Co. v. Commercial Petroleum, Inc.*, 928 F.2d 104, 107 (4th Cir. 1991); *El Greco Leather Prods. Co. v. Shoe World*, 806 F.2d 392, 395 (2d Cir. 1986); *see also* 4 McCarthy on Trademarks and Unfair Competition § 25.42 (4th ed.). Although Defendant argues that there are no material differences between Plaintiffs’ standards and Defendant’s reproductions, Plaintiffs need not show that Defendant’s reproduced standards were defective, only that they were unable to exercise quality control. *See Zino Davidoff SA v. CVS Corp.*, 571 F.3d 238, 243 (2d Cir. 2009). The claim survives because “the interference with the trademark holder’s legitimate steps to control quality unreasonably subjects the trademark holder to the risk of injury to the reputation of its mark.” *Id.* Plaintiffs have established that Defendant’s quality control standards, including “double-keying” the standards, a process involving two separate individuals typing the same material and comparing the results to determine the existence of any errors, resulted in missing or inverted pages and typographical errors in numerical values or formulas. (ASTM PSMF ¶¶ 190, 214–15). Because the standards are therefore not “genuine,” the first sale doctrine does not apply, and Plaintiffs have established that Defendant used its trademarks in commerce without authorization.

3. Likelihood of Confusion

Next, the court must assess whether there is a substantial likelihood of consumer confusion. This hinges on whether “an appreciable number of ordinarily prudent customers are likely to be misled, or simply confused, as to the source” of the copied standards that Public Resource posted online. *Globalaw*, 452 F. Supp. 2d at 47.

Plaintiffs argue that consumers will be confused both in thinking that Plaintiffs authorized Defendant’s posting of the standards, and that Plaintiffs produced the PDF and HTML versions of the standards that Defendant posted. *See Am Ass’n for the Advancement of Science v. Hearst Corp.*, 498 F. Supp. 244, 258 (D.D.C. 1980) (noting that both are appropriate bases for a confusion argument). Courts in this Circuit consider approximately seven factors in assessing the likelihood of confusion, though none is individually determinative. *Globalaw*, 452 F. Supp. 2d at 48. They include: (1) the strength of the Plaintiffs’ marks; (2) the degree of similarity between the marks; (3) the proximity of the products; (4) evidence of actual confusion; (5) Defendant’s purpose or reciprocal good faith in adopting its own mark; (6) the quality of Defendant’s product; and (7) the sophistication of the buyers. *Id.* Several courts in other Circuits have determined that when a defendant uses an identical mark on a similar product, consideration of all the factors is not necessary. *See Int’l Cosmetics Exch., Inc. v. Gapardis Health & Beauty, Inc.*, 303 F.3d 1242, 1248-49 (11th Cir. 2002); *Wynn Oil Co. v. Thomas*, 839 F.2d 1183, 1190-91 (6th Cir. 1988).

Defendant does not dispute that Plaintiffs’ marks are “strong,” that Defendant used marks and logos that are identical to Plaintiffs’ marks and logos when it posted the Plaintiffs’ standards online, and that the standards it applied the marks and logos to were identical or nearly identical to Plaintiffs’. (PSMF ¶¶ 210–11; Def. Br. at 65). Moreover, it is undisputed that the standards

distributed by Plaintiffs and by Defendant were in close proximity, since Defendant offered the standards in the same market as Plaintiff—i.e., the Internet—as a free alternative to purchasing the standards from Plaintiffs directly. *See* Restatement (Third) of Unfair Competition § 21 cmt. j (1995) (“[T]he use of similar designations on goods that are used together, or that perform the same function, or that are of the same general class, is more likely to cause confusion than is a use in connection with goods used for different purposes, or in different contexts, or by different purchasers.”). It is also undisputed that Defendant intended for individuals to consider that the standards were identical. (PSMF ¶ 213).

Defendant argues that despite these undisputed facts, consumers would not be confused because it posts disclaimers that it claims “adequately informed consumers” so that “no reasonable consumer would mistake [its cover page] as part of the original document.” (Def. Reply at 28 (referring to the PDF disclaimer at ASTM ECF No. 118-12, Ex. 16)). Defendant also argues that the PDF versions it posted “look like scans of physical documents,” and that the “preamble for the .html standards informs reasonable consumers that Public Resource has provided the transcription.” (*Id.* (referring to the HTML disclaimer at ASTM ECF No. 118-13, Ex. 26)).¹⁴ Here, Defendant’s disclaimer on the PDF reads in full:

In order to promote public education and public safety, equal justice for all, a better informed citizenry, the rule of law, world trade and world peace, this legal document is hereby made available on a noncommercial basis, as it is the right of all humans to know and speak the laws that govern them.

(ASTM ECF No. 118-12, Ex. 16). The disclaimer on the HTML versions contains similar

¹⁴ Defendant cites to *Prestonettes, Inc. v. Coty*, 264 U.S. 359, 369 (1924), in support of its argument that a disclaimer is sufficient to inform consumers that it has repackaged or changed the original. The facts of that case do not support Defendant’s position, as the disclaimer in that case stated clearly that the distributor was not connected with the producer and that the producer’s product was merely a constituent part of the distributor’s new product. *Coty*, 264 U.S. at 367.

language. (ASTM ECF No. 118-13, Ex. 26). These disclaimers do not mention Defendant's creation of the reproductions, Plaintiffs' lack of association or authorization, or that they are even reproductions or transcriptions, and can hardly be called disclaimers at all. Moreover, Defendant's assertion that the PDFs "look like scans" offers no assistance to a consumer looking at the standard, as they would have no way to determine whether the Plaintiffs or Defendant created the scan. While Defendant has since adopted a more thorough disclaimer that includes information about Public Resource's retyping of the HTML versions and the possibility of errors (DSMF ¶ 169), it did not begin using that disclaimer until 2015, after the start of this litigation. (Decl. of Carl Malamud ¶ 31 (ASTM ECF No. 122-8)).

The parties have presented no evidence to establish the existence or non-existence of actual consumer confusion. While such evidence is not required, without it summary judgment on consumer confusion, and trademark infringement more generally, is a difficult call. However, the facts here present nearly as black-and-white a case as possible. A consumer in the market for one of Plaintiffs' voluntary consensus standards may encounter them on Plaintiffs' websites for purchase, or on Defendant's website for free download. Because Defendant has intentionally created a copy that is meant to appear identical, including use of Plaintiffs' trademarks, then that consumer may download that standard for free from Defendant without knowing that it is not created by the Plaintiffs and may contain missing pages or typographical errors leading to inaccurate values for measurements. In short, Plaintiffs have presented enough evidence for the court to conclude that there is no genuine dispute on the factual issue of whether consumer confusion is likely.

4. Defendant's Nominative Fair Use Defense

While Plaintiffs have successfully established Defendant's infringing use of their

trademarks, Defendant argues that its use of Plaintiffs' trademarks is "nominative fair use." Under this defense, Defendant must demonstrate that its use of Plaintiffs' trademarks was necessary to describe their standards; that it only used as much of the marks as was reasonably necessary to identify the standards; and that it has not done anything to suggest sponsorship or endorsement by the Plaintiffs or to inaccurately describe the relationship between the parties' products. *See Rosetta Stone Ltd. v. Google, Inc.*, 676 F.3d 144, 154 (4th Cir. 2012). Nominative fair use by a defendant makes it "clear to consumers that the plaintiff, not the defendant, is the source of the trademarked product or service." *Century 21 Real Estate Corp. v. Lendingtree, Inc.*, 425 F.3d 211, 220 (3d Cir. 2005). Thus, if Defendant's use is nominative fair use, it would not create "confusion about the source of [the] defendant's product." *Tiffany (NJ) Inc. v. eBay Inc.*, 600 F.3d 93, 102 (2d Cir. 2010) (alteration in original). On this point, the parties argue past each other. Defendant believes no consumer would believe that Defendant, rather than Plaintiffs, was the source of the standards, and so its use is a fair use. Plaintiffs argue that Defendant's use cannot be fair precisely *because* consumers would believe that Plaintiffs were the source of the reproduced standards, which they are not. However, because the court has already determined that consumer confusion as to the source of the trademarked standards is likely, the nominative fair use defense is inapplicable and the court need not assess each of the *Rosetta Stone* factors listed above.

The court therefore finds that Defendant engaged in trademark infringement by its use of Plaintiffs' registered trademarks, and Plaintiffs' motion for summary judgment on their trademark claims is GRANTED and Defendant's cross-motion is DENIED.

IV. REMEDIES

Both ASTM Plaintiffs and AERA Plaintiffs seek a permanent injunction barring

Defendant from distributing, displaying, or creating derivative works from their copyrighted standards and, in the case of ASTM Plaintiffs, their trademarks, which this court has authority to grant under 17 U.S.C. § 502(a) (Copyright Act) and 15 U.S.C. § 1116 (Lanham Act). Plaintiffs must establish (1) irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for their injury; (3) that a remedy in equity is warranted after considering the balance of hardships; and (4) that the public interest would not be disserved by a permanent injunction. *See eBay Inc. v. MercExchange, LLC*, 547 U.S. 388, 391 (2006).

A. Irreparable Injury

The ASTM Plaintiffs assert that they will face three separate irreparable injuries if Defendant is permitted to continue distribution of Plaintiffs' standards, including substantial declines in revenue that may cause their business models to change, the loss of the exclusive rights under the Copyright Act to exclude others from distributing, reproducing, or displaying their protected works, and the loss of control of the goodwill associated with their trademarks.

AERA Plaintiffs similarly assert that they will face three separate irreparable injuries if Defendant is permitted to continue distribution of Plaintiffs' standards, including loss of business opportunities, the loss of the exclusive rights under the Copyright Act to exclude others from distributing, reproducing, or displaying their protected works, and the adverse effect on Plaintiffs' efforts to create further standards.

It is well established that the threat of continuing copyright infringement justifies granting a permanent injunction. *See Walt Disney Co. v. Powell*, 897 F.2d 565, 567 (D.C. Cir. 1990) ("When a [] plaintiff has established a threat of continuing infringement, he is entitled to an injunction."); *Hanley-Wood LLC v. Hanley Wood LLC*, 783 F. Supp. 2d 147, 151 (D.D.C. 2011); *Breaking the Chain Found. v. Capital Educ. Support, Inc.*, 589 F. Supp. 2d 25, 30

(D.D.C. 2008). While a court should not automatically issue an injunction after it finds there was past copyright or trademark infringement, here Plaintiffs’ alleged irreparable injury is not the past infringement but the threat of future infringement. Defendant has not provided any assurances that it would cease posting of Plaintiffs’ standards—indeed, it is undisputed that during the course of this litigation, Public Resource posted online versions of the ASTM Plaintiffs’ other standards not involved in this litigation. (PSMF ¶ 235). Moreover, Defendant’s counsel at oral argument admitted that Defendant would post the AERA Plaintiffs’ 2014 Standards if they were incorporated by reference into federal regulations in the future. (Tr. of Motions Hearing at 75:24–76:2). The court thus determines that the continued threat of infringement is sufficient to weigh in favor of an injunction.

B. Adequacy of Monetary Damages

Plaintiffs argue that because damages here are difficult to quantify and Defendant may be unable to pay damages, then legal remedies are inadequate. *See Fox Television Stations, Inc. v. FilmOn X LLC*, 966 F. Supp. 2d. 30, 50 (D.D.C. 2013). The evidence shows that while the Plaintiffs’ standards were accessed thousands of times on Defendant’s website, Defendant does not track information that would be helpful in calculating damages, such as how many of those accesses actually led to downloads, and whether those downloads were in lieu of purchases. Moreover, Defendant did not dispute that it has “extremely limited financial resources available to pay any damages award” and that in 2014 it “generated under \$100,000 in operating income and had \$248,000 in total net assets.” (ASTM PSMF ¶¶ 272–73). Given that the Copyright Act provides for statutory damages ranging from \$750 to \$30,000 for each of the standards at issue in the overall case, or even up to \$150,000 per infringement if Plaintiffs were to later prove that infringement was committed willfully, Defendant’s potential inability to pay is surely a factor

weighing towards equitable relief. *See* 17 U.S.C. § 504(c)(1)–(2).

C. Balance of Hardships & Public Interest

The court must weigh the likely harms faced by Plaintiffs described above with any harms faced by Defendant if an injunction is imposed. Here, Defendant’s CEO Carl Malamud was asked in his ASTM deposition what financial impact an injunction barring posting of the standards would have on Public Resource, and he responded “probably none.” (Malamud Dep. at 219:22–220:4 (Ex. 3 to Rubel Decl. (ASTM ECF No. 118-12))). The only harm Mr. Malamud identified was that “one hates to have wasted that [] effort” that went into posting the standards online. (*Id.*). Without evidence of any additional harms, this factor weighs strongly in favor of an injunction.

Additionally, the public must not be disserved by the issuance of an injunction. Here, the public interest is served by the policy interests that underlie the Copyright Act itself, namely the protection of financial incentives for the continued creation of valuable works, and the continued value in maintaining the public-private system in place in the U.S. to ensure continued development of technical standards.

Taken together, the court finds that injunctive relief is appropriate and that Defendant should be permanently barred from violating any of Plaintiffs’ exclusive copyrights, including distributing, displaying, reproducing, or creating derivative works in the nine standards on which ASTM Plaintiffs moved for summary judgment and AERA Plaintiffs’ 1999 Standards, as well as barred from any use of ASTM Plaintiffs’ trademarks in connection with the posting of these standards online or elsewhere.

V. CONCLUSION

For the reasons set forth above, ASTM Plaintiffs’ Motion is GRANTED, AERA

Plaintiffs' Motion is GRANTED IN PART and DENIED IN PART, and Defendant's Cross-Motions are DENIED.

Date: February 2, 2017

Tanya S. Chutkan

TANYA S. CHUTKAN

United States District Judge

PAGES JA04058-JA04821

INTENTIONALLY LEFT BLANK

Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 19 of 123

EXHIBIT 156

ASTM Reading Room

A20/A20M-1993a ⓘ Standard Specification for General requirements for Steel Plates for Pressure Vessels

A20/A20M-1997b ⓘ

Current Active Version: A20/A20M-2019 ⓘ

A36/A36M-1997ae1 ⓘ Standard Specification for Carbon Structural Steel

Current Active Version: A36/A36M-2019 ⓘ

A47-1968 ⓘ Standard Specifications For Malleable Iron Castings

A47M-1990 ⓘ

A47M-1990(1996) ⓘ

A53-1976 ⓘ Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless

A53-1979 ⓘ

A53-1993a ⓘ

A53-1996 ⓘ

A53/A53M-1998a ⓘ

A53/A53M-2010 ⓘ

Current Active Version: A53/A53M-2018 ⓘ

A74-1975 ⓘ Standard Specification for Cast Iron Soil Pipe And Fittings


A74-1992 ⓘ


Current Active Version: A74-2017 ⓘ


A82-1979 ⓘ Standard Specification for Cold-Drawn Steel Wire For Concrete Reinforcement


Replaced By: A1064/A1064M ⓘ

A99-1976 ⓘ Standard Specification for Ferromanganese


Current Active Version: A99-2003(2014) 


A100-1969(1974)  Standard Specification for Ferrosilicon


A100-1993(2000) 

Current Active Version: A100-2007(2018) 

A101-1973  Standard Specification for Ferrochromium

A101-1993(2000) 


Current Active Version: A101-2004(2014)e1 


A106-1995  Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service


A106/A106M-2004 


A106/A106M-2004b 

A106/A106M-2010 


Current Active Version: A106/A106M-2019 


A109/A109M-1998a  Standard Specification for Steel, Strip, Carbon (0.25 Maximum Percent), Cold-Rolled


Current Active Version: A109/A109M-2016(2018) 


A116-1973  Standard Specification for Zinc-Coated (Galvanized) Iron Or Steel Farm- Field And Railroad Right-Of-Way Wire Fencing


Current Active Version: A116-2011(2016) 

A126-1966  Standard Specifications For Gray Iron Castings For Valves, Flanges, And Pipe Fittings

A126-1995e1 

Current Active Version: A126-2004(2014) 

A134-1996  Standard Specification for Pipe, Steel, Electric-Fusion (Arc)-Welded (Sizes NPS 16 and Over)

A134-1996(2012) 

Current Active Version: A134/A134M-2018 

A135-1997c Standard Specification for Electric-Resistance-Welded Steel Pipe
Current Active Version: A135/A135M-2019 ⓘ

A139-1996 ⓘ Standard Specification for Electric-Fusion (Arc)-Welded Steel Pipe (NPS 4 and Over)

Current Active Version: A139/A139M-2016 ⓘ

A148/A148M-1993b(1998) ⓘ Standard Specification for Steel Castings, High Strength, for Structural Purposes

Current Active Version: A148/A148M-2019 ⓘ

A153-1982(1987) ⓘ Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware

Current Active Version: A153/A153M-2016a ⓘ

A167-1977 ⓘ Standard Specification for Stainless And Heat-Resisting Chromium-Nickel Steel Plate, Sheet. And Strip

A178/A178M-1995(2000) ⓘ Standard Specification for Electric-Resistance-Welded Carbon Steel and Carbon-Manganese Steel Boiler and Superheater Tubes

Current Active Version: A178/A178M-2002(2012) ⓘ

A179/A179M-1990a(2005) ⓘ Standard Specification for Seamless Cold-Drawn Low-Carbon Steel Heat-Exchanger and Condenser Tubes

A179/A179M-1990a(2012) ⓘ

Current Active Version: A179/A179M-2019 ⓘ

A182/A182M-1997c ⓘ Standard Specification for Forged or Rolled Alloy-Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service

Current Active Version: A182/A182M-2019 ⓘ

A184-1979 ⓘ Standard Specification for Fabricated Deformed Steel Bar Mats For Concrete Reinforcement

Current Active Version: A184/A184M-2019 ⓘ

A185-1979 ⓘ Standard Specification for Welded Steel Wire Fabric For Concrete Reinforcement

Replaced By: A1064/A1064M ⓘ

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 23 of 123](#)
A192/A192M-1994(1996) Standard Specification for Seamless Carbon Steel Boiler Tubes for High-Pressure Service

Current Active Version: A192/A192M-2017 ⓘ

A193-1990a ⓘ Standard Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service

A193/A193M-1998a ⓘ

Current Active Version: A193/A193M-2017 ⓘ

A194/A194M-1998b ⓘ Standard Specification for Carbon and Alloy Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both

Current Active Version: A194/A194M-2018 ⓘ

A197M-1987(1992) ⓘ Specification for Cupola Malleable Iron [Metric] (Withdrawn 1999)

A197/A197M-1998 ⓘ

Current Active Version: A197/A197M-2000(2015) ⓘ

A203/A203M-1997 ⓘ Standard Specification for Pressure Vessel Plates, Alloy Steel, Nickel

A203/A203M-1997(2007)e1 ⓘ

Current Active Version: A203/A203M-2017 ⓘ

A210/A210M-1996 ⓘ Standard Specification for Seamless Medium-Carbon Steel Boiler and Superheater Tubes

Current Active Version: A210/A210M-2019 ⓘ

A213/A213M-1995a ⓘ Standard Specification for Seamless Ferritic and Austenitic Alloy-Steel Boiler, Superheater, and Heat-Exchanger Tubes

Current Active Version: A213/A213M-2018b ⓘ

A214/A214M-1996 ⓘ Standard Specification for Electric-Resistance-Welded Carbon Steel Heat-Exchanger and Condenser Tubes

A214/A214M-1996(2012) ⓘ

Current Active Version: A214/A214M-2019 ⓘ

A216/A216M-1993(1998) [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 34 of 123](#)
Standard Specification for Steel Castings, Carbon, Suitable for Fusion
Welding, for High- Temperature Service

Current Active Version: A216/A216M-2018 [i](#)

A226/A226M-1995 [i](#) Specification for Electric-Resistance-Welded Carbon Steel Boiler Superheater
Tubes for High-Pressure Service (Withdrawn 1997)

Replaced By: No_Replacement

A234/A234M-1997 [i](#) Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel
for Moderate and High Temperature Service

Current Active Version: A234/A234M-2018a [i](#)

A240/A240M-1999b [i](#) Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate,
Sheet, and Strip for Pressure Vessels and for General Applications

Current Active Version: A240/A240M-2018 [i](#)

A242-1979 [i](#) Standard Specification for High-Strength Low-Alloy Structural Steel

A242-1981 [i](#)

Current Active Version: A242/A242M-2013(2018) [i](#)

A249/A249M-1996a [i](#) Standard Specification for Welded Austenitic Steel Boiler, Superheater, Heat-
Exchanger, and Condenser Tubes

Current Active Version: A249/A249M-2018a [i](#)

A262-1998 [i](#) Standard Practices for Detecting Susceptibility to Intergranular Attack in Austenitic
Stainless Steels

Current Active Version: A262-2015 [i](#)

A268/A268M-1996 [i](#) Standard Specification for Seamless and Welded Ferritic and Martensitic Stainless
Steel Tubing for General Service

Current Active Version: A268/A268M-2010(2016) [i](#)

A276-1998b [i](#) Standard Specification for Stainless Steel Bars and Shapes

Current Active Version: A276/A276M-2017 [i](#)

A285-1978 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 25 of 123](#)
Standard Specification for Pressure Vessel Plates, Carbon Steel, Low and Intermediate-Tensile Strength

Current Active Version: A285/A285M-2017 [i](#)

A300-1958 [i](#) Standard Specification for Steel Plates For Pressure Vessels For Service At Low Temperatures

A300-1968 [i](#)

A302/A302M-1993 [i](#) Standard Specification for Pressure Vessel Plates, Alloy Steel, Manganese-Molybdenum and Manganese-Molybdenum-Nickel

A302/A302M-1997e1 [i](#)

Current Active Version: A302/A302M-2017 [i](#)

A307-1978 [i](#) Standard Specification for Carbon Steel Externally Threaded Standard Fasteners

A307-1997 [i](#)

Current Active Version: A307-2014e1 [i](#)

A308-1978e1 [i](#) Standard Specification for Steel, Sheet, Cold-Rolled, Long Terme Coated

A312/A312M-1995ae1 [i](#) Standard Specification for Seamless and Welded Austenitic Stainless Steel Pipes

Current Active Version: A312/A312M-2018a [i](#)

A320/A320M-1997 [i](#) Standard Specification for Alloy/Steel Bolting Materials for Low-Temperature Service

Current Active Version: A320/A320M-2018 [i](#)

A325-1979 [i](#) Standard Specification for High-Strength Bolts For Structural Steel Joints

A333-1967 [i](#) Standard Specifications For Seamless And Welded Steel Pipe For Low-Temperature Service

A333/A333M-1994 [i](#)

A333/A333M-2011 [i](#)

Current Active Version: A333/A333M-2018 [i](#)

A334/A334M-1996 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 26 of 123](#) Standard Specification for Seamless and Welded Carbon and Alloy Steel Tubes for Low-Temperature Service

Current Active Version: A334/A334M-2004a(2016) [i](#)

A335/A335M-1995a [i](#) Standard Specification for Seamless Ferritic Alloy-Steel Pipe for High-Temperature Service

Current Active Version: A335/A335M-2019a [i](#)

A350/A350M-1997 [i](#) Standard Specification for Carbon and Low-Alloy Steel Forgings, Requiring Notch Toughness Testing for Piping Components

Current Active Version: A350/A350M-2018 [i](#)

A351/A351M-1994 [i](#) Standard Specification for Castings, Austenitic, Austenitic- Ferritic (Duplex), for Pressure-Containing Parts

Current Active Version: A351/A351M-2018e1 [i](#)

A352/A352M-1993(1998) [i](#) Standard Specification for Steel Castings, Ferritic and Martensitic, for Pressure-Containing Parts, Suitable for Low-Temperature Service

Current Active Version: A352/A352M-2018a [i](#)

A358/A358M-1995ae1 [i](#) Standard Specification for Electric-Fusion-Welded Austenitic Chromium-Nickel Alloy Steel Pipe for High-Temperature Service

Current Active Version: A358/A358M-2015 [i](#)

A361-1976(1981)e1 [i](#) Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) By The Hot-Dip Process For Roofing And Siding

A366/A366M-1997e1 [i](#) Standard Specification for Commercial Steel (CS) Sheet, Carbon (0.15 Maximum Percent) Cold-Rolled (Withdrawn 2000)

Replaced By: A1008/A1008M

A369/A369M-1992 [i](#) Standard Specification for Carbon and Ferritic Alloy Steel Forged and Bored Pipe for High-Temperature Service

Current Active Version: A369/A369M-2018a [i](#)

A370-1968 [i](#) Standard Methods And Definitions For Mechanical Testing Of Steel Products

A370-1994 [i](#)

A370-1997a [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 27 of 123](#)

Current Active Version: A370-2019e1 [i](#)

A372/A372M-2003(2008) [i](#) Standard Specification for Carbon and Alloy Steel Forgings for Thin-Walled Pressure Vessels

A372/A372M-2010 [i](#)

Current Active Version: A372/A372M-2016 [i](#)

A376/A376M-1998 [i](#) Standard Specification for Seamless Austenitic Steel Pipe for High-Temperature Central-Station Service

Current Active Version: A376/A376M-2017 [i](#)

A381-1996(2001) [i](#) Standard Specification for Metal-Arc-Welded Steel Pipe for Use With High-Pressure Transmission Systems

A381-1996(2005) [i](#)

Current Active Version: A381/A381M-2018 [i](#)

A391-1965 [i](#) Standard Specifications For Alloy Steel Chain

Current Active Version: A391/A391M-2007(2012) [i](#)

A395-1968 [i](#) Standard Specifications For Ductile Iron For Pressure Containing Castings For Use At Elevated Temperatures

A395/A395M-1998 [i](#)

Current Active Version: A395/A395M-1999(2018) [i](#)

A403/A403M-1998 [i](#) Standard Specification for Wrought Austenitic Stainless Steel Piping Fittings

Current Active Version: A403/A403M-2019 [i](#)

A412-1975 [i](#) Standard Specification for Stainless And Heat-Resisting Chromium-Nickel-Manganese Steel Plate, Sheet, And Strip

A416-1974 [i](#) Standard Specification for Uncoated Seven-Wire Stress-Relieved Strand For Prestressed Concrete

Current Active Version: A416/A416M-2018 [i](#)

A420/A420M-1996 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 28 of 123](#) Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Low-Temperature Service

Current Active Version: A420/A420M-2019 [i](#)

A421/A421M-1998a [i](#) Standard Specification for Uncoated Stress-Relieved Steel Wire for Prestressed Concrete

Current Active Version: A421/A421M-2015 [i](#)

A441-1979 [i](#) Standard Specification for High- Strength Low- Alloy Structural Manganese Vanadium Steel

A441-1981 [i](#)

A446-1976(1981)e1 [i](#) Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) By The Hot-Dip Process, Structural (Physical) Quality

Replaced By: A653/A653M [i](#)

A449-1978a [i](#) Standard Specification for Quenched And Tempered Steel Bolts And Studs

Current Active Version: A449-2014 [i](#)

A475-1978 [i](#) Standard Specification for Zinc-Coated Steel Wire Strand

Current Active Version: A475-2003(2014) [i](#)

A482-1976 [i](#) Standard Specification for Ferrochrome-Silicon

A482-1993(2000) [i](#)

Current Active Version: A482/A482M-2011(2016) [i](#)

A483-1964(1980) [i](#) Standard Specification for Silicomanganese

A483-1964(1994) [i](#)

A483-1964(2000) [i](#)

Current Active Version: A483/A483M-2010(2015) [i](#)

A490-1979 [i](#) Standard Specification for Quenched And Tempered Alloy Steel Bolts For Structural Steel Joints

A495-1976 [i](#) Standard Specification for Calcium-Silicon And Calcium-Manganese-Silicon

A495-1994(2000) [i](#)

Current Active Version: A495-2006(2015) [Case 1:13-cv-01315-TSC Document 198-40 Filed 10/07/19 Page 29 of 123](#)

A496-1978 ⓘ Standard Specification for Deformed Steel Wire For Concrete Reinforcement

Replaced By: A1064/A1064M ⓘ

A497-1979 ⓘ Standard Specification for Welded Deformed Steel Wire Fabric For Concrete Reinforcement

Replaced By: A1064/A1064M ⓘ

A500-1978 ⓘ Standard Specification for Cold-Formed Welded And Seamless Carbon Steel Structural Tubing In Rounds And Shapes

Current Active Version: A500/A500M-2018 ⓘ

A501-1976 ⓘ Standard Specification for Hot-Formed Welded And Seamless Carbon Steel Structural Tubing

Current Active Version: A501/A501M-2014 ⓘ

A502-1976 ⓘ Standard Specification for Steel Structural Rivets

Current Active Version: A502-2003(2015) ⓘ

A505-1987(1998) ⓘ Standard Specification for Steel, Sheet and Strip, Alloy, Hot-Rolled and Cold-Rolled, General Requirements for

Current Active Version: A505-2016 ⓘ

A514-1977 ⓘ Standard Specification for High-Yield- Strength, Quenched And Tempered Alloy Steel Plate, Suitable For Welding

A514-1981 ⓘ

Current Active Version: A514/A514M-2018e1 ⓘ

A515/A515M-2003 ⓘ Standard Specification for Pressure Vessel Plates, Carbon Steel, for Intermediate- and Higher-Temperature Service

Current Active Version: A515/A515M-2017 ⓘ

A516/A516M-1990(2001) ⓘ Standard Specification for Pressure Vessel Plates, Carbon Steel, for Moderate- and Lower-Temperature Service

Current Active Version: A516/A516M-2017 ⓘ

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 30 of 123](#)

A520-1997 ⓘ Standard Specification for Supplementary Requirements for Seamless and Electric-Resistance-Welded Carbon Steel Tubular Products for High-Temperature Service Conforming to ISO Recommendations for Boiler Construction (Withdrawn 2000)

Replaced By: No_Replacement

A522/A522M-1995b ⓘ Standard Specification for Forged or Rolled 8 and 9% Nickel Alloy Steel Flanges, Fittings, Valves, and Parts for Low-Temperature Service

Current Active Version: A522/A522M-2014(2019) ⓘ

A525-1979 ⓘ Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) By The Hot-Dip Process, General Requirements

A525-1991be1 ⓘ

Current Active Version: A653/A653M-2019a ⓘ

A526/A526M-1985 ⓘ Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Commercial Quality

Replaced By: A653/A653M ⓘ

A529-1975 ⓘ Standard Specification for Structural Steel With 42 000 Psi (290 Mpa) Minimum Yield Point (1/2 In. (12.7 Mm) Maximum Thickness)

Current Active Version: A529/A529M-2019 ⓘ

A536-1984(1993) ⓘ Standard Specification for Ductile Iron Castings

A536-1984(2009) ⓘ

Current Active Version: A536-1984(2019)e1 ⓘ

A537/A537M-1991 ⓘ Standard Specification for Pressure Vessel Plates, Heat-Treated, Carbon-Manganese-Silicon Steel

Current Active Version: A537/A537M-2013(2019) ⓘ

A539-1990a ⓘ Standard Specification for Electric-Resistance-Welded Coiled Steel Tubing for Gas and Fuel Oil Lines

A568/A568M-2000b ⓘ Standard Specification for Steel, Sheet, Carbon, and High-Strength, Low-Alloy, Hot-Rolled and Cold-Rolled, General Requirements for

Current Active Version: A568/A568M-2017a ⓘ

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 31 of 123](#)

A569/A569M-1991a(1993)e1 ⓘ Standard Specification for Steel, Carbon (O. 15 Maximum, Percent), Hot-Rolled Sheet and Strip Commercial Quality

Replaced By: A1011/A1011M ⓘ

A570-1979 ⓘ Standard Specification for Hot-Rolled Carbon Steel Sheet And Strip, Structural Quality

Replaced By: A1011/A1011M ⓘ

A572-1979 ⓘ Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Steels Of Structural Quality

A572-1982 ⓘ

Current Active Version: A572/A572M-2018 ⓘ

A575-1996 ⓘ Standard Specification for Steel Bars, Carbon, Merchant Quality, M-Grades

A575-1996(2007) ⓘ

Current Active Version: A575-1996(2018) ⓘ

A576-1990b(2000) ⓘ Standard Specification for Steel Bars, Carbon, Hot-Wrought, Special Quality

A576-1990b(2012) ⓘ

Current Active Version: A576-2017 ⓘ

A578/A578M-1996(2001) ⓘ Standard Specification for Straight-Beam Ultrasonic Examination of Plain and Clad Steel Plates for Special Applications

Current Active Version: A578/A578M-2017 ⓘ

A588-1979a ⓘ Standard Specification for High-Strength Low-Alloy Structural Steel With 50 000 psi Minimum Yield Point To 4 in. Thick

A588-1981 ⓘ

Current Active Version: A588/A588M-2019 ⓘ

A591/A591M-1989 ⓘ Standard Specification for Steel Sheet, Electrolytic Zinc-Coated, for Light Coating Mass Applications

Replaced By: A879/A879M ⓘ

A606-1975 [Case 1:13-cv-01215-TSC Document 198-46 Filed 10/07/19 Page 32 of 123](#)
Standard Specification for Steel Sheet and Strip, Hot-Rolled and Cold-Rolled, High-Strength, Low-Alloy, with Improved Corrosion Resistance

A606-1998 ⓘ

Current Active Version: A606/A606M-2018 ⓘ

A607-1975(1981) ⓘ Standard Specification for Steel Sheet And Strip, Hot-Rolled And Cold-Rolled, High-Strength, Low-Alloy Columbium And / Or Vanadium

A607-1998 ⓘ

A611-1972(1979) ⓘ Standard Specification for Steel, Cold-Rolled Sheet, Carbon, Structural

Replaced By: A1008/A1008M ⓘ

A612-1972a ⓘ Standard Specification for High-Strength Steel Plates for Pressure Vessels for Moderate- and Lower-Temperature Service

Current Active Version: A612/A612M-2012(2019) ⓘ

A615-1979 ⓘ Standard Specification for Deformed And Plain Billet-Steel Bars For Concrete Reinforcement

Current Active Version: A615/A615M-2018e1 ⓘ

A616-1979 ⓘ Standard Specification for Rail-Steel Deformed And Plain Bars For Concrete Reinforcement

Replaced By: A996/A996M ⓘ

A617-1979 ⓘ Standard Specification for Axle-Steel Deformed And Plain Bars For Concrete Reinforcement

Replaced By: A996/A996M ⓘ


A618-1974 ⓘ Standard Specification for Hot-Formed Welded And Seamless High-Strength Low-Alloy Structural Tubing


Current Active Version: A618/A618M-2004(2015) ⓘ

A621/A621M-1991 ⓘ Standard Specification for Steel, Sheet and Strip, Carbon, Hot-Rolled, -Drawing Quality


A633-1979a ⓘ Standard Specification for Normalized High-Strength Low-Alloy Structural Steel


Current Active Version: A633/A633M-2018 ⓘ


[Case 1:18-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 33 of 123](#)
A653/A653M-1998a  Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process


Current Active Version: A653/A653M-2019a 


A668-1981a  Standard Specification for Steel Forgings, Carbon And Alloy, For General Industrial Use

Current Active Version: A668/A668M-2019a 


A671-1994  Standard Specification for Electric-Fusion-Welded Steel Pipe for Atmospheric and Lower Temperatures


A671-2004 


A671/A671M-2010 

Current Active Version: A671/A671M-2016a 


A672-1996(2001)  Standard Specification for Electric-Fusion-Welded Steel Pipe for High-Pressure Service at Moderate Temperatures


A672/A672M-2009 

Current Active Version: A672/A672M-2014 


A691-1998(2007)  Standard Specification for Carbon and Alloy Steel Pipe, Electric-Fusion-Welded for High-Pressure Service at High Temperatures


A691/A691M-2009 


Current Active Version: A691/A691M-2018a 

A715-1981e1  Standard Specification for Steel Sheet and Strip, Hot-Rolled, High-Strength, Low-Alloy, with Improved Formability

Replaced By: A1008/A1008M,A1011/A1011M

A1008/A1008M-2003  Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability

Current Active Version: A1008/A1008M-2018 

A1011/A1011M-2003  Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability

A1011/A1011M-2003a 

Current Active Version: A1017A101M-2018a [Case 1:13-cv-01315-TSC Document 198-40 Filed 10/07/19 Page 34 of 123](#)

B3-1990 ⓘ Standard Specification for Soft or Annealed Copper Wire

Current Active Version: B3-2013(2018) ⓘ

B16-1992 ⓘ Standard Specification for Free-Cutting Brass Rod, Bar and Shapes for Use in Screw Machines

Current Active Version: B16/B16M-2010(2015) ⓘ

B21-1996 ⓘ Standard Specification for Naval Brass Rod, Bar, and Shapes

Replaced By: B21/B21M

B26/B26M-1997 ⓘ Standard Specification for Aluminum-Alloy Sand Castings

Current Active Version: B26/B26M-2018e1 ⓘ

B33-1991 ⓘ Standard Specification for Tinned Soft or Annealed Copper Wire for Electrical Purposes

Current Active Version: B33-2010(2014) ⓘ

B41-1991 ⓘ Standard Specification for Seamless Red Brass Pipe, Standard Sizes

Replaced By: E39

B42-1993 ⓘ Standard Specification for Seamless Copper Pipe, Standard Sizes

B42-1996 ⓘ

Current Active Version: B42-2015a ⓘ

B43-1991 ⓘ Standard Specification for Seamless Red Brass Pipe, Standard Sizes

B43-1996 ⓘ

Current Active Version: B43-2015 ⓘ

B68-1995 ⓘ Standard Specification for Seamless Copper Tube, Bright Annealed

Current Active Version: B68/B68M-2019 ⓘ

B75-1997 ⓘ Standard Specification for Seamless Copper Tube

Current Active Version: B75/B75M-2019 ⓘ

B85-1996 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 35 of 123](#) [Standard Specification for Aluminum Alloy Die Castings](#)

Current Active Version: B85/B85M-2018e1 [i](#)

B88-1966a [i](#) Standard Specification for Seamless Copper Water Tube

B88-1983a [i](#)

B88-1993a [i](#)

B88-1996 [i](#)

Current Active Version: B88-2016 [i](#)

B96-1993 [i](#) Standard Specification for Copper-Silicon Alloy Plate, Sheet, Strip, and Rolled Bar for General Purposes and Pressure Vessel

Current Active Version: B96/B96M-2016 [i](#)

B111-1995 [i](#) Standard Specification for Copper and Copper- Alloy Seamless Condenser Tubes and Ferrule Stock

Current Active Version: B111/B111M-2018a [i](#)

B117-1964 [i](#) Standard Method Of Salt Spray (Fog) Testing

B117-1973(1979) [i](#)

B117-1990 [i](#)

B117-1997 [i](#)

B117-2003 [i](#)

Current Active Version: B117-2018 [i](#)

B122/B122M-1995 [i](#) Standard Specification for Copper-Nickel-Tin Alloy, Copper-Nickel-Zinc Alloy (Nickel Silver), and Copper-Nickel Alloy Plate, Sheet, Strip, and Rolled Bar

Current Active Version: B122/B122M-2016 [i](#)

B124-1996 [i](#) Standard Specification for Copper and Copper Alloy Forging Rod, Bar, and Shapes

Current Active Version: B124/B124M-2019 [i](#)

B127-1993ae1 [i](#) Standard Specification for Nickel-Copper Alloy (UNS N04400) Plate, Sheet, and Strip

B127-1998 [i](#)

Current Active Version: B127-2005(2014) [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 36 of 123](#)

B152-1997 ⓘ Standard Specification for Copper Sheet, Strip, Plate, and Rolled Bar

Current Active Version: B152/B152M-2013 ⓘ

B161-1993 ⓘ Standard Specification for Nickel Seamless Pipe and Tube

Current Active Version: B161-2005(2019) ⓘ

B162-1993ae1 ⓘ Standard Specification for Nickel Plate, Sheet, and Strip

Current Active Version: B162-1999(2019) ⓘ

B165-1993 ⓘ Standard Specification for Nickel-Copper Alloy (UNS N04400)* Seamless Pipe and Tube

Current Active Version: B165-2005(2014) ⓘ

B167-1997a ⓘ Standard Specification for Nickel-Chromium-Iron Alloys (UNS N06600, N06601, N06603, N06690, N06025, and N06045)* Seamless Pipe and Tube

Current Active Version: B167-2018 ⓘ

B171/B171M-1999 ⓘ Standard Specification for Copper-Alloy Plate and Sheet for Pressure Vessels, Condensers, and Heat Exchangers

Current Active Version: B171/B171M-2018 ⓘ

B193-1987(1992) ⓘ Standard Test Method for Resistivity of Electrical Conductor Materials

Current Active Version: B193-2016 ⓘ

B209-1993 ⓘ Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate

B209-1996 ⓘ

Current Active Version: B209-2014 ⓘ

B210-1968 ⓘ Standard Specifications For Aluminum-Alloy Drawn Seamless Tubes

B210-1995 ⓘ

Current Active Version: B210/B210M-2019 ⓘ

B221-1976a ⓘ Standard Specification for Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes

Current Active Version: B221-2014 ⓘ

Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 37 of 123
B224-1980e1 ⓘ Standard Classification of COPPERS

B224-1991 ⓘ

Current Active Version: B224-2016 ⓘ

B227-1970(1980) ⓘ Standard Specification for Hard-Drawn Copper-Clad Steel Wire

Current Active Version: B227-2015 ⓘ

B234-1995 ⓘ Standard Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes for Condensers and Heat Exchangers

Current Active Version: B234-2017 ⓘ

B241-1969 ⓘ Standard Specifications For Aluminum-Alloy Seamless Pipe And Seamless Extruded Tube

B241/B241M-1996 ⓘ

Current Active Version: B241/B241M-2016 ⓘ

B251-1993 ⓘ Standard Specification for General Requirements for Wrought Seamless Copper and Copper-Alloy Tube

Current Active Version: B251/B251M-2017 ⓘ

B280-1993a ⓘ Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service

B280-1995a ⓘ

Current Active Version: B280-2018 ⓘ

B283-1996 ⓘ Standard Specification for Copper and Copper-Alloy Die Forgings (Hot-Pressed)


Current Active Version: B283/B283M-2019 ⓘ

B306-1992 ⓘ Standard Specification for Copper Drainage Tube (DWV)

Current Active Version: B306-2013 ⓘ

B315-1993 ⓘ Standard Specification for Seamless Copper Alloy Pipe and Tube


Current Active Version: B315-2019 ⓘ

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 38 of 123](#)
B361-1995  Standard Specification for Factory-Made Wrought Aluminum and Aluminum-Alloy Welding Fittings

Current Active Version: B361-2016 

B370-1977  Standard Specification for Copper Sheet And Strip For Building Construction


Current Active Version: B370-2012 


B456-1995  Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium

Current Active Version: B456-2017 


B539-1990  Standard Test Methods for Measuring Contact Resistance of Electrical Connections (Static Contacts)

Current Active Version: B539-2018 


B557-1984  Standard Methods of TENSION TESTING WROUGHT AND CAST ALUMINUM- AND MAGNESIUM-ALLOY PRODUCTS

B557-1984e1 


Current Active Version: B557-2015 

B580-1979(2000)  Standard Specification for Anodic Oxide Coatings on Aluminum


Current Active Version: B580-1979(2019) 

B587-1980  Standard Specification for Welded Brass Tube


Current Active Version: B587-2019 

B633-1985e1  Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel

Current Active Version: B633-2019 

B694-1986  Standard Specification for Copper, Copper Alloy, and Copper-Clad Stainless Steel Sheet and Strip for Electrical Cable Shielding

Current Active Version: B694-2019 

B736-1992a  Standard Specification for Aluminum, Aluminum Alloy and Aluminum-Clad Steel Cable Shielding Stock

B858-1995 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 39 of 123](#) Standard Test Method For Ammonia Vapor Test for Determination Susceptibility to Stress Corrosion Cracking in Copper Alloys

Current Active Version: B858-2006(2018) ⓘ

C4-1962 ⓘ Standard Specifications For Clay Drain Tile

Current Active Version: C4-2004(2018) ⓘ

C5-1979(1997) ⓘ Standard Specification for Quicklime for Structural Purposes

Current Active Version: C5-2018 ⓘ

C12-1998e1 ⓘ Standard Practice for Installing Vitrified Clay Pipe Lines

Current Active Version: C12-2017 ⓘ

C14-1981 ⓘ Standard Specification for Concrete Sewer, Storm Drain, And Culvert Pipe

Current Active Version: C14-2015a ⓘ

C22-1977 ⓘ Standard Specification for Gypsum

Current Active Version: C22/C22M-2000(2015) ⓘ

C28-1980 ⓘ Standard Specification for Gypsum Plasters

Current Active Version: C28/C28M-2010(2015) ⓘ

C32-1973 ⓘ Standard Specification for Sewer And Manhole Brick (Made From Clay Or Shale)

Current Active Version: C32-2013(2017) ⓘ

C33-1985 ⓘ Standard Specification for Concrete Aggregates

C33-2007 ⓘ

Current Active Version: C33/C33M-2018 ⓘ

C34-1962 ⓘ Standard Specifications For Structural, Clay Load-Bearing Wall Tile

Current Active Version: C34-2017 ⓘ

C35-1976 ⓘ Standard Specification for Inorganic Aggregates For Use In Gypsum Plaster

Current Active Version: C35-2001(2019) ⓘ

C36-1980 [Case 1:13-cv-01215-TSC Document 198-40](#) Filed 10/07/19 Page 40 of 123
Standard Specification for Gypsum Wallboard

C36-1993 [i](#)

C36/C36M-1999e1 [i](#)

Current Active Version: C1396/C1396M-2017 [i](#)

C37-1981 [i](#) Standard Specification for Gypsum Lath

Replaced By: C1396/C1396M [i](#)

C52-1954(1965) [i](#) Standard Specifications For Gypsum Partition Tile Or Block

C55-1975 [i](#) Standard Specification for Concrete Building Brick

Current Active Version: C55-2017 [i](#)

C56-1971 [i](#) Standard Specification for Structural Clay Non-Load-Bearing Tile

Current Active Version: C56-2013(2017) [i](#)

C57-1957(1965) [i](#) Standard Specifications For Structural Clay Floor Tile

C61-1976 [i](#) Standard Specification for Gypsum Keenes Cement

Current Active Version: C61/C61M-2000(2015) [i](#)

C62-1981 [i](#) Standard Specification for Building Brick (Solid Masonry Units Made From Clay Or Shale)

Current Active Version: C62-2017 [i](#)

C64-1972(1977) [i](#) Standard Specification for Refractories for Incinerators and Boilers

C73-1975 [i](#) Standard Specification for Calcium Silicate Face Brick (Sand-Lime Brick)

Current Active Version: C73-2017 [i](#)

C76-2000 [i](#) Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

Current Active Version: C76-2019a [i](#)

C79-1978 [i](#) Standard Specification for Gypsum Sheathing Board

Replaced By: C1396/C1396M [i](#)

C88-1976 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/18 Page 41 of 123](#)
Standard Test Method for Soundness Of Aggregates By Use Of Sodium Sulfate Or Magnesium Sulfate

Current Active Version: C88/C88M-2018 [i](#)

C90-2000 [i](#) Standard Specification for Loadbearing Concrete Masonry Units

Current Active Version: C90-2016a [i](#)

C91-1978e1 [i](#) Standard Specification for Masonry Cement

Current Active Version: C91/C91M-2018 [i](#)

C94-1981 [i](#) Standard Specification for Ready-Mixed Concrete

C94/C94M-2007 [i](#)

Current Active Version: C94/C94M-2019a [i](#)

C126-1971 [i](#) Standard Specification for Ceramic Glazed Structural Clay Facing Tile, Facing Brick, And Solid Masonry Units

Current Active Version: C126-2018 [i](#)

C129-1975 [i](#) Standard Specification for Non-Load-Bearing Concrete Masonry Units

Current Active Version: C129-2017 [i](#)

C139-1973 [i](#) Standard Specification for Concrete Masonry Units For Construction Of Catch Basins And Manholes

Current Active Version: C139-2017 [i](#)

C143-1978 [i](#) Standard Test Method for Slump Of Portland Cement Concrete

Current Active Version: C143/C143M-2015a [i](#)

C144-1976 [i](#) Standard Specification for Aggregate For Masonry Mortar

Current Active Version: C144-2018 [i](#)

C150-1956 [i](#) Standard Specifications for Portland Cement

C150-1981 [i](#)

C150-1994b [i](#)

C150-2007 [Case 1:13-cv-01215-TSC](#) Document 198-40 Filed 10/07/19 Page 42 of 123

Current Active Version: C150/C150M-2019a [i](#)

C157-1975 [i](#) Standard Test Method for Length Change Of Hardened Cement Mortar And Concrete

Current Active Version: C157/C157M-2017 [i](#)

C177-1985(1993)e1 [i](#) Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus

C177-1997 [i](#)

C177-2004 [i](#)

Current Active Version: C177-2019 [i](#)

C206-1979 [i](#) Standard Specification for Finishing Hydrated Lime

Current Active Version: C206-2014 [i](#)

C207-1979(1988)e1 [i](#) Standard Specification for Hydrated Lime for Masonry Purposes

Current Active Version: C207-2018 [i](#)

C208-1972 [i](#) Standard Specification for Insulating Board (Cellulosic Fiber), Structural And Decorative

C208-1972(1982) [i](#)

Current Active Version: C208-2012(2017)e1 [i](#)

C209-1972 [i](#) Standard Methods of Testing Insulating Board (Cellulosic Fiber), Structural And Decorative

Current Active Version: C209-2015 [i](#)

C212-1960(1975) [i](#) Standard Specification for Structural Clay Facing Tile

C212-1960(1986) [i](#)

Current Active Version: C212-2017 [i](#)

C216-1981e1 [i](#) Standard Specification for Facing Brick (Solid Masonry Units Made From Clay Or Shale)

Current Active Version: C216-2017a [i](#)

C220-1991(2004) [i](#) Standard Specification for Flat Asbestos-Cement Sheets

Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 43 of 123
Current Active Version: C220-1991(2015) ⓘ

C221-1977 ⓘ Standard Specification for Corrugated Asbestos-Cement Sheets

Current Active Version: C221-1998(2014) ⓘ

C222-1978 ⓘ Standard Specification for Asbestos-Cement Roofing Shingles

Current Active Version: C222-1997(2014) ⓘ

C223-1978(1984) ⓘ Standard Specification for Asbestos-Cement Siding

Current Active Version: C223-1998(2014) ⓘ

C236-1989(1993)e1 ⓘ Standard Test Method for Steady-State Thermal Performance of Building Assemblies by Means of a Guarded Hot Box (Withdrawn 2001)

Replaced By: C1363 ⓘ

C260-1977 ⓘ Standard Specification for Air-Entraining Admixtures for Concrete

Current Active Version: C260/C260M-2010a(2016) ⓘ

C270-1980a ⓘ Standard Specification for Mortar For Unit Masonry

Current Active Version: C270-2019ae1 ⓘ

C315-1978c(1983) ⓘ Standard Specification for Clay Flue Linings

Current Active Version: C315-2007(2016) ⓘ

C317-1976 ⓘ Standard Specification for Gypsum Concrete

Current Active Version: C317/C317M-2000(2019) ⓘ

C330-1980 ⓘ Standard Specification for Lightweight Aggregates For Structural Concrete

C330-2005 ⓘ

Current Active Version: C330/C330M-2017a ⓘ

C377-1966(1977) ⓘ Standard Specification for Precast Reinforced Gypsum Slabs

C412-1981a ⓘ Standard Specification for Concrete Drain Tile

Current Active Version: C412-2019 ⓘ

C425-1977(1982) [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 44 of 123](#) Standard Specification for Compression Joints for Vitrified Clay Pipe and Fittings

Current Active Version: C425-2004(2018) [i](#)

C428-1978 [i](#) Standard Specification for Asbestos-Cement Nonpressure Sewer Pipe

C428-1981(1985) [i](#)

Current Active Version: C428/C428M-2005(2019) [i](#)

C475-1964 [i](#) Standard Specifications For Joint Treatment Materials For Gypsum Wallboard Construction

Current Active Version: C475/C475M-2017 [i](#)

C476-1971 [i](#) Standard Specification for Mortar And Grout For Reinforced Masonry

Current Active Version: C476-2018 [i](#)

C494-1979 [i](#) Standard Specification for Chemical Admixtures For Concrete

Current Active Version: C494/C494M-2017 [i](#)

C495-1999a [i](#) Standard Test Method for Compressive Strength of Lightweight Insulating Concrete

Current Active Version: C495/C495M-2012 [i](#)

C508-1998 [i](#) Standard Specification for Asbestos-Cement Underdrain Pipe

Current Active Version: C508/C508M-2000(2015) [i](#)

C509-1979 [i](#) Standard Specification for Cellular Elastomeric Preformed Gasket And Sealing Material

Current Active Version: C509-2006(2015) [i](#)

C514-1977 [i](#) Standard Specification for Nails For The Application Of Gypsum Wallboard

Current Active Version: C514-2004(2014) [i](#)

C516-1975 [i](#) Standard Specification for Vermiculite Loose Fill Insulation

C516-1980(1996)e1 [i](#)

Current Active Version: C516-2019 [i](#)

C517-1971(1979) [i](#) Standard Specification for Diatomaceous Earth Block and Pipe Thermal Insulation